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Chapter I

The EU Regulatory Framework Applicable to Electronic Communications

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1–001 Introduction and overview—Chapter I describes the EU regulatory framework applicable to electronic communications.[1] It will first explain the background to the legislative initiatives adopted in the early to mid-1990s, which culminated in the full liberalisation of the provision of telecommunications services and networks in the Member States in 1998. It will also outline the legislative and regulatory regime that comprises the Electronic Communications Regulatory Framework that is presently applicable to the electronic communications sector. This Regulatory Framework was adopted in 2002, came into application in July 2003 and was revised in 2009, following a review process that started in 2006 (section A). Following the intrinsic logic of the Electronic Communications Regulatory Framework, the Chapter then addresses general and institutional issues, access to markets, the regulation of undertakings that operate networks and provide services on wholesale and retail markets, and the protection of the rights of end-users and consumers. The chapter therefore focuses on and discusses the following subjects: the scope, objectives and principles of the Regulatory Framework (section B); the powers, responsibilities and organisation of national regulatory authorities ("NRAs") and the harmonisation mechanisms introduced for the purpose of sector-specific electronic communications regulation (section C); market entry, including the liberalisation of the electronic communications sector, the authorisation of operators and service providers and the management of radio spectrum and numbering resources (section D); the regulation of undertakings possessing significant market power ("SMP") and general access obligations imposed on operators (section E); the provision of universal service and other services of general economic interest (section F); end-user rights and consumer protection (section G); international roaming within the EU (section H); and the protection of privacy and security in electronic communications (section I). The chapter then closes with complementary considerations, regarding the application of the Regulatory Framework to businesses established outside the EU, as well as an overview of the relevant rules of the World Trade Organisation (section J).

[1] "Electronic communications" means the transmission of signals by electromagnetic means. See para.1–041, *et seq.*, below, for definitions and concepts and the reasoning for the Regulatory Framework using, from 2002 onwards, the concept of "electronic communications", rather than "telecommunications".

A. Background to and the evolution of the EU Regulatory Framework

1–002 The Regulatory Framework for Electronic Communications was adopted in 2002, came into application in the Member States in 2003 and was amended in 2009.[2] It contains the regulatory principles that are applicable to the establishment and operation of electronic communications networks and services and associated facilities and services across the EU.[3] It provides the basis for all national electronic communications legislation in the Member States. The Regulatory Framework constitutes the completion of a process of liberalisation and harmonisation initiated by the Commission in 1987, with the adoption of the Green Paper on Telecommunications,[4] which led to the full liberalisation of the sector in 1998.[5]

1. From the 1987 Green Paper on Telecommunications to full liberalisation of the sector

1–003 At that time of the 1987 Green Paper, the EU telecommunications sector was, in all Member States (with the exception of the United Kingdom, which had partially liberalised and privatised its telecommunications market in 1984), characterised by the presence of state-owned monopoly operators which did not face competition in the major aspects of their activities. The technological development of the sector (in particular digitalisation, which was to lead to a convergence of the telecommunications and information technology sectors and to make possible communications between computers[6]) dramatically and very rapidly changed the sector's economic context. It became apparent that unless markets were opened and new competitive forces were introduced, the required investment to develop the technology would not be made, with the risk that consumers would not have benefitted to the fullest extent from this technological revolution.[7] The Commission also considered that, unless an adequate harmonised regulatory framework was

[2] This is referred to as the "Regulatory Framework". Where specific reference is made to measures adopted in 2002, the term "2002 Regulatory Framework" is used.

[3] Pursuant to the Agreement on the European Economic Area of May 2, 1992, O.J. 1994 L1/3, as subsequently amended, the Regulatory Framework is also applicable in the three EFTA States that are signatories of the EEA Agreement, Iceland, Liechtenstein and Norway, under the supervision of the EFTA Surveillance Authority, which performs a similar supervisory and enforcement role to that of the European Commission. See generally *http://www.eftasurv.int* and para.1–455, below.

[4] Communication from the Commission of July 30, 1987, "Towards a dynamic European economy: Green Paper on the development of the common market for telecommunications services and equipment", COM(87) 290 ("1987 Green Paper"). The 1987 Green Paper can be considered as the starting point of a systematic European policy for the telecommunications sector. It should nevertheless be noted that there had already been prior initiatives in the sector, *e.g.* regarding the development of new technologies, standardisation and public procurement: see Pelkmans and Young, *Telecoms-98* (CEPS, 1998), 52–54.

[5] For a review of the historical context and of the different phases of European telecommunications policy, see Braun and Capito, "The emergence of EC Telecommunications Law as a New Self-Standing Field within Community Law", in Koenig, Bartosch, Braun and Romes (eds.), *EC Competition and Telecommunications Law* (Wolters Kluwer, 2nd ed., 2009), 41; Cawley, "The European Union and World Telecommunications Markets", in Madden (ed.), *World Telecommunications Markets* (Edward Elgar, 2003), 153; Nikolinakos, *EU Competition Law and Regulation in the Converging Telecommunications, Media and IT Sectors* (Kluwer, 2006), 21–56. More specifically on the fully liberalised regulatory model of 1998, see Larouche, "Telecommunications" in Geradin (ed.), *The Liberalization of State Monopolies in the European Union and Beyond* (Kluwer, 2000), 15.

[6] 1987 Green Paper, para.1–002, n.4, 24–26.

[7] *ibid.*, presentation, 1–3.

adopted to support the development of the telecommunications market, Europe would have been left behind its trading partners.[8]

1–004 In order to create a more competitive environment for the supply of telecommunications services and terminal equipment, the 1987 Green Paper proposed a three-pronged approach: (i) the liberalisation of the supply of most telecommunications services and of terminal equipment; (ii) the establishment of harmonised and open access conditions to telecommunications networks; and (iii) the application of the competition rules to telecommunications providers.[9] Liberalisation, harmonisation and the application of the competition rules are the three pillars of the opening-up and reorganisation of the telecommunications sector in order to achieve the overall objective of European policy in this sector, *i.e.* "to develop the conditions for the market to provide European users with a greater variety of telecommunications services, of better quality and at lower cost, affording Europe the full internal and external benefits of a strong telecommunications sector".[10] This overall objective remained through the years.

1–005 **Liberalisation**—The objective of liberalisation is to abolish monopolies (exclusive rights) and special rights enjoyed by incumbent operators and to remove legal barriers to entry for new players. Article 106(3) Treaty on the Functioning of the European Union empowers the Commission to adopt general measures to ensure that Member States comply, regarding public undertakings and undertakings to which they grant special or exclusive rights, with their Treaty obligations, in particular the competition rules. Article 106(3) [ex 86[11]] has proven to be an effective means of liberalising markets, as it permits the Commission to adopt measures relatively rapidly, without the need to involve the Council and the European Parliament, although in practice the Commission did consult the Member States and the European Parliament in adopting the liberalisation directives.[12] To achieve its objective of liberalising telecommunications markets, the Commission adopted a number of so-called "liberalisation" directives under Article 106(3).

1–006 ***Progressive opening of the markets***—The liberalisation of the European telecommunications markets was a gradual process, starting with telecommunications terminal equipment and non-reserved telecommunications services (including in particular value-added services, such as email, voice mail, online information and database services, electronic data interchange ("EDI"), audio-conferencing, traveller services, enhanced facsimile services, code and protocol conversion, online information and data processing services). These were opened to

[8] Larouche, para.1–002, n.5, 15, at 17; 1987 Green Paper, para.1–002, n.4, 26–27, 158 and 161–169.

[9] See Géradin, "L'Ouverture à la Concurrence des Entreprises de Réseau—Analyse des Principaux Enjeux du processus de Libéralisation" (1999) 1–2 *Cahiers de Droit Européen*, 13, 15. See also Braun and Capito, "The emergence of EC Telecommunications Law as a New Self-Standing Field within Community Law", in Koenig, Bartosch, Braun and Romes (eds.), para.1–002, n.5, 41, at 42–47.

[10] 1987 Green Paper, para.1–002, n.4, summary report, 3.

[11] In the EC Treaty as originally adopted, before the revisions introduced by the Treaties of Amsterdam and Lisbon this provision was numbered Art.90(3).

[12] The applicability of the competition rules to the telecommunications sector was confirmed by the Court of Justice in Case 41/83, *Italy v Commission (British Telecommunications I)* [1985] E.C.R. 873. The use of Art.106(3) as the legal basis for the adoption by the Commission of liberalisation directives in the telecommunications sector was challenged by some Member States, but confirmed by the Court of Justice, including the right of the Commission to abolish exclusive rights in the telecommunications sector and the appropriateness of Art.106(3) as a legal instrument on which to base such action: Case C-202/88, *France v Commission (Competition in the markets in telecommunications terminal equipment)* [1991] E.C.R. I-1223 and also Joined Cases C-271, C-281 and C-289/90, *Spain v Commission (Competition in the markets for telecommunications services)* [1992] E.C.R. I-5833.

competition as a result, respectively, of the Telecommunications Terminal Equipment Directive in 1988[13] and the Services Directive in 1990.[14] The latter liberalised all telecommunications services other than voice telephony[15] and public data services (in the latter case, until December 31, 1992). It was not applicable to telex, mobile radiotelephony, paging, satellite services, nor to radio and television broadcasting transmission.

1–007 The liberalisation process was then extended through successive amendments to the Services Directive, which included additional services within its scope. Satellite networks were the first to be addressed, in 1994.[16] This liberalised the establishment and operation of satellite earth station networks, as well as the provision of satellite network services (being the establishment and operation of earth stations, including "uplinks" and "downlinks") and satellite communications services (being communications services making use of such facilities). The use of cable television networks to provide non-reserved telecommunications services was liberalised in 1995.[17] It was expected that the use of the transmission capacity of cable networks to provide non-reserved telecommunications services would have the effect of bringing down prices charged by incumbent telecommunications operators for transmission capacity on their networks, by offering an alternative to their existing public telecommunications networks. In 1996, mobile services and networks[18] and alternative infrastructures[19] were liberalised and could, until January 1, 1998, already be used to provide all telecommunications services, except voice telephony services. Finally, public voice telephony services and public networks used for the provision of voice telephony were liberalised as of January 1, 1998,[20] thus completing the liberalisation of the sector.[21] However, broadcasting transmission remained, in principle, not covered by the telecommunications liberalisation framework.[22] As part of the 2002 Regulatory Framework, these directives were consolidated in 2002 into a single directive, the Liberalisation Directive.[23]

1–008 The gradual pace of liberalisation, in particular the temporary maintenance of incumbent operators' exclusive and special rights[24] to supply public voice telephony services and to operate networks, was justified by the need to preserve the financial stability of incumbent operators and their capacity to provide "universal service",[25] which the Member States considered could have been threatened by a sudden opening of the entire market, and especially voice telephony services, to full competition. Until full liberalisation of telecommunications markets in 1998, there was thus a distinction between "reserved services", *i.e.* public voice telephony (which could continue to be provided by incumbent operators under exclusive or special rights), and "non-reserved" or "competitive" services, *i.e.* the liberalised services.[26] This distinction ceased to have any relevance following the full liberalisation of the telecommunications sector on January 1, 1998.

1–009 ***Separation of regulatory and commercial activities***—One essential aspect of the liberalisation process was the separation of the regulatory and operational functions of the incumbent

[13] Directive 88/301 of May 16, 1988 on competition in the markets in telecommunications terminal equipment, O.J. 1988 L131/73 ("Telecommunications Terminal Equipment Directive"), as amended by Directive 94/46 of October 13, 1994 amending Directive 88/301 and Directive 90/388 in particular with regard to satellite communications, O.J. 1994 L268/15 ("Satellite Directive"). The Telecommunications Terminal Equipment Directive was consolidated and repealed by Directive 2008/63 of June 20, 2008 on competition in the markets in telecommunications terminal equipment, O.J. 2008 L162/20 ("Terminal Equipment Liberalisation Directive"). Terminal equipment is equipment directly or indirectly connected to the interface of a public telecommunications network to send, process or receive information: Terminal Equipment Liberalisation Directive, Art.1. A connection is indirect if equipment is placed between the terminal and the interface of the network. The network connection may be made by wire, optical fibre or electromagnetically. Terminal equipment also includes satellite earth station equipment, *i.e.* equipment capable of being used for the transmission and/or the reception of radio-communications signals by means of satellites or other space-based systems, including very small aperture terminals ("VSATs"), mobile and transportable satellite earth station equipment, satellite news gathering ("SNG") equipment and television receive-only ("TVRO") satellite earth station equipment.

[14] Directive 90/388 of June 28, 1990 on competition in the markets for telecommunications services, O.J. 1990 L192/10 ("Services Directive").

[15] "Voice telephony" was defined as "the commercial provision for the public of the direct transport and switching of speech in real-time between public switched network termination points, enabling any user to use equipment connected to such a network termination point in order to communicate with another termination point": Services Directive, para.1–006, n.14, Art.1. See also Communication from the Commission of October 20, 1995 on the status and implementation of Directive 90/388 on competition in the markets for telecommunications services; O.J. 1995 C275/2 ("1995 Status of Telecommunications Competition Communication").

[16] Satellite Directive, para.1–006, n.13.

[17] Directive 95/51 of October 18, 1995 amending Directive 90/388 with regard to the abolition of the restrictions on the use of cable television networks for the provision of already liberalised telecommunications services, O.J. 1995 L256/49, *corr.* O.J. 1996 L308/59 ("First Cable Directive"). This Directive was followed in 1999 by Directive 1999/64 of June 23, 1999 amending Directive 90/388 in order to ensure that telecommunications networks and cable TV networks owned by a single operator are separate legal entities, O.J. 1999 L175/39 ("Second Cable Directive"). This last amendment of the Services Directive, para.1–006, n.14, required Member States to ensure that, under certain circumstances, telecommunications networks and cable TV networks owned by a single operator are placed in separate legal entities. It therefore imposed "legal" separation: see para.1–149 *et seq.*, below.

[18] Directive 96/2 of January 16, 1996 amending Directive 90/388 with regard to mobile and personal communications, O.J. 1996 L20/59, *corr.* O.J. 1996 L66/36 ("Mobile Directive"), which opened the mobile and personal communications markets to competition.

[19] Directive 96/19 of March 13, 1996 amending Directive 90/388 with regard to the implementation of full competition in telecommunications markets, O.J. 1996 L74/13 ("Full Competition Directive"). Art.1(2) introducing a new Art.2 into the Services Directive, para.1-006, n.14. Alternative infrastructures included networks established by energy and transportation utilities or railways.

[20] *ibid.*

[21] Additional implementation periods were possible for Member States with less developed networks like Portugal or Spain (maximum of five years) and for Member States with very small networks like Luxembourg (maximum of two years).

[22] This was subject to an exception: the provision of satellite network services for the conveyance of radio and television programmes was considered to be a telecommunications service and thus fell under the provisions of the Services Directive, para.1–006, n.14: Satellite Directive, para.1–006, n.13, recital 17.

[23] Directive 2002/77 of September 16, 2002 on competition in the markets for electronic communications networks and services, O.J. 2002 L249/21 ("Liberalisation Directive").

[24] For a discussion of these concepts, see para.1–138, below.

[25] At the time, the criterion used in order to justify the maintenance of special and exclusive rights on certain activities pursuant to Art.106(2) [ex 86(2) and then 90(2)] was the need to guarantee the performance of "services of general economic interest". With regard to the telecommunications sector, the provision and exploitation of a universal network, *i.e.* one having general geographic coverage, and being provided to any service provider or user upon request within a reasonable period of time, was a service of general economic interest and the financing of the development of telecommunications networks still derived mainly from the operation of the telephone service: Services Directive, para.1–006, n.14, recital 18. The concept of "universal service", in a strict sense, was only later introduced in European telecommunications regulation (on universal service, see section F, below).

[26] On the difficulty of defining the boundary between reserved and non-reserved services as well as between "basic" and "value-added" services, see 1987 Green Paper, para.1–002, n.4, 33–36, 64–67 and Larouche, para.1–002, n.5, 15, at 24–27.

national telecommunications operators, functions which were at one time generally performed by the same body. The continued exercise of regulatory functions by the incumbent was considered a major obstacle to the introduction of competition, as it entailed the inherent risk of discrimination against new entrants in favour of the incumbent's operations. Accordingly, the liberalisation directives required the Member States to create independent national regulatory authorities that would be responsible for matters such as licensing, the allocation of frequencies, the surveillance of usage conditions and the granting of type-approval to terminal equipment, as well as other regulatory functions (such as ensuring in general the applications of the rules).[27]

1–010 Harmonisation—Liberalisation has moved in step with the harmonisation of national regulatory rules, which is its necessary complement. Harmonisation aims at ensuring equivalent regulatory systems and consistent application of the European rules in all Member States, so that undertakings can compete on equal terms and that undertakings and consumers benefit fully from the liberalisation of the market. Due to economies of scale,[28] the benefits of liberalisation and the competition introduced by it could only be achieved if applied to a large internal market, rather than to a multitude of small separated markets. Harmonisation has been achieved through a series of directives adopted under Article 114 [ex 95],[29] which enables the Council and the European Parliament, upon a proposal from the Commission, to adopt legislative measures aimed at the establishment and functioning of the internal market by harmonising Member States' laws. From 1993 onwards, harmonisation directives were adopted under a cumbersome and lengthy legislative process, the so-called "co-decision procedure" (pursuant to Article 251 [ex 189b] of the EC Treaty), which involved mainly the European Parliament and the Council, but with the Commission having the right of initiative.[30] As a result of the Lisbon Treaty, the co-decision procedure has become the "ordinary legislative procedure", under which the European Parliament and the Council adopt jointly regulations, directives and decisions, following a proposal from the Commission and in accordance with the procedure defined in Article 294.[31]

1–011 ***Open Network Provision Directives***—The process of harmonisation under the principle of Open Network Provision ("ONP") started with the adoption in 1990 of the ONP Framework

[27] Services Directive, para.1–006, n.14, Art.7; Telecommunications Terminal Equipment Directive and Terminal Equipment Liberalisation Directive, para.1–006, n.13, Art.6. For a discussion of the role of the NRAs and the content of the concept of "regulation" in the context of the Electronic Communications Regulatory Framework, see paras.1–074 and 1–075, below. For an analysis of the concept of "independence" of the NRAs, see paras.1–088–1–093, below.

[28] According to the European Regulators Group ("ERG"), economies of scale arise when increasing production causes average costs (per unit of output) to fall. They are common where the production process involves high fixed costs (compared to variable costs), which is often the case in communications markets. One other way in which increasing scale can lower unit costs is by allowing greater specialisation, and in turn higher productivity. See ERG, Revised ERG Working paper on the SMP concept for the new regulatory framework, ERG(03) 09rev3, September 22, 2005, 6.

[29] In the EC Treaty, before the revisions introduced by the Treaties of Amsterdam and Lisbon, this provision was numbered Art.100a.

[30] For an explanation of the co-decision procedure, see Craig and De Búrca, *EU Law* (Oxford University Press, 4th ed., 2008), 113–117.

[31] Art.289(1). The different steps of the "ordinary legislative procedure" are the same as under the former "co-decision procedure", but the scope of the procedure has been extended to include several new policies, such as trade policy and criminal cooperation: see Priollaud and Siritzky, *Le Traité de Lisbonne—Texte et commentaire article par article des nouveaux traits européens (TUE-TFUE)* (La Documentation française, 2008), 365–371.

Directive.[32] The ONP Framework Directive set out harmonised conditions for open and efficient access to, and use of, public telecommunications networks (and services), which at that time were still covered (to a certain extent—see para.1–006 *et seq.*) by the incumbent operators' exclusive or special rights, and were therefore needed for the provision of non-reserved services by other providers. These rules included principles for harmonised technical interfaces, usage and supply conditions (*e.g.* conditions for network access or the resale of capacity and delivery times), setting tariffs for such services and networks as well as (later on) for numbering/addressing/naming and for access to frequencies (the ONP principles[33]). The ONP Framework Directive was amended in 1997 to adjust it to the requirements of a competitive environment in telecommunications. It was also supplemented by a series of subsequent harmonisation directives implementing ONP principles in specific areas, including leased lines (in 1992),[34] voice telephony (in 1995),[35] interconnection (in 1997),[36] and universal service (in 1998).[37] In order to foster effective and sustainable competition, ONP conditions imposed asymmetric obligations on incumbent operators, because of the

[32] Directive 90/387 of June 28, 1990 on the establishment of the internal market for telecommunications services through the implementation of open network provision, O.J. 1990 L192/1 corr. O.J. 1983 L85/28 ("ONP Framework Directive"). The ONP Framework Directive was amended in 1997 by Directive 97/51 of October 6, 1997 amending Directives 90/387 and 92/44 for the purpose of adaptation to a competitive environment in telecommunications, O.J. 1997 L295/23.

[33] On the concept of ONP, see 1987 Green Paper, para.1–002, n.4, figure 13, E and 69–70. See also: the first edition of this work, 31–35; Berben, "Open Network Provision: A Concept for Europe", in Schaff (ed.), *Legal and economic aspects of telecommunications* (Elsevier, 1990), 555; and Sauter, *Competition Law and Industrial Policy in the EU* (Clarendon, 1997), 193–200. ONP aims to ensure that access is provided to users, service providers and other network operators on a transparent, non-discriminatory basis and at fair and reasonable costs. According to such principles, an incumbent telecommunications operator was prohibited from restricting new entrants' access to its public network, unless one of the limited number of non-economic reasons in the public interest existed, *i.e.* security of network operations, maintenance of network integrity, interoperability of services and data protection (the so-called "essential requirements"). In the run-up to the introduction of full competition, the list of exceptions was extended by Directive 97/51 to include the protection of the environment, town and country planning objectives, effective use of frequency spectrum and avoidance of harmful interference between radio-based telecommunications systems and other space or terrestrial technical systems.

[34] Directive 92/44 of June 5, 1992 on the application of open network provision to leased lines, O.J. 1992 L165/27, *corr.* O.J. 1993 L96/35 ("ONP Leased Lines Directive"), amended by Directive 97/51 and latest by Decision 98/80 of January 7, 1998 on amendment of Annex II to Directive 92/44, O.J. 1998 L14/27.

[35] Directive 95/62 of December 13, 1995 on the application of open network provision (ONP) to voice telephony, O.J. 1995 L321/6, *corr.* O.J. 1996 L108/62. This directive was repealed and replaced by Directive 98/10 of February 26, 1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment, O.J. 1998 L101/24 ("ONP Voice Telephony Directive"), as amended by Decision 2001/22 of December 22, 2000 on amendment of Annex III to Directive 98/10 of 26 February 1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment, O.J. 2001 L5/12.

[36] Directive 97/33 of June 30, 1997 on interconnection in telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP), O.J. 1997 L199/32 ("ONP Interconnection Directive"), as amended by Directive 98/61 of September 24, 1998 amending Directive 97/33 with regard to operator number portability and carrier pre-selection, O.J. 1998 L268/37.

[37] ONP Voice Telephony Directive, para.1–011, n.35.

exclusive or special rights that they enjoyed before January 1, 1998 and because of the significant market power that they continued to enjoy after this date.[38] These obligations were considered as sufficient safeguards in order to allow incumbent operators to continue to be active on all telecommunications markets. Neither legal separation, requiring incumbents to place specific activities (*e.g.* the provision of their (access) network) into subsidiaries having separate legal personality, or functional separation, requiring different activities to be placed in different business units, were imposed.[39]

1–012 ***Licensing and data protection directives***—In addition to the ONP directives, in 1997 harmonisation directives were adopted on licensing[40] and data protection in the telecommunications sector.[41] These harmonisation directives formed, together with the Services Directive as amended, the so-called "1998 Regulatory Framework".[42] The harmonisation directives (with the exception of the Telecommunications Data Protection Directive) required the Commission to review their functioning and to propose possible amendments by the end of 1999. Following the so-called "1999 Review", new harmonisation directives were adopted in 2002, on the basis of Article 114 [ex 95]. These directives (including a directive on privacy in electronic communications) replaced the earlier directives and form, together with the Liberalisation Directive (which consolidated the Services Directive)[43] the Electronic Communications Regulatory Framework.

1–013 ***Regulation on unbundled access to the local loop***—Finally, a Regulation on unbundled access to the local loop was adopted in December 2000, also on the basis of Article 114 [ex 95].[44] By its very nature, the local loop (*i.e.* the "last mile" of the network connecting the customer's premises to a distribution frame or equivalent facility) presents all the characteristics of a natural monopoly and may thus be considered as an essential facility. New entrants did not own or have access to widespread alternative network infrastructures and were unable, with traditional technologies, to match the economies of scale and the coverage of incumbent operators. It was, therefore, not economically viable for new entrants to duplicate an incumbent's metallic loop access infrastructure within a reasonable period of time: incumbent operators had rolled out their metallic local access infrastructures over significant periods of time in which they were protected by exclusive rights and had been able to cross-subsidise investment costs through monopoly rents from providing services. New entrants therefore experienced difficulties in serving end-users, which

[38] Under the ONP Directives, an operator was rebuttably presumed to have SMP when it had a market share of 25% or more in the relevant market: see ONP Interconnection Directive, para.1-011, n.36, Art.4(3) and ONP Voice Telephony Directive, para.1–011, n.35, Art.2(2)(i).

[39] On this issue, see paras.1–145 *et seq.*, 1–149 *et seq.*, 1–240, and 1–284 *et seq.*, below.

[40] Directive 97/13 of April 10, 1997 on a common framework for general authorisations and individual licences in the field of telecommunications services, O.J. 1997 L117/15 ("Licensing Directive").

[41] Directive 97/66 of December 15, 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector, O.J. 1998 L24/1 ("Telecommunications Data Protection Directive").

[42] On this regulatory Framework, see Commission Staff Working Document of October 18, 2000, "Europe's Liberalised Telecommunications Market—A Guide to the Rules of the Game"; Larouche, *Competition Law and Regulation in European Telecommunications* (Hart, 2000) and the first edition of this work, 3–71.

[43] Liberalisation Directive, para.1–007, n.23.

[44] Regulation 2887/2000 of December 18, 2000 on unbundled access to the local loop, O.J. 2000 L336/4 ("LLU Regulation"). The LLU Regulation has been repealed in 2009: see paras.1–019 and 1–028, below. On the issues of LLU and access to physical network infrastructure, see also respectively paras.1–266 and 1–268, *et seq.*, below.

slowed down the development of competition, even if full *de jure* liberalisation had been achieved in 1998.

1–014 The LLU Regulation applied only to the "traditional" copper loop of the narrowband telephone network.[45] It required operators designated as having significant market power to meet all reasonable requests from third parties that were authorised to provide communications services for unbundled access to that local loop and related facilities (including the provision of collocation facilities, cable connections and relevant information technology systems). For the purposes of the LLU Regulation, an operator was rebuttably presumed to have SMP when it had a market share of 25 per cent or more in the market for the provision of fixed public telephone networks and services.[46] Unbundled access included both "full unbundled access" and "shared access".[47] Full unbundled access was considered to give competitors access to the entire and sole use of the twisted metallic pair, whilst shared access was intended to enable competitors to offer broadband services to the consumer over the high-frequency (non-voice) part of the frequency spectrum of the copper line, whilst voice telephony continues to be offered by the incumbent operator over the low-frequency part of the same line. According to the LLU Regulation, access to the local loop was to be provided under transparent, fair and non-discriminatory conditions.[48] This included providing third parties with facilities equal to those provided for the notified operator's own services (or to associated companies) under the same conditions and time-scales.

1–015 ***Harmonisation and telecommunications terminal equipment***—The directives liberalising telecommunications networks and services co-existed with the rules liberalising telecommunica-

[45] *ibid.*, Art.2(c), which defines the "local loop" as "the physical twisted metallic pair circuit connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network". The provision of new loops with high capacity optical fibre was considered as a specific market that is developing under competitive conditions with new investments and was therefore not covered by the LLU Regulation: *ibid.*, recital 5. This issue gained considerable importance during the review of the 2002 Regulatory Framework that was launched in 2006: see para.1–029, below.

[46] The 25% market share threshold was applicable as the LLU Regulation, para.1–013, n.44, Art.2(a) explicitly referred to operators designated as having significant market power under the ONP Interconnection Directive, para.1–011, n.36, or under the ONP Voice Telephony Directive, para.1–011, n.35, both of which imposed this rebuttable 25% market share threshold. See also para.1–011, n.38, above.

[47] *ibid.*, Art.(2)(e),(f) and (g).

[48] Incumbent operators argued that they were in compliance with the non-discrimination requirements imposed by the LLU Regulation if they granted their competitors the same access conditions that they applied to their downstream business (at one extreme, at the local Digital Subscriber Loop Access Multiplexer (DSLAM) and at the other, at a national Point Of Presence (POP)). However, the Commission considered that access on such terms may impose heavy transmission costs on a new entrant seeking access (if its network does not have the same geographic coverage and topography of the incumbent's network), or, alternatively, condemn it to the simple role of a reseller if it cannot control the quality and data rate supplied to customers connected through the incumbent's network to its POP. In addition, access at the ATM (Asynchronous Transfer Mode) level, *i.e.* the software which enables the organisation of a digital signal in such a way as to allow very high speed transmission of the signal, was and remains, together with access at the DSLAM or POP (where appropriate)), necessary to allow new entrants to make full use of their network (or alternative network offerings) and to control the technical characteristics of the connection to the end-user; see also, para.1–261, n.1070, below. Under general principles of EU law, it is settled that the non-discrimination principle is not to be applied in a purely formal way, but must take into account its underlying objective, which is to open up the market. See Eighth Report from the Commission of December 3, 2002 on the Implementation of the Telecommunications Regulatory Package—European telecoms regulation and markets 2002, COM(2002) 695, 31.

tions terminal equipment.[49] Similarly, a specific harmonisation regime was also put in place regarding the practical placing on the market, the putting into service and the mutual recognition of conformity of telecommunications terminal equipment. This regime is currently contained in the RTTE Directive,[50] which is the fourth directive adopted on this subject since 1986 and constitutes the last step in the establishment of a single market in terminal equipment.[51]

1–016 Economic regulation and social regulation—Another sub-division of sector-specific regulation, distinct from that between liberalisation and harmonisation measures, is the distinction between measures of economic regulation and those constituting social regulation.[52] Economic regulation aims at the maximisation of economic efficiency by creating the conditions for competition to emerge and to continue to exist and, in the absence of competitive markets, by regulating companies with market power. Economic regulation therefore organises and promotes market entry and the management of necessary resources (*e.g.* frequencies and numbers). It also controls the (possible) anti-competitive exercise of market power on wholesale and retail markets

[49] See para.1–006, above.

[50] Directive 1999/5 of March 9, 1999 on radio equipment and telecommunications terminal equipment and the mutual regulation of their conformity, O.J. 1999 L91/10, as amended by Regulation 1882/2003 of September 29, 2003 adapting to Decision 1999/468 the provisions relating to committees which assist the Commission in the exercise of its implementing powers laid down in instruments subject to the procedure referred to in Art.251 of the EC Treaty, O.J. 2003 L284/1 and by Regulation 596/2009 of June 18, 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Decision 1999/468 with regard to the regulatory procedure with scrutiny—Adaptation to the regulatory procedure with scrutiny—Part Four, O.J. 2009 L188/14 ("RTTE Directive"). The RTTE Directive explicitly covers not only telecommunications terminal equipment, but also radio equipment, *i.e.* the product or relevant component thereof that is capable of communication by means of the emission and/or reception of radio waves utilising the spectrum allocated to terrestrial/space radiocommunications: *ibid.*, Art.2(c). Nevertheless, receive-only radio equipment intended to be used solely for the reception of sound and TV broadcasting services is excluded from the scope of the RTTE Directive: *ibid.*, Art.1(4) and Annex I(4). See also Report from the Commission of February 9, 2010, Second Progress Report on the Operation of Directive 1999/5 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity, COM(2010) 43. According to the report, market entrance for innovative radio technologies is, due to the existing process for putting in place the necessary regulatory decisions concerning spectrum use and harmonised standards, an issue that merits more in-depth investigation: *ibid.*, 8. A Commission proposal for revision of the RTTE Directive is scheduled for end 2010, *ibid.*, 3.

[51] See Directive 86/361 of July 24, 1986 on the initial stage of the mutual recognition of type-approval for telecommunications terminal equipment, O.J. 1986 L217/21. This was replaced with effect from November 6, 1992 by Directive 91/263 of April 29, 1991 on the approximation of the laws of the Member States concerning telecommunications terminal equipment, including mutual recognition of their conformity, O.J. 1991 L128/1 (as amended by Art.11 of Directive 93/68 of July 22, 1993, O.J. 1993 L220/1), the scope of which was extended to certain satellite earth station equipment pursuant to Directive 93/97 of October 29, 1993 supplementing Directive 91/263 in respect of satellite earth station equipment, O.J. 1993 L290/1. These directives were subsequently consolidated into Directive 98/13 of February 12, 1998, relating to telecommunications terminal equipment and satellite earth station equipment, including the mutual recognition of their conformity, O.J. 1998 L74/1, which was itself repealed, with effect from April 7, 2000 by the RTTE Directive, para.1–015, n.50. For a discussion of the context that led to the adoption of these successive directives, see Nikolinakos, para.1–002, n.5, 38–40 and Walden, "European Union Communications Law", in Walden (ed.), *Telecommunications Law and Regulation* (Oxford University Press, 3rd ed., 2009), 167, at 181–183.

[52] Prosser, *Law and the Regulators* (Clarendon Press, 1997), 4–6, 10–15. See also: Cawley, "Aligning ex-ante regulation with anti-trust law: some issues and problems", presented at the 2002 TPRC Conference and available at *http://tprc.si.umich.edu/tprc02/Program02.htm*, 4; i2010 High Level Group, The Challenges of Convergence, December 12, 2006, 8–9, available at *http://ec.europa.eu/information_society/eeurope/i2010/high_level_group/index_en.htm*.

by undertakings possessing significant market power, in particular in the context of transactions between market players regarding access,[53] and in particular, interconnection, that are necessary for markets to function. Social regulation is based on a desire to avoid an undesirable distribution of wealth or opportunity[54] and to ensure wide access to "essential" services. Examples include ensuring the provision of services of general economic interest through universal service obligations, or protecting the non-economic interests of consumers by reinforcing their rights and protecting their privacy. Regarding electronic communications, economic regulation is primarily designed to manage the transition to competition, its scope will therefore be progressively reduced as markets become fully competitive[55] (at least as far as regulation related to market power is concerned). To the contrary, regulation designed to meet general interest (or "social") objectives will, in principle, remain in place.[56]

1–017 Competition rules—From the very beginning of the liberalisation and harmonisation of the European telecommunications sector,[57] it was found that the effective application of the competition rules is essential to achieving the full benefits of market liberalisation required by sector-specific regulation. In particular, these rules ensure that the liberalisation process, and the development of competitive markets, is not undermined by unilateral or coordinated market conduct and concentrations that limit, or protect market players from, competition. The application of the competition rules in the electronic communications sector is reviewed in Part II.[58]

2. The Electronic Communications Regulatory Framework adopted in 2002 and subsequent developments

1–018 The 2002 Electronic Communications Regulatory Framework—The 1998 package of telecommunications liberalisation and harmonisation directives successfully created the regulatory framework for the emergence of effective competition in the telecommunications sector during the transition from monopoly to open markets and, in markets where competition was not yet effective, for proper regulation of undertakings with SMP. Building on this progress, in 2002 the European Parliament and the Council, as well as the Commission, adopted a new regulatory framework.[59] Based on the Commission's 1999 review, the 2002 Electronic Communications

[53] As used here, "access" means the making available of facilities and/or services by one undertaking to another undertaking for the purpose of providing electronic communications services.

[54] Prosser, para.1–016, n.52, 13.

[55] Communication from the Commission of November 10, 1999, "Towards a new framework for Electronic Communications infrastructure and associated services—The 1999 Communications Review", COM(1999) 539 ("1999 Review Communication"), 3.

[56] *ibid.*

[57] See 1987 Green Paper, para.1–002, n.4, positions H and I, which required the strict and continuous review of the commercial activities of incumbent operators and new entrants according to the EC Treaty's competition rules.

[58] See Chapter V (in respect of anti-competitive agreements and concerted practices and the abuse of a dominant position), Chapter VI (in respect of the state aid rules) and Chapter VII (in respect of mergers, joint ventures and strategic alliances). See also Chapter VIII, in respect of the inter-relationship between sector-specific regulation and the competition rules.

[59] On the 2002 Electronic Communications Regulatory Framework, see: Burri Nenova, *EC Electronic Communications and Competition Law* (Cameron May, 2007), 197–243; Farr and Oakley, *EU Communications Law* (Sweet & Maxwell, 2nd ed., 2006); Koenig, Bartosch, Braun and Romes (eds.), para.1–002, n.5; Maxwell (gen. ed.) *Electronic Communications: The New EU Framework* (Oceana Publications, 2002); Long (gen. ed.) and Hobday (ed.) *Global Telecommunications Law and Practice* (Sweet and Maxwell, 2001–2008, looseleaf),

Regulatory Framework replaced and overhauled the existing liberalisation and harmonisation directives, in response to market and technological developments in the converging electronic communications environment.[60] The three-pronged approach of liberalisation, harmonisation and the application of competition law was maintained and sector-specific rules continued to comprise economic regulation as well as social regulation.[61] Even if the concept of Open Network Provision was no longer used, its basic philosophy was maintained, *i.e.* to bring about competition by ensuring that competitors had open, effective and non-discriminatory access to the networks, services and facilities of operators with significant market power, who remained subject to asymmetric obligations. The Electronic Communications Regulatory Framework was also extended in scope to apply to all types of electronic communications networks and services, including terrestrial networks used for radio and television broadcasting, and cable television networks. The regulation of telecommunications terminal equipment continued, in principle, to fall outside its scope.[62] The Electronic Communications Regulatory Framework adopted in 2002 consists of a set of directives and other measures, designed towards:

(i) the adoption of competition law-based sector-specific regulation: the Regulatory Framework indeed adjusts *ex ante* regulation applicable to operators with significant market power to apply the concepts and methods of competition law, in order to better harmonise the application of sector-specific regulation and the competition rules, given the complementary nature and objectives of the two sets of rules ;

(ii) the harmonisation of national regulatory systems: the Regulatory Framework provides Member States' regulatory authorities with a set of objectives and regulatory tools that are to be applied consistently across the EU under the Commission's guidance and supervision;

(iii) the gradual phasing out of sector-specific (economic) regulation: the Regulatory Framework foresees for specific regulatory measures to be "rolled back" once specific markets have been found to have become competitive, thereafter making competition rules the sole instrument of economic regulation[63] for these markets, while social regulation could be maintained also in the longer run irrespective of the nature of competition;

(iv) ensuring flexibility: the Regulatory Framework gives NRAs a broad discretion in certain areas and also relies on soft-law instruments (such as recommendations, which

3001–3046; Nikolinakos, para.1–002, n.5, 177–533; Nihoul and Rodford, *EU Electronic Communications Law—Competition and Regulation in the European Telecommunications Market* (Oxford University Press, 2004); Scherer, "Electronic Communication Law and Policy of the European Union", in Scherer (ed.), *Telecommunication Laws in Europe—Law and Regulation of Electronic Communications in Europe* (Tottel Publishing, 5th ed., 2005), 1; Walden, para.1–015, n.51, 167.

[60] 1999 Review Communication, para.1–016, n.52, 1–3.

[61] On economic and social objectives and regulation in the context of the Electronic Communications Regulatory Framework, see Burri Nenova, para.1–018, n.59, 43–101. See also para.1–016, above.

[62] On this issue, and on the links existing between the two regulatory frameworks, see para.1–057, below.

[63] 1999 Review Communication, para.1–016, n.55, 3, 13–14 and 19. See also Burri Nenova, para.1–018, n.59, 3. Some elements of economic regulation, *e.g.* the management of resources such as spectrum, could even remain necessary after the emergence of effective competition. On the relationship between sector-specific regulation and the competition rules, see Chapter VIII and ERG Report on Transition from sector-specific regulation to competition law, ERG(09) 40 (October 2009).

may easily be adapted) to allow for adjustment of regulation in an environment of rapid and unpredictable evolutions of technologies and markets;

(v) taking account of industry convergence: the Regulatory Framework covers all electronic communications networks and services, irrespective of their means of transmission and regardless of the type of information conveyed and it also deals, as far as possible and appropriate, with markets and not with technologies. Therefore, all networks used for the transmission of radio and television programmes are now covered by the Regulatory Framework, although content continues—in principle—to be regulated separately under other EU and national rules.

1–019 Road map—The Electronic Communications Regulatory Framework comprises a series of directives and other legal measures, which were conceived and adopted as a single package. It consists of a general directive that sets out a common regulatory framework for electronic communications networks and services ("Framework Directive")[64] and lays down the foundations for the other measures, including four directives covering specific subjects:

(i) the directive on the authorisation of electronic communications networks and services ("Authorisation Directive");[65]

(ii) the directive on access to, and interconnection of, electronic communications networks and associated facilities ("Access Directive");[66]

(iii) the directive on universal service and users' rights relating to electronic communications networks and services ("Universal Service Directive");[67] and

[64] Directive 2002/21 of March 7, 2002 on a common regulatory framework for electronic communications networks and services ("Framework Directive"), O.J. 2002 L108/33. The Framework Directive was amended by Regulation 717/2007 of June 27, 2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21, O.J. 2007 L171/32 ("2007 Roaming Regulation"); by Regulation 544/2009 of June 18, 2009 amending Regulation 717/2007 and Directive 2002/21, O.J. 2009 L167/12 ("Roaming Amendment Regulation") and by Directive 2009/140 of November 25, 2009 amending Directives 2002/21, 2002/19 and 2002/20, O.J. 2009 L337/37 ("Better Regulation Directive"). The term "2002 Framework Directive" refers to the original text of the directive as adopted in 2002 and the term "Framework Directive" refers to the directive as amended in 2009 by the Roaming Amendment Regulation and the Better Regulation Directive. The term "2007 Roaming Regulation" refers to the original text of the Regulation as adopted in 2007 and the term "Roaming Regulation" refers to the Regulation as amended in 2009 by the Roaming Amendment Regulation. On the content of the category of "specific directives", see 2002 Framework Directive, Art.2(l) and Framework Directive, Art.2(1). See also *ibid.* Art.1(5) and para.1–074, n.316.

[65] Directive 2002/20 of March 7, 2002 on the authorisation of electronic communications networks and services ("Authorisation Directive"), O.J. 2002 L108/21. The Authorisation Directive was amended by the Better Regulation Directive, para.1–019, n.64. The term "2002 Authorisation Directive" refers to the original text of the directive as adopted in 2002 and the term "Authorisation Directive" refers to the directive as amended in 2009 by the Better Regulation Directive.

[66] Directive 2002/19 of March 7, 2002 on access to, and interconnection of, electronic communications networks and associated facilities ("Access Directive"), O.J. 2002 L108/7. The Access Directive was amended by the Better Regulation Directive, para.1–019, n.64. The term "2002 Access Directive" refers to the original text of the directive as adopted in 2002 and the term "Access Directive" refers to the directive as amended in 2009 by the Better Regulation Directive.

[67] Directive 2002/22 of March 7, 2002 on universal service and users' rights relating to electronic communications networks and services ("Universal Service Directive"), O.J. 2002 L108/51. The Universal Service Directive was amended by Directive 2009/136 of November 25, 2009 amending Directive 2002/22, Directive 2002/58 and Regulation 2006/2004 on cooperation between national authorities responsible for the

(iv) the directive concerning the processing of personal data and the protection of privacy in the electronic communications sector ("E-Privacy Directive"), which was subsequently amended and supplemented by the Data Retention Directive.[68]

This package also includes a decision on a regulatory framework for radio spectrum policy ("Radio Spectrum Decision").[69] As a reaction to continuing high prices payable by customers when using their mobile telephones while travelling abroad within the EU and the difficulties in addressing them by applying either existing sector-specific rules or competition law, the Roaming Regulation was adopted in 2007 and supplements the 2002 Regulatory Framework.[70] The LLU Regulation adopted in 2000, although not as such part of the 2002 Regulatory Framework, was maintained, but was repealed in 2009 by the Better Regulation Directive.[71]

1–020 The 2002 Electronic Communications Regulatory Framework was completed by the Commission directive on competition in the markets for electronic communications services ("Liberalisation Directive").[72] This consolidated (and repealed) the provisions of the Services Directive and subsequent directives that amended and expanded its scope.[73] The Liberalisation

enforcement of consumer protection laws, O.J. 2009 L337/11 ("Citizens' Rights Directive"). The term "2002 Universal Service Directive" refers to the original text of the directive as adopted in 2002 and the term "Universal Service Directive" refers to the directive as amended in 2009 by the Citizens' Rights Directive.

[68] Directive 2002/58 of July 12, 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications), O.J. 2002 L201/37 ("E-Privacy Directive"). The E-Privacy Directive was amended by Directive 2006/24 of March 15, 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58, O.J. 2006 L105/54 ("Data Retention Directive") and by the Citizens' Rights Directive, para.1–019, n.67. The term "2002 E-Privacy Directive" refers to the original text of the directive as adopted in 2002 and the term "E-Privacy Directive" refers to the directive as amended in 2006 by the Data Retention Directive and in 2009 by the Citizens' Rights Directive.

[69] Decision 676/2002 of March 7, 2002 on a regulatory framework for radio spectrum policy in the European Community ("Radio Spectrum Decision"), O.J. 2002 L108/1. The scope of this Decision is broader than electronic communications and encompasses other sectors, such as transport and research and development: see para.1–201, below.

[70] Roaming Regulation, para.1–019, n.64. The 2007 Roaming Regulation, para.1–019, n.64 was amended in 2009 by the Roaming Amendment Regulation, para.1–019, n.64. As a consequence of the amendment, the new title of the Roaming Regulation is "Regulation 717/2007 of June 27, 2007 on roaming on public mobile communications networks within the Community". The 2007 Roaming Regulation was adopted on the basis of Art.95 [new 114]. The validity of this legal basis has been challenged in litigation in the English High Court and a preliminary reference has been made to Court of Justice: Case C-58/08, *Vodafone et al v Secretary of State for Business, Enterprise and Regulatory Reform*, O.J. 2008 C107/17. Advocate General Poiares Maduro has suggested the Regulation was properly adopted on the basis of Art.114 [ex 95]; Opinion of October 1, 2009. See para.1–349, n.1430, below.

[71] Better Regulation Directive, para.1–019, n.64, Art.4. Recital 15 of the LLU Regulation, para.1–013, n.44, stated that the LLU Regulation complemented the 1998 Regulatory Framework and that the new regulatory framework for electronic communications— *i.e.* the 2002 Regulatory Framework in preparation at the time of adoption of the LLU Regulation—should include appropriate provisions to replace it. Recital 43 of the 2002 Framework Directive, para.1–019, n.64, therefore required the Commission to monitor the transition from the 1998 Regulatory Framework to the Electronic Communications Regulatory Framework and, in particular, suggested that the Commission could, at an appropriate time, bring forward a proposal to repeal the LLU Regulation: see also para.1–028, below.

[72] See para.1–007, n.23, above.

[73] See paras.1–006, n.14, and 1–007, above.

Directive retained only the provisions of these directives that were considered to be still relevant, which have been adapted to technological developments and aligned, where appropriate, to the provisions of the 2002 harmonisation directives.

1–021 Accompanying measures—In addition, as part of the process of implementing the provisions of the 2002 Electronic Communications Regulatory Package by the Member States, the Commission issued an impressive series of accompanying measures, *i.e.* decisions, guidelines and recommendations.[74] These measures complemented the framework package that is composed of directives (which leave to Member States the choice of the form and methods to be used in order to achieve the intended result[75]) and provide guidance to the NRAs in their application of the rules of the Regulatory Framework. The main accompanying measures for the purposes of implementing the Regulatory Framework's rules on regulating undertakings with significant market power are:

(i) the Commission's guidelines on market analysis and the assessment of significant market power ("SMP Guidelines");[76] and
(ii) the Commission's 2003 recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation ("First Relevant Markets Recommendation"), which was replaced by a further recommendation adopted in 2007 ("Second Relevant Markets Recommendation").[77]

1–022 Implementation measures adopted by the Commission also addressed institutional issues, most significantly the creation of the European Regulators Group ("ERG"),[78] which was comprised of NRAs (the Commission being represented at all meetings), with the aim of developing the internal market through a consistent application of the Regulatory Framework in all Member States. Other Commission measures concern technical issues, such as numbering[79] and

[74] A comprehensive list of applicable measures may be found in Appendix 5.

[75] Article 288 [ex 249].

[76] Commission Guidelines of July 11, 2002 on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, O.J. 2002 C165/6 ("SMP Guidelines").

[77] Recommendation 2003/311 of February 11, 2003 on the relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21 on a common regulatory framework for electronic communications networks and services, O.J. 2003 L114/45 ("First Relevant Markets Recommendation"), replaced by Recommendation 2007/879 of December 17, 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21 on a common regulatory framework for electronic communications networks and services, O.J. 2007 L344/65 ("Second Relevant Markets Recommendation").

[78] Decision 2002/627 of July 29, 2002 establishing the European Regulators Group for Electronic Communications Networks and Services, O.J. 2002 L200/38 ("ERG Decision"), as amended by Decision 2004/641 of September 14, 2004 amending Decision 2002/627, O.J. 2004 L293/30 and by Decision 2007/804 of December 6, 2007 amending Decision 2002/627, O.J. 2007 L323/43. See also Decision 2002/622 of July 26, 2002 establishing a Radio Spectrum Policy Group, O.J. 2002 L198/49 ("RSPG Decision"), as amended by Decision 2009/978 of December 16, 2009 amending Decision 2002/622, O.J. 2009 L336/50.

[79] Decision 2007/116 of February 15, 2007 on reserving the national numbering range beginning with '116' for harmonised numbers for harmonised services of social value, O.J. 2007 L49/30 ("116 Decision"), as amended by Decision 2007/698 of October 29, 2007 amending Decision 2007/116 as regards the introduction of additional reserved numbers beginning with '116', O.J. 2007 L284/31 and by Decision 2009/884 of November 30, 2009 amending Decision 2007/116 as regards the introduction of additional reserved numbers beginning with '116', O.J. 2009 L317/46.

standardisation.[80] These measures are complemented by harmonisation recommendations, aimed at fostering a consistent application of the provisions of the Electronic Communications Regulatory Framework in the Member States.[81] Finally, a number of technical harmonisation measures have also been adopted by the Commission, based on the Radio Spectrum Decision.[82] It is obvious that one of the intentions of the 2002 Regulatory Framework, *i.e.* to simplify and reduce the number of existing legal measures from 20 to six,[83] has not really been achieved.

1–023 Timeframe for national implementation measures—Member States had until July 24, 2003 to transpose into national law the Framework, Authorisation, Access and Universal Service Directives. Those national measures had then to be applied from July 25, 2003. Only five of the then fifteen Member States were able to meet fully the July 24, 2003 deadline.[84] The E-Privacy Directive had to be implemented before October 31, 2003. No single application date was foreseen for this Directive.[85] With regard to the Liberalisation Directive, Member States were obliged to supply to the Commission not later than July 24, 2003 information to enable it to verify their compliance with the directive. This allowed, in particular, Member States to demonstrate that they had implemented the new subject matters introduced by the Liberalisation Directive (as compared

[80] Decision 2007/176 of December 11, 2006 establishing a list of standards and/or specifications for electronic communications networks, services and associated facilities and services and replacing all previous versions, O.J. 2007 L86/11 ("Commission's List of Standards"), as amended by Decision 2008/286 of March 17, 2008 amending Decision 2007/176 as regards the list of standards and/or specifications for electronic communications networks, services and associated facilities and services, O.J. 2008 L93/24.

[81] *e.g.* Recommendation 2005/698 of September 19, 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications, O.J. 2005 L266/64 ("Accounting Separation Recommendation"); Recommendation 2009/396 of May 7, 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, O.J. 2009 L124/67 ("Termination Rates Recommendation").

[82] Para.1–019, n.69. See para.1–207, *et seq.*, below.

[83] 1999 Review Communication, para.1–016, n.55, 16–18.

[84] Denmark, Finland, Ireland, Sweden and the United Kingdom (except for Gibraltar).

[85] Regarding the five directives, a number of proceedings were launched by the Commission for non-notification of transposition measures (see a summary table of these proceedings established by the Commission, available at *http://ec.europa.eu/information_society/policy/ecomm/implementation_enforcement/infringement/index_en.htm)*. These proceedings led to findings of infringement by the Court of Justice in respect of Belgium (Case C-240/04, *Commission v Belgium*, judgment of March 10, 2005, unpublished, concerning the Framework, Authorisation, Access and Universal Service Directives, and Case C-376/04, *Commission v Belgium*, judgment of April 28, 2005, unpublished, concerning the E-Privacy Directive), Greece (Case C-250/04, *Commission v Greece*, judgment of December 15, 2005, unpublished, concerning the Access Directive; Case C-252/04, *Commission v Greece*, judgment of December 15, 2005, unpublished, concerning the Universal Service Directive; Case C-253/04, *Commission v Greece*, judgment of December 15, 2005, unpublished, concerning the Framework Directive; Case C-254/04, *Commission v Greece*, judgment of December 15, 2005, unpublished, concerning the Authorisation Directive and Case C-475/04, *Commission v Greece* [2006] E.C.R. I-69, Summary pub., concerning the E-Privacy Directive), France (Case C-31/05, *Commission v France*, judgment of July 14, 2005, unpublished, concerning the Framework, Authorisation and Access Directives) and Luxembourg (Case C-236/04, *Commission v Luxembourg*, judgment of March 10, 2005, unpublished, concerning the Framework, Authorisation, Access and Universal Service Directives and Case C-375/04, *Commission v Luxembourg*, judgment of April 28, 2005, unpublished, concerning the E-Privacy Directive). The Data Retention Directive had specific transposition deadlines: September 15, 2007 with the possibility for Member States to postpone until March 15, 2009 the application of the Directive to the retention of communications data relating to internet access, internet telephony and internet email: Data Retention Directive, para.1–019, n.68, Art.15. Ireland, Greece and Sweden have been found to have failed to transpose the Date Retention Directive within the prescribed period: Case C-202/09, *Commission v Ireland*, judgment of November 26, 2009, not yet reported; Case C-211/09, *Commission v Greece*, judgment of November 26, 2009, not yet reported and Case C-185/09, *Commission v Sweden*, judgment of February 4, 2010, not yet reported (see also para.1–444 below).

to the former Services Directive), *e.g.* concerning the scope of networks covered, which has been extended in order to include terrestrial radiocommunications and cable networks used for the transmission of radio and television programmes.

1–024 The 2006 Review of the Electronic Communications Regulatory Framework and the legislative measures adopted in 2009—The 2002 Framework, Authorisation, Access, Universal Service and E-Privacy Directives contained review clauses requiring the Commission to report, at the latest, in 2006 on their functioning. This "2006 Review" did not cover the Liberalisation Directive,[86] the Data Retention Directive[87] or the Radio Spectrum Decision, although the management of radio frequencies turned out to be one of the key issues raised by the Commission's reform proposals. The 2006 Review was one of the measures designed to promote, in the context of the Commission's strategic framework for the "i2010–European Information Society 2010" ("i2010 Action Plan"), a single European information space offering affordable and secure high bandwidth communications, rich and diverse content and digital services.[88] According to the Commission's i2010 Communication, the 2006 Review was intended to allow the Commission to examine the principles and modes of implementation of the 2002 Electronic Communications Regulatory Framework, especially where bottlenecks were delaying the provision of faster, more innovative and competitive broadband services.[89]

1–025 ***The 2006 Review Communication***—Following a call for input on the forthcoming review launched in November 2005, the Commission published in June 2006 a communication on the 2006 Review.[90] In general, its assessment of the 2002 Electronic Communications Regulatory Framework, and of the results delivered, was positive. According to the Commission,[91] effective competition was improving and, even if the majority of incumbent operators considered that *ex ante* regulation hindered new investment, competition had stimulated investments. The Commission was convinced that the principles and flexible tools in the 2002 Regulatory Framework, when applied fully, effectively and consistently, offered the most appropriate means of encouraging

[86] See para.1–135, below.

[87] The Commission is required to evaluate the application of the Data Retention Directive and its impact on economic operators and consumers by September 15, 2010: Data Retention Directive, para.1–019, n.68, Art.14.

[88] Communication from the Commission of June 1, 2005 on i2010—A European Information Society for growth and employment, COM(2005) 229 ("i2010 Communication"), 4–6. The i2010 Agenda is a key element of the renewed Lisbon Strategy launched by the 2005 Spring European Council: *ibid.*, 3 and 11–12. See also Communication from President Barroso in agreement with Vice-President Verheugen of February 2, 2005 to the Spring European Council, "Working together for growth and jobs—A new start for the Lisbon Strategy", COM(2005) 24, 22, and Presidency Conclusions of March 23, 2005, Brussels European Council, March 22/23, 2005, "Relaunching the Lisbon Strategy: A partnership for Growth and Employment", 7619/1/05 Rev 1, point 18. See also European Commission, *Europe's Digital Competitiveness Report – Main achievements of the i2010 strategy 2005–2009*, (European Communities, 2009), available at *http://ec.europa.eu/information_society/eeurope/i2010/key_documents/index_en.htm#EDCR.*

[89] i-2010 Communication, para.1–024, n.88, 5.

[90] Respectively Working Document from DG Information Society and Media of November 25, 2005 on the forthcoming review of the EU regulatory framework for electronic communications and services including review of the Recommendation on relevant markets ("Commission 2005 Call for Input"), available at *http://ec.europa.eu/information_society/policy/ecomm/doc/library/public_consult/review/comments/511_25_call_for_input_comp.pdf* (responses are available at *http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/review/index_en.htm)* and Communication from the Commission of June 29, 2006 on the Review of the EU Regulatory Framework for electronic communications networks and services, COM(2006) 334 ("2006 Review Communication"). See also related Commission Staff Working Documents of June 29, 2006, Proposed Changes, SEC(2006) 816 and Impact Assessment, SEC(2006) 817.

[91] 2006 Review Communication, para.1–025, n.90, 4–5.

investment, innovation and market development. The 2002 Regulatory Framework had also shown itself to be capable of addressing new technologies, such as Voice over Internet Protocol (VoIP) and had the capacity to accommodate further technological and market evolutions. Nevertheless, the Commission identified improvements that appeared to be necessary in a number of areas. Among those, improvements in spectrum management were deemed to be important in order to allow this basic resource of electronic communications to achieve its full potential in contributing to offering innovative, diverse and affordable services and to strengthening the competitiveness of European information technology and communications industries.[92] Other improvements considered necessary included the reduction of the procedural burden associated with the regulation of non-competitive markets, improving the mechanisms foreseen in order to consolidate the internal market (*e.g.* by allowing the Commission to veto inappropriate obligations, or "remedies", imposed by NRAs on undertakings with SMP, which had risked inconsistency in regulatory approaches throughout the EU due to the NRAs' broad discretion in that matter) and the repeal of provisions or measures which had become obsolete (such as the LLU Regulation). Strengthening consumers' and users' rights, and guaranteeing the security of electronic communications, were other issues on which the Commission found that the 2002 Regulatory Framework could be improved.[93]

1–026 ***The 2007 legislative proposals***—Building on the 2006 Review Communication, and after extensive consultation,[94] in November 2007 the Commission published a report on the outcome of the 2006 Review.[95] This report was accompanied by three legislative proposals, respectively for the Better Regulation Directive (amending the 2002 Framework, Authorisation and Access Directives),[96] for the Citizens' Rights Directive (amending the 2002 Universal Service and E-Privacy Directives, as well as Regulation 2006/2004 on consumer protection cooperation[97])[98] and for the

[92] *ibid.*, 6–8.

[93] *ibid.*, 8–11.

[94] Responses to the Consultation on the 2006 Review Communication are available at *http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/review_2/index_en.htm*.

[95] Communication from the Commission of November 13, 2007, "Report on the outcome of the Review of the EU regulatory framework for electronic communications networks and services in accordance with Directive 2002/21 and Summary of the 2007 Reform Proposals", COM(2007) 696 ("2007 Reform Proposals Communication"). See also related Commission Staff Working Document of November 13, 2007, Impact Assessment—Accompanying document to the Commission's regulatory proposals {(COM(2007) 697, COM(2007) 698, COM(2007) 699, SEC(2007) 1473}, SEC(2007) 1472 and Commission Staff Working Document of November 13, 2007, Summary of the Impact Assessment—Accompanying document to the Commission's regulatory proposals {(COM(2007) 697, COM(2007) 698, COM(2007) 699, SEC(2007) 1472}, SEC(2007) 1473.

[96] Commission Proposal of November 13, 2007 for a Directive amending Directives 2002/21, 2002/19 and 2002/20, COM(2007) 697 ("Commission Proposal for a Better Regulation Directive").

[97] Regulation 2006/2004 of October 27, 2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws (the "Regulation on consumer protection cooperation"), O.J. 2004 L364/1 as amended by Directive 2005/29 of May 11, 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Directive 84/450, Directives 97/7, 98/27 and 2002/65 and Regulation 2006/2004 ("Unfair Commercial Practices Directive"), O.J. 2005 L149/22; by Directive 2007/65 of December 11, 2007 amending Directive 89/552 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities, O.J. 2007 L332/27 and by the Citizens' Rights Directive, para.1–019, n.67.

[98] Commission Proposal of November 13, 2007 for a Directive amending Directive 2002/22, Directive 2002/58 and Regulation 2006/2004, COM(2007) 698 ("Commission Proposal for a Citizens' Rights Directive").

EECMA Regulation.[99] The latter proposal foresaw the establishment of a European Electronic Communications Market Authority ("EECMA"), which, during the legislative process, became the Body of European Regulators for Electronic Communications ("BEREC").[100] These proposals reflected the three pillars of action identified in the 2007 Reform Proposals Communication:[101] better regulation for competitive electronic communications;[102] completing the single market in electronic communications;[103] and connecting with citizens by improving users' rights and consumer protection (*e.g.* through greater transparency of information from service providers to consumers, by strengthening the rights of users with disabilities by facilitating their access to electronic communications services and by strengthening the security of networks and services and user privacy).

1–027 ***Review of the list of markets relevant for*** ex ante ***regulation***—One important element of the "better regulation" concept is the willingness of the Commission to reduce the application of *ex ante* regulation where market developments and the advent of effective competition allow it to do so. In this context, and in parallel with the re-examination of the 2002 Regulatory Framework, the Commission also reviewed the First Relevant Markets Recommendation adopted in 2003 and, in 2007, replaced it with the Second Relevant Markets Recommendation.[104] The number of product and service markets in which the imposition of sector-specific regulatory obligations are presumed to be justified[105] was reduced from 18 foreseen in the First Relevant Markets Recommendation to seven.[106] This progress in establishing effective competition in the electronic communications sector means, in principle,[107] already a significant phasing out of sector-specific regulation, with the

[99] Commission Proposal of November 13, 2007 for a Regulation establishing the European Electronic Communications Market Authority, COM(2007) 699 ("Commission Proposal for an EECMA Regulation").

[100] See para.1–099 *et seq.*, below.

[101] 2007 Reform Proposals Communication, para.1–026, n.95, 3–13.

[102] *ibid.*, 4–8. The proposals included refocusing market regulation on remaining market competition problems, *e.g.* by introducing functional separation as a remedy, on the one hand, and by simplifying access to spectrum and by removal of unnecessary restrictions on spectrum use on the other hand.

[103] According to the 2007 Reform Proposals Communication, *ibid.*, 3, 8–10, coherence and consistency of the application of the EU rules in the internal market could be strengthened and artificial segmentation of markets on a national basis could be overcome by establishing an independent European authority having as its principal responsibilities the reinforcement of this coherence and consistency (*e.g.* by making better use of the combined expertise of national regulators composing it than was the case in ERG and by serving as an entry point for firms seeking to acquire rights of use for spectrum) and by reinforcing the Commission's oversight on remedies through a veto power. on remedies proposed by NRAs. The Commission should also be able to adopt binding harmonisation measures in an increased number of areas, *e.g.* costing methodologies and consumer protection. The consistent application of the EU internal market rules would also be improved by strengthening NRAs' independence and enforcement powers.

[104] See para.1–021, n.77, above, and Chapter IV, below.

[105] *i.e.* markets where national and EU competition law remedies are not sufficient to address the competition problems present on those markets: Framework Directive, para.1–019, n.64, Art.15(1) and 2002 Framework Directive, recital 27. *De facto*, these are the markets on which undertakings possessing significant market power are likely to be active.

[106] Second Relevant Markets Recommendation, para.1–021, n.77, Annex.

[107] According to national circumstances, and subject to the Commission's scrutiny under the procedures laid down in Arts. 7 and 7a of the Framework Directive, NRAs may impose sector-specific *ex ante* regulation on operators with SMP on other markets than those listed in the Commission's recommendations on relevant product and service markets: see para.1–116, *et seq.*, below. Therefore, even though a market may not be specified in the Second Relevant Markets Recommendation, it is nevertheless possible that, in a specific Member State, in certain circumstances, and under the supervision of the Commission, *ex ante* regulation may be imposed on an undertaking with SMP on such a market.

withdrawal of the obligations formerly imposed by NRAs on the 11 markets not contained in the Second Relevant Markets Recommendation.[108]

1–028 ***The outcome of the 2006 Review***—The 2006 Review led to the adoption of new legislation to amend and update the 2002 Regulatory Framework.[109] On November 25, 2009 the Better Regulation Directive[110] (which also repealed the LLU Regulation[111]), the Citizens' Rights Directive[112] and the BEREC Regulation (creating the Body of European Regulators for Electronic Communications)[113] were formally adopted. The Citizens' Rights Directive and the BEREC Regulation were adopted by the European Parliament and Council in second reading; a third reading "conciliation" procedure was required for the Better Regulation Directive, due to

[108] *e.g.* the markets for publicly available local, national and international telephone services provided at a fixed location for residential and non-residential customers.

[109] See Commission Press Releases, *Telecoms: European Commission welcomes EU Ministers' approval of broad reform to bring about a competitive single telecoms market*, IP/09/1800 (November 20, 2009), *European Commission welcomes European Parliament approval of sweeping reforms to strengthen competition and consumer rights on Europe's telecoms markets*, IP/09/1812 (November 24, 2009) and *New Telecoms Rules enter into force*, IP/09/1966 (December 18, 2009). See also Renda, "The review of the EU telecoms framework: a tale of the anti-commons", in Cave *et al* (eds.), *Monitoring EU Telecoms Policy 2009* (Network for Electronic Research on Electronic Communications—NEREC, 2009), 9; and Stevens, *Toezicht in de elektronische-communicatiesector; Constitutionele en institutionele aspecten van de wijzigende rol van de overheid* (Larcier, 2010), 78–99. For a collection of applicable regulatory texts, which includes a consolidated version of the 2002 Electronic Communications Regulatory Framework as amended in 2009, see European Commission, *Regulatory framework for electronic communications in the European Union – Situation in December 2009* (March 31, 2010), available at *http://ec.europa.eu/information_society/policy/ecomm/doc/library/regframeforec_dec2009.pdf*. A consolidated version of the 2002 Electronic Communications Directives may also be found at *http://eur-lex.europa.eu/RECH_consolidated.do*.

[110] See para.1–019, n.64. See also Commission Declaration on Net Neutrality, attached to the Better Regulation Directive, O.J. 2009 L337/69 and O.J. 2009 C308/2. A number of statements were made by various Member States and the Commission in the Council: the Netherlands (on its abstention from the vote of the Better Regulation Directive); Austria (and 12 other Member States) on the Citizens' Rights and ePrivacy Directives (regarding the application of Art.5(3) of the ePrivacy Directive to the use of cookies); Austria (and 15 other Member States) on the Better Regulation and Framework Directives (regarding the powers of the Commission under Art.19 of the Framework Directive to adopt harmonisation decisions); and the Commission (on Art.19 of the Framework Directive): see Council Document 16481/09 ADD 1 (December 7, 2009), points 22–25, available at *http://register.consilium.europa.eu*.

[111] Better Regulation Directive, para 1–019, n.64, Art.4. The LLU Regulation, para.1–013, n.44, was rendered obsolete by the application of the 2002 Electronic Communications Regulatory Framework, which also covered local loop unbundling, through the application of the rules dealing with SMP operators, pursuant to Art.12 of the 2002 Access Directive, para.1–019, n.66, as the First Relevant Markets Recommendation, para.1–021, n.77, listed, as market 11, "wholesale unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services". Therefore, once all NRAs had completed at least once their market analyses of this market, the LLU Regulation became unnecessary: see Better Regulation Directive, para.1–019, n.64, recital 74. See also para.1–019, n.71, above.

[112] See para.1–019, n.67, above.

[113] Regulation 1211/2009 of November 25, 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office, O.J. 2009 L337/1 ("BEREC Regulation"). BEREC is not a genuine European regulatory authority: it is a forum for cooperation among NRAs and between NRAs and the Commission and will provide opinions, expertise and assistance to NRAs and to the Commission, the European Parliament and the Council: *ibid.*, recitals 6–7 and Art.2. As BEREC replaces the ERG, the ERG Decision, para.1–022, n.78, should be repealed in the near future: BEREC Regulation, *ibid.*, recital 6. On BEREC, see para.1–099 *et seq.*, below.

disagreements over the so-called "internet freedom provision"[114] proposed by the European Parliament.[115] The Better Regulation and Citizens' Rights Directives entered into force on December 19, 2009 and the BEREC Regulation on January 7, 2010.[116] Member States must transpose the provisions of the Better Regulation and Citizens' Rights Directives into national legislation by May 25, 2011. In addition, the Better Regulation Directive foresees a single application date (May 26, 2011) for the national transposition measures; such a date is not specified in respect of the Citizens' Rights Directive.[117] Therefore, Member States may apply the measures transposing the Citizens' Rights Directive once they have adopted them. To the contrary, a consequence of the single application date foreseen by the Better Regulation Directive is, for example, that the revised EU Consultation Procedure under Articles 7 and 7a of the Framework Directive (introduced by the Better Regulation Directive)[118] cannot come into operation until May 26, 2011. The procedure indeed needs national transposition measures in order to organise its application by NRAs. The Lisbon Treaty has reinforced the powers of the Commission when opening infringement procedures against a Member State which does not transpose a directive on timely basis. These changes may make it more likely that the new directives are transposed in a timely manner.[119]

[114] Framework Directive, para.1–019, n.64, Art.1(3); see Commission Press Release, *Agreement on EU telecoms reform paves way for stronger consumer rights, an open internet, a single European telecoms market and high-speed internet connections for all citizens*, MEMO/09/491 (November 5, 2009).

[115] The European Parliament's proposal, made in the first reading of the Commission Proposal for a Better Regulation Directive (para.1–026, n.96), was known as "Amendment 138": European Parliament legislative resolution of September 24, 2008 on the proposal for a directive amending directives 2002/21, 2002/19 and 2002/20 (COM(2007)0697—C6–0427/2007—2007/0247(COD)), P6_TA-PROV(2008)0449 and Art.8(4)(h): *ibid.*, O.J. 2010 C8 E/291. Also Commission Amended Proposal of November 6, 2008 for a directive amending directives 2002/21, 2002/19 and 2002/20, COM(2008) 724 ("Commission Amended Proposal for a Better Regulation Directive") 15. See also Commission Press Release, *Commission Position on Amendment 138 adopted by the European Parliament in plenary vote on 24 September*, MEMO/08/681 (November 7, 2008); European Parliament Press Release, *No agreement on reform of telecom legislation*, 20090505IPR55085 (May 6, 2009); Commission Press Release, *European Parliament Approves EU Telecoms Reform but Adds 1 Amendment: Commission Reaction*, MEMO/09/219 (May 6, 2009); European Parliament Press Release (background), *FAQs on internet access safeguards and the telecoms package*, 20091105BKG63887 (November 5, 2009); Council Press Release, *Parliament—Council Conciliation Committee. Agreement on the better regulation directive in telecoms package*, 15538/09 (Presse 318) (November 6, 2009); and European Parliament Press Release, *Telecoms package conciliation: MEPs and Council representatives agree on internet access safeguards*, 20091105IPR63793 (November 10, 2009). During the legislative procedure, the provision was moved from Art.8(4)(h), as initially foreseen, to become Art.1(3a) of the Framework Directive, para.1–019, n.64. See also para.1–029, below and para.1–055, below.

[116] Respectively, Better Regulation Directive, para.1–019, n.64, Art.6; Citizens' Rights Directive, para.1–019, n.67, Art.5 and BEREC Regulation, para.1–028, n.113, Art.26. According to Art.25 of the latter, the Commission must publish a report on the working of BEREC and the Office within three years of the effective start of its operations, respectively. The Better Regulation and Citizens' Rights Directives do not contain specific evaluation clauses, but the directives adopted in 2002 contain provisions requiring regular reviews by the Commission of their functioning and these remain in effect: 2002 Framework Directive, para.1–019, n.64, Art.25; 2002 Authorisation Directive, para.1–019, n.65, Art.16; 2002 Access Directive, para.1–019, n.66, Art.17; 2002 Universal Service Directive, para.1–019, n.67, Art.36(3); E-Privacy Directive, para.1–019, n.68, Art.18.

[117] Respectively, Better Regulation Directive, para.1–019, n.64, Art.5; Citizens' Rights Directive, para.1–019, n.67, Art.4.

[118] On these procedures, see para.1–116 *et seq.*, below.

[119] Art.260(3). See paras.1–033 and 1–069, below.

1–029 The legislative process saw very controversial debates. Among the main areas of dispute between the European institutions were:

- the organisation of a flexible and harmonised radio spectrum policy that would ensure the most efficient use of this resource and the best allocation of the "digital dividend", *i.e.* the spectrum that will be released by the switchover from analogue to digital broadcasting as a result of the superior transmission efficiency of digital technology. A reformed policy that would ensure more efficient spectrum use would also increase the percentage of the population which can have access to a wireless broadband network connection in rural regions, where building a new fibre infrastructure is too costly;[120]
- the improvement of the consistent application of the Electronic Communications Regulatory Framework throughout the EU and the Commission's role and powers in this context (*e.g.* whether it should have a veto power over remedies imposed by NRAs on undertakings with SMP, and the scope of its discretion to adopt binding harmonisation measures), as well as the creation, status, structure and roles of a possible European regulatory authority;[121]
- the regulation of next generation access ("NGA") networks, *i.e.* optical fibre-based networks that would be rolled-out as far as a street cabinet or even the end-user's premises, which enables bitrates several times higher than those currently available on traditional copper wire access networks, encouraging both competition and investments;[122]
- providing NRAs with the best possible "toolkit" to regulate undertakings with SMP, including whether to permit functional separation (*i.e.* to require a vertically integrated operator with SMP to place activities related to the wholesale provision of relevant access products into an independently operating business unit and to separate them from its other business[123]) and the organisation of this last resort remedy; and

[120] Commission MEMO/09/219 (May 6, 2009), para.1–028, n.115, 3. On the use of spectrum and on spectrum policy, see paras.1–161, *et seq.* and 1–186 *et seq.*, below.

[121] The BEREC Regulation, para.1–028, n.113, creates BEREC. The Commission's original proposal was to create the European Electronic Communications Market Authority ("EECMA"): Commission Proposal for an EECMA Regulation, para.1–026, n.99. At the first reading stage, the European Parliament proposed the Body of European Regulators in Telecom ("BERT"): European Parliament legislative resolution of September 24, 2008 on the proposal for a regulation establishing the European Electronic Communications Market Authority O.J. 2010 C8 E/337 ("Parliament First Reading on an EECMA Regulation"). The Commission later proposed the creation of the Body of European Telecoms Regulators: Commission Amended Proposal for a regulation establishing the EECMA, COM(2008) 720 (November 5, 2008) ("Commission Amended Proposal for an EECMA Regulation"), whilst the Council's Common Position proposed the creation of the Group of European Regulators in Telecoms ("GERT"): Council Common Position 14/2009 of February 16, 2009, adopted with a view to the adoption of a Regulation establishing the Group of European Regulators in Telecoms (GERT) O.J. 2009 C75 E/67. Each modification resulted in a modification of the authority's status, competences and organisation. On BEREC, see para.1–099 *et seq.*, below. On the Commission's powers under the EU Consultation Procedure see para.1–116 *et seq.*, below; on harmonisation measures, see para.1–125, *et seq.*, below.

[122] NGA networks are required to deliver high-definition content (such as high definition television) and interactive applications. On NGA networks, see in particular section E, below.

[123] Under functional separation, access to the network would be provided by the separated business unit on the same terms and conditions to all client undertakings, including other downstream business units within its

- the recognition of the right to internet access and the protection of fundamental rights (*e.g.* freedom of expression and of access to information), whilst also protecting intellectual property rights against repeated infringement through illegal online downloads and file-sharing. The issues of the degree to which access to the internet should, and could, be protected by EU law, and related procedural and judicial safeguards for internet users, caused considerable controversy between the European Parliament and the Council, nearly provoked the failure of the entire legislative reform package and forced the Better Regulation Directive into a third reading.[124]

1–030 Other important elements of the reform package are the enhanced independence of NRAs, an increase in the rights and protection of consumers (*e.g.* requirements to provide better information on the services received, enhanced and quicker fixed and mobile number portability, better access to emergency services, improved protection against data breaches and spam), new guarantees for an open and more "neutral" internet and improved recognition of the special needs of disabled end-users.[125]

1–031 From "i2010" to "Europe 2020" and the "European Digital Agenda"—The 2006 Review was one of the elements of the Commission's i2010 strategy to create a single European information space.[126] In August 2009, the Commission launched a public consultation on post-i2010 and on a new strategy for the European Information Society from 2010 to 2015, once the i2010 strategy was to be completed.[127] In December 2009 the Council discussed a post i2010 strategy and has called on the Commission to develop, in close cooperation with the Member States, a new "Digital Agenda for Europe", which should include a proposal for a European high-speed broadband strategy to reach 100 per cent high-speed broadband internet coverage by 2013 throughout the EU. The Council has also invited Member States to develop strategies for next generation networks, in order to facilitate the efficient roll out of infrastructures for very high-speed access to support the development of high speed mobile and wireless services throughout the EU and to implement the revised Electronic Communications Regulatory Framework as quickly as possible.[128] As for the Commission, it consulted publicly, at the end of 2009 on an "EU 2020

corporate group. In this way, functional separation should lead to effective competition, as the separated wholesale business would no longer have incentives to discriminate in favour (or against) a specific service provider relying on its access network. On functional separation, see paras.1–284 and 1–285, below.

[124] See Commission MEMO/09/941 (November 5, 2009), para.1–028, n.114. See para.1–028, above. On the "internet freedom provision", see paras.1–055 and 1–056, below.

[125] On the most prominent reforms resulting from the 2006 Review, see Commission Press Release, *EU Telecoms Reform: 12 reforms to pave way for stronger consumer rights, an open internet, a single European telecoms market and high-speed internet connections for all citizens*, MEMO/09/568 (December 18, 2009).

[126] See para.1–024, above.

[127] See *http://ec.europa.eu/information_society/eeurope/i2010/pc_post-i2010/index_en.htm*, especially, Commission Questionnaire, "Post-i2010: priorities for new strategy for European information society (2010–2015)".

[128] Council Conclusions of December 18, 2009 on "Post i-2010 Strategy—towards an open, green and competitive knowledge society", 2987th Council meeting, Transport, Telecommunication and Energy, December 17/18, 2009, points 6(a)-(b) and 7(a)-(d), available at *http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/trans/111999.pdf*; see also Council Press Release on the 2987th Council meeting, Transport, Telecommunications and Energy, December 17/18, 2009, 17456/09 (Presse 373). However, the implementation date of May 26, 2011 for the Better Regulation Directive is nevertheless to be respected: see para.1–028, above.

Strategy" to build on the achievements of the Lisbon Strategy, focusing on entrenching recovery from the economic crisis of the last years and helping to prevent a similar one.[129] In March 2010 the Commission presented its "Europe 2020 agenda" for a smart, sustainable and inclusive growth in Europe. The Commission sets three key, interlocking, priorities: (i) developing an economy based on knowledge and innovation ("smart growth"), (ii) promoting a more resource-efficient, greener and more competitive economy ("sustainable growth") and (iii) fostering a high-employment economy delivering social and territorial cohesion ("inclusive growth"). The Commission defined seven "flagship initiatives" in order to catalyse progress under each priority theme. One of these initiatives, linked to the "smart growth" priority, is the "digital agenda for Europe" which should speed up the roll-out of high-speed internet (through substantial investment in fibre networks and wireless broadband) and the development of interoperable applications, bringing the benefits of a digital single market to households and firms. In this way, all citizens should have broadband access by 2013, while by 2020 an access for all to very high internet speeds (30 Mbps or above) should be reached and with 50 per cent or more of European households subscribing to internet connections above 100 Mbps. Making the flagship initiatives a reality will be a joint effort of EU-level and Member States.[130] Currently, the Commission is preparing a broadband strategy to meet the targets of the Europe 2020 agenda.

3. Remedies for Member States' infringements of Directives

1–032 Infringement proceedings by the Commission under Articles 258 and 260—The liberalisation and harmonisation directives[131] adopted by the European institutions bind the Member States as to the result to be achieved, but leave to them the choice of the form and methods to achieve that objective.[132] National legislation and other measures to implement the directives must be taken by national authorities by the deadline specified in each directive. Although the details of the national legislation may vary, the end result must be the same in all Member States. It is the Commission's role to ensure that directives are implemented both on time and properly and Articles 258 and 260 [ex 226 and 228] give it the power to enforce the Member States' obligations

[129] Commission Press Release, *Commission launches consultation on EU 2020: a new strategy to make the EU a smarter, greener social market*, IP/09/1807 (November 24, 2009). See also Commission Working Document of November 24, 2009, "Consultation on the Future 'EU 2020' Strategy", COM(2009)647.

[130] Commission Communication of March 3, 2010 on EUROPE 2020—A strategy for smart, sustainable and inclusive growth, COM(2010) 2020 ("Communication on Europe 2020"), 5–6, 10, 14, 32. See also, European Commission Press Release, *Europe 2020: Commission proposes new economic strategy in Europe*, IP/10/225 (March 3, 2010).

[131] Although the core of the Electronic Communications Regulatory Framework is constituted of directives, it also comprises some regulations, including the Roaming Regulation, para.1–019, n.64, and the BEREC Regulation, para.1–028, n.113. A regulation is binding in its entirety and directly applicable in all Member States: Art. 288 [ex 249]. Regulations are "directly applicable" in the sense that they are part of the national legal system without the need for transformation or adoption by separate national legal measures. As they are immediately part of the domestic law of Member States without the need for transposition, there is no reason why, so long as their provisions are sufficiently clear, precise, and relevant to the situation of an individual litigant, they should not be capable of being relied upon and enforced by individuals before their national courts: see Craig and De Búrca, para.1–010, n.30, 83–85 and 278. The changes introduced by the Lisbon Treaty to the Commission's enforcement powers in infringement procedures under Arts.258 and 260 [ex 226 and 228] are also applicable to regulations: see paras.1–033 and 1–034, below.

[132] Art.288 [ex 249]; see generally, Craig and De Búrca, para.1–010, n.30, 85 for developments on Art.249 EC, still relevant *mutatis mutandis*.

before the Court of Justice. However, these proceedings can last several years, which undermines substantially their effectiveness. Nevertheless, the Commission has brought numerous cases before the Court of Justice for failure to implement correctly directives adopted in the electronic communications sector.[133]

1–033 Enforcement before the Court of Justice—In the event that a Member State (or any public body, including an NRA) fails to fully implement a directive into national law in a timely or in an appropriate fashion, the Commission, on its own initiative[134] or following a complaint by an injured party can initiate proceedings against the Member State under Article 258 [ex 226].[135] Under the Lisbon Treaty, the Commission may request the imposition of a lump sum and/or penalty payment for the non-communication of measures transposing a directive adopted under a legislative procedure, without first having already obtained a judgment finding the Member State to have failed to meet its obligations under EU law. This new power for the Commission might

[133] As at March 18, 2010, some 120 infringement procedures for incorrect implementation had been opened by the Commission (of which 89 have subsequently been closed) regarding the 2002 Electronic Communications Regulatory Framework. The Commission has brought infringement procedures against all 27 Member States. Regularly updated tables providing information on infringement procedures launched by the Commission regarding the Electronic Communications Regulatory Framework, addressing both procedures opened for non-communication of transposition measures (see para.1–023, n.85, above), and procedures for incorrect implementation, are available at *http://ec.europa.eu/information_society/policy/ecomm/implementation_enforcement/infringement/index_en.htm.*

[134] In the electronic communications sector, the Commission closely monitors the implementation of directives by the Member States. It has issued a number of reports assessing the level of implementation of the liberalisation and harmonisation directives by Member States, most recently the Communication from the Commission of March 24, 2009, "Progress report on the single European electronic communications market 2008 (14th Report)", COM(2009) 140 ("14th Implementation Report"). See also, Commission Staff Working Document, accompanying the Communication from the Commission, Progress report on the single European electronic communications market 2008 (14th Report) (COM(2009) 140), Volume 1, Parts 1 and 2 (SEC(2009) 376/2 of July 30, 2009), and Volume 2 (SEC(2009) 376 of March 24, 2009) ("Accompanying Document to the 14th Implementation Report"). Member States are generally also required to notify implementing measures to the Commission, which assists the latter in its monitoring, *e.g.* Art.28(3) of the Framework Directive requires Member States to communicate to the Commission the laws, regulations and administrative provisions adopted in the field of the Directive. Art.5(1) of the Better Regulation Directive, para.1–019, n.64 and Art.4(1) of the Citizens' Rights Directive, para.1–019, n.67 require: Member States to communicate the text of the transposition measures. Notification obligations also apply to NRAs, independently of the Framework Directive's Arts. 7 and 7a (see para.1–116 *et seq.*, below): NRAs must notify to the Commission the names of operators deemed to have significant market power on the relevant wholesale markets and the related obligations imposed upon them (Access Directive, para.1–019, n.66, Art.16(2)) and the names of undertakings designated as having universal service obligations, as well as the obligations imposed upon them (Universal Service Directive, para.1–019, n.67, Art.36(1)–(2)).

[135] For a comprehensive review of the procedure under Arts. 226–228 EC [now 258–260], see Craig and De Búrca, para.1–010, n.30, 428–459. For a review of the case law of the European Courts in relation to infringement proceedings for failure to implement telecommunications and electronic communications directives properly, see the Commission's *Guide to the Case Law of the Court of Justice of the European Union in the field of Telecommunications* (January 2010), available at: *http://ec.europa.eu/information_society/policy/ecomm/implementation_enforcement/infringement/index_en.htm.* The Guide also includes preliminary rulings (under Art.267 [ex 234]) and actions for annulment (under Art.263 [ex 230]). Summary updates of more recent case law may be found on the same website. Communications Committee Working Document of February 4, 2010 on Impact of the Lisbon Treaty on infringement proceedings, COCOM10–08.

speed up transposition by Member States.[136] Infringement proceedings under Article 258 involve several phases. First, whether acting on its own initiative or after having received a complaint, the Commission will consult informally with the Member State concerned and attempt to bring the infringement to an end. This informal stage, which may last from a few months to several years, results in a large proportion of infringements being terminated by Member States without further steps being taken by the Commission: the Member State in question will then adopt the measures necessary to implement properly the relevant directive. If the matter is not resolved at the informal stage, the Commission will send to the Member State a letter of formal notice setting out its case against the Member State. If the Member State does still not comply with its obligations, the Commission will send a "reasoned opinion" to the Member State, establishing the legal arguments on which the Commission is relying to demonstrate that the Member State has failed to comply with its obligations. As a last resort, the Commission will refer the matter to the Court of Justice, which in appropriate cases will eventually adopt a judgment establishing the infringement and requiring the Member State to take the necessary measures to comply with the judgment.[137]

1–034 Further enforcement in the event of continued non-compliance—In the case of a continued failure by a Member State to comply with its Treaty obligations, even after a judgment of the Court of Justice, the Commission may refer the matter back to the Court of Justice pursuant to Article 260(2) [ex 228(2)]. The Lisbon Treaty has accelerated the procedure, as the Commission, in order to bring the matter before the Court of Justice, must go through only one administrative phase instead of the two (*i.e.* letter of formal notice and reasoned opinion) that had previously been required.[138] The Court of Justice may impose a fine upon the Member State in question: a lump sum and/or a periodic penalty payment for each day of continuing default until the Member State complies with its obligations.[139] As at March 18, 2010 four procedures had been opened by the Commission under Article 260(2) [ex 228(2)]. Two cases concerned the obligation to ensure that caller location information is available throughout the Member State's territory to authorities handling emergencies for all calls made to the single European emergency call number "112", including from mobile phones. Italy and Lithuania have both failed to comply with judgments of the Court of Justice finding that they had failed to implement the relevant provisions of the 2002 Universal Service Directive.[140] On May 14, 2009 and on June 25, 2009, respectively, the Commission sent letters of formal notice to the two Member States.[141] On November 20, 2009, it sent a

[136] Art.260(3) [ex 228(3)]. See paras.1–028, above and 1–069, below. See also House of Lords, European Union Committee, *The Treaty of Lisbon: An impact statement—Volume I*, Report (HL Paper 62–I, 2008), 76–77; and Priollaud and Siritzky, para.1–010, n.31, 344. Formerly, the Court could impose a financial penalty only if a Member State had failed to comply with a previous Court judgment finding that the Member State had failed to comply with its EU law obligations. This enforcement procedure is not applicable to the liberalisation directives, adopted under Art.106(3) [ex 86(3)], as these are not adopted under a "legislative procedure" as foreseen by Arts. 260(3) and 289(3).

[137] Art.260(1) [ex 228(1)].

[138] Art.260(2). See also House of Lords, para.1–033, n.136, 76, and Priollaud and Siritzky, para.1–010, n.31, 343–344.

[139] Case C-369/07, *Commission v Greece*, judgment of July 7, 2009, not yet reported: lump sum of €2 million and periodic penalty payment of €16,000 per day, payable until Greece complies with the earlier judgment of the Court of Justice.

[140] Case C-539/07, *Commission v Italy*, [2009] E.C.R. I-1, summary pub, and Case C-274/07, *Commission v Lithuania* [2008] E.C.R. I-7117. Both cases concerned Art.26(3) of the 2002 Universal Service Directive, para.1–019, n.67, now Art.26(5) of the Universal Service Directive, *ibid.*

[141] Commission Press Releases, *Telecoms: Italy urged to take action on 112 caller location to comply with Court judgment*, IP/09/774 (May 14, 2009) and *Telecoms: European Commission calls on Lithuania to provide*

reasoned opinion to Italy and closed the case against Lithuania.[142] A third case concerns Portugal. In March 2009, the Court of Justice found that Portugal had failed to fulfil its obligations under the Electronic Communications Regulatory Framework to make available to all end-users at least one comprehensive telephone directory and at least one comprehensive directory enquiry service.[143] On June 25, 2009, the Commission formally notified Portugal that it considered that Portugal had still not complied with the Court of Justice's judgment.[144] The fourth case involves Poland: on January 22, 2009, the Court of Justice decided that Poland had not correctly transposed the definition of a "subscriber" of publicly available electronic communications services by limiting the concept to persons having a written contract.[145] This deprived some groups of subscribers, *e.g.* pre-paid users, of a number of rights given by the Electronic Communications Regulatory Framework. As Poland had not obeyed to the Court of Justice's judgment by modifying its definition, a letter of formal notice was sent to Poland on October 29, 2009.[146]

1–035 Review by the Commission under Article 106(3)—Article 106(1) [ex 86(1)] obliges Member States to neither enact nor maintain measures that are contrary to the Treaties and which benefit public undertakings or undertakings with exclusive or special rights. Article 106(3) [ex 86(3)] gives the Commission the power to address decisions or directives to Member States to ensure the application of Article 106(1).[147] Proceedings under Article 106(3) can be initiated by the Commission either following a complaint or on its own initiative. The liberalisation directives in the electronic communications sector were adopted under Article 106(3) [ex 86(3)].[148] In contrast to proceedings under Article 258 [ex–226], proceedings under Article 106(3) are a much more expedient enforcement tool, as the Commission alone is involved in the process, can act directly and adopts the final decision or directive. However, the Commission can only adopt a decision under Article 106(3) if the Member State's conduct constitutes or results in an infringement of another Treaty provision, normally Article 102 [ex 82], which prohibits the abuse of a dominant position by an operator, usually the former incumbent operator.[149] As a result, a failure to implement, either at all or properly, an electronic communications directive would not ordinarily, as such, give the Commission a cause of action under Article 106(3). However, in some instances, this could be the case, for example should the conditions of authorisations or of individual rights of use favour the incumbent operator to the detriment of new entrants, thereby infringing both the non-discrimination requirement embodied in the Authorisation Directive and placing the incumbent in

caller location for 112 emergency calls, IP/09/1010 (June 25, 2009). On the issue of caller location information for emergency calls, see paras.1–337 and 1–338, below.

[142] Commission Press Release, *112: European Commission sends Italy final warning and closes legal action against Lithuania*, IP/09/1784 (November 20, 2009).

[143] Case C-458/07, *Commission v Portugal*, [2003] E.C.R. I-29, summary pub. The judgment concerns Arts.5(1), 5 (2), 25(1) and 25(3) of the 2002 Universal Service Directive, para.1–019, n.67, the content of which is largely maintained by the Citizens' Rights Directive. On directories, see para.1–296 and 1–330 *et seq.*, below.

[144] Commission Press Release, *Telecoms: Commission urges Portugal to speed up delivery of phone directories and directory enquiries to comply with Court judgment*, IP/09/1007 (June 25, 2009).

[145] Case C-492/07, *Commission v Poland*, [2009] E.C.R. I–8, summary pub.

[146] Commission Press Release, *Telecoms: Commission urges Poland to comply with the judgment of the European Court of Justice on subscribers' rights*, IP/09/1615 (October 29, 2009).

[147] The conditions of application of Art.106 in competition cases are discussed in more detail in para.5–111 *et seq.*

[148] In the EC Treaty as originally adopted, before the revisions introduced by the Treaties of Amsterdam and Lisbon, this provision was numbered Art. 90(3). See para.1–005 *et seq.*, above, and para.1–135 *et seq.*, below.

[149] See para.5–039 *et seq.*

a position where it would infringe Article 102.[150] In such circumstances, the Commission could adopt a decision under Article 106(3)finding an infringement by the Member State in question of Article 106(1) in conjunction with the EU's Treaty's competition rules (Articles 101 [ex 81] and/or 102),[151] the rules on the freedom to provide cross-border services (Article 56 [ex 49]) or the freedom of establishment (Article 49 [ex 43]).[152] When a Member State fails to implement a decision adopted under Article 106(3), the Commission may bring the matter before the Court of Justice under Article 258.[153] Nevertheless, the Commission is not obliged to adopt decisions, or to initiate proceedings, under Article 106, as individual complainants cannot require the Commission to do so.[154]

1–036 Enforcement of directives by private parties—Although directives are addressed to Member States, individuals may rely on provisions of directives that have direct effect, *i.e.* domestic courts have a duty to enforce the rights that private parties derive from those provisions.[155]

1–037 ***Conditions for direct effect***—Individuals may rely on directives in actions against Member States (or emanations thereof): if (i) the deadline for implementation has passed and the Member State has failed to implement the directive or has implemented it in an incorrect manner;[156] (ii) the provisions are sufficiently clear and precise for being applied directly by a national court (which may vary as between different provisions of a directive);[157] and (iii) the relevant provisions leave little or no discretionary power to the Member State in their implementation.[158] The principle of direct effect applies against Member States, but directives may be capable of having direct effect against publicly owned electronic communications operators on the basis that

[150] See also Liberalisation Directive, para.1–007, n.23, Art.4, discussed in para.1–143, below.

[151] See, *e.g.*, Decision 95/489 of October 4, 1995 concerning the conditions imposed on the second operator of GSM radiotelephony services in Italy, O.J. 1995 L280/49 ("Omnitel") and Decision 97/181 of December 18, 1996 concerning the conditions imposed on the second operator of GSM radiotelephony services in Spain, O.J. 1997 L76/19 ("Second GSM licence in Spain"): see para.5–124 *et seq.*, below.

[152] See, for instance, the Commission's decision in Case 35.760, *VTM*, Commission Decision 97/606 of June 26, 1997, O.J. 1997 L244/18, upheld by Court of First Instance in Case T-266/97, *Vlaamse Televisie Maatschappij v Commission*, [1999] E.C.R. II-2329: see para.2–013, below.

[153] Case 226/87, *Commission v Greece* [1988] E.C.R. 3611.

[154] Case C-141/02 P, *Commission v max-mobil* [2005] E.C.R. I-1283, para.69; see para.5–126, below.

[155] Case 41/74, *Van Duyn* [1974] E.C.R. 1337, para.12. On this issue in general, see also Craig and De Búrca, para.1–010, n.30, 279–300. For instance, the provisions of the second sentence of Art.6(1), Art.7(1) and Art.8(1) of the RTTE Directive (para.1–015, n.50) have direct effect and confer on individuals rights which may be relied upon before national courts even though the Directive itself has not been formally implemented in national law within the period prescribed: Joined Cases C-388/00 and C-429/00, *Radiosistemi* [2002] E.C.R. I-5845, paras.66, 77). See also Joined Cases C-152/07 to C-154/07, *Arcor and others* [2008] E.C.R. I-5959, para.44, in which the Court of Justice found that Art.4c of the Services Directive, para.1–006, n.14 as introduced by the Full Competition Directive, para.1–007, n.19 and Art.12(7) of the ONP Interconnection Directive, para.1–011, n.36, produced direct effect and could be relied on directly before a national court by individuals to challenge a decision of an NRA.

[156] Case C-141/00, *Ambulanter Pflegedienst Kügler* [2002] E.C.R. I-6833, paras.51–61. See also Case C-462/99, *Connect Austria* [2003] E.C.R. I-5197, paras.40–42. Nevertheless, directives may even have an effect before the end of the transposition period as, although the Member States are not obliged to implement a directive before the end of the period prescribed for transposition, during that period they must refrain from taking any measures that are liable to seriously compromise the result prescribed by the directive: Case C-129/96, *Inter-Environnement Wallonie* [1997] E.C.R. I-7411, paras.41–50.

[157] Case 148/78, *Pubblico Ministero v Ratti* [1979] E.C.R. 1629, para.23.

[158] *Van Duyn*, para.1–036, n.155, paras. 1, 6 and 8. Nevertheless, in later cases the Court of Justice has found that the existence of discretion would not necessarily prevent a directive from being relied upon by an individual: see Craig and De Búrca, para.1–010, n.29, 281.

they are "emanations" or "organs" of the state, and this may remain the case in certain circumstances even after they have been privatised.[159] As any action by the Commission against a Member State is likely to take a considerable time, private action before national courts may bring more immediate results, given the availability of interlocutory proceedings at national level, although proceedings could be lengthened by the need for a preliminary ruling from the Court of Justice under Article 267 [ex 234], regardless of whether the directive has direct effect.

1–038 ***Enforcement of unimplemented directives against private parties***—Directives can only have "vertical" direct effects: they do not have "horizontal" direct effects. This means that, once their implementation date has passed, they may be relied on against the state and any "emanation" of it (including state-owned operators and NRAs), but not against private individuals and undertakings.[160] Nevertheless, national courts should seek to interpret national law in accordance with the provisions of a directive, so far as this is possible, even against private undertakings.[161]

1–039 ***Damages***—Injured parties can also seek damages against Member States before national courts for failure to implement a directive in question if this denies them the rights afforded by the directive and thereby causes them loss.[162]

1–040 ***Sector-specific appeal***—Finally, Article 4 of the Framework Directive offers to any user or undertaking providing electronic communications networks and/or services who is affected by a decision of an NRA the right of appeal against the decision to an appeal body that is independent of the parties involved.[163]

B. Scope, objectives and principles of the Electronic Communications Regulatory Framework

1. Scope of the Electronic Communications Regulatory Framework

1–041 From telecommunications to electronic communications—At the worldwide level of the International Telecommunication Union,[164] the concept of "telecommunication" is defined in a

[159] Case C-188/89, *Foster v British Gas* [1990] E.C.R. I-3313, paras.18–20. "However, it is not entirely clear what kind of control the state must have over a body in order for it to be one which, constitutionally speaking, represents the power of the state": see Craig and De Búrca, para.1–010, n.30, 286.

[160] Case 152/84, *Marshall v Southampton and South-West Hampshire AHA (Teaching)* [1986] E.C.R. 723, para.48. Despite arguments that directives should have "horizontal" direct effect, the Court of Justice has confirmed that they do not: Case C-91/92, *Faccini Dori* [1994] E.C.R. I-3325, para.48.

[161] Case C-106/89, *Marleasing SA* [1990] E.C.R. I-4135, paras.6–9, 13.

[162] See Joined Cases C-6/90 and C-9/90, *Francovich and Bonifaci v Italy* [1991] E.C.R. I-5357, paras.29–37. A Member State may be liable to third parties in connection with the implementation of a directive where: (i) the directive in question was intended to confer rights on individuals; (ii) the breach was sufficiently serious; and (iii) there was a direct causal link between the breach of the obligation to implement and the damage sustained by the injured party. Joined Cases C-46/93 and 48/93, *Brasserie du Pêcheur v Germany* [1996] E.C.R. I-1029, para.51; Joined Cases C-178–179/94 and 188–190/94, *Dillenkofer and others v Germany* [1996] E.C.R. 4845, paras.21–24. See also Tridimas, *The General Principles of EU Law* (Oxford University Press, 2nd ed., 2006), 503–504. See generally Craig and De Búrca, para.1–010, n.30, 328–341.

[163] See paras.1–094 and 1–095, below. See also: Authorisation Directive, para.1–019, n.65, Art.10(7); Liberalisation Directive, para.1–007, n.23, Art.2(5); and Framework Directive, para.1–019, n.64, Art.11(3), regarding the specific issue of rights of way.

[164] The International Telecommunication Union ("ITU") is a specialised agency of the United Nations, dealing with information and communication technology issues. In March 2010, it comprised 191 Member

broad way as "any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems".[165] This definition of telecommunications both takes account of future developments and includes the transmission of sound radio and television signals.[166] Compared with this broad international definition, neither the liberalisation[167] nor the harmonisation[168] directives that comprised the 1998 European Telecommunications Regulatory Framework covered the transmission of broadcasting signals. This was because telecommunications, information technology and broadcasting sectors were, at that time, not yet converged and definitional boundaries were established between telecommunications and broadcasting. Therefore, in this pre-convergence environment, specific networks were associated with the delivery of specific types of messages or signals, such that different types of network were covered by specific regulatory frameworks respectively.

1–042 ***The process of convergence***—The 1999 Review Communication noted that, with the technological convergence of the telecommunications, information technology and broadcasting sectors, this restricted view and the limited scope of the 1998 Telecommunications Regulatory Framework could not be maintained.[169] The Commission therefore considered that it was necessary to adopt a "horizontal approach", in which all transmission networks and services would be covered by a single regulatory framework. Convergence indeed brought with it a technical "de-specialisation" of networks and created the possibility of "multiple play", in the sense that different types of services, such as telephony and broadcasting, could be delivered or accessed over networks which had previously, by reason of technological constraints, been used only for specific services. For example, for technical reasons, a cable TV network could not traditionally be used for the bi-directional transmission of speech, whilst the capacity of a classical telephone network did not allow the transmission of television programmes. Currently, as a result of technological developments, different types of networks may be used to transmit different types of services, including television, voice telephony and internet access.

1–043 ***A new regulatory regime that takes account of technological convergence***—With the

States and 566 Sector Members, as well as 153 Associates. Its principal role is to regulate and organise the development of telecommunications worldwide. It has three sectors, corresponding to its main tasks: standardisation (ITU-T), spectrum management (ITU-R) and development (ITU-D). For information on the ITU, see *http://www.itu.int/net/home/index.aspx*.

[165] Annex to the Constitution of the International Telecommunication Union, No.1012, in International Telecommunication Union, *Collection of the basic texts of the International Telecommunication Union adopted by the Plenipotentiary Conference* (2007) ("Annex CS").

[166] The ITU defines "radiocommunication" as "telecommunication by means of radiowaves": Annex CS, para.1–041, n.165, No.1009. It also defines "broadcasting service" as "a radiocommunication service in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, television transmissions or other types of transmission": *ibid.*, No.1010.

[167] With the exception of the Satellite Directive, para.1–006, n.13, recital A7, according to which the provision of satellite network services for the conveyance of radio and television programmes was a telecommunications service and therefore fell under the provisions of that Directive: see para.1–007, above and paras.1–136 and 137, below.

[168] Art.2(4) of the ONP Framework Directive, para.1–011, n.32, defined "telecommunications services" as "services whose provision consists wholly or partly in the transmission and routing of signals on a telecommunications network ... with the exception of radio broadcasting and television".

[169] 1999 Review Communication, para.1–016, n.55, 1–2, 4, 6. See also Communication from the Commission of December 3, 1997, "Green Paper on the convergence of the telecommunications, media and information technology sectors, and the implications for regulation", COM(97) 623, Chapter V ("1997 Green Paper").

impact of convergence, it was, from a regulatory point of view, no longer appropriate to have different regulatory frameworks for different kinds of transmission networks. Therefore, since 2002 the Electronic Communications Regulatory Framework has adopted a horizontal approach. Taking convergence into account, sector-specific regulation (and the definitions it uses) applies to any network or service by which signals can be transmitted, regardless of the type of information conveyed. This approach is an application of the principle of the technological neutrality of regulation.[170] With regard to the concepts used, the adoption of the new horizontal approach is clearly expressed by the directives since their adoption in 2002 through the use of the concepts of "electronic communications services" and "electronic communications networks", rather than the previously used terms "telecommunications services" and "telecommunications networks".[171] Nevertheless, regarding its scope, the EU concept of "electronic communications" may be considered as equivalent to the ITU's concept of "telecommunications".

1–044 A horizontal approach covering all electronic communications networks and services—The Framework Directive establishes a harmonised framework for the regulation of: (i) electronic communications networks; (ii) electronic communications services; (iii) associated facilities; and (iv) associated services.[172] The four key concepts for the delineation of the scope of the Electronic Communications Regulatory Framework, and for its application, are defined by Article 2 of the Framework Directive.[173] These definitions cover all transmission services provided over satellite and terrestrial networks, including both fixed and wireless networks, the public switched telephone network, data networks that use the internet protocol (IP), cable television networks, and other radio and television broadcast networks. The aim of the Regulatory Framework is to create a level playing field on which no network operator has a competitive advantage over others due to differences in regulation. Some of the key definitions contained in the 2002 Framework Directive have been amended by the Better Regulation Directive.[174] The need for further clarification of some of the basic definitions may also be noted.[175]

1–045 ***Electronic communications network***—An electronic communications network is defined by Article 2(a) of the Framework Directive, as amended by the Better Regulation Directive,[176] as:

> "transmission systems and, where applicable, switching or routing equipment and other resources, including network elements which are not active, which permit the conveyance of signals by wire, radio, optical or other electromagnetic means, including satellite networks, fixed (circuit- and packet-switched, including Internet) and mobile terrestrial networks, electricity cable systems, to the extent that they are used for the purpose of transmitting signals, networks

[170] Framework Directive, para.1–019, n.64, Art.8(1), second sub-para. See para.1–068, below.

[171] Liberalisation Directive, para.1–007, n.23, recital 7.

[172] Framework Directive, para.1–019, n.64, Art.1.

[173] The Authorisation, Access, Universal Service, E-Privacy and Data Retention Directives, as well as the Roaming Regulation, apply, in addition to specific definitions relevant to their specific subject-matter, the definitions contained in the Framework Directive.

[174] These definitions were updated (electronic communications network and associated facilities), clarified (public communications network) or added (associated services) in the context of the 2006 Review: Better Regulation Directive, para.1–019, n.64, Art.1(2). See also Commission Proposal for a Better Regulation Directive, para.1–026, n.96, 25–26.

[175] This issue is, with regard to the Data Retention Directive in particular, addressed in para.1–430, below.

[176] Concerning the definition of the concept under the Liberalisation Directive, see paras.1–135 and 1–136, below.

> used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed."

An electronic communications network is, accordingly, a set of systems, equipment and active and passive elements permitting the transmission of signals, regardless of the content that these signals carry. All types of electronic communications network are covered by the Regulatory Framework, irrespective of the technology used, provided that electromagnetic means are involved. The list of examples contained in the definition is indicative and the definition is flexible to take account of future technological developments. The Better Regulation Directive updated the definition, by adding that the resources which are part of a network include "network elements which are not active",[177] *e.g.* dark, unlit fibre.[178] The inclusion of passive elements in the definition of electronic communications network ensures that the definition is not too narrow. A narrow definition could have limited the scope of the Regulatory Framework, which in turn could have affected NRAs' ability to include such passive elements directly in their definition of a relevant market[179] and to impose directly-related *ex ante* obligations on these elements. Active elements, *e.g.* switches, routers and Digital Subscriber Line Access Multiplexers (DSLAM), require electricity in order to function and to send/receive signals on the network. By contrast, in this context it may be considered that passive elements can function without themselves being connected to electricity; therefore, a dark fibre is a passive element as light will be conveyed through it without the fibre itself needing electricity.

1–046 ***Electronic communications services***—According to Article 2(c) of the Framework Directive, an electronic communications service is:

> "a service normally provided for remuneration which consists wholly or mainly in the conveyance of signals on electronic communications networks, including telecommunications services and transmission services in networks used for broadcasting, but exclude services providing, or exercising editorial control over, content transmitted using electronic communications networks and services; it does not include information society services... which do not consist wholly or mainly in the conveyance of signals on electronic communications networks."

The main function of an electronic communications service consists in the conveyance of signals on

[177] Better Regulation Directive, para.1–019, n.64, Art.1(2)(a).

[178] According to BEREC, "dark fibre is a wholesale passive access product (unlit optical fibre) and can be used by the operators to connect its (equipments in) core networks to the access points": BEREC, Report on Next Generation Access—Implementation Issues and Wholesale Products, BoR (10) 08, March 2010 ("BEREC Report on NGA"), 50, available on the documentation section of the ERG website (*http://www.erg.eu.int/documents/berec_docs/index_en.htm*). Dark fibre may be defined as "optical fibre already deployed (e.g. in ducts), but not in use, *i.e.* without any electronics/optoelectronics operating at both ends": *ibid.*, 66. Under the definition of electronic communications network used in the Framework Directive, dark fibre is, as such, not an electronic communications network on its own: Maxwell, para.1–018, n.59, booklet I.0, 11. This is because dark fibre does not, on its own, permit the conveyance of signals. For a discussion of this question under the Liberalisation Directive, see para.1–137, below.

[179] *In casu*, market 4 (wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location): Annex to the Second Relevant Markets Recommendation, para.1–021, n.77.

electronic communications networks. Other elements, *e.g.* cryptography, may be included in the service, but they may not be predominant in the service offer. The definition also provides an open list of examples and allows for technological evolution. Voice over Internet Protocol (VoIP) has indeed to be considered as an electronic communications service.[180]

1–047 According to its definition, an electronic communications service is normally provided for remuneration. It is, therefore, considered as a service within the meaning of EU rules on the free movement of services.[181] The service must be commercial by nature, while the concept of "remuneration" should be understood in a broad sense. According to the Court of Justice, the essential characteristic of remuneration lies in the fact that it constitutes consideration for the service in question.[182] The remuneration does not have to come from the recipient of the service, as long as there is remuneration from some party. In this way, an activity financed by advertisements can be considered as a service provided for remuneration.

1–048 Furthermore, as an electronic communications service consists wholly or mainly in the conveyance of signals, services which do not focus on transmission are excluded from its scope, including:

(i) services providing, or exercising editorial control over, content; and
(ii) certain Information Society services, *i.e.* services normally provided for remuneration, at a distance, by electronic means and at the individual request of the recipient.[183] These services span a wide range of economic activities which take place online and are provided on request. Most of these services fall outside the scope of the Framework Directive, because they do not consist wholly or mainly in the conveyance of signals on electronic communications networks, *e.g.* web-based content services. However, some Information Society services, such as the provision of internet access, are specifically stated to fall within the scope of the Electronic Communications Regulatory Framework,[184] as well as within the scope of the Information Society Directives.

These boundary lines do not allow for either a "once and for all" delimitation of the services that

[180] See paras.1–137, 1–159, and 1–317, below.

[181] Art.57 [ex 50].

[182] Case 263/86, *Belgium v Humbel* [1988] E.C.R. 5365, para.17. On the concepts of "service" and "remuneration", see Craig and De Búrca, para.1–010, n.30, 818–823.

[183] Directive 98/34 of June 22, 1998, laying down a procedure for the provision of information in the field of technical standards and regulations and of rules of Information Society services, O.J. 1998, L204/37, as amended by Directive 98/48 of July 20, 1998, amending Directive 98/34, O.J. 1998 L217/18 and by Directive 2006/96 of November 20, 2006, adapting certain Directives in the field of free movement of goods, by reason of the accession of Bulgaria and Romania, O.J. 2006 L363/81 ("Transparency Directive"), Art.1(2).

[184] 2002 Framework Directive, para.1–019, n.64, recital 10 and Directive 2000/31 of June 8, 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce), O.J. 2000 L178/1 ("E-Commerce Directive"), recital 18. See also Maxwell, para.1–018, n.59, Booklet I.1, 5. Some authors appear to give a more restrictive interpretation of Art.2(c) of the Framework Directive and of recital 10 to the 2002 Framework Directive, and seem to consider that a service falls into one category or the other, but not in both at the same time: Valcke and Dommering, "Directive 2000/31/EC—'e-Commerce' Directive", in Castendyck, Dommering and Scheuer (eds.), *European Media Law* (Wolters Kluwer, 2008), 1079 at 1087–1088. In their view, a service that consists wholly or mainly in the transmission of data via electronic communications networks would therefore not be an Information Society service and not fall under the related regulation. However, as soon as a communications service is offered in a

are excluded from the scope of the Electronic Communications Regulatory Framework or a clear-cut separation of the scope of the applicability of the various legislative measures. It is therefore up to the NRAs to decide, on a case-by-case basis, whether or not a given service is an electronic communications service or a content-related service.[185]

1–049 It is not necessary that the undertaking itself conveys signals in order for it to be considered as a provider of an electronic communications service. For example, the resale to end-users of capacities bought from a third party who actually provides the conveyance is sufficient. Resellers are, therefore, considered to be providers of electronic communications services and may consequently take advantage of rights provided under the Regulatory Framework, *e.g.* access rights.

1–050 ***Public communications networks and electronic communications services available to the public***—The provision of electronic communications services available to the public implies the use of a public communications network and the application of specific regulatory conditions, *e.g.* with regard to the authorisation, access or data retention regimes. A public communications network is defined as "an electronic communications network used wholly or mainly for the provision of electronic communications services available to the public which support the transfer of information between network termination points".[186] This definition does not provide clarification of the circumstances in which a network or service is considered to be available to the public and the Framework Directive also does not contain a specific definition of the concept.[187] Nevertheless, some assistance may be provided by the Citizens' Rights Directive, which states that the E-Privacy Directive "focuses on public electronic communications networks and services, and does not apply to closed user groups and corporate networks".[188] Therefore, closed user groups and corporate networks and services are not public. This reasoning is consistent with that applied under the Services Directive, as explained by the Commission's 1995 Communication on the Status of Telecommunications Competition,[189] according to which the term "for the public" should be understood in its common sense, *i.e.* a service for the public is a service available to all the members of the public on the same basis.[190] The Commission has also stated that corporate networks and/or closed user groups are examples of services which should not be considered to be "for the public".[191]

bundle with an information society service, the regulatory frameworks applicable to both electronic communications and electronic commerce would apply. Indeed, the Electronic Communications Regulatory Framework gives NRAs the powers to regulate uncompetitive markets in situations where content services are bundled with electronic communications services: 2006 Review Communication, para.1–025, n.90, 4.

[185] Scherer, para.1–018, n.59, 1, at 21–22.

[186] Framework Directive, para.1–019, n.64, Art.2(d). See also Liberalisation Directive, para.1–007, n.23, Art.1(2). For a definition of "network termination point" see Framework Directive, para.1–019, n.64, Art.2(da) and para.1–057, n.240, below.

[187] The definition of "publicly available electronic communications services" in Art.1(4) of the Liberalisation Directive, para.1–007, n.23, *i.e.* "electronic communications services available to the public", does not provide further clarification.

[188] Citizens' Rights Directive, para.1–019, n.67, recital 55.

[189] Para.1–006, n.15.

[190] *ibid.*, 5.

[191] *ibid.*, 5 and 7–8. According to this Communication, "corporate networks" are "those networks generally established by a single organisation encompassing distinct legal entities, such as a company and its subsidiaries or its branches in other Member States" and "closed user groups" are "those entities, not necessarily bound by economic links, but which can be identified as being part of a group on the basis of a lasting professional relationship among themselves, or with another entity of the group, and whose internal communications needs result from the common interest underlying this relationship. In general, the link between the members of the

1–051 ***Associated facilities***—In addition to electronic communications networks, the Electronic Communications Regulatory Framework also applies to "associated facilities",[192] which are defined as: "those associated services, physical infrastructures and other facilities or elements associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service or have the potential to do so, and include, inter alia, buildings or entries to buildings, building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes, and cabinets".[193] Associated facilities are not, as such, either electronic communications networks or electronic communications services. However, they enable or support the provision of services by these means, as they are necessary for the establishment, operation and maintenance of an electronic communications network. The Framework Directive provides an indicative list of examples of such civil engineering infrastructure,[194] including notably buildings or entries to buildings, building wiring, antennae, towers, ducts, conduits and cabinets.[195] These are also passive elements in the sense that they do not require electricity in order to function.[196] Passive elements can therefore, in principle, be either part of an electronic communications network (network elements) or associated facilities. The practical importance of the concept of associated facilities (and of the passive elements contained within this category) is that it defines the scope of Article 12 of the Framework Directive. Article 12 gives NRAs the power to impose obligations upon undertakings regarding the sharing of associated facilities (and co-location), without the need to conduct first a market analysis in order to identify whether the undertaking concerned has significant market power. These obligations are "symmetric obligations", as they can be imposed upon every undertaking regardless of its market power.[197] This possibility is of particular importance for easing the roll-out of new, fibre-based, access networks (*i.e.* next generation access networks, or "NGAs") to street cabinets or even to individual homes.[198] However, the imposition

group is a common business activity", *e.g.* funds transfer for the banking industry or reservations for airlines: *ibid.*, 8. See also Larouche, para.1–012, n.42, 11–14.

[192] As such, associated facilities are only relevant for the application of the Framework and Access Directives. The Access Directive especially addresses the making available of facilities and/or services to another undertaking for the purpose of providing electronic communications services, including when they are used for the delivery of Information Society services or broadcast content services.

[193] Framework Directive, para.1–019, n.64, Art.2(e).

[194] Regarding NGA, see Commission Draft Recommendation of June 12, 2009 on regulated access to Next Generation Access Networks (NGA) ("Second Draft NGA Recommendation"), available at *http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/nga_2/index_en.htm*. According to the draft Recommendation, the term "civil engineering infrastructure" refers to the physical local loop facilities deployed by an electronic communications operator to host local loop cables such as copper wires, optical fibre and co-axial cables. It therefore typically refers, but is not limited to, subterranean or above-ground assets such as sub-ducts, ducts, manholes or poles: *ibid.*, point 8.

[195] Framework Directive, para.1–019, n.64, Art.2(e).

[196] See para.1–045, above.

[197] According to Art.12(1)(f) of the Access Directive, para.1–019, n.66, providing co-location or other forms of associated facility sharing is, in addition, one of the obligations which NRAs may impose upon undertakings with significant market power, *in casu* on market 4 (wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location) of the Second Relevant Markets Recommendation, para.1–021, n.77. On the issue of the facility sharing obligations of both SMP operators and non-SMP operators, see para.1–239 and para.1–259 *et seq.*, below.

[198] According to recital 43 of the Better Regulation Directive, para.1–019, n.64, improving the sharing of facilities can indeed significantly improve competition and lower the overall financial and environmental cost of deploying electronic communications infrastructure for undertakings, particularly new access networks.

of an access obligation on passive network elements (such as dark fibre) falls only within the scope of Article 12 of the Access Directive[199] and, to impose such an obligation, an NRA must first designate the undertaking concerned as having SMP on the relevant market.[200] In addition, a more technical distinction between the different kinds of "passive elements" could be that "fibre" would be considered to be a direct element of a transmission system and therefore included within the definition of electronic communications network. Buildings, towers ducts, conduits, masts, manholes, cabinets and similar infrastructure are passive elements and associated facilities (and not network elements), as they are not directly used in the transmission of signals, even if in practice they are needed to establish, and maintain the network.[201]

1–052 ***Associated services***—The list of the key definitions for the application of the Electronic Communications Regulatory Framework is completed with the concept of "associated services".[202] The concept was mentioned in, but not defined by, the 2002 Framework Directive. Article 2(ea), inserted by the Better Regulation Directive, defines these services as: "those services associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service or have the potential to do so and include, inter alia, number translation or systems offering equivalent functionality, conditional access systems and electronic programme guides, as well as other services such as identity, location and presence service". Location services facilitate the provision of emergency services, but also commercial offers, *e.g.* information on events, linked to the place where a specific customer is located. Under the 2002 Framework Directive, conditional access

[199] Especially as passive elements are within the scope of the definition of an electronic communications network: see para.1–045, above.

[200] The European Parliament, in its first reading of the Better Regulation Directive, and the Council, in its Common Position, wanted to add within the new Art.12 of the Framework Directive (co-location and sharing of network elements and associated facilities) the possibility for NRAs to impose also the sharing of network elements which are not active on an undertaking independently of its market power. Although the title of Art.12 continues to mention the sharing of network elements, this was finally not maintained in the text of Art.12 as amended by the Better Regulation Directive. Indeed, the Commission, in its amended proposal, had considered that "it would not be proportionate to provide access to all passive network elements (such as dark fibre) unless the undertaking concerned has significant market power, in which case it could be subject to access measures pursuant to Article 12 of the Access Directive". See, respectively, European Parliament Committee on Industry, Research and Energy, Report on the proposal for a directive amending Directive 2002/21, Directive 2002/19 and Directive 2002/20 (COM(2007)0697—C6–0427/2007—2007/0247(COD))A6–0321/2008 (July 22, 2008), Rapporteur: Catherine Trautmann, *err.* A6–0321/2008err01, August 19, 2008 ("Trautmann 2008 Report"), amendments 27 and 70; Council Common Position 15/2009 of February 16, 2009 with a view to the adoption of a Directive amending Directives 2002/21, 2002/19 and 2002/20, O.J. 2009 C103 E/1 ("Common Position for a Better Regulation Directive"); Commission Amended Proposal for a Better Regulation Directive, para.1–028, n.115, 24 and 6–7. See also para.1–239, below and especially n.993 concerning a possible extension of Art.12 of the Framework Directive to passive network elements such as dark fibre.

[201] Building wiring is, with regard to the reasoning developed above, a difficult case to argue for inclusion as an associated facility. Indeed, the European Parliament's Rapporteur, Caroline Trautmann MEP, considered that wiring is not part of associated facilities of the network but part of the network itself: European Parliament proposed amendment contained its draft report of April 23, 2008 (COM(2007)0697—C6–0427/2007—2007/0247(COD) PE 398.542, amendment 10. However, if building wiring is not owned by the network operator from whom sharing is asked, one could argue that such wiring is not an element of the network as such, but rather an associated facility: see para.1–239, below.

[202] As is the case for associated facilities, associated services are, as such, only taken into consideration by the Framework and Access Directives. See also Citizens' Rights Directive, para.1–019, n.67, recital 46.

systems and electronic programme guides were considered to be examples of associated facilities. This makes it appear logical that associated services are now included within the definition of associated facilities. In this context, it should be noted that associated facilities and resources do not only enable and/or support the provision of electronic communications services. According to the preparatory works for the 2002 Framework Directive,[203] the provision of broadcasting or other content services may, in addition to electronic communications services, also be supported by associated facilities and services.

1–053 Focus on the regulation of transmission—The Framework Directive continues to differentiate between the regulation of transmission (and, among others, the transmission of broadcasts) and the regulation of content.[204] The content of services delivered over electronic communications networks using electronic communications services is not within the scope of the Electronic Communications Regulatory Framework.[205] Regulation of the content of television programmes and more generally of audiovisual media services falls under the Audiovisual Media Services Directive.[206] Similarly, financial services and certain Information Society services, which do not consist wholly or mainly in the conveyance of signals on electronic communications networks,[207] continue to be regulated only under the E-Commerce Directive.[208]

1–054 Links between the regulation of transmission and of content—Despite the separation between the regulation of transmission and of content, the Electronic Communications Regulatory Framework nevertheless recognises that this separation does not prejudice the taking into account of the links existing between transmission and content.[209] Transmission and the regulation of transmission can indeed have an immediate effect on the provision (or not) of content to end users and, more generally, on the promotion of cultural and linguistic diversity, as well as media pluralism.[210] The following examples of the links between the regulation of transmission and the regulation of content may be mentioned:

[203] As the 2002 Framework Directive did not define the concept of "associated services", the considerations were only made with regard to "associated facilities", which at the time included conditional access systems and electronic programme guides. *Mutatis mutandis*, they may still be considered to be valid.

[204] See Communication from the Commission of December 14, 1999 on principles and guidelines for the Community's audiovisual policy in the digital age, COM(1999) 657, 11.

[205] Framework Directive, para.1–019, n.64, Art.1(3) and 2002 Framework Directive, para.1–019, n.64, recital 5. See also 2002 Access Directive, para.1–019, n.66, recital 2.

[206] Directive 89/552 of October 3, 1999 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities, O.J. 1989 L298/23 ("Television without Frontiers Directive"), as amended by Directive 97/36, O.J. 1997 L202/60 and by Directive 2007/65, O.J. 2007 L332/27, which renamed the Directive as the "Audiovisual Media Services Directive": see para.2–018 *et seq.*, below.

[207] See para.1–048, above.

[208] See para.3–114 *et seq.*, below.

[209] 2002 Framework Directive, para.1–019, n.64, recital 5.

[210] Therefore, NRAs established under the Electronic Communications Regulatory Framework may intervene in the domain of content and contribute to the implementation of policies aimed at the promotion of cultural and linguistic diversity, as well as media pluralism: Framework Directive, para.1–019, n.64, Art.8(1), third sub-para. See also Universal Service Directive, para.1–019, n.67, Art.33(3), which states that NRAs and other relevant authorities may promote cooperation between the providers of electronic communications networks and/or services and sectors interested in the promotion of lawful content in electronic communications networks and services. Such cooperation procedures that are established to promote lawful content should not, however, facilitate the systematic surveillance of internet usage.

- the inclusion among the Regulatory Framework's policy objectives to be promoted by the NRAs of network neutrality, *e.g.* by stating that NRAs must ensure that there is no distortion or restriction of competition in the electronic communications sector, including the transmission of content. In this way, discrimination against a specific (competing) internet content provider, through a network operator giving priority access to some (of its related) content providers or by using traffic management techniques in order to slow down the traffic for others,[211] should in principle be prevented;[212]
- the possibility, foreseen by the Authorisation Directive, to grant rights of use of radio frequencies directly to providers of radio or television broadcast content services;[213] and
- the right for Member States to impose "must carry" obligations for the transmission of specified radio and television broadcast channels upon certain electronic communications networks.[214]

1–055 ***Safeguards for end-users' access to internet***—The relationship between transmission and content is also relevant to the so-called "internet freedom provision" contained in Article 1(3a) of the Framework Directive. This Article provides end-users with procedural guarantees to protect their access to, or use of, services and applications through electronic communications networks, especially the internet, against restrictive measures adopted by national authorities, *e.g.* cutting-off access.[215] One of the reasons for addressing this issue is that the internet, and effective access to it, is essential for education and for the practical exercise of the freedoms of expression and access to information.[216] The "internet freedom provision", one of the most prominent reforms introduced by the 2009 revisions to the Electronic Communications Regulatory Framework, was considered by the then EU Commissioner for Information Society and Media, Commissioner Reding, as unprecedented internationally and a strong signal that the EU pays due attention to fundamental

[211] See paras.1–059, 1–318 and 1–326, below.

[212] Framework Directive, para.1–019, n.64, Art.8(2)(b). Given the competitiveness on the retail broadband market, this type of network neutrality problem could however be considered as of less concern. This could be the reason why the Commission did not particularly point out that this provision could also be a legal basis for network neutrality problems in its non-binding Declaration on Network Neutrality, para.1–028, n.110. For the time being the most prominent network neutrality problem in the Union stays with the vulnerability of broadband end-users' interests, as notably addressed by new Art.8(4)(g) of the Framework Directive, foreseeing that NRAs must also promote the end-users ability to access and distribute information or run applications and services of their choice. On network neutrality, see also Better Regulation Directive, para.1–019, n.64, recital 23; Universal Service Directive, para.1–019, n.67, Arts.22(3) and 21(3)(d); Citizens' Rights Directive, para.1–019, n.67, recital 34; Universal Service Directive Arts.1(3), 20(1)(b) and 21(3)(c). See also paras.1–059, 1–061, 1–318, 1–324, and 1–326, below.

[213] Authorisation Directive, para.1–019, n.65, Art.5(2), second sub-para.; 2002 Authorisation Directive, para.1–019, n.65, recital 12; and Better Regulation Directive, para.1–019, n.64, recital 68. See also para.1–179, below. The terminology used ("providers of radio or television broadcast content services") is taken from the 2002 Authorisation Directive, Art.5. It is unclear whether the possibility to be granted directly rights of use of frequencies also applies to providers of other audiovisual media services, given that recital 68 of the Better Regulation Directive discusses, in this context, "general interest obligations imposed on broadcasters for the delivery of audiovisual media services".

[214] Universal Service Directive, para.1–019, n.67, Art.31; Citizens' Rights Directive, para.1–019, n.67, recital 48; and 2002 Universal Service Directive, para.1–019, n.67, recital 43–44.

[215] See paras.1–028 and 1–029, above.

[216] Better Regulation Directive, para.1–019, n.64, recital 4.

rights, in particular when it comes to the Information Society.[217] The Commission's original legislative proposals[218] did not include safeguards against undue restrictions of users' internet access.[219] The issues of internet freedom and the conditions under which end-users' access to internet can be cut-off were first raised by the European Parliament at the first reading stage in September 2008.[220] The Parliament was reacting to a French draft bill foreseeing the establishment of an independent administrative authority, the *Haute Autorité pour la Diffusion des Oeuvres et la Protection des droits sur Internet* ("HADOPI"). As originally drafted, the bill would have permitted HADOPI to order the disconnection of an internet access subscriber who repeatedly infringed copyright laws (the so-called the "three-strikes law").[221] The European Parliament's amendment was controversial because of the delicate balance that must be found between several fundamental rights protected under the European Convention for the Protection of Human Rights and Fundamental Freedoms and the EU principles on fundamental rights, *i.e.*: (i) the internet is essential for the right to education and for the practical exercise of the freedoms of expression and access to information;[222] (ii) inappropriate and even illegal use of the internet, such as illegally downloading music and video works, disseminating hate speech, or planning terrorist activities, may infringe respectively the right to property, the prohibition of discrimination, and the right to security; and (iii) any measure affecting fundamental rights should be sufficient to meet the requirements of procedural justice, *e.g.* the rights to a fair trial and an effective remedy.[223] The European Parliament indeed foresaw that no restriction could be imposed on end-users' internet access without the *prior* ruling of a judicial authority. The Member States considered that this intruded into their

[217] Commission MEMO/09/491 (November 5, 2009), para.1–028, n.114, 1.

[218] Note, that later on, the Commission accepted that Amendment 138 in principle was considered to serve as a useful restatement of principles applying independently of this provision: Commission Amended Proposal for a Better Regulation Directive, para.1–028, n.115, 15.

[219] European Parliament Press Release of November 10, 2009, para.1–028, n.115.

[220] The proposed amendment is known as "Amendment 138": see para.1–028, n.115, above. At first reading, the European Parliament proposed a new Art.8(4)(h) of the Framework Directive and that NRAs should apply "the principle that no restriction may be imposed on the fundamental rights and freedoms of end-users without a prior ruling of the judicial authorities, notably in accordance with Article 11 of the Charter of Fundamental Rights of the European Union on freedom of expression and information, except when public security is threatened, in which case the ruling may be subsequent": European Parliament legislative resolution of September 24, 2008 (COM(2007)0697—C6–0427/2007—2007/0247(COD)), P6_TA(2008)0449, O.J. 2010 C8 E/291. Art.11 of the Charter of Fundamental Rights of the European Union, O.J. 2010 C83/383, provides that "1. Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. 2. The freedom and pluralism of the media shall be respected."

[221] Loi No.2009–669 du 12 juin 2009 favorisant la diffusion et la protection de la création sur internet (Act furthering the diffusion and protection of creativity on the internet), Official Journal of the French Republic No.0135 (June 13, 2009), available at: *http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=?cidTexte=JORFTEXT000020735432*. An unofficial English translation is available at *http://www.laquadrature.net/wiki/HADOPI_full_translation*. After the European Parliament's second reading vote (which took place on May 6, 2009), the French Constitutional Council quashed the possibility for HADOPI to order the disconnection of a subscriber's internet access without the intervention of a court: Decision No.2009–580 of the Constitutional council of the French Republic (June 10, 2009), Official Journal of the French Republic No.0135 (June 13, 2009); an English version of the decision is available at: *http://www.conseil-constitutionnel.fr/conseil-constitutionnel/root/bank_mm/anglais/2009_580dc.pdf*). The Law was thus promulgated without these provisions.

[222] Better Regulation Directive, para.1–019, n.64, recital 4.

[223] Commission MEMO/09/219 (May 6, 2009), para.1–028, n.115, point 10.

national legal systems and the Council consequently rejected this proposal.[224] Given the importance it attached to the principle of freedom of access to the internet, the European Parliament brought forward the same amendment again at second reading, despite a compromise proposal having been negotiated with the Council in the meantime.[225] This amendment became the only hurdle preventing the Council from adopting the Better Regulation Directive in second reading,[226] which was also the reason why the issue attracted much attention.[227] The final compromise text was achieved in November 2009 in third reading.[228]

1–056 According to the text adopted,[229] Member States should guarantee end-users' access to, or use of, services and applications through electronic communications networks. Member States may, however, impose restrictions in certain cases which are not harmonised at the EU level by the Electronic Communications Regulatory Framework.[230] Member States may, therefore, adopt legislation that would allow restrictions to be placed on, or even the cutting-off of, internet access, *e.g.* in the case of repeated illegal downloading of copyright works. Those national measures must respect the principles and safeguards foreseen by Article 1(3a) of the Framework Directive. In particular, the restrictions taken by (administrative) national authorities must comply with the fundamental rights and freedom of natural persons in accordance with the European Convention for the Protection of Human Rights and Fundamental Freedoms and general principles of EU law. Measures which restrict fundamental rights or freedoms, can only be imposed if they are appropriate, proportionate and necessary within a democratic society. Their implementation must be subject to adequate procedural safeguards, including effective judicial protection and due process. Therefore, the principle of presumption of innocence and the right to privacy should be also given due respect and Member States should provide a prior, fair and impartial procedure for the person(s) concerned, including the right to be heard.[231] Finally, the right to effective and timely judicial review must be subsequently guaranteed, but there is no requirement for a judicial ruling *prior* to the adoption of measures restricting access.[232]

[224] Council Common position 15/2009 for a Better Regulation Directive, para.1–051, n.200, statement of the Council's reasons, point III.4.2.

[225] European Parliament legislative resolution of May 6, 2009 (16496/1/2008—C6–0066/2009—2007/0247(COD)), P6_TA-PROV(2009)0361, recital 3a and Art.8(4)h of the Framework Directive.

[226] Council Press Release, *2964th Council meeting Transport, Telecommunications and Energy*, 14056/09 (Presse 283) (October 9, 2009), 21.

[227] Commission MEMO/09/219 (May 6, 2009), para.1–028, n.115.

[228] Commission, MEMO/09/491 (November 5, 2009), para.1–028, n.114.

[229] Framework Directive, para.1–019, n.64, Art.1(3a).

[230] European Parliament Press Release of November 5, 2009, para.1–028, n.115, question 6. According to the Parliament, it is up to the Member States to decide what constitutes a criminal act which can lead to cutting off a user's internet access.

[231] This is without prejudice to the need for appropriate conditions and procedural arrangements in duly substantiated cases of urgency.

[232] Imposing the requirement for a prior judicial ruling would require, to a certain extent, a harmonisation of national judicial systems. This could be considered as going beyond the purpose and scope of Art.114 [ex 95] and therefore beyond what the EU could adopt under this legal basis: European Parliament Press Release of November 10, 2009, para.1–028, n.115. Nevertheless, in its resolution on the current negotiations between the EU and other OECD countries of the Anti-Counterfeiting Trade Agreement (ACTA) designed to strengthen the enforcement of intellectual property rights and combat counterfeiting and piracy, the European Parliament referred to Art.1(3a) of the Framework Directive, para.1–019, n.64, and considered "that the proposed agreement should not make it possible for any so-called 'three-strikes' procedures to be imposed" and "that any agreement must include the stipulation that the closing-off of an individual's internet access shall be subject to *prior* examination by a court" (emphasis added): European Parliament resolution of March 10, 2010 on the transparency and state of play of the ACTA negotiations, P7_TA-PROV(2010)0058, point 11.

1–057 Separate regulatory framework for terminal equipment—Telecommunications terminal equipment is subject to specific liberalisation and harmonisation directives, respectively the Terminal Equipment Liberalisation Directive[233] and the RTTE Directive.[234] The regulation of terminal equipment is, therefore, not part of the Electronic Communications Regulatory Framework. The Electronic Communications Regulatory Framework is without prejudice to the provisions of the RTTE Directive.[235] Nevertheless, the two regulatory frameworks are not mutually exclusive: to allow NRAs to meet the objectives of the Electronic Communications Regulatory Framework, in particular concerning the end-to-end interoperability of services, its scope[236] covers certain aspects of radio equipment[237] and telecommunications terminal equipment[238] that also fall within the scope of the RTTE Directive, as well as consumer equipment used for digital television, notably provisions facilitating access for disabled users.[239] For regulatory purposes, the boundary between the Electronic Communications Regulatory Framework and the regulation of tele-

[233] See para.1–006, n.13.

[234] See para.1–015, n.50.

[235] Framework Directive, para.1–019, n.64, Art.1(4). See also the 2002 Authorisation Directive, para.1–019, n.65, recital 5, which states that the self-use of radio terminal equipment, based on the non-exclusive use of specific radio frequencies by a user and not related to an economic activity (such as the use of a citizens' band by radio amateurs), does not consist of the provision of an electronic communications network or service and is therefore not covered by the Authorisation Directive, but by the RTTE Directive.

[236] Framework Directive, para.1–019, n.64, Art.1(1); see also Universal Service Directive, para.1–019, n.67, Art.1(1).

[237] For a definition of "radio equipment", see para.1–015, n.50, above.

[238] For the purpose of the RTTE Directive, "telecommunications terminal equipment" means "a product enabling communication or a relevant component thereof which is intended to be connected directly or indirectly by any means whatsoever to interfaces of public telecommunications networks (that is to say, telecommunications networks used wholly or partly for the provision of publicly available telecommunications services)": RTTE Directive, para.1–015, n.50, Art.2(b). Receive-only radio equipment intended to be used solely for the reception of sound and TV broadcasting services is not covered by the RTTE Directive. The interoperability of consumer digital television equipment is covered by the Universal Service Directive, para.1–019, n.67, Art.24, Annex VI and Framework Directive, para.1–019, n.64, Art.18.

[239] Framework Directive, para.1–019, n.64, Art.1(1); Better Regulation Directive, para.1–019, n.64, recital 11; and Universal Service Directive, para.1–019, n.67, Art.1(1). In this context, the Citizens' Rights Directive, para.1–019, n.67, recital 8, states that, without prejudice to the RTTE Directive, and in particular the disability requirements laid down in its Art.3(3)(f), certain aspects of terminal equipment, including consumer premises equipment intended for disabled end-users (whether their special needs are due to disability or related to age), should be brought within the scope of the Universal Service Directive in order to facilitate access to networks and the use of services. For example, textphones for the deaf or speech-impaired, or special terminal devices for the hearing-impaired, could be made available free of charge in the context of universal service provision: see para.1–298, below. More generally, the Universal Service Directive provides for equivalence in access to, and choice of, electronic communications services for disabled end users and, in particular, imposes upon Member States an obligation to encourage the availability of terminal equipment offering the necessary services and functions in order to implement specific arrangements for these users: Universal Service Directive, para.1–019, n.67, Art.23a(2); see para.1–329, below. The Regulatory Framework also addresses terminal equipment beyond the issue of disabled end users; for example, a contract concluded between a consumer and a provider of a public electronic communications network or service shall specify any restrictions imposed by the provider on the use of terminal equipment, such as by way of SIM-locking mobile devices: Universal Service Directive, para.1–019, n.67, Art.20(1)(b); see para.1–324, below.

communications terminal equipment is represented by the network termination point.[240] Defining the location of the network termination point is the responsibility of the NRAs, where necessary on the basis of a proposal submitted by the concerned undertaking.[241]

2. Policy objectives of the Electronic Communications Regulatory Framework

1–058 Three fundamental policy objectives—The Electronic Communications Regulatory Framework specifies explicitly its three main policy objectives. According to Article 8 of the Framework Directive, these are: (i) the promotion of an open and competitive market for electronic communications networks, services and associated facilities and services; (ii) the development of the internal market; and (iii) the promotion of European citizens' interests.[242] These objectives continue the objectives of previous regulatory frameworks, starting with the 1987 Green Paper.[243] They constitute basic guidelines for the NRAs, which must fulfil their obligations so as to ensure their attainment.[244] The three main objectives are supplemented and clarified by a number of indicative subsidiary objectives and means in order to achieve the main objectives.[245]

1–059 ***Promotion of competition***—The first fundamental policy objective of the Electronic Communications Regulatory Framework is the promotion of competition in electronic communications markets, so that users, including disabled users, elderly users, and users with special social needs, derive maximum benefit in terms of choice, price and quality.[246] NRAs must promote competition by ensuring that there are no distortions or restrictions of competition in the electronic communications sector, including for the transmission of content.[247] This includes ensuring network neutrality by preventing, discrimination against internet content providers other than those owned by or affiliated with the network operator concerned.[248] NRAs shall also promote competition by encouraging the efficient use and ensuring the effective management of radio frequencies and numbering resources.[249]

1–060 ***Development of the internal market***—The second fundamental policy objective is the development of the internal market. Article 8(3) of the Framework Directive lists explicitly the following subsidiary objectives: (i) the removal of remaining obstacles to the provision of electronic communications networks, associated facilities and services and electronic communications services at the European level;[250] (ii) the establishment and development of trans-European networks

[240] A network termination point ("NTP") is "the physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the NTP is identified by means of a specific network address, which may be linked to a subscriber number or name": Framework Directive, para.1–019, n.64, Art.2(da).

[241] 2002 Universal Service Directive, para.1–019, n.67, recital 6.

[242] Framework Directive, para.1–019, n.64, respectively Arts.8(2), 8(3) and 8(4).

[243] See para.1–004, above.

[244] Framework Directive, para.1–019, n.64, Art.8(1).

[245] See para.1–059 *et seq.*, below.

[246] Framework Directive, para.1–019, n.64, Art.8(2)(a).

[247] *ibid.*, Art.8(2)(b).

[248] See para.1–054, above, and paras.1–318 and 1–326, below.

[249] Framework Directive, para.1–019, n.64, Art.8(2)(d). See para.1–161 *et seq.*, below. Art.8(2)(c) of the 2002 Framework Directive has been repealed by the Better Regulation Directive and its content has been transferred to the principles to be applied by NRA while pursuing the regulatory objectives, listed in Art.8(5)(d) of the Framework Directive.

[250] *ibid.*, Art.8(3)(a).

and the interoperability of pan-European services, and end-to-end connectivity;[251] and (iii) cooperation between NRAs, the Commission and BEREC to ensure the development of consistent regulatory practice and the consistent application of the Electronic Communications Regulatory Framework.[252] Cooperation between regulators is of particular importance in completing the internal market in electronic communications, as the economic situations and regulatory traditions of the Member States still vary considerably and a truly European common regulatory culture is still only emerging.

1–061 ***Promotion of citizens' interests***—The third fundamental policy objective, the promotion of the interests of EU citizens, comprises several elements and subsidiary objectives: (i) the guarantee of access to services of general economic interest, including, but not only, the universal service;[253] (ii) the protection of consumers in their dealings with suppliers, in particular through the availability of simple and inexpensive dispute resolution procedures, the provision of clear information (notably on tariffs and usage conditions) and taking into account the needs of specific social groups, such as disabled and elderly users,[254] (iii) ensuring network neutrality, so that end users are able to access and distribute information or run applications and services of their choice;[255] and (iv) the protection of personal data and privacy, as well as guaranteeing the integrity and security of public communications networks.[256]

1–062 Another important aspect of the promotion of citizens' interests is the recognition of the right to internet access as part of their enjoyment of fundamental rights, such as the freedom of expression and the freedom to access information.[257]

1–063 Character of, and relationship between, the policy objectives—The policy objectives stated by Article 8 of the Framework Directive are not just declarations of good intentions. NRAs must take all reasonable measures to ensure their achievement[258] and must justify specific obligations

[251] *ibid.*, Art.8(3)(b).

[252] *ibid.*, Art.8(3)(d). Art.8(3)(c) of the 2002 Framework Directive, para.1–019, n.64, was repealed by the Better Regulation Directive. Art.8(3(c) had required NRAs to ensure that in similar circumstances there was no discrimination in the treatment of electronic communications providers. This requirement is now contained in Art.8(5)(b) of the Framework Directive, para.1–019, n.64, which lists the principles to be applied by NRAs in implementing the regulatory objectives of the Regulatory Framework.

[253] *ibid.*, Art.8(4)(a).

[254] *ibid.*, Art.8(4)(b), (d) and (e).

[255] *ibid.*, Art.8(4)(g). See also para.1–054, above, paras.1–318 and 1–326, below.

[256] *ibid.*, Art.8(4)(c) and (f).

[257] See paras.1–028 *et seq* and 1–055 *et seq.*, above.

[258] Framework Directive, para.1–019, n.64, Art.8(1), first sub-para. According to the Framework Directive, Member States are the guardians of this obligation and must ensure its respect by the NRAs. See also Case C-380/05, *Centro Europa 7* [2008] E.C.R. I-349, para.81; Case C-387/06, *Commission v Finland* [2008] E.C.R. I-1, summary pub., paras.23, 24 and 26; and Case C-227/07, *Commission v Poland* [2008] E.C.R. I-8403, paras.62 to 68 and 65. In *Commission v Finland*, the Court of Justice held that NRAs must have all the powers necessary for them to take all reasonable measures aimed at achieving the objectives of the Regulatory Framework and that, in order to prove that the NRA's pursuit of the regulatory objectives had been impeded by national law, the Commission was required to examine in detail all of the NRA's powers. In *Commission v Poland*, the Court of Justice held that a Member State had fulfilled its obligation to ensure that its NRA acted in pursuit of the regulatory objectives especially the promotion of competition if the NRA had been given wide general powers of intervention to do so regarding access and interconnection; in this respect, see also Case C-192/08, *TeliaSonera Finland*, judgment of November 12, 2009, not yet reported, para.50. In Case C-424/07, *Commission v Germany*, judgment of December 3, 2009, not yet reported, paras.89 and 91, the Court of Justice held that NRAs are required to promote the regulatory objectives when carrying out their regulatory tasks and that the Member States must ensure that NRAs do so. Arts.8(2), (3) and (4) of the

imposed upon undertakings in the light of these objectives.[259] The pursuit of the objectives is therefore a key element for the legitimacy of NRAs' action and they may be invoked in the context of an appeal made against an NRA's decision. However, the policy objectives and the subsidiary objectives are defined very broadly, so that they may be in conflict with each other or require different courses of actions, obliging the NRAs to choose between them.[260] The question thus arises as to whether there is a hierarchy between different objectives which would require the NRAs to give preference to one objective over another in considering their relative importance.

1–064 Article 8 of the Framework Directive does not explicitly state a hierarchy between the different objectives. Some authors consider that the absence of a clear hierarchy raises the question of knowing how NRAs should be accountable for choosing one objective over another when faced with a conflict (or, indeed, even in the absence of a conflict).[261] In *Commission v Germany*, Advocate General Maduro considered that the absence of a system attributing priority as between the objectives, and the consequent discretion granted to NRAs, was fully intentional on the part of the Community legislature.[262] In its judgment, the Court of Justice held that NRAs are required to promote the regulatory objectives referred to in Article 8 of the Framework Directive when carrying out their regulatory tasks specified in the Regulatory Framework. Therefore, it is also for the NRAs—and not the national legislatures—to balance, on a case-by-case basis, those objectives when exercising their tasks. Therefore, national legislation giving priority to only one of the objectives recognised by the Framework Directive (*e.g.* during the analysis by the NRA of the need to regulate a new market) is not compatible with the Electronic Communications Regulatory Framework, as it gives a weighting to those objectives, even though such a weighting exercise is a matter for the NRA when carrying out the regulatory tasks assigned to it.[263]

1–065 The policy objectives contained in Article 8 of the Framework Directive are closely intertwined. In this way, competition and the creation and functioning of an effective internal market should guarantee the interests of end users, as they will bring about innovation, better services, lower prices and reduce the market power of the incumbent operators, although regulation may be necessary if market mechanisms do not achieve these results.[264] Many issues, such as interconnection, concern all three objectives, *i.e.* competition, internal market and, through end-to-end connectivity, end-user interests.

Framework Directive each use the term "shall" when it comes to the NRAs' obligations regarding the achievement of the three main objectives of the Regulatory Framework, indicating that their achievement is mandatory.

[259] Access Directive, para.1–019, n.66, Art.8(4) and Universal Service Directive, para.1–019, n.67, Art.17(2). See also Framework Directive, para.1–019, n.64, Arts.7(1), 20(3) and 21(3), Access Directive, Arts.5(1) and 12(2) and Authorisation Directive, para.1–019, n.65, Arts.5(6) and 7(3).

[260] See, *e.g.* Walden, para.1–015, n.51, 167, at 197.

[261] See, *e.g.* Larouche and de Visser, "Key institutional issues and possible scenarios for the review of the EC electronic communications framework", annex to the Contribution of the Tilburg Law and Economics Center (TILEC) on the Commission's call for input regarding the review of the EC electronic communications framework and of the Recommendation on relevant markets, 12–13, available at *http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/review/index_en.htm*.

[262] *Commission v Germany*, para.1–063, n.258, opinion of AG Maduro of April 23, 2009, paras.60–68.

[263] *Commission v Germany*, para.1–063, n.258, paras.91, 93–94.

[264] See Universal Service Directive, para.1–019, n.67, Art.1(1), which states that the aim of the Directive is to ensure the availability throughout the EU of good-quality publicly available services through effective competition and choice and to deal with circumstances in which the needs of end-users are not satisfactorily met by the market.

3. Principles of the Electronic Communications Regulatory Framework

1–066 Six principles for a good governance—The good governance principles underlying the Electronic Communications Regulatory Framework are:[265] (i) regulation should be based on a set of clearly defined policy objectives;[266] (ii) proportionality and "light-handed" regulation, *i.e.* sector-specific regulation should be limited to the minimum necessary to attain those objectives; (iii) technological neutrality; (iv) a balanced approach towards the need for legal certainty and for flexibility; (v) harmonisation of national regulatory regimes, whilst recognising the key role of NRAs in enforcing regulation at the national level; and (vi) the application of mechanisms for the periodic review of the functioning of the Regulatory Framework.[267] To these principles may added those of network neutrality and the right to internet access, both of which may be considered as policy objectives but also as regulatory principles.[268] Furthermore, these general principles are supplemented by a number of regulatory principles that are addressed directly to the NRAs and the NRAs must apply in the pursuit of the achievement of the Regulatory Framework's policy objectives, *e.g.* promoting efficient investment and innovation in new and enhanced infrastructures.[269] These principles for the NRAs sometimes directly reflect and clarify the general principles of good governance, including the principle of promoting regulatory predictability by ensuring a consistent regulatory approach over appropriate review periods[270] applying the general regulatory principle of legal certainty.[271]

1–067 ***Proportionality and "light handed" regulation***—Applying the general principle of proportionality[272] to electronic communications, the Electronic Communications Regulatory Framework states that regulation should be limited to the minimum necessary to meet its objectives.[273] Intrusive sector-specific regulation is, and should indeed be, an exception in a framework that is fundamentally based on the operation of market forces. A first application of this principle is therefore the reduction to a minimum of barriers to entry for new providers, *e.g.* by the use of general authorisations which no longer require an explicit decision by the NRA before a new entrant can start business, and by limiting the use of individual grants of rights of use to the use of

[265] Principles (i) to (v) are reported extensively in the Commission's 1999 Review Communication, para.1–016, n.55, 13–15. Principles (i), (ii) and (iii) are explicitly stated in Art.8(1) of the Framework Directive, para.1–019, n.64, whilst the others are to be found throughout the legislation comprising the Regulatory Framework: Valcke, Queck and Lievens, *EU Communications Law—Significant Market Power in the Mobile Sector* (Edward Elgar, 2005), 42–80. For a critical appraisal of the realisation of these principles during the first years of the application of the Electronic Communications Regulatory Framework, see de Streel, "Current and future European regulation of electronic communications: A critical assessment" (2008) 32 *Telecommunications Policy* 722.

[266] See, para.1–058 *et seq.*, above, in particular paras.1–063 and 1–064.

[267] Framework Directive, para.1–019, n.64, Art.25; Authorisation Directive, para.1–019, n.65, Art.16; Access Directive, para.1–019, n.66, Art.17; Universal Service Directive, para.1–019, n.67, Art.36(3); E-Privacy Directive, para.1–019, n.68, Art.18; and BEREC Regulation, para.1–028, n.113, Art.25. See also Data Retention Directive, para.1–019, n.68, Art.14, Universal Service Directive, Art.15, on the review of the scope of universal service and Roaming Regulation, para.1–019, n.64, Art.11.

[268] See paras.1–054 as well as 1–318 and paras.1–055 to 1–056, respectively.

[269] Framework Directive, para.1–019, n.64, Arts.8(5)(d).

[270] *ibid.*, Art.8(5)(a).

[271] See paras.1–069 and 1–070, 1–791, 1–261, below.

[272] Art.5 TEU [ex 5 EC].

[273] Framework Directive, para.1–019, n.64, Art.8(1) first sub-para.

resources such as radio frequencies and numbers.[274] A second application of the principle of "light handed" regulation is the intention to progressively reduce the use of *ex ante* sector-specific rules as competition in the markets develops and, ultimately, for (economic issues of) electronic communications to be regulated only by horizontal laws, especially competition law.[275] Therefore, regulatory obligations aimed at bringing about competition may only be imposed or maintained by an NRA if there is no effective and sustainable competition (*i.e.* these obligations should not remain if there is no undertaking with significant market power).[276] Indeed, the Electronic Communications Regulatory Framework applies competition law concepts and methodologies.[277] Nevertheless, economic regulation organising market entry (*e.g.* granting of frequencies and numbers) and social regulation (*e.g.* universal service and specific consumer protection provisions) will, in principle, not be rolled-back in the near future.[278] Also, some regulatory remedies, such as "functional separation", according to which a vertically-integrated undertaking with significant market power must place its access network and wholesale access business into a separate business entity that is distinct from its services business, even if considered as exceptional, might also prolong the application of sector-specific competition law obligations,[279] particularly as significant interference in an undertaking's structure can have long lasting effects that are difficult to roll-back.

1–068 ***Technological neutrality***—The Electronic Communications Regulatory Framework addresses markets and not technologies. Therefore, in order to not become obsolete in an environment that is marked by unpredictable technological changes that occur at an ever-increasing pace, regulation should not differentiate between the technologies used by networks and services. In this sense, the convergence of the telecommunications, media and information technology sectors was one of the reasons for introducing the principle of technological neutrality, which is applied by the horizontal approach of the Regulatory Framework. Nevertheless, the principle is not absolute, as the Member States' obligation is to take the utmost account of the desirability of making regulations technologically neutral.[280] Differentiation based on technology is, therefore, possible if this is necessary, for example, given the technological constraints and specificities of the scarce resource of radio frequencies.[281] Discrimination in favour of a specific technology may also be appropriate in certain circumstances, for example to promote digital television as a means for increasing spectrum efficiency.[282] In this respect, the management of radio frequencies is explicitly mentioned in the Framework Directive and may be considered as a circumstance in which the application of both possible exceptions may be possible, as the principle of technology neutrality is

[274] Authorisation Directive, para.1–019, n.65, Arts.3 and 5.

[275] Better Regulation Directive, para.1–019, n.64, recital 5.

[276] Framework Directive, para.1–019, n.64, Arts.8(5)(f) and 16, as well as 2002 Framework Directive, para.1–019, n.64, recital 27. See also paras.1–086 and 1–220 *et seq.*, below.

[277] For example, the definition of the concept of "undertaking with significant market power" (being a dominant undertaking, as defined by competition law: Framework Directive, para.1–019, n.64, Art.14(2)), and the definition of markets relevant for *ex ante* obligations (*ibid.*, Art.15).

[278] See para.1– 016, above.

[279] This remedy has been introduced in Art.13a of the Access Directive by the Better Regulation Directive; see also paras.1–145 and 1–284 *et seq.*, below.

[280] Framework Directive, para.1–019, n.64, Art.8(1), second sub-para.

[281] Another example is the emerging technology of powerline communications, which creates specific technological problems, *e.g.* interference: see Recommendation 2005/292 of April 6, 2005 on broadband electronic communications through powerlines, O.J. 2005 L93/42.

[282] 2002 Framework Directive, para.1–019, n.64, recital 18.

explicitly without prejudice to Article 9 of the Framework Directive regarding radio frequencies.[283] Article 9 of the Framework Directive provides for two applications of the principle, *i.e.* technology and service neutrality regarding radio frequencies,[284] but also allows Member States to derogate from these principles where this is necessary, *e.g.* to promote cultural and linguistic diversity and media pluralism (through the provision of radio and television broadcasting services), to avoid inefficient use of radio frequencies, to protect public health against electromagnetic fields or to ensure technical quality of service.

1–069 ***Balancing flexibility and legal certainty***—One of the pre-eminent characteristics of the electronic communications sector is that not only technologies, but also market situations, evolve in extremely rapid and unpredictable ways. However, legislative procedures are, at both the EU and national levels, rather slow. Indeed an EU co-decision procedure usually took some 18 months for a directive to be adopted,[285] followed by another 18 months for its transposition into national legislation.[286] It remains to be seen whether, under the ordinary legislative procedure[287] (which, following the entry into force of the Lisbon Treaty replaces the co-decision procedure, but keeps the different steps of the procedure[288]), the adoption process will be faster and whether more "first-reading deals" will be concluded between the European Parliament and the Council.[289] In this context, it is vital that the Regulatory Framework is capable of adapting flexibly and quickly to market and technological developments. The Electronic Communications Regulatory Framework therefore contains a number of provisions that provide flexibility, including limiting itself, to a certain extent, to setting out basic rules, principles and objectives, which will be supplemented by soft-law measures,[290] that are easy to adapt and implement. In addition, a broad discretion is given to NRAs in the choice of the remedies that they can impose upon undertakings with significant market power, unlike under the 1998 Regulatory Framework, under which once an undertaking

[283] Framework Directive, para.1–019, n.64, Art.8(1), second sub-para.

[284] See paras.1–193 and 1–194, below, respectively. In this sense, technology neutrality is the possibility for a provider to use all types of technologies used for electronic communications services in the radio frequency bands that have been declared available for electronic communications: Framework Directive, para.1–019, n.69, Art.9(3). Service neutrality is the possibility to provide all types of services in those frequency bands: *ibid.*, Art.9(4). See, for example, the possibility to use the 900 MHz and 1800 MHz frequency bands also for technologies and services other than GSM, discussed in para.1–207, below.

[285] At least in the electronic communications sector. See Art.251 EC [new 294 TFEU].

[286] This is not applicable to regulations, which are directly applicable: see Art.288 [ex 249]. See para.1–023, above, on the difficulties for the Member States in respecting the transposition deadlines for the directives comprising the 2002 Electronic Communications Regulatory Framework and para.1–028 and 1–033, above, on the possible acceleration of the transposition of the 2009 directives due to the new procedure under Art.260(3) for enforcing Member States' non-compliance. See also Better Regulation Directive, para.1–019, n.64, Art.5 and Citizens' Rights Directive, para.1–019, n.67, Art.4, giving Member States until May 25, 2011 (*i.e.* 18 months after the date of the adoption of the directives) for transposing them into national law.

[287] Arts.294 [ex 251] and 289.

[288] See also para.1–010, above.

[289] House of Lords, para.1–033, n.136, 69–70.

[290] Soft-law measures include recommendations, opinions and guidelines. See, *e.g.*, Commission's First and Second Relevant Markets Recommendations, para.1–021, n.77 (Framework Directive, para.1–019, n.64, Art.15(1)), or Commission harmonisation recommendations pursuant to Art.19 of the Framework Directive: para.1–022, n.81; see para.1–125, below.

was found to have significant market power, it was subject to all the regulatory obligations foreseen in the relevant directives.[291]

1–070 Legal certainty and predictability must be balanced with flexibility. In a sector, such as electronic communications, where high investments are required, long-term regulatory certainty is key.[292] In order to foster legal certainty, NRAs must align their activities and decisions with the policy objectives of the Regulatory Framework. Promoting regulatory predictability is, after the 2009 amendments to the Regulatory Framework, explicitly included as a regulatory principle that NRAs must respect regarding market reviews.[293] Furthermore, the Commission's soft-law measures, the use of public consultations before an NRA adopts decisions,[294] effective mechanisms for appeals against the decisions of an NRA[295] and the application of well-known competition law methodologies during the assessment of whether an operator has SMP should also enhance legal certainty and predictability. However, the assessment of the performance of the 2002 Regulatory Framework with regard to the achievement of legal certainty is, at best, ambivalent.[296] Among the reasons for this may be the broad scope of its policy objectives, the lack of a clear hierarchy of objectives and the possibility of contradictions between these different objectives.[297] In addition, the application of competition law methodologies, which were developed for stable industries, may be difficult to apply to dynamic markets like electronic communications and their use in the regulatory context may create distortions in the development of both competition law and sector-specific regulation, as the objectives and the procedures of both sets of rules are (partly) different.[298] Finally, there seems to be a discrepancy between the de-regulatory approach of the Regulatory Framework and the interventionist stance of some NRAs, which does not help in understanding their true aims.[299]

1–071 Harmonisation whilst recognising a key role for NRAs in enforcing regulation at the national level—In discussing the principles that should underlie the 2002 Regulatory Framework, the 1999 Review Communication stated that primary responsibility for achieving the objectives of the regulatory framework should rest with the NRAs, as they are best placed to take account of the different levels of competition and market development in the respective Member States. The Commission recognised, however, that in a context of different national market situations and regulatory traditions, and given the increased discretion given to NRAs, there was a need for harmonisation at the EU level of both the regulatory regime and its application, in order to avoid (continued) fragmentation of the internal market.[300] The issue is still relevant: there remains an ongoing need to ensure the development of consistent regulatory practice and the consistent application of the Regulatory Framework in all Member States, and therefore of the development of a European regulatory culture, but not necessarily of harmonisation of results in individual

[291] Access Directive, para.1–019, n.66, Art.8; Universal Service Directive, para.1–019, n.67, Art.17.
[292] See, *e.g.*, Better Regulation Directive, para.1–019, n.64, recitals 51 and 55.
[293] Framework Directive, para.1–019, n.64, Art.8(5)(a); see para.1–079, below.
[294] *ibid.*, Art.6 and Universal Service Directive, para.1–019, n.67, Arts.22(1) and 33.
[295] Framework Directive, para.1–019, n.64, Art.4.
[296] According to de Streel, para.1–065, n.265, 726, the principle of legal certainty has not been achieved so far.
[297] See paras.1–063 and 1–064, above.
[298] de Streel, para.1–066, n.265, 727.
[299] *ibid.*, 726.
[300] 1999 Review Communication, para.1–016, n.55, 15.

cases. These consistent practices and applications are considered as essential for the successful development of an internal market in electronic communications networks and services.[301]

1–072 In the context of the 2002 Regulatory Framework, some tools were put in place to consolidate the internal market, which is one of its fundamental policy objectives. For example, in order to avoid the creation of barriers to the functioning of the internal market, the Commission was given a power of veto to require NRAs to withdraw certain draft measures related to the control of significant market power under the Article 7 harmonisation procedure.[302] It was also foreseen that the Commission should adopt harmonisation recommendations,[303] or even harmonisation decisions, in the fields of numbering and the radio frequency spectrum.[304] In addition, the European Regulators Group ("ERG"), comprising the NRAs and debating with a Commission representative present, was founded.[305] Its main role was to contribute to the development of consistent regulatory practice by facilitating cooperation between NRAs and between NRAs and the Commission. However, in 2006, the internal market for electronic communications was found to still not be complete.[306] The consolidation of the internal market was therefore one of the key issues identified in the 2006 Review.[307] Consequently, the means of ensuring an internal market with harmonised and consistent regulation were revised and, *inter alia*, BEREC was ultimately created as part of the 2009 revisions to the Regulatory Framework in order to replace ERG.

C. National Regulatory Authorities and their environment

1–073 Overview—By the time of the 1999 Review, national regulatory authorities ("NRAs")[308] were already considered as "the cornerstone of the application in the Member States of virtually the entire [1998] regulatory package... and [would] play a major part in framing and applying the revised regulatory framework",[309] *i.e.* the Electronic Communications Regulatory Framework.

[301] BEREC Regulation, para.1–028, n.113, recitals 2 and 3.
[302] 2002 Framework Directive, para.1–019, n.64, Art.7; see also para.1–116, below.
[303] *ibid.*, Art.19(1).
[304] *ibid.*, Arts.10(4) and 19(2) respectively; see para.1–125 *et seq.*, below, and Radio Spectrum Decision, para.1–019, n.69, Art.4.1.
[305] ERG Decision, para.1–022, n.78.
[306] Hogan & Hartson and Analysys, *Preparing the next steps in regulation of electronic communications. A contribution to the review of the electronic communications regulatory framework. Final Report for the European Commission*, 2006, 132, available at *http://ec.europa.eu/information_society/policy/ecomm/library/ext_studies/index_en.htm#2006*.
[307] 2007 Reform Proposals Communication, para.1–026, n.95, 3–4 and 8–10.
[308] For a list of NRAs established in each Member State with primary responsibility for overseeing the day-to-day operation of the market for electronic communications networks and services, see ERG Decision, para.1–022, n.78, Art.4 and Annex, as well as *http://www.erg.eu.int/links/index_en.htm*. For an overview of developments regarding NRAs, see the 14th Implementation Report, para.1–033, n.134, 12–13, and the Accompanying Document to the 14th Implementation Report, para.1–033, n.134, Volume 1, Part 2, 31–33. For a comparison of the effectiveness of national regulatory environments and of NRAs in promoting the objectives of the Electronic Communications Regulatory Framework, see Jones Day and SPC Network, *ECTA Regulatory Scorecard 2008—Report on the relative effectiveness of the regulatory frameworks for electronic communications*, January 28, 2009, available at: *http://www.ectaportal.com/en/REPORTS/Regulatory-Scorecards/Regulatory-Scorecard-2008*.
[309] Communication from the Commission of November 10, 1999, "Fifth Report on the Implementation of the Telecommunications Regulatory Package", COM(1999) 537, 9.

This statement was reaffirmed by the then Information Society Commissioner Reding in 2008[310] and will remain appropriate in the future, even as the level of sector-specific economic regulation is progressively reduced as markets become competitive and can be deregulated. In this context, this section discusses[311] the definition and responsibilities of NRAs, the principles applicable to their activities and organisation (*e.g.* the requirement to promote efficient investment in new and enhanced infrastructures, their independence and the right of appeal against an NRA's decision); the tools and means which should be at their disposal; their institutional environment (*i.e.* the Body of European Regulators for Electronic Communications ("BEREC") and the Communications Committee ("COCOM")); the mechanisms for NRAs to participate in the consolidation of the internal market for electronic communications; and, finally, the NRAs' role in intervening in dispute resolution procedures.[312] Although the specific conditions under which the competent NRAs are established and exercise their functions are determined by national legislation, this must take account of the principles and rules laid down by the Electronic Communications Regulatory Framework.[313]

1. Definition and responsibilities

1–074 National Regulatory Authorities—Member States must ensure that their NRAs are competent for the tasks assigned to them under the Electronic Communications Regulatory Framework.[314] NRAs are primarily responsible for applying national legislation implementing the

[310] Commissioner Reding commented that "National regulatory authorities are the backbone of the EU Telecoms rules and are therefore central to fair regulation in our Single Telecoms Market": see Commission Press Release, *Commission opens three new cases on independence and effectiveness of telecoms regulators in Latvia, Lithuania and Sweden*, IP/08/1343 (September 18, 2008).

[311] For a discussion of recent case law of the Court of Justice regarding NRAs, see Rizzuto, "The harmonised enforcement of European Union telecommunications law: the case law of the European judicature on the constitutional fundamentals", Parts 1 and 2, (2009) 2 and 3 C.T.L.R., 37 and 67.

[312] See para.1–129 *et seq.*, below. This section will consider the NRAs' role in resolving, by a binding decision, disputes arising between undertakings providing electronic communications networks or services in a Member State, or between such undertakings and other undertakings in the Member State benefiting from obligations of access and/or interconnection, under Art.20 of the Framework Directive, para.1–019, n.64, as well as its intervention in cross-border disputes. Out-of-court dispute resolution under Art.34 of the Universal Service Directive, para.1–019, n.67, regarding disputes between consumers and undertakings providing electronic communications networks and/or services, is addressed in para.1–346, below.

[313] *e.g.* with regard to the NRAs' independence, see 2002 Framework Directive, para.1–019, n.64, recital 37.

[314] Framework Directive, para.1–019, n.64, Art.3(1); Access Directive, para.1–019, n.66, Art.8(1). The Court of Justice has held that, by imposing by law on all operators of public telecommunications networks a general obligation to negotiate agreements for access, when, with regard to access, imposing such a negotiation should indeed be the responsibility of the NRA under Arts.8 and 12(1)(b) of the Access Directive, Poland had not transposed correctly Art.4(1) of the Access Directive: *Commission v Poland*, para.1–063, n.258, paras.35–44. In addition, NRAs must perform their responsibilities themselves and may not delegate them to bodies established pursuant to undertakings given by an operator in the context of the SMP procedure. In Italy, a monitoring system was established to facilitate the enforcement of Telecom Italia's obligations to provide non-discriminatory access, which comprised two bodies (the Supervisory Board, which was part of Telecom Italia's governance system, and the Office of the Telecommunications Adjudicator, OTA Italia). The Commission considered that the activities of the Supervisory Board and of OTA Italia must not replace, impede or interfere in any way with the exercise of the powers of the NRA (AGCOM) to intervene in access disputes: Cases IT/2009/0987–0989: *Remedies related to the markets for retail access, wholesale physical infrastructure access and wholesale broadband access in Italy*, Commission Comments of October 29, 2009, 3 and 6. See also Commission Press Release, *Telecoms: Commission calls on Italian telecoms regulator to ensure that new separation*

provisions of the Electronic Communications Regulatory Framework.[315] They are defined as "the body or bodies charged by a Member State with any of the regulatory tasks assigned [by the relevant directives]".[316] As the concept of "regulatory tasks" is not defined more specifically, it is

arrangements for Telecom Italia and Telecom Italia's commitments endorsed by the regulator promote and do not jeopardize effective competition, IP/09/1613 (October 29, 2009), and paras.1–129 and 1–145, below.

[315] Specific institutions, instead of the NRAs established by the Framework Directive , are foreseen in the field of data protection and privacy, concerning the application of national legislation implementing the provisions of the E-Privacy and Data Retention Directives, para.1–019, n.68 (the concept of "NRA" is only used by Art.15a(4) of the E-Privacy Directive, para.1–019, n.68, which was inserted in 2009 by the Citizens' Rights Directive, para.1–019, n.67, regarding cross-border cooperation). The provisions of Directive 95/46 of October 24, 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, O.J. 1995 L281/31 ("Framework Data Protection Directive") are particularised and complemented by the E-Privacy Directive regarding the processing of personal data in the electronic communications sector, and foresee the establishment of specific competent authorities. Art.28 of the Framework Data Protection Directive states that each Member State shall provide that one or more public authorities are responsible for monitoring the application within its territory of national law implementing the directive. It furthermore requires that these authorities shall act with complete independence in exercising the functions entrusted upon them. In Case C-518/07, *Commission v Germany*, judgment of March 9, 2010, not yet reported, paras.30, 35–37, 42 and 46, the Court of Justice held that this latter requirement is to be interpreted as meaning that the supervisory authorities, in this instance the authorities responsible for supervising the processing of personal data outside the public sector, must enjoy an independence that allows them to perform their duties free from external influence. According to the Court, that independence precludes not only any influence exercised by the supervised bodies, but also any directions or any other external influence, whether direct or indirect, which could call into question the performance by those authorities of their task consisting of establishing a fair balance between the protection of the right to private life and the free movement of personal data. Therefore, state scrutiny exercised over the supervisory authorities concerned is not consistent with such requirement of independence. The government concerned may indeed be itself an interested party in the data processing at issue and the mere risk that the scrutinising authorities could exercise a political influence over the decisions of the supervisory authorities is enough to hinder the latter authorities' independent performance of their tasks. The Court furthermore held that such independence does not in itself deprive the supervisory authorities of their democratic legitimacy and accountability, *e.g.* if they are required to comply with the law and subject to review of the competent courts (see also para.1–380, n.1553, below). In addition, Art.7 of the Data Retention Directive, para.1–019, n.68, specifically provides for the creation of independent supervisory authorities, which may be the same authorities as those created under Art.28 of the Framework Data Protection Directive. Art.29 of the Framework Data Protection Directive also sets up a Working Party on the Protection of Individuals with regard to the Protection of Personal Data, which is composed of representatives of the national supervisory authorities, representatives of the authorities established for the EU institutions and bodies and a Commission representative: see *http://ec.europa.eu/justice_home/fsj/privacy/workinggroup/index_en.htm*. Furthermore, Art.31 of the Framework Data Protection Directive creates a Committee that is comprised of representatives of the Member States who cooperate in taking decisions whenever Member States' approval is required under the Directive, which is similar to the Communications Committee created for the Electronic Communications Regulatory Framework by Art.22 of the Framework Directive, para.1–019, n.64, see para.1–114, below. In addition, in some circumstances, "competent authorities" carry out regulatory activities related to electronic communications which, however, are not entrusted explicitly to NRAs, *e.g.* regarding the granting of rights of way according to Art.11(1) of the Framework Directive, para.1–019, n.64, and Art.4(1) of the Authorisation Directive, para.1–019, n.58. On the issue of "competent authorities", see also para.1–071, below.

[316] Framework Directive, para.1–019, n.64, Art.2(g). The directives in question are the Framework Directive, the Authorisation Directive, the Access Directive, the Universal Service Directive and the E-Privacy Directive: *ibid.*, Art.2(l). The Roaming Regulation, para.1–019, n.64, is also similarly concerned: see Arts.1(3) and 2(1); also, Framework Directive, Art.1(5). Member States may decide which bodies are "national regulatory authorities" for the purposes of the Electronic Communications Regulatory Framework: 2002 Framework Directive, para.1–019, n.64, recital 37.

necessary to consider the texts of the directives in order to identify the specific tasks with which NRAs are entrusted. The NRAs' regulatory tasks consist mainly in the application of the regulatory rules to specific cases by adopting individual decisions, which include monitoring operators' compliance with the rules and the decisions based on them,[317] as well as dispute resolution.[318] However, beyond decisions in individual cases, a number of decisions are taken by NRAs at an intermediate level, which are of a nature that is somewhere between legislation and individual decisions and their effects go beyond their direct addressee. For example, a decision concerning the principal aspects of an interconnection agreement with an operator with SMP (*i.e.* tariffs, conditions of co-location, etc.) will have effects beyond the individual case and addressees to which it applies, as it will influence the operation of the whole industry.[319] In some cases, the regulatory framework also empowers NRAs to adopt general measures.[320] In addition, NRAs enjoy a wide discretion in taking their decisions, especially when it comes to the choice of regulatory obligations imposed upon undertakings with significant market power.[321] NRAs are indeed free to choose between the remedies included by the European legislator in the "toolbox" of possible remedies.[322] In exceptional circumstances and with the prior agreement of the Commission, the NRA may even impose on undertakings with significant market power obligations regarding access that have not been foreseen by the relevant directive.[323]

1–075 ***Plurality of authorities ensuring the NRA's tasks***—Member States must publish in an

[317] In particular, Framework Directive, para.1–019, n.64, Arts.5(1) and 21a and Authorisation Directive, para.1–019, n.65, Arts.10 and 11; see also para.1–097, below.

[318] Framework Directive, para.1–019, n.64, Arts.20 and 21.

[319] Cave and Larouche, *European Communications at the Crossroads—Report of a CEPS Working Party* (CEPS, 2001), 19.

[320] *e.g.* Framework Directive, para.1–019, n.64, Art.10(1), which states that NRAs must establish objective, transparent, and non-discriminatory procedures for granting rights of use for national numbering resources; Universal Service Directive, para.1–019, n.67, Art.22(2), according to which NRAs may specify the quality of service parameters for electronic communications and the content, form and manner of the information to be published, including possible quality certification mechanisms, in order to ensure that end users, including disabled end users, have access to comprehensive, comparable, reliable and user-friendly information.

[321] Although various provisions of the European Regulatory Framework require that, as regards the new markets, the NRAs should proceed cautiously in adopting *ex ante* regulation, there is not a general principle of non-regulation of such markets, and the Framework Directive confers on the NRAs, and not on the national legislature, the task of determining the need for regulation of emerging markets: *Commission v Germany*, para.1–063, n.258, paras.73, 74, 78, and 106. Therefore, legislation that, as a general rule, excluded the *ex ante* regulation of new markets by the NRA was not consistent with EU law, as Germany had encroached on the wide powers conferred on NRAs by preventing the adoption of regulatory measures appropriate to each particular case. In addition, limiting an NRA's discretion to submit "new markets" to the market definition and analysis processes necessarily involved a failure to comply with the procedures provided for in Articles 6 and 7 of the Framework Directive. See further, para.1–083, n.371, para.1–221, n.927 and para.1–267, n.1089.

[322] Access Directive, para.1–019, n.66, Art.8(2) and, even more broadly drafted, Universal Service Directive, para.1–019, n.67, Art.17(2). NRAs' discretion is, nevertheless, limited as NRAs must submit the relevant draft measures to scrutiny by the Commission, BEREC and NRAs in other Member States: Framework Directive, para.1–019, n.64, Arts.7 and 7a. NRAs must also impose obligations which are based on the nature of the competition problem identified in the relevant market, proportionate and justified in the light of the objectives of Art.8 of the Framework Directive: Access Directive, para.1–019, n.66, Art.8(4) and Universal Service Directive, para.1–019, n.67, Art.17(2). See also Access Directive, Arts.5(1) and (2), para.1–059, above and paras.1–072, 1–083 and 1–236, below.

[323] Access Directive, para.1–019, n.66, Art.8(3), second sub-para.; see also para.1–225, below.

accessible form the tasks to be undertaken by the NRAs.[324] Where a Member State assigns its tasks to more than one body, it must ensure, where appropriate, consultation and cooperation between those authorities[325] and between those authorities and the national authorities entrusted with the implementation of competition[326] and consumer protection legislation.[327] The Court of Justice has confirmed that the very wording of the Framework Directive's definition of an NRA (*i.e.* "body or bodies charged with regulatory tasks") foresees the potentially pluralist nature of NRAs[328] and allows Member States to have two or more NRAs that are responsible in parallel for regulating electronic communications networks and services.[329] It has held that the assignment of the national numbering resources and the management of the national numbering plans[330] must be regarded as regulatory functions[331] and that the Framework Directive does not preclude the functions of

[324] Framework Directive, para.1–019, n.64, Art.3(4). The NRAs and their tasks must also be notified to the Commission: *ibid.*, Art.3(6); Access Directive, para.1–019, n.66, Art.16(1); Roaming Regulation, para.1–19, n.64, Art.12.

[325] In a number of Member States, more than one authority performs the functions of an NRA under the Regulatory Framework, for example, Spain, Austria, Belgium and Latvia. In Spain, the Comisión del Mercado de las Telecommunicaciones and the Ministry of Industry, Tourism and Commerce share the regulation of numbering resources: see also Accompanying Document to the 14th Implementation Report, para.1–033, n.134, Vol.1, Part 2, 147. In Austria, the Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) acts as the operational arm of the Austrian Communications Authority (KommAustria), which is a subordinate administrative body of the Federal Chancellery that regulates the broadcasting sector. RTR also acts as the operational arm of the Telecommunications Control Commission (TKK), which is responsible for the regulation of the electronic communications sector: *ibid.*, 252. In Belgium, apart from the Belgian Institute for Postal Services and Telecommunications (BIPT), bodies established by the three Communities (Conseil Supérieur de l'Audiovisuel, Vlaamse Regulator voor de Media and Medienrat) perform the tasks of NRAs regarding the transmission of broadcasting signals (and are also responsible for the regulation radio and TV content), whilst the Federal Competition Council, in addition to its competencies regarding competition, is responsible for resolving disputes between electronic communications providers: *ibid.*, 65. In addition, even the Federal legislature has considered itself an NRA with regard to the costs of universal service; there are two cases pending before the Court of Justice concerning whether the Federal legislature's role is compatible with the requirements of the Regulatory Framework: see n.335, below and para.1–309, n.1255, below. Latvia also has notified multiple NRAs in the electronic communications sector: the Public Utilities Commission, the Electronic Communications Office (ECO), the Ministry of Transport, the State Data Inspectorate and the Consumer Rights Protection Centre. Among these various regulators, the Public Utilities Commission (SPRK) has the broadest regulatory responsibilities, including market analysis, the designation of undertakings with SMP and the imposition of regulatory obligations: *ibid.*, 191–192.

[326] NRAs are, in particular, required to cooperate with national competition authorities in assessing the competitiveness of the relevant markets, in order to verify the existence of any operator that possesses SMP: Framework Directive, para.1–019, n.64, Art.16(1). National competition authorities indeed possess the specific knowledge needed for the application of the competition law concepts and methods also used by the sector-specific Regulatory Framework.

[327] *ibid.*, Art.3(4).

[328] Case C-82/07, *Comisión del Mercado de las Telecommunicaciones v Administración del Estado* [2008] E.C.R. I-1265, para.19.

[329] See Maxwell, para.1–018, n.59, booklet I.1, 29–30; Braun and Capito, "The Framework Directive", in Koenig, Bartosch, Braun and Romes (eds.), para.1–002, n.5, 343, 345–347.

[330] See Framework Directive, para.1–019, n. 64, Art.10(1). The Better Regulation Directive, para.1–019, n. 64, replaced, with regard to the tasks of the NRAs, the wording "assignment of all national numbering resources", by "the granting of rights of use of all national numbering resources", although this technical adjustment does not affect the sense of the provision.

[331] Such activities are not to be considered as "operational functions", as they do not form part of the functions exercised by entities which ensure services and/or networks provisions as defined in Art.2(m) of the Framework Directive (*i.e.* "'provision of an electronic communications networks' means the establishment,

assigning national numbering resources or of managing national numbering plans from being shared by a number of independent regulatory authorities (*in casu*, in Spain, the Comisión del Mercado de las Telecommunicaciones—the NRA with primary responsibility for overseeing the day-to-day operation of the market—and the Ministry of Industry, Tourism and Commerce, which has residual powers in the management of public numbering resources),[332] provided that the allocation of tasks is made public, is easily accessible and is notified to the Commission.[333] The risk of outside influence (*i.e.* external intervention or political pressure) jeopardising an NRA's independence[334] makes a national legislative body unsuited to act as an NRA under the Regulatory Framework.[335] It should finally be noted[336] that some regulatory activities in the broad sense, especially concerning public goods like the granting of rights of way[337] and (since the 2009 reforms to the Regulatory Framework) the allocation of radio spectrum for electronic communications services, as well as issuing general authorisations or individual rights of use of such radio frequencies,[338] are entrusted to the "competent (national) authorities" and not necessarily to NRAs as such. In such areas, which are especially linked to national sovereignty, this might give the Member States additional discretion in the organisation of the functions concerned, although they are of course free to entrust them to the NRA that performs in general the other functions under the Regulatory Framework.

operation, control or making available of such a network"): *Comisión del Mercado de las Telecommunicaciones v Administración del Estado*, para.1–075, n.328, para.15.

[332] If a ministerial authority is involved, even partially, in exercising regulatory functions, the Member State concerned must ensure that the requirements regarding the independence of NRAs are respected: see para.1–089, below.

[333] *Comisión del Mercado de las Telecommunicaciones v Administración del Estado*, para.1–075, n.328, paras. 21 and 27.

[334] See para.1–088 *et seq.*, below.

[335] Better Regulation Directive, para.1–019, n.64, recital 13. This issue will be considered by the Court of Justice in Case C-389/08, *BASE et al v Council of Ministers*, O.J. 2008 C285/27, pending. In its request for a preliminary ruling, the Belgian Constitutional Court submitted to the Court of Justice the question of whether the legislature of a Member State, acting in the capacity of a national regulatory authority, is allowed to determine generally and on the basis of the calculation of the net costs of the universal service provider—previously the sole provider—that the provision of universal service represents an "unfair burden" for those undertakings designated as universal service providers under Art.12 of the Universal Service Directive, para.1–019, n.67, Art.12. A similar question is raised in Case C-222/08, *Commission v Belgium*, O.J. 2008 C209/24, pending. See also para.1–306, below.

[336] Specific authorities may be created in the fields of the protection of privacy, data protection and data retention: see para.1–074, n.315.

[337] Framework Directive, para.1–019, n.64, Art.11(1); see also 2002 Framework Directive, para.1–019, n.64, recital 22.

[338] *ibid.*, Art.9(1). Art.9(1) of the 2002 Framework Directive, para.1–019, n.64, used, for the same tasks, the concept of the NRA. With regard to the authorisation to transfer, or to lease, usage rights to third parties, however, recital 39 of the Better Regulation Directive, para.1–019, n.64, still uses the concept of the NRA, as does Art.6 of the Framework Directive, concerning national consultations, when it refers to Art.9 of the same Directive regarding the frequency spectrum. In addition, Art.5(3) of the Authorisation Directive, para.1–019, n.65 (regarding the granting of rights of use of numbers and radio frequencies) also uses the concept of "NRA", as does Art.8(2)(d) with regard to the encouragement of the efficient use and management of radio frequencies and numbers. See also para.1–188, below.

2. Principles governing NRAs' activities and their organisation

1–076 General principles of EU law: objectivity, non-discrimination, proportionality and transparency—In the pursuit of the policy objectives of the Electronic Communications Regulatory Framework, NRAs must apply the general principles of EU law, including objectivity, transparency, non-discrimination and proportionality.[339] This requirement is explicitly stated in Article 8(5) of the Framework Directive, but is also to be found in a number of specific provisions of the Regulatory Framework. In this way, objectivity, according to the Framework Directive, means that NRAs must act in an impartial way.[340] It also requires that NRAs' decisions and policies are directed towards the achievement of the objectives of the Regulatory Framework.[341] The principle of non-discrimination requires NRAs, for example, to establish procedures for granting rights of use for national numbering resources that are non-discriminatory.[342] As far as proportionality is concerned, Article 12(2) of the Access Directive specifies a number of factors (*e.g.* the technical and economic viability of using or installing competing infrastructure and the feasibility of providing the access proposed) that an NRA must take into account when assessing how access obligations should be imposed in a proportionate way upon undertakings having SMP.

1–077 ***Consultation and transparency mechanism***—Articles 3(3), 5(4) and 5(5) of the Framework Directive require NRAs to act transparently and to publish such information as would contribute to an open and competitive market.[343] The Regulatory Framework also foresees obligations for NRAs to consult interested parties before taking a measure. In this context, Article 6 of the Framework Directive imposes a transparency and national consultation mechanism:[344] when NRAs intend to impose measures to apply the relevant provisions of the directives comprising the Regulatory Framework and/or national measures that implement these directives, they must give interested parties, including operators active in the concerned relevant market, an opportunity to comment on the draft measure within a reasonable period.[345] Draft measures that have a significant impact on the relevant market and therefore should be subject to public consultation include those which: (i) define the relevant markets for the purposes of an SMP market analysis; (ii) assess

[339] On the principles of proportionality, non-discrimination and transparency, see generally Craig and De Búrca, para.1–010, n.30, 544–551, 558–561 and 562–568, respectively. On the principle of objectivity, see Nihoul and Rodford, para.1–018, n.53, 97.

[340] Framework Directive, para.1–019, n.64, Art.3(3).

[341] *ibid.*, Art.8(1). See Nihoul and Rodford, para.1–018, n.59, 97. See also Access Directive, para.1–019, n.66, Arts.5(2) and 8(4); Universal Service Directive, para.1–019, n.67, Art.17(2).

[342] Framework Directive, para.1–019, n.64, Art.10(1).

[343] This is without prejudice to the respect of the rules on business confidentiality: *ibid.*, Arts.5(3) and 5(4).

[344] See also: *ibid.*, Arts.12(2) and 12(3), regarding the planned imposition of facilities or property sharing (including co-location) on non-SMP undertakings; Universal Service Directive, para.1–019, n.67, Art.33(1) requiring NRAs to establish consultation mechanisms to ensure that, in their decisions on issues related to end-user and consumer rights concerning publicly available electronic communications services, due consideration is given to consumers' interests.

[345] Framework Directive, para.1–019, n.64, Art.6. According to para.145 of the SMP Guidelines, para.1–021, n.76, NRAs' decisions should not be delayed excessively by the national public consultation, as this can impede the development of the market. For decisions relating to the existence and designation of undertakings with SMP, the Commission considers that a period of two months is reasonable for the public consultation. Different periods could be used in some cases, if this is justified. Conversely, where the NRA proposes to adopt an SMP decision on the basis of the results of an earlier decision that has been subject to public consultation, an appropriate consultation period for the proposed decision may well be shorter than two months.

whether an operator possesses SMP in those markets; (iii) impose, amend or withdraw any *ex ante* regulatory obligations; (iv) apply restrictions on the principles of service and technological neutrality in the use of radio frequency bands; and (v) will otherwise have a significant impact on the market.[346] NRAs are required to publish their national consultation procedures. A single information point through which all ongoing consultations can be accessed should be established in each Member State. NRAs must publish the results of public consultations, whilst complying with the requirements of EU and national law protecting the confidentiality of business secrets.[347] If a national consultation under Article 6 of the Framework Directive procedure concerns draft measures which should also be notified to the Commission, BEREC and the NRAs of other Member States under the Article 7 EU consultation procedure (*e.g.* draft measures applying the SMP procedure), the NRAs must conduct its national public consultation prior to the EU consultation required under the Article 7 procedure, in order to allow the views of interested parties to be reflected in the EU consultation. This would also avoid the need for a second EU consultation, in the event of changes to a draft measure as a result of the national consultation.[348]

1–078 Specific regulatory principles for NRAs: Article 8(5) of the Framework Directive—The general principles of EU law, as well as the general principles underlying the Electronic Communications Regulatory Framework,[349] are supplemented and specified by a number of regulatory principles that are addressed directly to the NRAs, which the NRAs must apply in the pursuit of the achievement of the Regulatory Framework's policy objectives. The specific principles are highlighted by Article 8(5) of the Framework Directive.[350] They provide further guidance for NRAs in carrying out their tasks under the Regulatory Framework and are especially focused on competition issues and the development of next generation networks.[351] Accordingly, the NRAs shall: (i) promote regulatory predictability, by ensuring a consistent regulatory approach over appropriate review periods; (ii) ensure that, in similar circumstances, there is no discrimination in the treatment of undertakings providing electronic communications networks and services; (iii) safeguard competition to the benefit of consumers and promote, where appropriate, infrastructure-based competition; (iv) promote efficient investment and innovation in new and enhanced infrastructures; (v) take due account of the variety of conditions relating to competition and consumers that exist in the various geographic areas within a Member State; and (vi) impose *ex ante* regulatory obligations only where there is no effective and sustainable competition and relax or lift

[346] Draft measures regarding dispute resolution, including the resolution of cross-border disputes, and draft measures falling under Art.7(9) of the Framework Directive for being urgent in order to safeguard competition and protect the interests of users, are excluded from the scope of the consultation procedure: Framework Directive, para.1–019, n.64, Art.6.

[347] *ibid.*

[348] Better Regulation Directive, para.1–019, n.64, recital 17. The Commission considers that any material modification to the draft measure made as a consequence of comments made by interested parties during a national consultation procedure that is undertaken in parallel with the Article 7 EU consultation procedure requires the measure to be re-notified to it: Case UK/2008/0787, *Wholesale terminating segments of leased lines in the UK*, Commission Comments of August 8, 2008, 5. See also, in the context of the application of the Article 7 procedure under the 2002 Electronic Communications Regulatory Framework, Recommendation 2008/850 of October 15, 2008 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21, O.J. 2008 L301/23 ("Article 7 Recommendation"), point 8(f).

[349] See para.1–066 *et seq.* and para.1–076, above.

[350] Framework Directive, para.1–019, n.64, Art.8(5)(a) to (f).

[351] See Commission Amended Proposal for a Better Regulation Directive, para.1–028, n.115, 15.

such obligations as soon as effective and sustainable competition is achieved. These regulatory principles are considered below in more detail.

1–079 ***Promoting regulatory predictability (Article 8(5)(a) Framework Directive)***—Regulatory certainty and predictability is a key issue in a sector requiring high investments in rolling-out the new optical fibre based networks that are needed to provide the higher bandwidths required by new broadband services. The regulatory approach adopted by an NRA and the terms and conditions for access, if applicable, should be consistent over appropriate review periods, in order to provide investors with the certainty needed to make these investments.[352] Nevertheless, when deciding whether *ex ante* obligations should continue to be imposed upon an undertaking with SMP in a specific market, NRAs should conduct a new market analysis at the end of each review period under the SMP procedure,[353] which is typically around every three years.[354] In this way, NRAs can take into account , in particular, the fact that the amortisation of an investment in Next Generation Access Networks is spread out over a number of years and a longer period than other investments. The principle implies that, even if the level of tariffs imposed upon an undertaking with significant market power would not stay identical over two (or even three) review periods, the underlying approach to regulation would remain the same.[355]

1–080 ***Ensuring non-discrimination (Article 8(5)(b) Framework Directive)***—This specific application of a general principle of EU law to NRAs' activities regarding undertakings providing electronic communications networks and services was considered by Article 8(3)(c) of the 2002 Framework Directive to be a secondary objective to the general objective of the development of the internal market. As it is more a principle for action than an objective, it has been moved by the Better Regulation Directive to the new Article 8(5)(b) of the Framework Directive.

1–081 ***Safeguarding competition and promoting, where appropriate, infrastructure based competition (Article 8(5)(c) Framework Directive)***—The third principle addresses the critical issue of the relationship between two different modes of competition: infrastructure-based (or facilities-based) competition and services-based (or access-based) competition.[356] The Electronic Communications Regulatory Framework favours infrastructure-based competition, wherever possible, as the best way to ensure effective and sustainable competition.[357] Infrastructure-based competition means that new entrant operators roll-out their own, ultimately full-scale, networks, which leads to

[352] Better Regulation Directive, para.1–019, n.64, recital 55.

[353] See para.1–220 *et seq.*, below.

[354] See Framework Directive, para.1–019, n.64, Art.16(6)(a). See also *ibid.* Art.16(6)(b) and (c) for specific review periods.

[355] The Commission rejected a European Parliament amendment, proposing the wording "promoting regulatory predictability through the continuity of remedies over several market reviews as appropriate" (European Parliament legislative resolution of September 24, 2008, P6_TA-PROV(2008)0449, para.1–028, n.115, amendment 62), as, in its view, "the implication that regulatory predictability could be achieved through continuity of remedies where those remedies would not otherwise have been selected should, however, be avoided": Commission Amended Proposal for a Better Regulation Directive, para.1–028, n.115, 15. See also Second Draft NGA Recommendation, para.1–051, n.194, para.6.

[356] Valcke, Queck and Lievens, para.1–066, n.265, 62–67; see also paras.1–262 *et seq.* and paras.1–284 *et seq.*, below.

[357] Framework Directive, para.1–019, n.64, Art.8(5)(c); Better Regulation Directive, para.1–019, n.64, recitals 54–55. See also Access Directive, para.1–019, n.66, Art. 12(2)(a) and Art.12(2)(d), which states that when NRAs are considering imposing access obligations upon an undertakings with significant market power, they shall take account, among other factors, of the need to safeguard competition in the long term, with particular attention to economically efficient infrastructure-based competition; and 2002 Access Directive, para.1–019, n.66, recital 19.

competition over competing networks. The benefit that a new entrant obtains is an increased level of control over its service offerings, which gives it greater scope for innovation and a downwards dynamic for costs, as well as greater diversity for consumers. Infrastructure-based competition is, however, only a long-term objective.[358] It is only possible if the incumbent's infrastructure is replicable.[359] An efficient level of infrastructure-based competition is the extent of infrastructure duplication (or replication) at which investors can reasonably be expected to make a fair return, based on reasonable expectations about the evolution of market shares.[360] Thus, where replication of the incumbent's infrastructure is feasible, NRAs should choose remedies which assist in the transition to infrastructure-based competition,[361] *e.g.* by tackling an SMP operator's attempts to thwart new entrants[362] and by applying access pricing policies that incentivise new entrants to build their own infrastructure.[363] In rolling-out additional investments in infrastructure further down the network hierarchy towards the end users, and thus making investments in network assets which are less and less easily replicable, new entrants will climb the "ladder of investment".[364]

[358] *ibid.*, recital 19.

[359] The concept of "replication" refers to other infrastructure that is capable of delivering the same services, which need not be on the basis of the same technology and, even if it is, there is no assumption that it will be configured in the same manner: ERG, Revised Common Position of May 18, 2006 on the approach to appropriate remedies in the ECNS regulatory framework—Final Version May 2006, ERG (06) 33, ("ERG Revised Remedies Paper"), 52.

[360] Better Regulation Directive, para.1–019, n. 64, recital 54.

[361] During this transition process, NRAs need also to bear in mind an incumbent's incentives to maintain and upgrade its network: ERG Revised Remedies Paper, para.1–081, n.359, 61.

[362] *ibid.*, 52 and 61. If an NRA is uncertain as to whether replication is feasible, it should preserve a neutral position and engage in on-going monitoring of the market to strengthen its view as to the prospect of replication: *ibid.*, 52 and 59–60.

[363] Cave, "Encouraging infrastructure competition via the ladder of investment" (2006) 30 *Telecommunications Policy* 223, 224.

[364] On this concept, aiming at bringing competition to the deepest level possible in the network, and on how to implement it, see Cave, para.1–081, n.363 and ERG Revised Remedies Paper, para.1–081, n.359, 61–64. For its application to Next Generation Access Networks, see ERG Opinion/Common Position of October 5, 2007 on Regulatory Principles of NGA, ERG(07) 16rev2 ("ERG Common Position on NGA"), 48–50 and ERG Report of June 2009 on Next Generation Access—Economic Analysis and Regulatory Principles, ERG (08) 17, 13–14, presenting the different rungs of an "NGA ladder of investment", leading from a new entrant's reliance on resale and bitstream products to access to the end user by the use of only its own infrastructure as the highest rung. According to the ERG, the concept of the "ladder of investment" assumes that "investments are made in a step by step way by new entrants. In order to allow new entrants to gradually (incrementally) invest in own infrastructure they need a chain of (complementary) access products to acquire a customer base by offering their own services to end users based on (mandated) wholesale access. Once they have gained a critical mass generating revenues to finance the investment, they will deploy their own infrastructure taking them progressively closer to the customer and increasingly able to differentiate their service from that of the incumbent, also making them less dependent of the incumbent's infrastructure. This involves migration from one access product (or access point) to another (moving to the next rung). Thus, the entrant passes progressively through several stages of infrastructure competition, as it ascends a "ladder of infrastructure", the initial phase being service competition, which can therefore be seen as a vehicle to infrastructure competition, which is the ultimate aim as it ensures sustainable competition in the long run": ERG Common Position on NGA, 48. In March 2010, BEREC, successor to the ERG (see paras.1–102 and 1–103, below), confirmed the principle of the "ladder of investment" and of promoting competition to the deepest level possible as still valid in an NGA environment and specified that depending on the roll-out scenario (Fibre to the Cabinet/Curb (FTTC) or Fibre to the Building or Home (FTTB, FTTH)) different rungs of the ladder and different wholesale products are relevant in this environment: BEREC Report on NGA, para.1–045, n.178, 10–14.

1–082 Services-based (or "access-based") competition, *i.e.* competition at the services level, can have two aspects. One is that services-based competition constitutes the first step in the direction of long run infrastructure-based competition. The other occurs if the incumbent's infrastructure is not replicable. In this second case, promoting service-based competition is an important goal for NRAs, as it is only through vigorous competition at the level of services that consumers can enjoy the maximum possible benefits of liberalisation and competition. In this context, NRAs will first have to ensure that there is sufficient access to wholesale inputs so that service competition can flourish. Competition at the services level must be undistorted by the activities of the upstream infrastructure provider.[365] A second concern of NRAs in this context must, however, be that the incumbent can make a sufficient return on investment in its existing infrastructure, to encourage further investment and to maintain and upgrade these existing facilities.[366]

1–083 ***Promoting efficient investment and innovation in new and enhanced infrastructures (Article 8(5)(d) Framework Directive)***—NRAs must promote investment and innovation in new and enhanced infrastructures, especially in NGAs.[367] This includes ensuring that any access obligations imposed by them take appropriate account of the investment risks incurred by the network operators. NRAs must also permit cooperative arrangements between network operators investing in new network infrastructure and parties seeking access to it, in order to diversify the investment risks, whilst ensuring that competition in the market is preserved and the principle of non-discrimination is respected.[368] The regulation of NGAs, which are required to deliver content-rich services and interactive applications,[369] is one of the key issues dealt with in the Better Regulation Directive.[370] Regulation should encourage both investment and competition.[371] On the one hand,

[365] ERG Revised Remedies Paper, para.1–081, n.359, 58.

[366] *ibid.*

[367] In a broader context, see also: Communication from the Commission of September 30, 2009, "Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks", O.J. 2009 C235/7 (see generally, para.6–106 *et seq.*, below); and Regulation 67/2009 of November 30, 2009 laying down general rules for the granting of Community financial aid in the field of trans-European networks, O.J. 2010 L27/20, which includes trans-European networks for telecommunications infrastructures.

[368] Framework Directive, para.1–019, n.64, Art.8(5)(d), which is a re-worded version of Art.8(2)(c) of the 2002 Framework Directive, para.1–019, n.64. See also Brussels European Council of March 19/20, 2009, Presidency Conclusions, 7880/1/09 REV1 (April 29, 2009), point 17, available at *http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/106809.pdf*. In the same sense, see Art.12(2)(c) of the Access Directive, para.1–019, n.66, which states that when NRAs are considering imposing access obligations upon an undertaking with significant market power, they shall take account, among others, of the initial investment made by the facility owner, bearing in mind any public investment made and the risks involved in making the investment.

[369] Better Regulation Directive, para.1–019, n.64, recital 8. In this way, NGAs are considered a key element for achieving the goals of the Lisbon Agenda and for strengthening the EU's international competitiveness.

[370] See para.1–029, above; see also Commission Press Release, *EU Telecoms Reform: 12 reforms to pave way for stronger consumer rights, an open internet, a single European telecoms market and high-speed internet connections for all citizens*, MEMO/09/513 (November 20, 2009) and Commission MEMO/09/568, para.1–030, n.125.

[371] The Electronic Communications Regulatory Framework, as revised in 2009, therefore does not allow NRAs to impose "regulatory holidays" on operators of NGAs. Under the 2002 Regulatory Framework, see *Commission v Germany*, para.1–063, n.258, in which the Court of Justice held that amendments to the German telecommunications legislation which meant that emerging markets should not, in principle, be subject to regulation (so that Deutsche Telekom could be granted a "regulatory holiday" for its NGA) was not compatible with Art.16 of the 2002 Framework Directive, as it deprived the German NRA of assessing the regulation of new, emerging markets on a case-by-case basis; see also para.1–074, n.321, para.1–221 and

while NGAs require substantial investments, there may be risks associated with investment projects specific to new access networks which support products for which demand is uncertain at the time the investment is made.[372] On the other hand, while full infrastructure-based competition is preferable, it will probably not be feasible in all Member States and in all geographic areas.[373] Consequently, access (and pricing) obligations will be necessary regarding NGAs in order to foster services-based competition. The challenge, which the principle contained in Article 8(5)(d) of the Framework Directive addresses, is to combine the promotion of competition and investment and to avoid that investment risks and the risks of being subject to regulatory obligations deter operators from making the investments needed.

1–084 The principle of promoting investment and innovation requires NRAs to ensure that any access obligations they may impose take account of the risks incurred by those who invest in new and enhanced access infrastructures. NRAs should therefore ensure that access and pricing conditions: reflect the circumstances underlying the investment decisions; take into account the roll-out costs, the expected rate of take up of the new products and services and the expected retail price levels;[374] and allow a fair return for investors, given the risks associated with investments in new access networks.[375] NRAs should, furthermore, permit various cooperative agreements between investors and access seekers to allow for risk-sharing.[376] These agreements may include pricing arrangements which depend on volumes or the length of the contract,[377] provided they do not have a discriminatory effect,[378] although the prohibition on discrimination is likely to limit investors' discretion in concluding such cooperative agreements. For example, the use of volume discounts should not prevent small new entrants (using small volumes) from profiting from favourable pricing arrangements. The first insight on the quality of the compromise represented by this principle and on how it may work in practice is found in the Commission's draft recommendation on regulated access to Next Generation Access Networks.[379]

1–085 ***Taking due account of the variety of conditions relating to competition and consumers (Article 8(5)(e) Framework Directive)***—In order to ensure a proportionate and adaptable approach to varying competitive conditions, NRAs, when applying the SMP procedure, should be

para.1–267, n.1089 and para.4–023, below. On the concept of "regulatory holidays", see generally Commission Press Release, *Commission launches 'fast track' infringement proceedings against Germany for 'regulatory holidays' for Deutsche Telekom*, IP/07/237 (February 26, 2007).

[372] *ibid*, recital 57.

[373] Trautmann 2008 Report, para.1–051, n.200, 110.

[374] Better Regulation Directive, para.1–019, n.64, recital 55.

[375] *ibid.*, recital 57. Such a "risk premium" allowing, *e.g.*, for a mark-up on access prices is also envisaged by Art.13(1) of the Access Directive, para.1–019, n.66.

[376] The use of the wording "promoting efficient investment and innovation..., including...by permitting various cooperative agreements" instead of "to this end" (which was proposed by the European Council: Brussels European Council of March 19–20, 2009, para.1–083, n.368, point 17), suggests that permitting cooperative agreements is complementary to adopting appropriate regulatory obligations and not the only way for achieving such appropriate obligations. Imposing an access obligation would therefore not solely depend on the conclusion of an agreement.

[377] Large volumes purchased and contracts concluded over a long period contribute to diminishing the investment risks.

[378] See also Better Regulation Directive, para.1–019, n.64, recital 55.

[379] See Second Draft NGA Recommendation, para.1–051, n.194. This draft replaced Commission Draft Recommendation of September 18, 2008 on regulated access to Next Generation Access Networks (NGA) ("First Draft NGA Recommendation"), available at *http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/nga/index_en.htm*. See also para.1–250 and paras.1–267 *et seq.*, below.

able to define markets on a sub-national basis and to lift regulatory obligations in markets and/or geographic areas where there is effective infrastructure competition.[380]

1–086 ***Imposing* ex ante *regulatory obligations only where there is not effective and sustainable competition and relaxing or lifting such obligations as soon as that condition is fulfilled (Article 8(5)(f) Framework Directive)*** —The principles of proportionality and "light-handed" regulation underlie the Electronic Communications Regulatory Framework and are stated by Article 8(1) of the Framework Directive.[381] Therefore, the last specific regulatory principle, contained in Article 8(5)(f) of the Framework Directive, requires NRAs to roll back sector-specific economic regulation once effective competition develops.[382]

1–087 However, if, to the contrary, there is not effective competition, NRAs must impose at least one *ex ante* regulatory obligation on operators with SMP.[383] In doing so, NRAs must use their discretion in selecting and imposing obligations which are based on the nature of the competition problem identified, proportionate and justified in the light of the objectives of the Regulatory Framework.[384] NRAs will have considered and identified the nature of the market problem(s) to be addressed in the course of the market definition and market analysis stages of the SMP process. They will therefore have a clear insight into the nature of the market failure that exists. NRAs can then apply the available remedy (or the series of remedies) that most clearly addresses the core of the problem, *i.e.* the possible specific anti-competitive effects arising from an operator possessing and maintaining significant market power. When choosing the most effective remedy, and in order to avoid over-regulation, NRAs should focus on the anti-competitive behaviour that is most likely to occur in the specific market situation.[385] According to the European Regulators Group, a final principle to be respected by NRAs, in selecting and imposing SMP-related obligations, is that remedies should be designed, where possible, to be compatible with providing incentives for investments in new infrastructure.[386] Regulatory obligations should, therefore, be designed in such a way that the advantages of compliance outweigh the benefits of avoidance. According to the ERG, incentive-compatible remedies require a minimum of on-going regulatory intervention.[387]

1–088 **Independence of NRAs**—The Member States must ensure that NRAs act in an impartial,

[380] Better Regulation Directive, para.1–019, n.64, recital 7. See also Framework Directive, para.1–019, n.64, Art.15(3) on NRAs' responsibility for defining geographic markets. On sub-national markets, see Communications Committee Working Document of April 9, 2008 on Article 7 procedures, COCOM08–13, 2; Communications Committee Working Document of April 20, 2009 on Article 7 procedures, COCOM09–07 REV1, 2–5; and ERG, Common Position on geographic aspects of market analysis (definition and remedies), ERG(08)20final (October 16, 2008).

[381] See para.1–067, above.

[382] Better Regulation Directive, para.1–019, n.64, recital 5 and Framework Directive, para.1–019, n.64, Art.16(3). See also 2002 Framework Directive, para.1–019, n.64, recital 27.

[383] Framework Directive, para.1–019, n.64, Art.16(4); Access Directive, para.1–019, n.66, Art.8(2); Universal Service Directive, para.1–019, n.67, Art.17(1). See para.1–225, below.

[384] Access Directive, para.1–019, n.66, Art.8(4), concerning remedies imposed regarding wholesale products, and Universal Service Directive, para.1–019, n.67, Art.17(2) concerning retail markets. See also ERG Revised Remedies Paper, para.1–081, n.359, 53–57 and Valcke, Queck and Lievens, para.1–066, n.265, 53–62.

[385] ERG Revised Remedies Paper, para.1–081, n.359, 54.

[386] *ibid.*, 53 and 64–67.

[387] Note, in this context, the power which should be given to the NRAs to impose dissuasive remedies under Art.21a of the Framework Directive, para.1–019, n.64, and Art.10 of the Authorisation Directive, para.1–019, n.65: see para.1–097, below.

transparent and timely manner.[388] Impartiality means that the NRAs must act with neutrality and a basic condition for impartiality is the independence of NRAs, most notably based on the separation of commercial (or operational) activities from regulatory functions.[389] Article 3(2) of the 2002 Framework Directive already included provisions to strengthen this separation. This provision was not amended in 2009. In particular, NRAs must be legally distinct and functionally independent from all operators providing electronic communications networks, equipment or services.[390] Member States that retain ownership or control of undertakings providing electronic communications networks and/or services must ensure the effective structural separation of their NRAs' regulatory functions from the State's activities associated with ownership or control.[391] The 2002 Framework Directive provided no further indications on the form that this structural separation should take.[392] It appeared, nevertheless, clear that "structural separation",[393] as envisaged by Article 3(2) of the Framework Directive, implies that conflicts of interest must be avoided and the Member State must take the measures necessary to ensure that the exercise of regulatory tasks is autonomous, neutral and not affected, in any form whatsoever, by the State's shareholding (if any) in an electronic communications undertaking.[394]

1–089 ***Comisión del Mercado de las Telecommunicaciones***—In *Comisión del Mercado de las Telecommunicaciones v Administración del Estado*,[395] the Court of Justice held that although Member States enjoy institutional autonomy as regards the organisation and the structuring of their NRAs, that autonomy may be exercised only in accordance with the objectives and the obligations laid down in the Framework Directive. Therefore, where regulatory functions are to be discharged, even partially, by ministerial authorities,[396] the relevant Member State must ensure that

[388] Framework Directive, para.1–019, n.64, Art.3(3).

[389] See para.1–009, above. On the requirement of "complete independence" of national data protection supervisory authorities, as foreseen under the Framework Data Protection Directive, para.1–074, n.315, Art.28(1), see paras.1–074, n.315, above and 1–380, n.1553, below.

[390] Framework Directive, para.1–019, n.64, Art.3(2). Legal independence requires that the NRAs must be legally separate from undertakings active in electronic communications markets and that it is not possible for a Member State to designate one of these undertakings for the fulfilment of an NRA's tasks and missions. Functional independence appears to imply that no connection may exist between the two functions and that policies must be drawn up, defined and implemented by the NRA independently of any link with a specific undertaking: Nihoul and Rodford, para.1–018, n.59, 22–23.

[391] Framework Directive, para.1–019, n.64, Art.3(2). Requirements imposed upon NRAs are in principle not applicable as such to "competent authorities" exercising regulatory activities connected to electronic communications but not defined as "NRAs" (see para.1–071, above) Nevertheless, Framework Directive, Art.11(2), requires that where public or local authorities retain ownership or control of undertakings that operate public electronic communications networks and/or publicly available electronic communications services, effective structural separation is put in place between the function responsible for granting rights of way by "competent authorities" and the activities associated with ownership or control.

[392] However, according to recital 11 of the 2002 Framework Directive, para.1–019, n.64, the requirement of independence is without prejudice to the institutional autonomy and constitutional obligations of the Member States or to the principle of neutrality with regard to the rules in Member States governing the system of property ownership laid down in Art.295 of the EC Treaty [new 345 TFEU].

[393] In this context, structural separation does not imply legal separation inside the government. On different meanings the concept of "structural separation" can take, see also para.1–145, n.634.

[394] Nihoul and Rodford, para.1–018, n.59, 23, 729 and 731.

[395] *Comisión del Mercado de las Telecommunicaciones v Administración del Estado*, para.1–075, n.328.

[396] *ibid.*, the Spanish of Industry, Tourism and Commerce had residual competences with respect to the management of public numbering resources.

those authorities are neither directly nor indirectly involved in "operational" functions[397] within the meaning of the Framework Directive.[398] Referring explicitly to the Court of Justice's judgment, the Commission brought infringement proceedings notably against Romania:[399] according to the Commission, the Romanian Ministry of Communications and Information Society was entrusted with regulatory tasks (including the allocation and assignment of radio frequencies), but simultaneously also exercised ownership and control activities in two providers of electronic communications networks and/or services, thereby infringing the requirement for effective structural separation between regulatory and ownership/operational functions.[400] The Commission appears to consider that activities related to the ownership or control of an undertaking are examples of operational functions.

1–090 ***Clarifications and additional guarantees for impartiality and independence provided by the Better Regulation Directive***—In order to ensure the more effective application of the Electronic Communications Regulatory Framework and to increase the authority of NRAs and the predictability of their decisions, the Better Regulation Directive strengthens the independence of NRAs.[401] Several specifications were added to the 2002 Framework Directive, with the insertion of a new Article 3(3a), in addition to the independence requirement as already formulated in Article 3(2) of the Framework Directive. These supplementary provisions appear to be applicable in general, even if a Member State does not retain ownership or control of electronic communications providers. They require national legislation to contain explicit provisions to ensure that, in the exercise of its tasks, an NRA is protected against external intervention or political pressure that is liable to jeopardise its independent assessment of matters coming before it or to create doubts as to its neutrality.[402] The idea of "political independence" of the NRA was already proposed by the European Parliament in 2002, but was not explicitly stated in the Framework Directive. The provisions introduced in 2009 concern the independence of the NRAs other (State) bodies and so the prohibition of the giving of instructions to an NRA, the dismissal of an NRA's management and the budget of an NRA. According to the new Article 3(3a) of the Framework Directive, these improved guarantees of independence are, however, not applicable to all NRA but are explicitly limited to NRAs that have responsibility for resolving disputes between undertakings or for *ex ante* market regulation.[403] The concept of an NRA that is responsible for *ex ante* market regulation is neither defined nor clarified by Article 3(3a) or the recitals of the Better Regulation Directive. In

[397] See para.1–075, n.331, above.

[398] *Comisión del Mercado de las Telecommunicaciones v Administración del Estado*, para.1–075, n.328, paras. 23–26.

[399] Commission Press Release, *Telecoms: Commission asks Romania to separate regulatory and ownership functions in telecoms*, IP/09/1624 (October 29, 2009). As at March 18, 2010 infringement proceedings regarding the separation of regulatory and ownership activities were also pending against the following Member States: Latvia (for a first case, see Commission Press Release, *Telecoms: Infringement case against Latvia on independence of regulator enters second phase*, IP/09/569 (April 14, 2009); for a second, complementary case involving Latvia, see Commission Press Release, *Telecoms: Commission requests information from Slovenia and Latvia over independence of telecoms regulators*, IP/10/321 (March 18, 2010)) and Lithuania (see Commission Press Release, *Telecoms: Commission urges Lithuania to separate regulatory and ownership functions in telecoms*, IP/09/1040 (June 25, 2009)).

[400] See generally, 14th Implementation Report and Commission Staff Working Document accompanying the 14th Implementation Report, para.1–033, n.134, Volume 1, Part 2, 31; and the Commission's tables summarising infringement procedures against the Member States, para.1–032, n.133.

[401] Better Regulation Directive, para.1–019, n.64, recital 13.

[402] *ibid.*

[403] Framework Directive, para.1–019, n.64, Art.3(3a), first and second sub-paras.

order that the scope of the additional guarantees of independence is not construed too narrowly, this concept should include all NRAs responsible for overseeing the day-to-day operation of the electronic communications market and should not be limited only to NRAs that are responsible for the specific application of the SMP procedure, as this would potentially exclude those NRAs that perform other regulatory functions,[404] *e.g.* under the Universal Service Directive, even if the concept of *ex ante* regulation is often used in the context of the economic regulation of market power.[405] The limitation was introduced by the Council in its Common Position,[406] and could, give Member States some freedom to not apply the additional requirements to certain authorities. However, in such a situation, it would appear that the general requirement of independence, as explained by the Court of Justice in *Comisión del Mercado de las Telecommunicaciones*, is applicable to all kinds of NRAs and must be respected.

1–091 ***Instructions to NRAs***—NRAs that have responsibility for resolving disputes between undertakings or for *ex ante* market regulation must act independently and cannot seek or take instructions from any other body in relation to the exercise of the tasks assigned to them. This is, however, without prejudice to supervision[407] in accordance with national constitutional law, although only appeal bodies set up in accordance with Article 4 of the Framework Directive[408] may have the power to suspend or overturn an NRAs' decisions.[409] This provision could create difficulties in some Member States, insofar as the supervision must be in conformity with the NRA's independence and as national administrative supervision may also include the power for the competent authority to annul or even replace the supervised decision.

1–092 ***Dismissal of an NRA's management***—The head of an NRA that has responsibility for resolving disputes between undertakings or for *ex ante* market regulation (or, where applicable, members of the collegiate body fulfilling that function within an NRA or their replacements) may be dismissed only if the conditions laid down in advance in national law for the performance of their duties are no longer fulfilled.[410] The decision to dismiss the head of the NRA concerned (or, where applicable, the members of the collegiate body) must be made public at the time of dismissal. The dismissed head of the NRA (or the members of the collegiate body) must receive a statement of reasons and must have the right to request its publication, where this would not otherwise take place, in which case it must be published.[411] These provisions should prevent the situations that

[404] Note that, in its statement of reasons regarding its common position on the Better Regulation Directive, para.1–019, n.64, the Council made, regarding the NRAs to which they apply, no difference between Arts.3(2), 3(3) and 3(3a) of the Framework Directive, para.1–019, n.64: Common Position for a Better Regulation Directive, para.1–051, n.200, statement of the Council's reasons, point III.1.a.

[405] *e.g.* in para.1–018, above or also the very titles of the First and Second Markets Recommendations, para.1–021, referring to "markets... susceptible to *ex ante* regulation".

[406] Common Position for a Better Regulation Directive, para.1–051, n.200, Art.1(3)(b).

[407] This is also without prejudice to cooperation between NRAs and other authorities, and to the transmission of information between them, as foreseen by Art.3(4) and (5) of the Framework Directive: Framework Directive, para.1–019, n.64, Art.3(3a), first sub-para. On the position of the Court of Justice regarding the relationship between "independence" and "State scrutiny" in the context of national data protection supervisory authorities, see *Commission v Germany*, para.1–074, n.315, paras. 18–19 and 31–37. See also paras.1–074, n.315, above and 1–380, n.1553, below.

[408] See paras.1–040, above, as well as 1–094 and 1–095, below.

[409] Framework Directive, para.1–019, n.64, Art.3(3a), first sub-para.

[410] *ibid.*

[411] *ibid.*

arose under the 2002 Regulatory Framework in Poland[412] Romania[413], Slovakia and Slovenia[414], which were subject to infringement proceedings already under the 2002 Regulatory Framework as clear rules regarding the dismissal of the head of the NRA or of the members of a collegiate body fulfilling that function were already then considered by the Commission as precondition to the impartiality of NRAs.

1–093 ***NRAs' budgets***—NRAs that have responsibility for resolving disputes between undertakings or for *ex ante* market regulation must have their own separate annual budgets, allowing them, in particular, to recruit a sufficient number of qualified staff.[415] The budgets shall be made public.[416]

1–094 Appeals against an NRA's decisions—NRAs' decisions must be subject to appeal. Member States must ensure that effective mechanisms exist under national law so that any user or undertaking providing electronic communications networks and/or services who is affected by an NRA's decision (including decisions when exercising its dispute resolution powers) has a right of appeal to an independent appeal body, which may—but need not necessarily, in a first stage—be a Court.[417] A strict interpretation of this provision would limit the right of appeal to the addressees of an NRA's decisions, which would be difficult to reconcile with the general objectives and regulatory principles of Article 8 of the Framework Directive, particularly the objective of promoting competition,[418] as well as with the general principle of EU law of effective judicial protection.[419] Consequently, the terms "user affected" and "undertaking affected" must be interpreted

[412] While the Polish government was a major shareholder in a number of telecommunications companies the head of the NRA had no fixed term of office and could be dismissed by the President of the Council of Ministers at any time and without giving reasons: see Commission Press Release, *New round of infringement proceedings in electronic communications: What are the issues*, MEMO/06/487 (December 13, 2006); see also Commission Staff Working Document accompanying the 14th Implementation Report, para.1–033, n.134, Volume 1, Part 2, 262–263. After appropriate amendment of the relevant Polish legislation, on June 25, 2009 the Commission closed the corresponding infringement procedure it had opened against Poland: see Commission Press Release *Telecoms: European Commission closes three cases against Poland after the introduction of legislative reforms in telecoms sector*, IP/09/1006 (June 25, 2009).

[413] In 2008, the president of the Romanian NRA was removed, on various grounds, before the end of his mandate and although this decision was suspended by a national court, was not reinstated, as the Romanian Government decided to restructure and rename the NRA: see Accompanying Document to the 14th Implementation Report, para.1–033, n.134, Volume 1, Part 2, 283 and Commission Press Release, *Telecoms: Commission launches infringement case against Romania over independence of regulator*, IP/09/165 (January 29, 2009).

[414] Regarding Slovakia the Commission considers that the chairman of the Slovakian NRA had been dismissed according to a procedure and to rules that did not fulfil the requirements of the Regulatory Framework: see Commission Press Release, *Independence of Telecoms Regulators: Commission launches infringement case against Slovakia*, IP/09/775 (May 14, 2009) and Accompanying Document to the 14th Implementation Report, para.1–033, n.134, Volume 1, Part 2, 308. Also regarding Slovenia, the Commission considers that the rules according to which the Slovenian Government dismissed the director of the NRA, and which give wide discretion to the Government, are not in conformity with the requirement of the independence of NRAs: see IP/10/321 (March 18, 2010), para.1–089, n.399.

[415] Better Regulation Directive, para.1–019, n.64, recital 13.

[416] Framework Directive, para.1–019, n.64, Art.3(3a), second sub-para.

[417] Framework Directive, para.1–019, n.64, Art.4(1), first sub-para., and, more specifically, Authorisation Directive, para.1–019, n.65, Art.10(7) and Liberalisation Directive, para.1–007, n.23, Art.2(5). A right of appeal before an independent body against decisions of the "competent authority" in respect of the granting of rights of way is provided for by Framework Directive, Art.11(3).

[418] Case C-426/05, *Tele2 Telecommunications v Telekom-Control-Kommission* [2008] E.C.R. I-685, para.38.

[419] Art.4 of the Framework Directive is derived from this principle, pursuant to which it is for the courts of the Member States to ensure judicial protection of an individual's rights under EU law: *ibid.*, para.30.

as being applicable not only to the addressee of a decision (*e.g.* an undertaking (formerly) having SMP which is subject to a decision of an NRA adopted in the context of a market analysis procedure), but also to users and undertakings in competition with the addressee of that decision whose rights are adversely affected by it,[420] *e.g.* by a decision to withdraw regulatory obligations imposed upon a former SMP undertaking which had previously benefitted those users and undertakings. This broad interpretation is of particular importance in a context where many NRA decisions (*e.g.* decisions imposing obligations upon undertakings with SMP) are intermediate level decisions whose effects go beyond the direct addressee.[421]

1–095 An appeal body must have appropriate expertise. Appeals must take into account and allow for the review of the substantive merits of the decision under appeal and cannot be limited to procedural questions.[422] Consequently, the appeal body must have at its disposal all the information necessary in order to decide on the merits of the appeal, including, if necessary, confidential information which the NRA has taken into account in reaching the decision under appeal.[423] However, the appeal body must guarantee the confidentiality of the information in question, whilst complying with the requirements of effective legal protection and ensuring the protection of the rights of defence of the parties to the appeal.[424] If the appeal body is not judicial in character, its decisions must be subject to further review by a court or tribunal. In this way, it is guaranteed that, at some stage of the appeal procedure, a request for a preliminary ruling on the interpretation of EU law may be made to the Court of Justice.[425] Pending the outcome of an appeal, the NRA's decision shall stand, unless interim measures are granted to suspend it.[426] In order to avoid the making of unnecessary and unmeritorious appeals and to discourage the practice of some national courts of routinely suspending regulatory decisions that are under appeal,[427] interim measures should be granted only in urgent cases in order to prevent serious and irreparable damage to the party applying for those measures and if the balance of interests so requires.[428]

3. Tools of and means for NRAs

1–096 Resources—The independence of an NRA, the quality of its decisions and, therefore, ultimately its legitimacy depend on the resources it has at its disposal. Member States are required to ensure that NRAs have adequate financial and human resources to carry out the tasks assigned

[420] *ibid.*, para.43. See also Case C-55/06, *Arcor v Germany* [2008] E.C.R. I-2931, paras.176 and 177. *Arcor* was decided shortly after *Tele2 Telecommunications v Telekom-Control-Kommission*, para.1–094, n.418, and concerned the right of appeal under the LLU Regulation, para.1–013, n.44 (and, therefore, the interpretation of Art.5a(3) of the ONP Framework Directive, para.1–011, n.32, which states that "a party affected by a decision of the national regulatory authority has a right of appeal to a body independent of the parties involved"). The Court held that an undertaking that is eligible for unbundled access to a local loop, but is not an addressee of an NRA's decision, is a party affected by and may challenge the decision, when the decision potentially affects its rights by reason of its content and the activity exercised or envisaged by the party. In addition, there is no need for there to be a contractual link between the addressee of the NRA's decision and the "party affected" for the rights of a beneficiary to be potentially affected by such a decision.

[421] See para.1–074, above.

[422] Framework Directive, para.1–019, n.64, Art.4(1), first sub-para.

[423] Case C-438/04, *Mobistar v IBPT* [2006] E.C.R. I-6675, para.43.

[424] *ibid.*, para.43.

[425] Framework Directive, para.1–019, n.64, Art.4(2) and Art. 267 [ex 234].

[426] *ibid.*, Art.4(1), second sub-para.

[427] 2006 Review Communication, para.1–025, n.90, 9.

[428] Better Regulation Directive, para.1–019, n.64, recital 14.

to them,[429] including to enable them, in so far as those responsible for the resolution of disputes between undertakings or for *ex ante* market regulation are concerned, to participate in and to contribute to the work of BEREC.[430] Beyond the issue of availability of resources, the requirement to support BEREC's objectives is applicable to all NRAs in general.[431]

1–097 NRAs' powers of investigation and to impose penalties—One of the most prominent of the NRAs' tasks is to monitor and supervise compliance of providers of electronic communications networks and services with the obligations imposed on them under the Electronic Communications Regulatory Framework.[432] Member States are, therefore, required to ensure that NRAs have the power to collect from undertakings providing electronic communications networks and services the information they consider necessary in order to ensure compliance with the provisions of the Electronic Communications Regulatory Framework, or decisions made in accordance with it.[433] NRAs must therefore be able to require from undertakings financial information or information concerning future network or service developments that could have an impact on the wholesale services that they make available to competitors. Undertakings with SMP on wholesale markets may also be required to submit accounting data on their activities on retail markets that are associated with those wholesale markets. NRAs must respect the principle of proportionality in requesting information and must state the reasons for the request.[434] They may set timescales to be respected by the undertakings concerned and may also define the level of detail required. NRAs must respect national and EU rules on business confidentiality with regard to the information obtained by them.[435] NRAs must also have the power to impose financial penalties on undertakings that fail to provide information.[436] More generally, Member States must provide for appropriate, effective, proportionate and dissuasive penalties for infringements of national legislation adopted pursuant to the Electronic Communications Regulatory Framework.[437] This

[429] Framework Directive, para.1–019, n.64, Art.3(3).

[430] *ibid.*, Art.3(3a), third sub-para.

[431] *ibid.*, Art.3(3b).

[432] A number of provisions of the Regulatory Framework require NRAs to monitor and supervise compliance and intend to provide them with the means for doing so. A general provision is contained in the Framework Directive, para.1–019, n.64, Art.5(1) on the NRAs' power to require information. More specifically, the Authorisation Directive, para.1–019, n.65, Art.10(1), first sub-para, forsees that NRAs must monitor and supervise compliance with the conditions of the general authorisation and individual rights of use for frequencies and numbers; with specific obligations imposed on undertakings with significant market power; with obligations regarding the provision of access to conditional access systems; with other access obligations imposed, regardless of a finding of significant market power, under Art. 5 of the Access Directive, para.1–019, n.66, or with obligations imposed on the providers(s) of universal service. Art.13b(3) of the Framework Directive applies in respect of ensuring compliance with network security and integrity obligations; and Art.7(1) of the Roaming Regulation, para.1–019, n.64, contains provisions for ensuring compliance with the Roaming Regulation.

[433] Framework Directive, para.1–019, n.64, Art.5(1). See also Authorisation Directive, para.1–019, n.65, Arts.10(1), second sub-para. and 11; Framework Directive, Art.13b(2)(a); Roaming Regulation, para.1–019, n.64, Art.7(4). NRAs will also receive information, albeit of a more limited nature, through the notifications made by undertakings in the context of the general authorisation, if such notification is required: Authorisation Directive, para.1–019, n.65, Art.3(3).

[434] Framework Directive, para.1–019, n.64, Art.5(1).

[435] *ibid.*, Art.5(1), second sub-para and (3); Roaming Regulation, para.1–019, n.64, Art.7(4).

[436] Authorisation Directive, para.1–019, n.65, Art.10(4).

[437] Framework Directive, para.1–019, n.64, Art.21a, regarding the Framework, Authorisation, Access, Universal Service and E-Privacy Directives. See, in addition: Roaming Regulation, para.1–019, n.64, Art.9 and Data Retention Directive, para.1–019, n.68, Art. 13(1). For specific penalties, see: Framework Directive,

provision was introduced into the Framework Directive by the Better Regulation Directive, as adequate enforcement powers contribute to the timely implementation of the Regulatory Framework and therefore foster regulatory certainty, which is an important driver for investment; existing provisions empowering NRAs under Article 10 of the 2002 Authorisation Directive to impose fines had indeed failed to provide an adequate incentive for operators to comply with regulatory requirements.[438] Article 10 of the Authorisation Directive provides for a regime of compliance enforcement, which can include an NRA ordering an operator to cease or delay provision of a service or bundle of services and which should now in practice be strengthened.[439]

4. Institutional environment

1–098 A multitude of authorities—In addition to the NRAs, a number of authorities, both at the European and at multi-national levels, are, in a broad sense, concerned with the electronic communications sector and its regulation. The most important are the European Commission (which is involved in sector-specific regulation in particular through the Article 7 Procedure which aims to consolidate the internal market,[440] and by adopting harmonisation decisions and recommendations[441] and other implementing measures[442]), the European Regulators Group for Electronic Communications Networks and Services ("ERG") and its successor, the newly-created Body of European Regulators for Electronic Communications ("BEREC"). ERG and BEREC replacing it, has particular responsibility for the consistent application, throughout the EU, of the provisions of the Electronic Communications Regulatory Framework. Other authorities, such as the Radio Spectrum Committee ("RSC") and the Radio Spectrum Policy Group ("RSPG"), are considered in the respective sections addressing the topics for which they are responsible.[443]

(a) European Regulators Group and Body of European Regulators for Electronic Communications

1–099 Disagreements between the European institutions over the creation of a European Regulatory Authority—The establishment of a European Regulatory Authority for telecommunications has been discussed for many years. It had first been proposed in 1994 by the Bangemann

Art.9(7) (spectrum hoarding); Universal Service Directive, para.1–019, n.67, Art.30(4), third sub-para. (number portability); and E-Privacy Directive, para.1–019, n.68, Art.13(6) (unsolicited communications).

[438] Better Regulation Directive, para.1–019, n.64, recital 51.

[439] See paras.1–157 and 1–171, below.

[440] Framework Directive, para.1–019, n.64, Arts.7 and 7a; see also, para.1–116 *et seq.*, below.

[441] *ibid.*, Arts.19 and 10(4); see also para.1–125 *et seq.*, below.

[442] For example, the Commission, having consulted BEREC and COCOM under the regulatory procedure with scrutiny, may adopt implementing decisions in order to ensure effective access to "112" services in the Member States: Universal Service Directive, para.1–019, n.67, Art.26(7). See also paras.1–114 and 1–115, below.

[443] See paras.1–202 *et seq.*, below. The RSPG has been retained following the 2009 amendments to the Electronic Communications Regulatory Framework. It will continue to assist and advise the Commission on radio spectrum policy issues, although its specific tasks have been adapted to reflect changes to the framework for spectrum management. Therefore, RSPG will advise the Commission on the preparation of multiannual radio spectrum policy programmes and assist it in proposing common policy objectives to the Parliament and the Council in order to coordinate the EU's position at the international level; in addition, the Parliament and the Council can request the RSPC to provide its opinion or a report: RSPG Decision, para.1–022, n.78, as amended in 2009, Arts.2 and 4, respectively.

Group Report.[444] The formation of such an institution was rejected during the 1999 Review (which led to the adoption of the 2002 Electronic Communications Regulatory Framework), where it was found that the creation of a European Regulatory Authority would not have provided sufficient added value to justify its likely costs.[445] Finally, the 2006 Review led, after controversial debates and the different proposals for the new agency, to the creation of BEREC.[446] BEREC is not a true regulatory authority, as it has no powers to regulate the markets or to adopt decisions to do so; rather, BEREC is an advisory body, which in a number of circumstances must be consulted and which, through its provision of opinions and advice and enhanced cooperation between its member NRAs, should foster the emergence of consistent regulatory practice and the development of a single European electronic communications market.

1–100 Working together for the internal market: from ERG to BEREC—Under Article 7(2) of the Framework Directive, NRAs have a general duty to work with each other and with the Commission and BEREC in a transparent manner to develop consistent regulatory practices and to ensure the consistent application of the directives comprising the Electronic Communications Regulatory Framework. In particular, they are required to cooperate on the types of instruments and remedies that are best suited to address particular market situations.[447] NRAs must take the utmost account of opinions and common positions adopted by BEREC and in general support actively BEREC's goals of promoting greater coordination in and coherence of regulatory regimes.[448]

1–101 ***The ERG and the IRG***—Article 7(2) of the 2002 Framework Directive already imposed a duty on NRAs to contribute to the development of the internal market by cooperating with each other and with the Commission. In this context, and pursuant to recital 36 of the 2002 Framework Directive, the Commission established the European Regulators Group, to bring together the regulators of electronic communications networks and services. The ERG was composed of one member per Member State, *i.e.* the heads of the independent NRA established in each Member State with primary responsibility for overseeing the day-to-day operation of the electronic communications networks and services markets. The Commission was also represented. NRAs from the 4 EFTA members (Iceland, Liechtenstein, Norway and Switzerland) and 3 candidate countries to the EU (Croatia, Former Yugoslav Republic of Macedonia and Turkey) participated as observers.[449] The ERG acted as a forum for NRAs and as an advisory group to assist the

[444] High level Group on the Information Society ("Bangemann Group"), Europe and the Global Information Society—Recommendations to the European Council (May 26, 1994), 13, available at: *http://ec.europa.eu/idabc/servlets/Doc?id=18174*.

[445] 1999 Review Communication, para.1–016, n.55, 9–11. Input on this issue was provided to the 1999 Review Communication especially by Cullen International and Eurostrategies, *Final report on the possible added value of European Regulatory Authority for telecommunications* (1999). Other studies carried out for the Commission and dealing at least partially with the issue of the establishment of a European Regulatory Authority included: Forrester Norall and Sutton, *The institutional framework for the regulation of telecommunications and the application of the EC competition rules* (1996); NERA and Denton Hall, *Issues associated with the creation of a European Regulatory Authority for Telecommunications* (1997).

[446] The evolution of the legislative process which led to the creation of BEREC is extensively reviewed in para.8–041 *et seq.* See also Queck, "The future of national telecommunications regulatory authorities" (2000) 3 *Info*, 251, 259–261, De Muyter, "Does Europe Need a Single European Telecom Regulator" (2008) 2 *Convergence*, 165 and Renda, *Achieving the Internal Market for E-communications in the EU—Report of a CEPS Task Force* (CEPS, 2008).

[447] Framework Directive, para.1–019, n.64, Arts.7(2) and 8(3)(d).

[448] *ibid.*, Art.3(3b) and 3(c); BEREC Regulation, para.1–028, n.113, Art.3(3).

[449] ERG Decision, para.1–022, n.78, Arts. 4 (members) and 5, fifth sub-para. (observers, *e.g.* EEA Member States' NRAs). See *http://erg.eu.int/links/index_en.htm*. The EFTA Surveillance Authority and the Swiss NRA

Commission in developing the internal market for electronic communications networks and services and in ensuring the consistent application of the Regulatory Framework.[450] The ERG worked in parallel with the Independent Regulators Group ("IRG"),[451] an unofficial forum comprising the same NRAs (as those participating as members and observers in the ERG), established in 1997 and used for informal strategic discussions not involving the Commission.[452]

1–102 ***Creation of BEREC***—In a context where the Regulatory Framework is substantially implemented at the national level, and where the risk of inconsistency in its implementation cannot be ignored, the ERG was considered to have made a positive contribution towards consistent regulatory practice by facilitating cooperation between NRAs, and between NRAs and the Commission.[453] Its approach to developing greater consistency among NRAs by exchanging information and knowledge on practical experience was considered successful in the short period following its creation. However, continued and intensified cooperation and coordination between NRAs was deemed to be required to develop further the internal market in electronic communication networks and services.[454] Therefore, the ERG needed to be strengthened and recognised explicitly in the Regulatory Framework, which led to the creation of the Body of European Regulators for Electronic Communications,[455] with a number of specific tasks assigned explicitly to it by the BEREC Regulation and by the revised directives of the Electronic Communications Regulatory Framework. However, the establishment of this new European body created considerable controversy in the process of reviewing the 2002 Regulatory Framework. The Commission initially proposed to establish the European Electronic Communications Market Authority ("EECMA") as an EU body with legal personality to replace the ERG and the European Network Security Agency ("ENISA"). Decisional power on trans-national issues was nevertheless to remain with the Commission, and the EECMA was proposed to play an assisting role without its own decisional powers, except in the field of numbering. The subsequent discussion in the Council showed that almost all Member States were against the creation of the EECMA; the Parliament, in its first reading, proposed the creation of the Body of European Regulators in Telecom ("BERT"). However, the Council, in its common position, considered that the name "Group of European Regulators in Telecoms" ("GERT") would have been more appropriate for the new body than BERT, as in its view the grouping of regulators should have had neither the characteristics of an EU agency nor legal personality. Finally, the Parliament, in its second reading, suggested creating BEREC, as well as the Office to provide BEREC with professional and administrative support.[456] This led to the adoption of the BEREC Regulation.[457] BEREC was formally launched at a meeting

could also participate as observer: Independent Regulators Group/European Regulators Group, *A guide to who we are and what we do* (February 2006), ERG(06) 03, 3, available at *http://www.erg.eu.int/documents/erg/index_en.htm*.

[450] ERG Decision, para.1–022, n.78, Art.3.

[451] Independent Regulators Group/European Regulators Group, ERG(06) 03, para.1–101, n.449, 9.

[452] Information on the IRG is available at *http://www.irg.eu/*.

[453] BEREC Regulation, para.1–028, n.113, recital 5.

[454] *ibid.*

[455] *ibid.*, recital 6.

[456] Additional details concerning the development of BEREC and the different proposals for possible organisations is available at: http://www.europarl.europa.eu/oeil/file.jsp?id = 5563982. See also para.1–029, n.121.

[457] BEREC acts within the scope of the Framework Directive, para.1–019, n.64; the Authorisation Directive para.1–019, n.65; the Access Directive, para.1–019, n.66; the Universal Service Directive, para.1–019, n.67; the E-Privacy Directive, para.1–019, n.68; and the Roaming Regulation, para.1–019, n.64: BEREC Regulation, para.1–028, n.113, Art.1(2).

in Brussels on January 28, 2010.[458] However, at the time important practical questions, including the appointment of the Administrative Manager of the Office and the location of its seat, remained to be decided upon. BEREC started its activities with the discussion on its 2010 Work Programme, for which it will be able to build on the ERG/IRG Work Programme for 2010 which was already conceived as a foundation for BEREC's first Work Programme.[459] BEREC started immediately advising the Commission[460] and holding meetings, but it can take on the whole of the specific tasks foreseen by the amended directives, *e.g.* its intervention in the revised EU Consultation Procedure (Articles 7 and 7a of the Framework Directive) and the delivery of opinions for resolving cross-border disputes, only once the period for the implementation of the directives has expired on May 25, 2011. BEREC's envisaged role is indeed dependent upon the new procedures being applied, and this requires transposition as NRAs are also involved in these procedures.

1–103 **Role and tasks of BEREC**—Established to replace the ERG,[461] BEREC acts as an forum to promote cooperation between NRAs, and between NRAs and the Commission; it can also advise the Commission and upon request, the Parliament and the Council. However, BEREC is not an EU agency and it does not have legal personality.[462]

1–104 ***Role of BEREC***—BEREC's role is to:

(i) develop and disseminate among NRAs best practices, such as common approaches, methodologies or guidelines on the implementation of the Regulatory Framework;
(ii) on request, provide assistance to NRAs on regulatory issues;
(iii) deliver opinions on the draft decisions, recommendations and guidelines of the Commission;
(iv) issue reports and provide advice, upon reasoned request of the Commission or on its own initiative, and deliver opinions to the Parliament and the Council, upon reasoned request or on its own initiative, on any matter regarding electronic communications within its competence; and
(v) on request, assist the Parliament, the Council, the Commission and the NRAs in relations, discussions and exchanges within third parties, and assist the Commission and NRAs in the dissemination of regulatory best practices to third parties.[463]

1–105 ***Tasks of BEREC***—Based on its role, BEREC has a number of tasks. The Commission and, when adopting decisions for their national markets, the NRAs must take the utmost account

[458] See Commission Press Release, *New EU Telecoms Regulator gets to work*, IP/10/62 (January 28, 2010) and BEREC Press Release, *BEREC—New EU Communications Body—is established* (January 28, 2010).

[459] ERG, IRG/ERG Draft Work Programme 2010: Maximising the internal market in electronic communications and applying institutional change, ERG(09)42rev1 (December 2009), 1.

[460] BEREC can also already start the analysis foreseen by Art.11 of the Roaming Regulation, para.1–019, n.64, in order to assist the Commission in its assessment of methods other than price regulation which could be used to create a competitive internal market for roaming. BEREC has already adopted a number of reports, including the BEREC Report on NGA, para.1–045, n.178. These documents are available at *http://www.erg.eu.int/documents/berec_docs/index_en.htm*. See also para.1–028, above.

[461] BEREC Regulation, para.1–028, n.113, recital 6. BEREC's replacement of the ERG will lead to the repeal of the ERG Decision, para.1–022, n.78, still in force on March 31, 2010. BEREC already uses the former ERG website (*http://www.erg.en.int/*, also *http://berec.europa.eu/*). The IRG will continue its activities, at least for some time.

[462] BEREC Regulation, para.1–028, n.113, recitals 7–9.

[463] *ibid.*, Art.2.

of the opinions, recommendations, guidelines, advice or regulatory best practices adopted by BEREC. BEREC may consult the relevant national competition authorities, where appropriate, before issuing its opinions to the Commission.[464] In general, Member States must ensure that the goals of BEREC of promoting greater regulatory coordination and coherence are actively supported by the NRAs.[465] BEREC's specific tasks include:

(i) to deliver opinions on draft measures proposed by NRAs concerning market definition, the designation of undertakings with significant market power and the imposition of remedies, and to cooperate and work together with the NRAs in accordance with the Article 7 Procedure;
(ii) to deliver opinions on draft recommendations and/or guidelines on the form, content and level of details to be given in notifications in the context of the Article 7 Procedure;
(iii) to be consulted on draft recommendations on relevant product and service markets;
(iv) to deliver opinions on draft decisions on the identification of transnational markets;
(v) on request, to provide assistance to NRAs in the context of the analysis of the relevant market;
(vi) to deliver opinions on draft Commission decisions and recommendations on harmonisation;
(vii) to be consulted and to deliver opinions on cross-border disputes;
(viii) to deliver opinions on draft Commission decisions authorising or preventing an NRA from adopting exceptional regulatory remedies beyond those proposed by Articles 9 to 13 of the Access Directive;
(ix) to be consulted on draft Commission measures relating to effective access to the emergency call number "112";
(x) to be consulted on draft Commission measures relating to the effective implementation of the "116" numbering range, in particular the missing children hotline number "116000";
(xi) to assist the Commission with the updating of Annex II of the Access Directive on the minimum contents of a reference offer for wholesale network infrastructure access;
(xii) on request, to provide assistance to NRAs on issues relating to fraud or the misuse of numbering resources within the EU , in particular for cross-border services;
(xiii) to deliver opinions aiming to ensure the development of common rules and requirements for providers of cross-border business services; and
(xiv) to monitor and report on the electronic communications sector, including publishing an annual report on developments in the sector.[466]

1–106 The Board of Regulators—BEREC's tasks are fulfilled by the Board of Regulators, which is responsible for taking all decisions relating to the performance of BEREC's functions.[467] In addition to fulfilling BEREC's tasks, the Board is also required to adopt BEREC's annual work programme before the end of each year, after consulting interested parties, and to transmit it to the

[464] *ibid.*, Art.3(3); Framework Directive, para.1–019, n.64, Art.3(3c).
[465] *ibid.*, Art.3(3b).
[466] BEREC Regulation, para.1–028, n.113, Art.3(1).
[467] *ibid.*, Art.5(1).

Parliament, the Council and the Commission.[468] It must also adopt an annual report on BEREC's activities and send it to the Parliament, the Council, the Commission, the European Economic and Social Committee and the Court of Auditors.[469] The Board is comprised of one member per Member State. Its members must be the head or nominated high-level representative of the NRA established in each Member State with primary responsibility for overseeing the day-to-day operation of the markets for electronic communications. One alternate member should also be nominated by every NRA. The Board enjoys full autonomy and must act independently. Its members are forbidden to seek or accept any instruction from any Member State government, the Commission and any other public or private entity.[470] The Commission is not a member of the Board but enjoys observer status. This is also the case for the NRAs from EFTA States (Iceland, Liechtenstein, Norway and Switzerland) and from those States that are candidates for accession to the European Union (Turkey, Croatia and the Former Yugoslav Republic of Macedonia) as well as, according to the BEREC Rules of Procedure, for the EFTA Surveillance Authority.[471] The Board appoints its Chair and its Vice-Chair(s) from among its members, whose term of office should be one year.[472] The Board holds four plenary meetings every year; extraordinary meetings can be convened at the initiative of the Chair, at the request of the Commission or upon the request of at least one third of the members of the Board.[473] The work of BEREC may be organised into Expert Working Groups.[474] The Commission is invited to all plenary meetings.[475] The Board acts by two-thirds majority, unless it is provided otherwise, and each member or alternate has one vote.[476] Furthermore, the Board adopts BEREC's rules of procedure, which are to be made publicly available.[477]

1–107 The Office—The Office is established to: (i) provide professional and administrative support services to BEREC; (ii) collect information from NRAs and exchange and transmit information in relation to BEREC's role and tasks; (iii) disseminate regulatory best practices among NRAs; (iv) assist the Chair in the preparation of the work of the Board; and (v) set up the Expert Working Groups, upon request of the Board, and provide support to ensure their smooth functioning. It executes its tasks under the guidance of the Board of Regulators.[478] Unlike BEREC, the Office is an EU body with legal personality.[479] It has legal, administrative and financial

[468] *ibid.*, Art.5(4).
[469] *ibid.*, Art.5(5).
[470] *ibid.*, Art.4(2).
[471] *ibid.*, Art.4(2) and Art.4(3); BEREC, Rules of Procedure of the Board of Regulators, BoR (10) 03, January 28, 2010 ("BEREC BoR Rules of Procedure"), Art.1, available at *http://www.erg.eu.int/documents/berec_docs/index_en.htm*; BEREC Press Release of January 28, 2010, para.1–102, n.458. Although Art.4(3) of the BEREC Regulation, para.1–028, n.113, mentions only NRAs from EEA Member States (*i.e.* Iceland, Liechtenstein, Norway) and not explicitly EFTA members, the same article allows the invitation of other experts and observers like the Swiss NRA (in addition to the EU accession candidate states).
[472] BEREC Regulation, para.1–028, n.113, Art.4(4).
[473] *ibid.*, Art.4(5).
[474] *ibid.*, Art.4(7).
[475] *ibid.*, Art.4(8).
[476] *ibid.*, Art.4(9). An exception to the two-thirds majority rule is *e.g.* provided for by Art.7a(3) of the Framework Directive, para.1–019, n.64 (opinion on a Commission notification of serious doubts regarding an NRA's proposed remedy—see para.1–123, below), which foresees a simple majority. See also para.1–111, below, on the financing of the Office.
[477] BEREC Regulation, para.1–028, n.113, Art.4(10).
[478] *ibid.*, Art.6(2).
[479] *ibid.*, Art.6(1) and recital 11.

autonomy in order efficiently to provide BEREC with its support. The Office comprises a Management Committee, an Administrative Manager, and a limited number of staff.[480]

1–108 ***Management Committee***—The rules of composition and organisation for the Board are also applicable to the Management Committee, with one difference in that the Commission is a member of the Management Committee, whereas it only has observer status in the Board.[481] The Management Committee appoints the Administrative Manager and staff.[482] It also provides guidance to the Administrative Manager in the execution of its tasks[483] and assists in the work of the Expert Working Groups.[484]

1–109 ***Administrative Manager***—The Administrative Manager is appointed by the Management Committee and is only accountable to the latter.[485] The appointment should be based on the candidate's merits, skills and experience relevant to electronic communications, following an open competition. The Parliament can issue a non-binding opinion on the suitability of the candidate selected by the Management Committee; and accordingly the candidate will be invited to make a statement and answer questions before the responsible committee of the Parliament.[486] The term of office of the Administrative Manager is three years[487] and can be extended once for not more than three years, taking into account the evaluation report undertaken by the Chair of the Management Committee and only in those cases where it can be justified by the duties and requirements of BEREC. The Parliament should be informed of the intention to make such an extension.[488] The Administrative Manager is responsible for heading the Office and assists with the preparation of: (i) the agenda of the Board, the Management Committee and the Expert Working Groups;[489] (ii) the draft work programme of the Office for the following year;[490] and (iii) the draft annual report on BEREC's activities.[491] The Administrative Manager must participate in the work of the Board and the Management Committee, but does not have a right to vote.[492] Others tasks of the Administrative Manager include: (i) supervising the implementation of the annual work programme of the Office, under the guidance of the Board;[493] (ii) ensuring the functioning of the Office by taking necessary measures, notably the adoption of internal administrative instructions and the publication of notices,[494] and (iii) implementing the budget of the Office.[495]

1–110 ***Staff***—The staff rules applicable to officials of the European Union also apply to the staff of the Office.[496] The Management Committee can adopt necessary implementing measures in

[480] *ibid.*, Art.6(3) and (5).
[481] *ibid.*, Art.7(1), first sub-para. The third sub-para. states that Art.4 of the BEREC Regulation regarding the composition and organisation of the Board (*e.g.* on observers and on voting), shall apply, *mutatis mutandis*, to the Management Committee.
[482] *ibid.*, Art.7(2) and (4).
[483] *ibid.*, Art.7(3).
[484] *ibid.*, Art.7(5).
[485] *ibid.*, Art.8(1).
[486] *ibid.*, Art.8(2).
[487] *ibid.*, Art.8(3).
[488] *ibid.*, Art.8(4).
[489] *ibid.*, Art.9(2).
[490] *ibid.*, Art.9(3).
[491] *ibid.*, Art.9(7).
[492] *ibid.*, Art.9(2).
[493] *ibid.*, Art.9(4).
[494] *ibid.*, Art.9(5).
[495] *ibid.*, Art.9(6).
[496] *ibid.*, Art.10(1). See, among others, Regulation 259/68 of February 29, 1968 laying down the Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Communities and instituting special measures temporarily applicable to officials of the Commission, O.J. 1968 L56/1, *corr.* O.J. 1982 L329/31, as amended.

agreement with the Commission.[497] The power of appointment and conclusion of contracts should be exercised by the Vice-Chair of the Management Committee.[498] In addition, national experts may be appointed on secondment to the Office on a temporary basis and for a maximum of three years.[499]

1–111 ***Financing of the Office***—The revenue and resources of the Office consist of: (i) a subsidy from the EU entered under the appropriate headings of the general EU budget; and (ii) financial contributions from Member States or from their NRAs made on a voluntary basis.[500] In particular, voluntary financial contributions should be approved by the Board, by unanimity, where all Member States or NRAs have decided to make a contribution, or by simple majority, where a number of Member States or NRAs acting unanimously have decided to make a contribution.[501] All revenues and expenditures[502] should be subject to forecasts for each financial year, coinciding with the calendar year, and should be entered in the Office's budget.[503] The Office should keep revenues and expenditures in balance.[504]

1–112 **Consultation and access to documents**—When appropriate, BEREC should consult interested parties to obtain their views before adopting any opinion, regulatory best practice and/or report. The result of the consultation procedure should be made publicly available, unless this would infringe the protection of confidential information.[505] BEREC and the Office should ensure that the public and any interested parties are given objective, reliable and easily accessible information, in particular in relation to the results of their work.[506] The public can have access to the documents held by BEREC and the Office under the EU Transparency Regulation.[507] Furthermore, the members of the Board and the Management Committee, the Administrative Manager and the Office's staff should make an annual declaration of commitments and a declaration of interests indicating any direct or indirect interests, which might be considered prejudicial to their independence.[508] The Office and its staff enjoy the privileges and immunities of the European Union.[509] In addition, as an EU body with legal personality, the Office should make good any damage caused by it or its staff in the performance of their duties in the case of non-contractual liability.[510]

1–113 **Evaluation and review**—Within three years of the effective start of BEREC's operations, the Commission should publish an evaluation report on the experience acquired as a result of the

[497] BEREC Regulation, para.1–028, n.113, Art.10(2).
[498] *ibid.*, Art.10(3).
[499] *ibid.*, Art.10(4).
[500] *ibid.*, Art.11(1).
[501] *ibid.*, Art.5(2).
[502] The expenditure of the Office covers staff, administrative, infrastructure and operational expenses: *ibid.*, Art.11(2).
[503] *ibid.*, Art.11(4).
[504] *ibid.*, Art.11(3).
[505] *ibid.*, Art.17 and Art.20.
[506] *ibid.*, Art.18.
[507] Regulation 1049/2001 of May 30, 2001 regarding public access to European Parliament, Council and Commission documents, O.J. 2001 L145/43; BEREC Regulation, para.1–028, n.113, Art.22.
[508] *ibid.*, Art.21.
[509] *ibid.*, Art.23.
[510] *ibid.*, Art.24.

operation of BEREC and the Office. The evaluation report should cover the results achieved by BEREC and the Office and their respective working methods, in relation to their respective objectives, mandates and tasks and in their respective annual work programme. The Parliament should issue an opinion on the evaluation report.[511]

(b) Communications Committee

1–114 Communications Committee—The Framework Directive[512] established a Communications Committee[513] ("COCOM").[514] It replaced the ONP Committee, which had been established under the previous ONP regulatory framework.[515] The Communications Committee is composed of delegates of the NRAs and is chaired by a Commission representative. COCOM assists the Commission on matters relating to the implementation of the Electronic Communications Regulatory Framework and consults representatives of operators, consumers, providers, users and consumers. As a so-called "Comitology committee",[516] a number of different procedures govern

[511] *ibid.*, Art.25.

[512] Framework Directive, para.1–019, n.64, Art.22; see also Access Directive, para.1–019, n.66, Art.14; Universal Service Directive, para.1–019, n.67, Art.37 and E-Privacy Directive, para.1–019, n.68, Art.14a.

[513] Another committee active in the field of electronic communications and dealing in particular with frequency issues, is the Radio Spectrum Committee, which was established by the Radio Spectrum Decision, para.1–019, n.69, Art.3. It assists the Commission in preparing and adopting technical implementing measures for the harmonised availability and efficient use of radio spectrum; see also para.1–202 *et seq.*, below. Evolutions under the Lisbon Treaty in relation to "Comitology committees", discussed below, are applicable *mutatis mutandis* to the Radio Spectrum Committee.

[514] General information regarding COCOM is available at: *http://ec.europa.eu/information_society/policy/ecomm/implementation_enforcement/comm_committee/index_en.htm*. COCOM documents are available at *http://circa.europa.eu/Public/irc/infso/cocom1/home*.

[515] ONP Framework Directive, para.1–011, n.32, Art.9.

[516] "Comitology" procedures are specified in Decision 1999/468 of June 28, 1999 laying down the procedures for the exercise of implementing powers conferred to the Commission, O.J. 1999 L184/23 ("Comitology Decision"), as amended by Decision 2006/512 of July 17, 2006, O.J. 2006 L200/11 (a consolidated version of the Comitology Decision has been published, O.J. 2006 C255/4); see also Arts.290 and 291 [ex. 202]. The term "comitology" refers to the delegation by the Council to the Commission of implementing powers for the adoption of EU legislation. According to the comitology procedure, representatives of the Member States, acting through "comitology committees", assist the Commission in the execution of the implementing powers conferred on it. The purposes of the Comitology Decision are: (i) to provide for criteria relating to the choice of committee procedures; (ii) to simplify the requirements for the exercise of implementing powers conferred on the Commission, as well as to improve the involvement of the Parliament in those cases where the basic instrument is adopted under the co-decision procedure; (iii) to improve the provision of information to the Parliament; and (iv) to improve the provision of information to the public concerning the committee procedures. The Comitology Decision lays down five different procedures for the exercise of implementing powers conferred on the Commission: (i) advisory procedure (Arts.2(a), 4); (ii) management procedure (Arts.2(b), 5); (iii) regulatory procedure (Arts.2(c), 3); (iv) regulatory procedure with scrutiny (Arts.2(2), 5a) and (v) safeguard procedure (Art.6). In the cases in which it is considered that COCOM must intervene, the directives of the Electronic Communications Regulatory Framework indicate which procedure is to be used. Under the advisory procedure, the Commission may adopt the proposed measure, even if the opinion of the comitology committee is not favourable. The regulatory procedure with scrutiny recognises a more important role for the Parliament; if the opinion of the relevant comitology committee on the proposed measure is favourable, the Parliament or the Council still can oppose the measure, but if they do not do so, the measure is adopted by the Commission. If the opinion of the comitology committee on the proposed measure is not favourable, or if no opinion is delivered, the measure cannot be adopted if the Council opposes it. If the Council is favourable, then the Parliament can still oppose it. If the Parliament does not oppose the measure, it

the work of COCOM. In particular, COCOM acts according to the "advisory procedure" (*e.g.* when the Commission wants to adopt recommendations defining the form, content and level of detail to be given in a notification made by an NRA in the context of the Article 7 Procedure),[517] which allows the Commission to adopt a measure even if COCOM gives a negative opinion. The advisory procedure is the "default solution" and is used in any case in which it is considered to be the most appropriate.[518] COCOM also acts in accordance with the "regulatory procedure with scrutiny" (*e.g.* when the Commission wants to adopt a decision identifying transnational markets or when it intends to amend the annexes of the Universal Service Directive),[519] which allows both the Council and the Parliament to block a measure proposed by the Commission. This procedure is used when the directives foresee the adoption of implementation measures of general scope designed to amend non-essential elements of the directives, *inter alia* by deleting some of those elements or by supplementing the directive by the addition of new non-essential elements.[520] Article 14a(3) of the E-Privacy Directive also foresees, in addition to the normal regulatory procedure with scrutiny, the application of the "urgency procedure" in which case, provided a favourable opinion of COCOM is given on the draft measure, the control of the Parliament and of the Council takes only place after adoption of the measure by the Commission.

1–115 Delegated and implementing acts—The entry into force of the Lisbon Treaty, which introduces a distinction between "delegated acts" (Article 290) and "implementing acts" (Article 291), will lead to consequential changes to the comitology system that had been established under the EC Treaty.[521] First, Article 290 allows the European legislator (in principle the Parliament and the Council) to delegate, in a legislative act it adopts, to the Commission the power to adopt non-legislative acts of general application ("delegated acts") to supplement or amend certain non-essential elements of those legislative acts. The objectives, content, scope and duration of the delegation of power will be defined in the relevant legislative act. Delegated acts will mainly replace the current comitology acts adopted under the regulatory procedure with scrutiny.[522] Second, even if it is—in principle—for the Member States to implement binding EU acts, Article 291 foresees that where uniform conditions for implementing legally binding EU acts are needed, those acts shall confer implementing powers on the Commission (or, in exceptional cases, on the Council). The Commission shall adopt these implementing acts according to the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of its

is adopted by the Commission or the Council, as the case may be. In the context of the regulatory procedure with scrutiny, a basic instrument may also provide for a derogation procedure in cases of urgency. In this case, if the opinion of the Comitology committee is favourable, and the Parliament or the Council only afterwards object to the measure, it may then be repealed. See generally, Craig and De Búrca, para.1–010, n.30, 119–123.

[517] Framework Directive, para.1–019, n.64, Art.7b. See generally, Framework Directive, Art.22(2); Access Directive, para.1–019, n.66, Art.14(2).

[518] Comitology Decision, para.1–114, n.516, Art.2(1)(c).

[519] Respectively Framework Directive, para.1–019, n.64., Art.15(4) and Universal Service Directive, para.1–019, n.67, Art.35. See in general Framework Directive, *ibid.*, Art.22(3); Access Directive, para.1–019, n.66, Art.14(3); Universal Service Directive, para.1–019, n.67, Art.37(3) and E-Privacy Directive, para.1–019, n.68, Art.14a(2).

[520] Comitology Decision, para.1–114, n.516, Art.2(2).

[521] Communication from the Commission of December 9, 2009, "Implementation of Article 290 of the Treaty on the Functioning of the European Union", COM(2009) 673, 3.

[522] *ibid.*, 3; see also De Streel and Defraigne, *Consequences of the Lisbon Treaty on EU telecoms, electronic communications and media policies*, Cullen International EU Telecom Flash Message 113/2009 (December 10, 2009), 4.

implementing powers, laid down by the Parliament and the Council in a regulation. Implementing acts cover all the current comitology acts (including those adopted under the advisory procedure), except those adopted under the regulatory procedure with scrutiny.[523] For the time being, Articles 290 and 291 will not have an immediate impact on the regulation of electronic communications. The current comitology procedures will continue to exist at least until the directives comprising the EU Regulatory Framework are specifically modified regarding the regulatory procedure with scrutiny/delegated acts and, more generally, a Regulation on implementing acts regarding the other comitology procedures is adopted.[524]

5. Procedures to consolidate the internal market for electronic communications

(a) The EU Consultation Procedures—Articles 7 and 7a of the Framework Directive

1–116 Overview—Among the main aims of the Electronic Communications Regulatory Framework are the development of the internal market by ensuring a consistent regulatory approach within the EU and providing legal certainty for market players wanting to invest in (cross-border) electronic communications networks and services. A key element for achieving these goals is the EU Consultation process provided for by the "Article 7 Procedure".[525] The Article 7 Procedure[526] requires NRAs to submit specified draft measures to the Commission, BEREC and

[523] *ibid.*, 4. See also Commission Proposal of March 9, 2010 for a Regulation laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers, COM(2010) 83 ("Commission Proposal for a Regulation on Implementing Powers"), 3–4.

[524] Cullen International, EU Telecom Regulatory Report 146 (December 22, 2009), 11. To this end, the Commission Proposal for a Regulation on Implementing Powers, para.1–115, n.523, was presented in March 2010. According to the proposal, first, the Committee structure foreseen in the Comitology Decision, para.1–114, n.516, would be maintained but rationalised; second, with the "advisory procedure", mirroring the existing advisory procedure, and the "examination procedure", replacing the existing management and regulatory procedures, only two main procedures would be organised; and, third, the current safeguard procedure would be replaced by a procedure regarding immediately applicable measures: Commission Proposal for a Regulation on Implementing Powers, para.1–115, n.523, 3–5, Arts. 2–6 and recitals 5, 6, 11. In order to ensure the transition from the regime of the Comitology Decision, which would be repealed, any reference in existing legislation to the procedures provided for in that Decision should, with the exception of the regulatory procedure with scrutiny, be understood as a reference to the corresponding procedures provided for in the new Regulation: *ibid.*, 5, Arts. 9–10 and recital 14. The relevant provisions of the EU Regulatory Framework would therefore not need to be immediately aligned by acts or through omnibus regulations. The effects of Article 5a of the Comitology Decision (regulatory procedure with scrutiny) would be maintained for the purposes of existing basic acts which refer to that Article (like the Framework Directive, para.1–019, n.64, Art.22(3); the Access Directive, para.1–019, n.66, Art.14(3); the Universal Service Directive, para.1–019, n.67, Art.37(2); the E-Privacy Directive, para.1–019, n.68, Art.14a(2) and (3)), until amendment of those basic acts: *ibid.*, Art.9 and recital 14.

[525] Following the 2009 amendments made to the 2002 Framework Directive by the Better Regulation Directive, the procedure is now to be found under Arts.7 and 7a of the Framework Directive, rather than, as was formerly the case, under the sole Art.7 of the 2002 Framework Directive. This direct and *ex ante* control of NRAs' draft decisions is in addition to two other controls that the Commission can derive from general EU law: a direct and *ex post* control by initiating infringement procedures before the Court of Justice under Art.258 [ex 226] and an indirect and *ex post* control in the form of the application of the competition rules in Arts.101, 102 and 106 [ex 81, 82 and 86].

[526] Regarding the application of the Article 7 Procedure under the 2002 Electronic Communications Regulatory Framework, see the Article 7 Recommendation, para.1–077, n.348. See also Communication from

the NRAs of other Member States. It raises, in particular, the question of to what extent the discretion of NRAs should be limited for the sake of a consistent application of the Regulatory Framework throughout the EU in order to contribute effectively to the development and completion of the internal market,[527] and therefore how far sector-specific regulation should be supervised by the Commission and how far it should be primarily left to the NRAs.[528] Unsurprisingly, the Article 7 Procedure was at the very heart of the discussions leading to the adoption of the 2002 Regulatory Framework. It was also one of the most controversial issues in the adoption of the Better Regulation Directive in 2009.[529]

1–117 ***"Veto" power for the Commission?***—At the very centre of controversy over the Article 7 Procedure was whether the Commission should have a veto power on some draft measures proposed by NRAs, which would allow it to require NRAs to withdraw the draft measure concerned, and whether this veto power should extend not only to the definition of relevant markets and to the designation of undertakings with SMP, but also to the remedies imposed by NRAs on these undertakings with SMP (or, in specific cases, on undertakings without SMP).[530] The choice of remedies by NRAs indeed presents the biggest risks for the emergence of regulatory inconsistencies, as here NRAs' discretion is at its greatest. In 2002, the Commission was given the power to require, in certain circumstances, the withdrawal (thus, to "veto") only of draft measures concerning the definition of relevant markets and the designation of undertakings with significant market power. The Commission was not given a power of veto over the regulatory obligations imposed on SMP operators. However, as pointed out by recital 19 of the Better Regulation Directive, the Commission's monitoring of the markets and, in particular, the experience of the Article 7 Procedure, has shown that inconsistencies in NRAs' application of remedies, even under similar market conditions, can undermine the internal market in electronic communications.

the Commission of February 6, 2006, on Market Reviews under the EU Regulatory Framework—Consolidating the internal market for electronic communications, COM(2006) 28 and Commission Staff Working Document of February 6, 2006, Annexes accompanying the Communication on Market reviews under the EU Regulatory Framework {COM (2006) 28}, SEC(2006) 86; Communication from the Commission of July 11, 2007 on market reviews under the EU Regulatory Framework (2nd report)—Consolidating the internal market for electronic communications, COM(2007) 401 and Commission Staff Working Document of July 11, 2007, Accompanying document to the Communication on market reviews under the EU Regulatory Framework (2nd report) {COM (2007) 401}, SEC(2007) 962. See also, Commission Press Releases, *Telecoms: the 'Article 7' procedure and the role of the Commission—Frequently Asked Questions*, MEMO/08/620 (October 15, 2008) and *EU Telecoms: the Article 7 procedure, the role of the European Commission and the impact of the EU Telecoms Reform: Frequently Asked Questions*, MEMO/09/539 (December 7, 2009). Notifications made under the Article 7 Procedure are extensively discussed in section E, below. Appendix 3 contains summaries of the most important cases under the Article 7 Procedure and Appendix 5 contains flowcharts summarising the mechanisms of Arts.7 and 7a of the Framework Directive. The Commission maintains up to date information on the status of market overviews and an overview of notifications received by it, as well as its comments and any eventual veto decisions, which is available at: *http://ec.europa.eu/information_society/ policy/ecomm/implementation_enforcement/eu_consultation_procedures/index_en.htm*

[527] Better Regulation Directive, para.1–019, n.64, recital 18.

[528] Grewe, "The Article 7 consultation mechanism", in Koenig, Bartosch, Braun and Romes (eds.), para.1–002, n.5, 381. On the legislative history of the procedure, *ibid.*, 381 at 383–385 and 418.

[529] See para.1–029, above. Consequently, and although it did not obtain all the powers it initially wished for, the Commission considers the revisions to its powers under the Article 7 Procedure, including in relation to remedies, to be amongst the twelve most prominent reforms introduced in 2009: Commission MEMO/09/513 (November 20, 2009), para.1–083, n.370, and Commission MEMO/09/568 (December 18, 2009), para.1–030, n.125. See also Commission MEMO/09/539 (December 7, 2009), para.1–116, n.526, 6.

[530] See, *e.g.* the Commission Proposal for a Better Regulation Directive, para.1–026, n.96, 9 and 28–30.

Therefore, a higher level of consistency in the application of remedies should be achieved, by giving the Commission a say (in close cooperation with BEREC) also on draft measures proposed by NRAs to impose regulatory obligations. The cooperation of BEREC[531] should allow the Commission to benefit from NRAs' expertise in the market analysis. In summary, following the period for the implementation of the 2009 reforms to the Article 7 Procedure (which expires on May 25, 2011), NRAs must notify certain draft measures under Article 7(3) of the Framework Directive to the Commission, BEREC and the NRAs in other Member States for their comments. If the Commission has serious doubts about specific notified draft measures, the relevant NRA may not immediately adopt its proposals after the expiry of the period for comments. If the Commission has serious doubts, after a further period of investigation, the Commission may: (i) if the draft measure concerns market definition and the designation of SMP, eventually adopt a decision requiring the NRA to withdraw its draft measure (under Article 7(4) of the Framework Directive); or (ii) if the draft measure concerns regulatory obligations, eventually adopt a recommendation that the NRA should amend or withdraw its draft measure (under Article 7a of the Framework Directive).[532]

1–118 Notification under Article 7(3) of the Framework Directive—NRAs are, according to Article 7(3) of the Framework Directive, required to notify[533] to the Commission, BEREC and the other NRAs[534] the following draft measures, if they would affect trade between Member States:[535] (i) any draft measure that concerns the three steps of the procedure regarding SMP,[536] *i.e.* the definition (including the identification) of markets susceptible to *ex ante* regulation, the designation of an operator (or operators) as possessing SMP and the imposition of specific remedies as foreseen by Article 8(2) of the Access Directive (*e.g.* transparency and access) or Article 17 of the Universal Service Directive;[537] and (ii) draft measures envisaging access obligations in those limited cases where a prior designation of SMP is not required,[538] *e.g.* obligations aiming at ensuring end-to-end connectivity, the interoperability of services, or access to electronic programme guides ("EPGs") and application program interfaces ("APIs") (under Article 5 of the Access Directive),[539] or obligations imposed on undertakings in order to comply with international commitments.[540]

1–119 ***Period for the review of draft NRA measures***—The Commission, the other NRAs and BEREC have a one month period (which may not be extended) to review a notified draft measure and to submit their comments to the relevant NRA.[541] If the Commission limits itself to comments, and does not take the procedure further, the NRA may then adopt the draft measure concerned, taking the utmost account of the comments received from the Commission, BEREC and the other NRAs, and, having done so, it must communicate the adopted final measure to the Commission and to BEREC.[542]

1–120 ***Judicial review of Commission comments***—The Commission's comments letters on NRAs' notified measures under the 2002 Framework Directive Article 7 procedure do not constitute an act producing binding legal effects, so are, therefore, not acts which are amenable to

[531] The involvement of BEREC in the Article 7 Procedure is also foreseen by Art.3(1)(a) of the BEREC Regulation, para.1–028, n.113.

[532] As a notified draft measure should, in principle, include all elements of the decision envisaged by the NRA (*i.e.* the market(s) concerned; if relevant, the undertakings found to have SMP (or not) and eventually the remedies foreseen: see Article 7 Recommendation, para.1–077, n.348, point 8), it appears possible that a draft decision may need to be split between the procedures of Arts.7(4) and Art.7a of the Framework Directive, para.1–019, n.64.

[533] In order to streamline procedures and given the short time limits, the Commission may adopt recommendations and/or guidelines introducing exemptions from the notification obligation: Framework Directive, *ibid.*, Arts.7(3) and 7b. These measures may also define the form, content and level of detail to be given in the notifications, and also cases that are suitable for simplified notifications (which are already foreseen by point 6 of the Article 7 Recommendation, para.1–077, n.348): see Framework Directive, Art.7b. Before adopting recommendations or guidelines concerning notifications under Art.7(3) of the Framework Directive, the Commission must consult the public, NRAs, BEREC and the COCOM under the advisory procedure (on COCOM and the comitology procedures, see paras.1–114 and 1–115, above). Draft NRA decisions that may be candidates for a simplified notification involve cases concerning stable markets or involving only minor changes to previously notified measures: Better Regulation Directive, para.1–019, n.64, recital 21. According to Art.7(9) of the Framework Directive, an NRA may, in urgent cases, adopt directly provisional and proportionate measures without following the procedures laid down in Arts.7(3) and (4), although these procedures must, however, then be followed to make such measures permanent.

[534] On June 25, 2009, the Commission opened an infringement procedure under Art.258 [ex 226] against Germany because its NRA, the Bundesnetzagentur, did not consult the Commission and the NRAs of the other Member States prior to deciding on new levels of mobile termination rates on March 31, 2009, thereby failing to respect the Article 7 Procedure, even although regulatory decisions setting mobile termination rates affect operators in other Member States and thus affect the functioning of the internal market. According to the Commission, this lack of transparency was a first in the application of the Regulatory Framework in the 27 Member States: see Commission Press Release, *Telecoms: Commission takes legal action against Germany for circumventing the EU transparency mechanism when regulating mobile termination markets*, IP/09/1008 (June 25, 2009).

[535] According to recital 38 of the 2002 Framework Directive, para.1–019, n.64, this criterion should not be difficult to fulfil, as it is considered to cover all measures that may have an influence, direct or indirect, actual or potential, on the pattern of trade between Member States in a manner which might create a barrier to the internal market.

[536] See para.1–220 *et seq.*, below.

[537] See also Framework Directive, para.1–019, n.64, Arts.15(3) and 16(6). According to Art.6(3) of the Access Directive, para.1–019, n.59, measures regarding conditional access systems also fall within the scope of Art.7 of the Framework Directive, even if Art.7 does not explicitly mention them: see para.1–232, below. According to the Commission, notifications of proposed remedies must also include any voluntary undertakings that are offered by the operator(s) concerned and are formally accepted by the NRA, insofar as the undertakings are aimed at the enforcement of regulatory obligations, or modify or replace existing regulatory obligations: Cases IT/2009/0987—0989, para.1–074, n.363. See also Communications Committee Working Document of January 18, 2010 on Article 7 procedures, COCOM09-36 REV1, 2.

[538] On this issue, see generally, para.1–236 *et seq.*, below.

[539] Art.7(3) of the Framework Directive, para.1–019, n.64 mentions, without specifying, Art.5 of the Access Directive, para.1–019, n.66. Art.5(2) of the Access Directive clarifies that only Art.5(1) of the Access Directive is within the scope of Art.7(3). Art.5(4) of the 2002 Access Directive [now Art.5(3) of the Access Directive] foresaw that NRAs should be empowered to intervene with regard to access and interconnection, on their own initiative, but also, in the absence of agreement between them, at the request of either of the parties involved. Draft measures adopted by NRAs in the context of this specific dispute resolution procedure also fell within the scope of the Article 7 Procedure. By the end of 2009, some 20 notifications had been made under this provision; all, except one, were made by Austria. However, in the context of the amendments to the 2002 Access Directive made in 2009 by the Better Regulation Directive, para.1–019, n.64, the provision regarding the specific dispute resolution procedure applicable to access and interconnection disputes was deleted from Art.5(4) [now Art.5(3)] of the Access Directive.

[540] Access Directive, para.1–019, n.66, Art.8(3), first sub-para., third indent and 8(5). This would cover, for example, interconnection obligations imposed to respect the commitments accepted by the EU and its Member States in the context of the WTO Agreement on Basic Telecommunications: 2002 Access Directive, para.1–019, n.66, recital 13. In addition, see para.1–122, n.555, para.1–238 and para.1–453, n.1821, below.

[541] Framework Directive, para.1–019, n.64, Art.7(3).

[542] *ibid.*, Arts.7(7) and (8), as well as Art.7a(1), second sub-para.

judicial review under Article 263 [ex 230].[543] Nevertheless, undertakings wishing to challenge a comments letter are not without any legal remedy as although the Commission's role was and is limited to consultation in the context of the procedure under Article 7(3) (and 7(7) [ex 7(5)]), this procedure leads, in principle, to the adoption of a decision by the NRA concerned, and a right of appeal against this decision lies to the national courts or tribunals of the Member State concerned. Where the appeal body foreseen by Article 4 of the Framework Directive is not judicial in character, its decision must be subject to review by a court or tribunal. National courts or tribunals hearing appeals against NRAs' decisions may, in accordance with Article 267 [ex 234], may refer questions to the Court of Justice for a preliminary ruling on the interpretation of the applicable EU regulatory framework. Since a reference for a preliminary ruling under Article 267 may also relate to non-binding EU acts; therefore, the national court or tribunal concerned could, by means of such a reference, ascertain whether the Commission's comments letter pursuant to Article 7(3) of the Framework Directive is based on a correct interpretation of EU law.[544] It is also notable that Article 7(7) [ex 7(5)] of the Framework Directive does not provide that the Commission's comments are to prevail over those of other NRAs. Accordingly, if the comments of an NRA and of the Commission were contradictory, the notifying NRA would not infringe Article 7(7) by following, after a careful review of the various comments received, the approach proposed by another NRA and not that proposed by the Commission.[545]

1–121 Commission veto power under Article 7(4) of the Framework Directive—The Commission may consider it necessary to go beyond providing simply comments on a notified draft measure. In this context, the first scenario, addressed by Article 7(4), arises when a draft measure notified under Article 7(3) intends to define a relevant market which differs from those defined in the Commission's Relevant Markets Recommendation,[546] or to designate (or not) an undertaking (or undertakings) as having SMP.[547] If the Commission indicates, within the one month review period, that a draft measure would create a barrier to the functioning of the internal market, or expresses serious doubts as to the compatibility of the draft measure with EU law (in particular the objectives referred to in Article 8 of the Framework Directive[548]), the notifying NRA is required to suspend the adoption of the concerned draft measure for a period of two months. This period may not be extended. Within this period the Commission may, taking the utmost account of the opinion of BEREC, adopt a decision requiring the relevant NRA to withdraw its draft measure and/or a decision lifting its reservations in relation to the concerned draft measure, leaving the way open for its adoption. The Commission's decision requiring the NRA to withdraw the draft measure must include a detailed and objective analysis of the reasons why it considers that the draft measure should not be adopted, together with specific proposals for amending it to make it compatible with EU law.[549] The NRA then has six months to amend or withdraw its draft measure. Within this period, the NRA must, if it

[543] Case T-109/06, *Vodafone v Commission* [2007] E.C.R. II-5151, para.150 and Case T-295/06, *BASE v Commission* [2008] E.C.R. II-28, para.109.

[544] *Vodafone v Commission*, para.1–120, n.543, paras.100 and 102 and *BASE v Commission*, para.1–120, n.543, paras.70 and 72; see also paras.1–090 and 1–091, above, on appeals against an NRA's decision.

[545] *Vodafone v Commission*, para.1–120, n.543, para.93 and *BASE v Commission*, para.1–120, n.543, para.63.

[546] Currently the Second Relevant Markets Recommendation, para.1–021, n.77.

[547] These cases include the definition of a geographic market: Case FI/2008/0848: *Wholesale broadband access in Finland*, Commission Comments of December 23, 2008, 7.

[548] See para.1–054, above.

[549] Framework Directive, para.1–019, n.64, Art.7(4) and (5).

intends to amend the draft measure, after public consultation, re-notify this amended draft measure in accordance with Article 7(3) of the Framework Directive,[550] thereby restarting the notification procedure. By January 29, 2010, the Commission had received a little over 1,000 notifications. It had closed nine cases with "withdrawal of serious doubts" letters,[551] whilst 40 notifications have been withdrawn by NRAs and two notifications have been declared incomplete. By March 2010, the Commission adopted only six veto decisions regarding nine cases.[552]

1–122 Commission recommendations under Article 7a of the Framework Directive—The Commission may also consider it necessary to go beyond providing only comments in relation to regulatory obligations taken into consideration by a specific draft measure notified under Article 7(3) of the Framework Directive. In this context, the second scenario, addressed by Article 7a, applies. Article 7a only covers those remedies imposed under Articles 5(1)[553] and 9 to 13 of the Access Directive[554] and Article 17 of the Universal Service Directive.[555]

1–123 During the one month period following the notification by the relevant NRA, the Commission must decide whether it agrees with the notified draft measure or whether it should notify the NRA concerned and BEREC that it considers that the draft measure would create a barrier to the internal market and/or is not compatible with EU law.[556] The notification by the Commission of its serious doubts signals the start of a period of three months for finding a solution to the Commission's concerns, during which the Commission, BEREC and the NRA concerned must cooperate closely to identify the most appropriate and effective measures.[557] In particular, BEREC plays an important role. Within six weeks of receiving the Commission's notification of its

[550] Framework Directive, para.1–019, n.64, Art.7(6) and Better Regulation Directive, para.1–019, n.64, recital 20.

[551] Under the revised Article 7 Procedure introduced in 2009, this would be done by way of the Commission adopting a decision under Art.7(5)(b) or Art.7a(5)(b) of the Framework Directive, para.1–019, n.64.

[552] Communications Committee Working Document of February 4, 2010 on Article 7 procedures COCOM10–05, 4–6; and Commission MEMO/09/539 (December 7, 2009), para.1–116, n.526: 2. The six veto decisions (*i.e.* requiring the "withdrawal of notified draft measures") are the following: Cases FI/2003/0024 and FI/2003/0027: *Publicly available international telephone services provided at a fixed location for residential and non-residential customers*, Commission Decision of February 20, 2004; Case FI/2004/0082: *Access and call origination on public mobile telephone networks in Finland*, Commission Decision of October 5, 2004; Case AT/2004/0090: *Transit services in the fixed public telephone network in Austria*, Commission Decision of October 20, 2004; Case DE/2005/0144: *Call termination on individual public telephone networks provided at a fixed location*, Commission Decision of May 17, 2005; Cases PL/2006/0518: *Retail access to the public telephone network at a fixed location for residential customers in Poland* and PL/2006/0524: *Retail access to the public telephone network at a fixed location for non-residential customers in Poland*, Commission Decision of January 10, 2007; Cases PL/2009/1019: *The wholesale national market for IP traffic exchange (IP transit)* and PL/2009/1020: *The wholesale market for IP traffic exchange (IP peering) with the network of Telekomunikacja Polska S.A.*, Commission Decision of March 3, 2010.

[553] Access Directive, para.1–019, n.66, Art.5(2).

[554] These remedies concern: transparency, non-discrimination, accounting separation, access and pricing: see paras.1–225 and 1–243 *et seq.*, below. Draft measures regarding functional separation (under the Access Directive, para.1–019, n. 66, Art.13a) would appear not to be within the scope of Art.7a of the Framework Directive, but fell under the Access Directive, Art.8(3), second sub-para. (prior authorisation by the Commission).

[555] Draft remedies planned according to Arts.6 and 8(3), first sub-para, third indent, of the Access Directive, which must be notified according to Art.7(3) of the Framework Directive (see para.1–118, above) are thus not within the scope of Art.7a of the Framework Directive.

[556] Framework Directive, para.1–019, n.64, Art.7a(1), first sub-para.

[557] *ibid.*, Art.7a(2) and BEREC Regulation, para.1–028, n.113, Art.3(1)a.

serious doubts, BEREC can issue a reasoned and published opinion indicating whether it considers that the draft measure should be amended or withdrawn and, where appropriate, provide specific proposals.[558] If BEREC agrees with the Commission's serious doubts, it must cooperate closely with the NRA concerned to find the most appropriate and effective measures.[559] It may also decide not to share the serious doubts of the Commission or not to issue an opinion.[560] Based on the Commission's notification and BEREC's opinion and advice, the NRA concerned may amend, withdraw or even maintain its draft measure.[561]

1–124 After the end of the three month period starting with the Commission's notification of its serious doubts, the Commission may, within one further month, and taking the utmost account of the opinion of BEREC (if any), either adopt a recommendation requiring the NRA concerned to amend or withdraw the draft measure;[562] or adopt a decision to lift its own reservations.[563] However, such recommendations have no binding force.[564] The NRA concerned may, therefore, decide not to comply with the recommendation and not amend or withdraw its measure. However, in doing so the NRA must provide a reasoned justification.[565] Subsequent to the Commission' action, the NRA concerned must, within one month, communicate to the Commission and BEREC its adopted final measure. Nevertheless, this time period can be extended in order to allow for a public consultation.[566] With regard to remedies, the position of the Commission is therefore much weaker as compared to its powers with regard to other measures notified under the Article 7 Procedure. Time will show whether BEREC will be able to bring about consistent application of rules and remedies.

(b) Harmonisation decisions and recommendations

1–125 **Commission harmonisation recommendations**—Besides its ability to intervene in the context of the Article 7 Procedure, the Commission may also contribute to a consistent application of the provisions of the Electronic Communications Regulatory Framework by adopting harmonisation recommendations under Articles 19(1) and 19(2) of the Framework Directive.[567] Harmonisation recommendations aim to avoid divergences in the implementation by the NRAs of their tasks creating a barrier to the internal market. They therefore aim at furthering the objectives of the Regulatory Framework. If the Commission issues a recommendation on the harmonised

[558] *ibid.*, Art.3(1)(a) and Framework Directive, para.1–019, n.64, Art.7a(3).
[559] *ibid.*, Art.7a(4).
[560] *ibid.*, Art.7a(5).
[561] *ibid.*, Art.7a(4).
[562] The Commission must provide reasons justifying its recommendation, in particular where BEREC does not share its serious doubts. The Commission may add to the recommendation specific proposals for amending the draft measure.
[563] Framework Directive, para.1–019, n.64, Art.7a(5).
[564] Article 288 [ex 249]. In this context, the use of the wording "issue a recommendation requiring the NRA..." may surprise, given that under EU law recommendations are not legally binding: on the legal effects of recommendations, see also para.1–120, below.
[565] Framework Directive, para.1–019, n.64, Art.7a(7).
[566] *ibid.*, Art.7a(6).
[567] The harmonisation measures adopted by the Commission under Art.19 of the Framework Directive are without prejudice to the specific harmonisation measures adopted in the field of frequency spectrum, *e.g.* on the basis of the Radio Spectrum Decision, para.1–019, n.69; or Arts.6 and 8 of the Authorisation Directive, para.1–019, n.65. For examples of harmonisation recommendations adopted under Art.19 of the 2002 Framework Directive which already foresaw this possibility for the Commission, see para.1–022, above.

application of the provisions of the Regulatory Framework, it must take the utmost account of the opinion of BEREC and it must consult the COCOM under the advisory procedure.[568] Member States must ensure that NRAs take the utmost account of those recommendations in carrying out their tasks. Where an NRA chooses not to follow a harmonisation recommendation, it shall inform the Commission, giving the reasons for its position.[569] In addition, even if recommendations are not intended to produce binding legal effects, national courts are bound to take them into consideration in deciding disputes submitted to them, in particular if the recommendation casts light on the interpretation of national measures adopted in order to implement them or where they are designed to supplement binding EU law provisions.[570]

1–126 **Commission Harmonisation Decisions**—In order to avoid the creation of barriers to the internal market as a result of divergent measures adopted by NRAs, the Commission may also adopt binding harmonisation decisions.[571] However, this possibility is given to the Commission only regarding numbering and the SMP procedure, and the decisions must be limited to regulatory principles, approaches and methodologies. Harmonisation decisions should not include details for individual cases, which will normally need to reflect national circumstances, and should not prohibit alternative approaches which can reasonably be expected to have equivalent effect.[572]

1–127 ***Numbering***—The Commission may adopt harmonisation decisions in respect of numbering, including number ranges, number portability and identifiers, number and address translation systems, and access to the "112" emergency number.[573] In this field, harmonisation decisions are especially intended to promote the functioning of the internal market and the development of pan-European services.[574] An example of such a measure is the "116" Decision,[575] allowing end users to find, throughout Europe, the same type of services with social value under the same numbers (*e.g.* hotlines for missing children should be accessible through the number 116000). In the adoption of harmonisation decisions in the field of numbering, BEREC's opinion must be considered and the COCOM must be involved under the regulatory procedure with scrutiny.[576]

1–128 ***SMP procedure***—The second matter in respect of which the Commission may adopt a

[568] Framework Directive, para.1–019, n.64, Art.19(1) and (2), first sub-para. On COCOM, the comitology procedures and changes to these procedures under the Lisbon Treaty, see paras.1–114 and 1–115, above; see also the BEREC Regulation, para.1–028, n.113, Art.3(1)(f).
[569] Framework Directive, para.1–019, n.64, Art.19(2), second sub-para.
[570] *Arcor v Germany*, para.1–094, n.420, para.94 (concerning the LLU Regulation, para.1–013, n.44): the Court of Justice explicitly referred to Case C-322/88, *Grimaldi v Fonds des Maladies Professionnelles* [1989] E.C.R. 4407, para.18 and Case C-207/01, *Altair Chimica* [2003] E.C.R. I-8875, para.41. See also *Vodafone v Commission*, para.1–120, n.543, para.102 and *BASE v Commission*, para.1–120, n.543, para.72, regarding the possible use of a preliminary ruling procedure under Art.267 [ex 234] to obtain an interpretation of non-binding Community acts: see para.1–120, above.
[571] Framework Directive, para.1–019, n.64, Art.19(1).
[572] *ibid.*, Art.19(3) and Better Regulation Directive, para.1–019, n.64, recital 58.
[573] Framework Directive, para.1–019, n.64, Art.19(3)b. See also, *ibid.*, Art.10(4). With regard to "112" services, see also Universal Service Directive, para.1–019, n.67, Art.26(7) and para.1–336, below.
[574] Framework Directive, para.1–019, n.64, Art.10(4); Better Regulation Directive, para.1–019, n.64, recital 41.
[575] "116 Decision", para.1–022, n.79, adopted on the basis of the similarly worded Art.10(4) of the 2002 Framework Directive, para.1–019, n.64. On the "116" numbering range, see also Universal Service Directive, para.1–019, n.67, Art.27a(5) regarding Commission harmonisation decisons aiming at ensuring effective implementation of the "116" numbering range in the Member States, and para.1–342, below.
[576] Framework Directive, para.1–019, n.64, Arts.19(1) and (4), as well as 10(4), second sub-para.; see also BEREC Regulation, para.1–028, n.113, Art.3(1)(f) and paras.1–114 and 1–115, above.

harmonisation decision is where this is necessary to correct the inconsistent implementation by NRAs of general regulatory approaches regarding the SMP procedure (under Articles 15 and 16 of the Framework Directive), where it creates a barrier to the internal market.[577] However, the Commission may not use this possibility to circumvent its lack of veto power over regulatory remedies. Therefore, such decisions shall not refer to specific notifications made by the NRAs, pursuant to Article 7a of the Framework Directive.[578] Furthermore, in such a case, the Commission shall propose a draft decision only after at least two years following the adoption of a recommendation dealing with the same issue, and taking utmost account of BEREC's opinion on the case for the adoption of such a decision, which must be provided by BEREC within 3 months of the Commission's request.[579] In addition, the COCOM must be involved under the regulatory procedure with scrutiny.[580] It is unclear whether such a Commission harmonisation decision regarding the SMP procedure may address the question of remedies. Sixteen Member States consider that "the scope of the Commission's decision-making powers under Article 19 of the Framework Directive by reference to Articles 15 and 16 of the Framework Directive is limited to matters concerning market definition, assessment of significant market power and the effect of market analysis on whether obligations should be imposed or not on undertakings but does not extend to the choice and design of remedies under Article 8 of the Access Directive or Article 17 of the Universal Service Directive".[581] However, the Commission disagrees and considers that, while harmonisation decisions adopted under Article 19 of the Framework Directive "may not refer to specific notifications issued by the national regulatory authorities pursuant to Article 7a of the Framework Directive, they do cover general regulatory approaches relating to the imposition, maintenance, amendment or withdrawal of obligations referred to in Article 16(2) of the Framework Directive".[582]

6. Dispute resolution by NRAs

1–129 Resolution of national disputes—In case of a dispute arising in a Member State between undertakings[583] providing electronic communications networks or services, or between such

[577] Framework Directive, para.1–019, n.64, Art.19(3)(a).
[578] *ibid.*
[579] *ibid.* See also BEREC Regulation, para.1–028, n.113, Art.3(1)(f).
[580] Framework Directive, para.1–019, n.64, Art.19(4). See also paras.1–114 and 1–115, above.
[581] Statement by Austria, Bulgaria, Estonia, Finland, Germany, Ireland, Italy, Latvia, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and the United Kingdom on the Better Regulation Directive, Framework Directive, para.1–028, n.110, point 24.
[582] Commission statement on Article 19 of the Framework Directive, para.1–028, n.110, point 25.
[583] According to Art.8(1) of the Roaming Regulation, para.1–019, n.64, the dispute resolution procedures foreseen by Arts.20 and 21 of the Framework Directive also apply in the event of a dispute between undertakings providing electronic communications networks or services regarding obligations related to roaming. See para.1–074, above, in respect of dispute resolution as an NRA's task, and para.1–346, below, in respect of out-of-court dispute resolution procedures for conflicts between consumers and undertakings providing electronic communications networks and/or services under Art.34(1) of the Universal Service Directive, para.1–019, n.67.

undertakings and other undertakings benefiting from obligations of access and/or interconnection,[584] the NRA[585] must, at the request of either party, take steps to resolve the matter within a maximum period of four months of such a request being made, except in exceptional circumstances.[586] However, Member States may foresee that the NRA involved may decline to resolve the dispute if other mechanisms, such as mediation, exist and would better contribute to the resolution of the dispute.[587] If, after four months, the dispute has not been resolved and if it has not been brought before the courts (which remains entirely possible), the NRA must decide on the dispute in the shortest possible timeframe and in any case within a further four months.[588] Whether taken by the NRA directly, or only after having first declined to act, the decision to resolve the dispute must aim at achieving the objectives of the Electronic Communications Regulatory Framework, be reasoned and published, and be binding on the parties.[589] Furthermore, decisions by NRAs to resolve disputes are, as with all decisions taken by NRAs, subject to appeal before an independent appeal body.[590]

1–130 Resolution of cross-border disputes—In the case of a cross-border dispute, *i.e.* between undertakings operating in different Member States, the NRAs involved must coordinate their efforts to resolve the dispute.[591] In a cross-border dispute resolution procedure, the NRAs involved have the right to consult BEREC and to request it to adopt an opinion as to the action to be

[584] The Commission Proposal for a Better Regulation Directive, para.1–026, n.96, 41, suggested the following wording for the new Art.20(1) of the Framework Directive "in the event of a dispute between service providers...where one of the parties is an undertaking providing electronic communications networks or services" and indicated, at 10, that this wording would clarify that disputes between content providers (*e.g.* broadcasters) and providers of electronic communications services fall within the scope of Art.20. Even if the exact wording of a new Art.20(1) has been changed in its final version, its sense appears to have remained the same. Therefore, a broadcasting content provider could bring a dispute regarding access to a conditional access system (under the Access Directive, para.1–019, n.66, Art.6 and Annex I) before the NRA.
[585] It is for the Member States to decide whether this function is to be performed by the NRA entrusted with the primary responsibility for overseeing the day-to-day operation of the market or by another body: see Framework Directive, para.1–019, n.64, Art.3(1) and (4). On the specific requirements regarding the independence of NRAs responsible for the resolution of disputes between undertakings, see Framework Directive, Art.3(3a) and para.1–090 *et. seq.*, above.
[586] *ibid.*, Art.20(1).
[587] An example of such alternative dispute resolution is provided by the formation of the "Office of the Telecommunication Adjudicator" in Italy, which was established within the context of the open network access structure proposed by Telecom Italia: see para.1–074, n.314, above and para.1–145, n.635, below. OTA Italia is responsible for dispute settlements under the responsibility of the NRA, AGCOM, and has *inter alia* a mediation function, in the sense that it must facilitate technical and operational dispute settlements amongst operators: see Cases IT/2009/0987–0989, para.1–074, n.314. In particular, operators participating in OTA Italia are contractually bound—until the completion of OTA Italia's attempts at mediation—not to submit an application to AGCOM for dispute resolution on matters within the scope of OTA Italia's remit. The Commission has, however, made clear its view that, although it welcomes alternative dispute resolution systems aimed at improving the provision of regulated services and contributing to reducing conflicts between operators, this must not create additional burdens and delays for alternative operators and, ultimately, for end-users: *ibid.*, 6. Furthermore, the resolution of disputes must comply with the provisions of Art.20 of the Framework Directive and, in particular, with the legal deadlines imposed by it, *ibid.*, 6.
[588] Framework Directive, para.1–019, n.64, Art.20(2).
[589] *ibid.*, Art.20(1), (3) and (4). Requirements of business confidentiality must be respected.
[590] *ibid.*, Art.4; see also paras.1–094 and 1–095.
[591] Framework Directive, para.1–019, n.64, Art.21(1) and (2), first sub-para.

taken.[592] In this case, BEREC's opinion must be obtained before action is taken to resolve the dispute, although the taking of urgent measures by NRAs remains possible.[593] No binding time-frame is provided for the resolution of cross-border disputes. Member States may foresee that the NRAs involved may jointly decline to resolve the dispute if other mechanisms, such as mediation, exist and would better contribute to the resolution of the dispute. If, after four months, the dispute is not resolved and the dispute has not been brought before the courts, the NRAs must coordinate their efforts to resolve the dispute, taking the utmost account of any opinion adopted by BEREC.[594]

1–131 Involvement of national courts in dispute resolution—The provisions of the Framework Directive for the resolution of disputes by NRAs are without prejudice to the right of a party to bring an action before the national courts.[595]

D. Market entry

1–132 Overview—As result of the liberalisation process that began in 1990 with the adoption of the Services Directive, electronic communications networks and services are now fully liberalised within the EU. The liberalisation process started with "non-reserved" (or "competitive") services, including the so-called "value-added" or "enhanced" services, such as email, voice mail, online information database services, electronic data interchange ("EDI") and other data transmission services, audio and video-conferencing, traveller services, enhanced facsimile services, code and protocol conversion, online information and data processing services. Through the application of Article 106(2) and (3) of the Treaty on the Functioning of the European Union [ex 86(2) and (3) of the EC Treaty] , liberalisation was extended subsequently and gradually,[596] in order to cover from January 1, 1998 fixed voice telephony services and the establishment and provision of telecommunications networks required for the provision of such services, which were the last telecommunications activities for which Member States had been entitled to maintain exclusive or special rights.[597] The Liberalisation Directive,[598] adopted in 2002 as part of the Electronic Communications Regulatory Framework, consolidated and repealed (from July 25, 2003) the Services Directive and the various directives that amended it.

1–133 As a natural complement to the opening of the markets guaranteed by the Liberalisation

[592] *ibid.*, Art.21(2), first and third sub-paras; see also BEREC Regulation, para.1–028, n.113, Art.3(1)(g) and Better Regulation Directive, para.1–019, n.64, recital 50.

[593] Framework Directive, para.1–019, n.64, Art.21(2), fourth sub-para.

[594] *ibid.*, Art.21(3).

[595] *ibid.*, Arts.20(5) and 21(4).

[596] See para.1–006 *et seq.*, above.

[597] Art.2(1) and (2), second sub-para. of the Services Directive, para.1–006, n.14, as introduced by the Full Competition Directive, para.1–007, n.19, Art.1(2): see para.1–007, above. With regard to network liberalisation, Art.2(2), third sub-para. of the Services Directive, introduced by the Full Competition Directive, required that all remaining restrictions on the provision of telecommunications services other than voice telephony over networks established by the provider of the telecommunications services, over infrastructures provided by third parties and by means of sharing of networks, other facilities and sites to be removed by no later than July 1, 1996. The transmission of broadcasting signals over cable and terrestrial radio networks was, however, not within the scope of the Services Directive and its subsequent amendments: see paras.1–007 and 1–018, above, and para.1–137, below.

[598] See para.1–007, n.23, Art.10.

Directive, the Authorisation Directive[599] provides the harmonised rules and conditions organising the practical entry on the market of those wishing to provide electronic communications networks and services. In order to make the theoretical freedom to provide networks and services guaranteed by the Liberalisation Directive[600] a reality and to foster market entry, the Authorisation Directive applies the principles of "light-handed" and "least burdensome" regulation.[601] The Electronic Communications Regulatory Framework therefore foresees, in principle, a general authorisation ensuring rights for the provision of electronic communications networks and services and providing for sector specific obligations in this regard, without the need for an explicit decision of the NRA or any other administrative act (see subsection 2). The general authorisation regime covers all electronic communications networks and services. It does not *per se* distinguish between different networks and services, unlike the 1998 Licensing Directive.[602] Nevertheless, some differentiation is possible: for example, electronic communications networks and services not provided to the public should be subject to fewer and lighter conditions than those applicable to services provided to the public.[603] Another differentiation is made between those electronic communications networks and services which use specific, scarce resources (*i.e.* radio frequencies, numbers and rights of way) and those which do not. If these specific resources are needed, individual decisions by a competent authority authorising their use may still be required (see subsection 3). The use of radio frequencies is also of importance for the general question of the EU's spectrum policy (see subsection 4), as is the issue of standardisation in general for a harmonised provision of electronic communications, for interconnectivity of networks and interoperability of services (see subsection 5).

1–134 Beyond the rules on liberalisation and authorisation, there will remain differences in the regulatory treatment of networks and services, as some markets are competitive and others are not, such that the providers of some networks and services are therefore subject to additional obligations if they have significant market power ("SMP") (see section E). Additionally, other differences may exist as some services are considered to be of general economic interest, such as universal service (see section F), and some services are of special importance for end-users and consumers (see section G). In this context, public voice telephony services remain subject to a higher level of regulatory intervention than other services, even if to a much lesser extent than in the past.[604] The

[599] See para.1–019, n.65.

[600] Liberalisation Directive, para.1–007, n.23, Art.2(2); see also Authorisation Directive, para.1–019, n.65, Art.3(1).

[601] *ibid.*, Art.1(1) and 2002 Authorisation Directive, para.1–019, n.65, recital 7; see also para.1–066, above.

[602] The Licensing Directive, para.1–012, n.40, was repealed by the Framework Directive, para.1–019, n.64, Art.26. Art.7(2) of the Licensing Directive permitted the use of individual licences in certain circumstances, including the provision of publicly available voice telephony services, the establishment and provision of public telecommunications networks as well as other networks involving the use of radio frequencies.

[603] 2002 Authorisation Directive, para.1–019, n.65, recital 16.

[604] See the first edition of this work, pp.11 and 15 *et seq.* In this way, call origination and call termination provided at a fixed location are still part of the Second Relevant Markets Recommendation, para.1–021, n.77; publicly available telephone services provided at a fixed location are still part of the universal service (see Universal Service Directive, para.1–019, n.67, Art.4(3)) and publicly available telephone services also still have a (limited) specific status in the context of measures for the protection the interests and rights of end users (see Universal Service Directive, Chap. IV), although as a result of the modifications introduced by the Citizens' Rights Directive most of these provisions (*e.g.* Art.20 on contracts and Art.21 on the publication of information) now cover public electronic communications networks and/or services, instead of public telephone networks and/or publicly available telephone services, as was foreseen by the 2002 Universal Service Directive, para.1–019, n.67.

provisions of the Electronic Communications Regulatory Framework will therefore have a different impact on operators providing these different types of services.

1. Open markets for electronic communications networks and services

1–135 The Liberalisation Directive,[605] adopted by the Commission in 2002, consolidates into one single directive the provisions of the Services Directive, which initiated the opening to competition of telecommunications services in 1990 and was subsequently amended as more services and networks were liberalised in the run-up to the introduction of full competition in 1998. The Liberalisation Directive was adopted by the Commission under Article 106(3) [ex 86(3)]. It adapted the definitions used to technological evolutions, clarified some provisions and maintains in force only those provisions of the Services Directive that were still relevant.[606] The 2006 Review did not concern the Liberalisation Directive and its provisions therefore remain unchanged by the legislative measures adopted in 2009.[607]

1–136 Types of networks and services covered—The Liberalisation Directive refers to "electronic communications services and networks",[608] rather than the term "telecommunications services and networks" used in earlier legislation. As for the entire Electronic Communications Regulatory Framework, these new terms took account of the convergence of the information technology, media and telecommunications industries, by bringing together under one single term all electronic communications services and/or networks that are involved in the transmission of signals by electromagnetic means, including fixed, mobile, cable television and satellite networks.[609]

1–137 The Liberalisation Directive therefore covers, under the concept of "electronic communications services" all services that are normally provided for remuneration and which consist wholly or mainly in the conveyance of signals on electronic communications networks. This includes services which were formerly subject to specific liberalisation directives: satellite network services,[610] mobile and personal communications services[611] and public voice telephony. These

[605] See para.1–007, n.23, above.

[606] Consequently, some provisions of the Services Directive were not included in the Liberalisation Directive, *e.g.* those concerning the transition to full liberalisation (Services Directive, para.1–006, n.14, Art.2(2), as amended). Other provisions of the Services Directive were not included in the Liberalisation Directive, as they were already to be found in the harmonisation directives of the Electronic Communications Regulatory Framework, *e.g.* provisions on rights of way and facility sharing (see Arts.11 and 12 of the 2002 Framework Directive, para.1–019, n.64), the independence of NRAs (see Art.3(2) of the 2002 Framework Directive) and accounting separation requirements imposed on providers of electronic communications networks or services which also have special or exclusive rights in other sectors (see Art.13 of the 2002 Framework Directive). See also, Liberalisation Directive, para.1–007, n.23, recitals 1 and 6.

[607] See para.1–024, above; see also the Impact Assessment to the Commission's 2006 Review Communication, para.1–025, n.90, 31, n.51 and 33.

[608] The definitions of "electronic communications network" and "electronic communications service" are contained in, respectively, Art.2(a) of the Framework Directive, para.1–019, n.64, and Art.1(1) of the Liberalisation Directive, para.1–007, n.23, as well as Art.2(c) of the Framework Directive and Art.1(3) of the Liberalisation Directive. The definitions used by the two Directives are the same, except that the Better Regulation Directive, para.1–019, n.64, completed the 2002 Framework Directive's definition of "electronic communications network" by adding after "other resources" the words "including network elements which are not active". On the meaning of this clarification, see paras.1–045 and 1–051, above.

[609] Liberalisation Directive, para.1–007, n.23, recital 7.

[610] See para.1–007, above.

[611] Services other than satellite services whose provision consists, wholly or partly, in the establishment of

services (and many others, such as the transmission of VoIP services) are electronic communications services within the meaning of the Framework Directive and for the purposes of the Liberalisation Directive.[612] The conveyance of radio and television signals over cable and terrestrial broadcast and transmission networks, did previously not fall within the scope of the Services Directive,[613] but is covered by the Liberalisation Directive and the definitions it uses. The definition of electronic communications networks also covers fibre networks which enable third parties, using their own switching or routing equipment, to convey signals.[614] The objective of the Liberalisation Directive is to provide as wide a scope as possible for liberalisation. Therefore, it is possible to consider that *e.g.* a municipality which puts dark fibre in the ground but which does not effectively activate the fibre (leaving this to undertakings adding their own switching and routing equipment), would benefit from the provisions of the Liberalisation Directive.[615]

1–138 Prohibition of special and exclusive rights—The Liberalisation Directive prohibits the maintenance or granting of exclusive or special rights for the establishment and/or the provision of electronic communications networks, or for the provision of publicly available electronic communications services.[616] It therefore required Member States to remove (if they had not already done so) exclusive and special rights[617] granted to incumbent electronic communications operators and not to grant new ones. Although only the provision of services to the public is explicitly mentioned, this does not mean that exclusive or special rights could be reintroduced in respect of

radio communications to a mobile user, and makes use wholly or partly of mobile and personal communications systems: see Services Directive, para.1–006, n.14, Art.1(1), as amended by Mobile Directive, para.1–007, n.18, Art.1(1)(a).

[612] Framework Directive, para.1–019, n.64, Art.2(c) and Liberalisation Directive, para.1–007, n.23, Art.1(3).

[613] The provision of satellite network services for the conveyance of radio and television programmes is considered to be a telecommunications service and was liberalised by the Satellite Directive, para.1–006, n.13; Liberalisation Directive, para.1–007, n.23, recital 8. See also paras.1–007, and, 1–018, and 1–132, above.

[614] Liberalisation Directive, para.1–007, n.23, recital 7; however, the wording of this recital appears to be somewhat ambiguous.

[615] This appears to go beyond the definition of "electronic communications network" and its scope as foreseen by the Framework Directive, para.1–019, n.64: see para.1–045, above, and Maxwell (ed.), para.1–018, n.59, booklet 1.0, 11.

[616] Liberalisation Directive, para.1–007, n.23, Art.2(1).

[617] According to the Liberalisation Directive, para.1–007, n.23, the term "exclusive rights" means "the rights that are granted by a Member State to one undertaking through any legislative, regulatory or administrative instrument, reserving it the right to provide an electronic communications service or to undertake an electronic communications activity within a geographic area" (Art.1(5)), whilst the term "special rights" means "the rights that are granted by a Member State to a limited number of undertakings through any legislative, regulatory or administrative instrument which, within a given geographical area: (a) designates or limits to two or more the number of such undertakings authorised to provide an electronic communications service or undertake an electronic communications activity, otherwise than according to objective, proportional and non-discriminatory criteria; or (b) confers on undertakings, otherwise than according to such criteria, legal or regulatory advantages which substantially affect the ability of any other undertaking to provide the same electronic communications service or to undertake the same electronic communications activity in the same geographical area under substantially equivalent conditions" (Art.1(6)). The key criteria for the existence of special rights appears to be that the granting authority shows a certain arbitrariness, *i.e.* it does not apply objective, proportional and non-discriminatory criteria to grant an advantage, *e.g.* through a granting of rights of way or rights to use frequencies otherwise than in accordance with objective, proportional and non-discriminatory criteria.

the provision of services to closed user groups or corporate networks,[618] which were already liberalised under the Services Directive, as the Liberalisation Directive cannot constitute a step backwards. In addition, the general authorisation regime foreseen by Article 3 of the Authorisation Directive and by Article 2(2) and (4) of the Liberalisation Directive, establishing the right to provide, covers all electronic communications services. Although the principle of full liberalisation of the sector has been recognised since 1998, the prohibition of exclusive and special rights covering electronic communications networks and services still remains important and topical.[619]

1–139 Right to provide electronic communications networks and services—A corollary of the prohibition of exclusive and special rights is the entitlement of all undertakings to provide electronic communications services or to establish, extend or provide electronic communications networks, provided that the relevant rules of the Electronic Communications Regulatory Framework, and especially the rules regarding authorisation, are respected.[620] The establishment and/or provision of electronic communications networks and services is thus subject only to a general authorisation (and to the conditions attached thereto). A general authorisation must be established on the basis of objective, non-discriminatory, proportionate and transparent criteria, and may eventually be complemented by rights of use for specific resources (such as frequencies or numbers).[621] Nevertheless, Member States may prohibit the provision of electronic communications networks or services on grounds of public policy, public security or public health.[622]

1–140 No restrictions may be imposed on the kind of networks that are used for the provision of electronic communications services, which may be provided over a network established by the service provider, over infrastructures provided by third parties, or by means of sharing networks, other facilities or sites.[623] In addition, restrictions may not be imposed on the kind of electronic communications services that may be offered over a specific network. Certain limitations are nevertheless explicitly foreseen by the Electronic Communications Regulatory Framework: *e.g.* the Authorisation Directive lists among the conditions which may be attached to rights of use for radio frequencies an "obligation to provide a service or to use a type of technology for which the rights of use for the frequency has been granted".[624] Those limitations are nevertheless the exception to the rule that any network can be used to provide any service.[625]

1–141 An example for this freedom to provide any kind of electronic communications service

[618] On these concepts, see 1995 Status of Telecommunications Competition Communication, para.1–006, n.15, 5 and 7–8; see also para.1–050, above.

[619] For example, in 2007 the Liberalisation Directive was used as the legal basis for amending a German Law that had introduced exclusive rights for the establishment and operation of an electronic communications network used for e-Health applications, especially the transmission of data between institutions of the healthcare sector and between these institutions and patients: Schütz, "Wider das Vergessen: Wettbewerbsrichtlinie verhindert E-Health Monopol" (2009) 10 *MultiMedia und Recht* 666–669.

[620] Liberalisation Directive, para.1–007, n.23, Art.2(2) and (4) and Authorisation Directive, para.1–019, n.65, Art.3(1) and (2).

[621] Liberalisation Directive, para.1–007, n.23, Arts.2(4) and 4 and Authorisation Directive, para.1–019, n.65, Arts.3(2), 5 and 6.

[622] Authorisation Directive, para.1–019, n.65, Art.3(1), which explicitly refers to Art.46(1) [now Art. 52]. See also Liberalisation Directive, para.1–007, n.23, Art.2(5), first sub-para., referring to Art.3(1) of the Authorisation Directive and para.1–157, below.

[623] Liberalisation Directive, para.1–007, n.23, Art.2(2).

[624] Authorisation Directive, para.1–019, n.65, Annex, B(1). See paras.1–193 and 1–194, below, regarding the principles of technology and service neutrality in the field of spectrum and the exceptions to these principles.

[625] Maxwell, para.1–018, n.59, booklet I.6, 3; see also para.1–068, above.

over any kind of electronic communications network is cable television networks. The regulatory framework adopted in the 1990s did not specifically prohibit Member States from restricting the use of telecommunications networks to provide television services, although certain Member States did impose dual restrictions. For example, in the United Kingdom, British Telecom was once prohibited from using its public telecommunications network to transmit broadcast signals, in order to protect the then fledgling cable sector. The broad definition of "electronic communications networks" contained in Article 2(3) of the Liberalisation Directive implies that Member States must not restrict the use of an electronic communications network to prevent it being used for the transmission of television signals.[626]

1–142 Restrictions on the use of networks may also infringe other provisions of EU law. For example, special or exclusive rights which restrict the use of electronic communications networks for the transmission and distribution of television signals are also contrary to Article 106(1) [ex 86(1) EC], read in conjunction with Article 49 [ex 43] (right of establishment) and/or Article 102(b) [ex 82(b)], insofar as they have the effect of permitting a dominant undertaking to limit production, markets or technical development to the prejudice of consumers.[627]

1–143 Rights of use for radio frequencies—The establishment and operation of an electronic communications network and the provision of electronic communications services may require the use of radio frequencies. Therefore, in addition to relying on the general authorisation, a provider may need, in order to guarantee an efficient use of radio spectrum, individual rights of use for frequencies. The Liberalisation Directive prohibits a Member State from granting or maintaining exclusive or special rights of use for radio frequencies: the rights of use of radio frequencies must be granted according to objective, non-discriminatory and transparent procedures and criteria.[628] The Electronic Communications Regulatory Framework also contains specific provisions on the granting of such rights of use[629] and the management of spectrum.[630]

1–144 Vertically integrated public undertakings—Without prejudice to the possibility for NRAs to impose a non-discrimination obligation on undertakings with significant market power,[631] Article 3 of the Liberalisation Directive requires Member States to ensure that dominant vertically integrated public undertakings which operate electronic communications networks do not discriminate in favour of their own retail activities. The use of the word "dominant" in this context does not necessarily correspond to the concept of SMP; rather, it should, arguably, be interpreted as a reference to the incumbent former monopolist operators, which previously enjoyed (now abolished) exclusive or special rights for the establishment of their networks.[632] Member States are entrusted by the Liberalisation Directive with this guardian role, as public authorities may exercise decisive influence on the behaviour of public undertakings, as a result either of the rules governing the undertaking or of the manner in which the shareholdings are distributed.[633]

[626] Liberalisation Directive, para.1–007, n.23, recital 8.

[627] *ibid.*

[628] Liberalisation Directive, para.1–007, n.23, Art.4.

[629] See para.1–161 *et seq.*, below.

[630] See para.1–186 *et seq.*, below.

[631] Framework Directive, para.1–019, n.64, Arts.14 and 16 in relation to Access Directive, para.1–019, n.66, Art.10.

[632] Liberalisation Directive, para.1–007, n.23, recital 10.

[633] *ibid.*

1–145 It is unclear whether such a non-discrimination obligation could be used *per se* as a basis for the imposition of any specific structural[634] or accounting separation obligations. However, such an interpretation would seem to be too extreme. It would be difficult to justify the imposition of structural separation on the basis of the principle of non-discrimination alone, in view of the lack of explicit reference in Article 3 of the Liberalisation Directive to the possibility for NRAs to impose structural separation obligations.[635] As regards accounting separation, the Access Directive

[634] The concept of "structural separation" is not explicitly defined in the Electronic Communications Regulatory Framework. It may take different meanings and refer to different forms of interventions in an organisation's structure: see para.1–088, above, and paras.1–240 and 1–284 *et seq.*, below. "Structural separation" is used in this paragraph, and also with regard to the examples of competition law given, as being equivalent to "legal separation", *i.e.* the establishment of distinct legal entities for an undertaking's networks and services business, even if they continue to be under common ownership: see also Cave, "Six Degrees of Separation: Operational Separation as a Remedy in European Telecommunications Regulation" (2006) 64 *Communications & Strategies* 89, 94. In particular, this interpretation applies to Art.8 of the Liberalisation Directive: see para.1–149 *et seq.*, below. In the general context of the Framework Directive, para.1–019, n.64, a more cautious and broad approach is applied. An explicit case in which (different forms of) structural separation may be imposed on undertakings is set out in Art.13 of the Framework Directive, which permits NRAs to impose structural separation obligations on operators that enjoy monopoly rights in other sectors (*e.g.* utilities) and, at the same time, are also active in the provision of electronic communications services directly or through subsidiaries. Such structural separation may be imposed to prevent unfair cross-subsidisation from the monopoly activity, even if the operator does not have SMP in the relevant electronic communications market. In this case, the broader approach applies and the structural separation envisaged does not necessarily entail a structural separation in the sense of legal separation, provided it is durable and substantial: see para.1–240, below. To ensure the independence of NRAs, Art.3 of the Framework Directive requires the structural separation of regulatory functions from activities associated with the ownership or control of an operator, but this does not require legal separation: see para.1–088 *et seq.*, above and Art.11(2) of the Framework Directive). "Structural separation" and "legal separation" are, therefore, not (necessarily) equivalents in the context of the Framework Directive: see Nihoul and Rodford, para.1–018, n.59, 729–734. In addition, in a more restrictive sense, "structural separation" can also be used in the sense of "ownership unbundling" or "divestiture", *i.e.* that some or the entire network is placed in a separate legal entity and is placed under different ownership: Impact Assessment to the Commission's 2007 regulatory proposals, para.1–026, n.95, 29.

[635] In some cases in the communications sector considered by the Commission under the Merger Control Regulation, concentrations have been approved on the condition that the parties involved implement the structural separation of the network and services businesses: see Case M.2803, *Telia/Sonera*, Commission decision of July 10, 2002 (discussed in para.7–281 *et seq.*, below), in which structural separation obligations were imposed, requiring legal separation of both parties' fixed and mobile networks and services businesses in Finland and Sweden as a condition for clearance for the merger, to remedy foreclosure concerns raised by the notified concentration. Strictly speaking, whilst the onus to offer commitments is on the parties, and it is not for the Commission to impose the remedies *ex officio*, in practice, it is difficult to ignore the fact that the Commission plays an important role in the remedies process: see paras.7–127 and 7–132. The issue of structural separation has also been considered in proceedings at the national level under both merger control and general competition law. Many competitors to the national incumbent operators often claim that an *ex ante* requirement for structural separation of the incumbent's activities at the wholesale and retail levels is a necessary precondition for the take-up of new services provided using the fixed telephone networks, such as broadband internet services. For example, in Case A/285, *Infostrada/Telecom Italia-Technologies ADSL*, Boll. 16–17/2001, the Italian national competition authority endorsed these views in one of the recitals of its decision, but finally did not impose *ex post* structural separation obligations. On December 15, 2008 AGCOM, the Italian NRA, approved Telecom Italia's voluntary undertakings reinforcing its non-discrimination and equal treatment obligations in the access network wholesale service provision to its own business units and to alternative operators: see AGCOM, Delibera n. 718/08/CONS, Approvazione della proposta di impegni presentata dalla societa' Telecom Italia s.p.a. ai sensi della legge 248/06 di cui al

provides that if the operator of a public communications network is designated as having SMP, it may be required to keep separate financial accounts for its different activities, in order to ensure detection by the NRA of unfair cross-subsidisation or discriminatory practices.[636] However, the provisions of the Access Directive in principle[637] fall short of allowing NRAs to require structural separation (especially in the sense of legal separation), even on operators with SMP.[638] It would therefore appear to be very difficult to use Article 3 of the Liberalisation Directive alone as a sufficient legal basis for the imposition of structural separation obligations, without the risk of undermining the rationale behind other provisions of the Electronic Communications Regulatory Framework. Article 13a of the Access Directive (inserted by the Better Regulation Directive) gives NRAs the possibility to impose "functional separation", *i.e.* to require a vertically integrated undertaking with SMP to place activities related to the wholesale provision of relevant access products into an independently operated business unit in order to ensure non-discriminatory

procedimento avviato con delibera n. 351/08/CONS, Gazzetta Ufficiale, No.302, December 29, 2008, available at *http://www.agcom.it*. The complex arrangements introduced neither structural (in the sense of legal) nor real functional separation (*i.e.* the placing of the access products within an operationally separate business entity). In the new structure, Open Access, the access network division of Telecom Italia receives orders for access network services from both Telecom Italia Wholesale and Telecom Italia Retail, which serve alternative operators and Telecom Italia's own retail customers respectively. The way these orders are executed aims at establishing equal treatment, *e.g.* orders will be addressed on "first come first served" basis notwithstanding whether the product has been ordered by an alternative operator or Telecom Italia's own retail customer (*i.e.* through Telecom Italia Wholesale or Telecom Italia Retail). Open Access does not, therefore, provide access services directly to alternative operators. In order to ensure the appropriate functioning of Open Access and in order to facilitate the enforcement of obligations to provide access on a non-discriminatory basis, a monitoring system comprised of two bodies (the Supervisory Board and the Office of the Telecommunications Adjudicator, OTA Italia), has been established pursuant to the undertakings given by Telecom Italia. The Supervisory Board, which forms part of Telecom Italia's governance system, is designed to monitor the implementation of the undertakings and to verify whether equal treatment is ensured. OTA Italia has responsibility for mediating in technical or operational disputes and operators are bound—until the completion of the mediation process—not to submit a dispute resolution application to AGCOM. AGCOM notified these undertakings to the Commission under Art.7 of the Framework Directive: see Cases IT/2009/0987–0989, para.1–074, n.314, 3 and 6 and Commission Press release, IP/09/1613, para.1–074, n.314 (on the issue of the qualification of the undertakings as "remedies", see para.1–113, n.457, above). In its comments, the Commission insisted that the Supervisory Board and OTA Italia should not interfere in any way with the exercise of AGCOM's powers to intervene and also, in any event, not replace such powers; this is of particular importance in the context of the independence and impartiality of NRAs. Furthermore, although the Commission welcomed alternative dispute resolution systems aimed at improving processes related to the provision of regulated services and reducing disputes between operators, it emphasised that the proceedings of the Supervisory Board and OTA Italia should not create additional burdens and delays for alternative operators and, ultimately, for end-users. The Commission underlined that the resolution of disputes must always comply with the provisions of Art.20 of the Framework Directive and with the applicable legal deadlines which were not altered by the Better Regulation Directive, para.1–019, n.64. See also para.1–074, above (on the competences of NRAs) and para.1–129, above (on dispute resolution). On the Italian experience and on other countries' experiences with functional separation, see generally WIK-Consult, *Next Generation Networks (NGNs)—Study for the European Parliament's Directorate General for Internal Policies* (October 2009), 62–64.

[636] Access Directive, para.1–019, n.66, Art.11; see para.1–255 *et seq.*, below.

[637] Nevertheless, NRAs may impose on an undertaking with SMP in exceptional circumstances and with prior authorisation of the Commission (acting in cooperation with BEREC), obligations other than those explicitly listed by the Access Directive; structural separation could be such an obligation: Access Directive, para.1–019, n.66, Art.8(3), second sub-para.

[638] On the concept of "structural separation" and the different forms it might take, see para.1–145, n.634, above. See also, para.1–088, above, and paras.1–240 and 1–284 *et seq.*, below.

treatment for all wholesale customers, including other businesses of the operator's group. From a legal point of view, functional separation appears therefore as a less intrusive form of regulatory interference than legal separation, which requires the wholesale and retail activities to be placed into a separate legal entities. In practice, however, functional separation, in order to achieve its goals, *e.g.* non-discriminatory treatment of all operators asking for access, may require substantial restructuring of an undertaking's organisation and functioning in order to establish adequate safeguards and "Chinese walls".[639] Article 13b of the Access Directive even foresees the possibility for an undertaking with SMP to voluntarily transfer its local access network assets (or substantial parts thereof) to a separate legal entity, under different ownership or to realise functional separation by establishing a separate business entity for these assets and the provision of access products.[640]

1–146 Directory Services—Directories and associated information services are an essential means of access to public communications services and, traditionally, have always been closely associated with the provision of voice telephony services. Directory services are therefore considered to be one of the basic elements of universal service. Accordingly, it was felt early in the liberalisation process that the introduction of a competitive environment in telecommunications services required, on the one hand, an extension of the Community's telecommunications legislation to include directory services and, on the other hand, the maintenance of a universal directory and information service accessible to all users at an affordable price.[641] The Services Directive required[642] (and the Liberalisation Directive now requires[643]) Member States to liberalise the establishment and provision of directory services, including both the publication of directories and directory enquiry services. This should lead to the development of a competitive market in directories and directory enquiry services, including the provision of "value-added" directory services, such as direct connection to the requested number. The Commission has noted that a wide range of alternative directories and directories enquiry services providers have been established across the Member States and that in several Member States competition has developed with numerous service providers (*e.g.* United Kingdom, Germany, France, Spain, Netherlands and Italy), using mostly the new "118XXX" numbering range for directory enquiry services, and some offering also other value added services such as call completion by SMS. However, according to the Commission, traditional directory enquiry services providers are facing challenges, as the market changes with an increasing use of the internet and a decreasing number of fixed lines. Other contact identifiers, such as email addresses and URL addresses, also enable consumers to satisfy their need for contact and communication.[644]

1–147 Directory services provide content and do not consist, as such, in the conveyance of

[639] See ERG Opinion of October 3, 2007 on Functional Separation, ERG (07) 44, 2007, 3–4 ("ERG Opinion on Functional Separation"); see also para.1–284, below.

[640] See para.1–286, below. See also para.1–287, below, regarding voluntary separation under Art.8(3) of the Universal Service Directive, para.1–019, n.67, addressing the case in which an undertaking designated as a universal service provider intends to dispose of a substantial part, or all, of its local access network assets to a separate legal entity under different ownership.

[641] ONP Voice Telephony Directive, para.1–011, n.35, Art.6 (see now Universal Service Directive, para.1–019, n.67, Art.5); see also para.1–296, below.

[642] Services Directive, para.1–006, n.14, Art.4(b), as amended by the Full Competition Directive, para.1–007, n.19, Art.1(6).

[643] Liberalisation Directive, para.1–007, n.23, Art.5.

[644] Commission Staff Working Document accompanying the 14th Implementation Report, para.1–033, n.134, Volume 1, part 2, 46.

signals. They are, therefore, not electronic communications services[645] and the licensing of directory services by Member States is not subject, as such, to the requirements of the Authorisation Directive. However, in so far as national licensing procedures for directory services would unduly restrict the possibility for operators from other Member States to set up competing directory services, those operators might be able to invoke, in addition to the prohibition of all exclusive and/or special rights concerning the establishment and provision of directory services foreseen by the Liberalisation Directive, the freedom of establishment guaranteed by Article 49 [ex 43] to challenge such national licensing procedures before national courts (since Article 49 has direct effect) or to complain to the Commission. In this context, it would seem contrary to the principles of the Electronic Communications Regulatory Framework to require new entrants to obtain an individual licence before launching competing directory services; a general authorisation requirement would seem to be adequate. A number of provisions of the Electronic Communications Regulatory Framework and other provisions of EU law are also relevant to directories and directory services, including provisions on universal service,[646] end-users' rights and consumer protection,[647] privacy[648] and the protection of databases.[649]

1–148 Access to and marketing of satellite capacity—The Satellite Directive required Member States to abolish restrictions on the provision of space segment capacity to licensed satellite earth-station network operators; this is maintained by the Liberalisation Directive.[650] Any supplier is therefore allowed to market satellite capacity directly to network operators. This direct access rule ended the previous situation under which space segment capacity could only be purchased from the national telecommunications operator in each country.[651] Member States are furthermore required to authorise the space segment supplier to itself check the conformity of the earth stations with technical and operational space segment access conditions, rather than reserve such conformity checks to the incumbent operator. In addition, since most of the available space segment capacity is offered by international satellite organisations (such as Eurasiasat, Eutelsat and Inmarsat) that are (or in some cases were, prior to being privatised) owned by a number of incumbent operators, both in the EU and in third countries, Member States that are party to such international satellite organisations are required to take all necessary measures to ensure compliance with the requirements of EU law.[652] This reflects the willingness of the Commission to bring intergovernmental treaty satellite organisations within the scope of the Community's regulatory framework, including EU competition law.[653]

[645] The Authorisation Directive, para.1–019, n.65, Art.2(1) refers to the definitions of the Framework Directive, para.1–019, n.64, in which an electronic communications service is defined as a "service [...] which consists wholly or mainly in the conveyance of signals on electronic communications networks" (Art.2(c)): see para.1–046 *et seq.*, above.

[646] See para.1–296, below.

[647] See paras.1–330 and 1–331, below.

[648] See paras.1–332 and 1–414, below.

[649] See para.1–333, below.

[650] Services Directive, para.1–006, n.14, Art.6, as amended by the Satellite Directive, para.1–006, n.13, Art.2(3)(b); Liberalisation Directive, para.1–007, n.23, Art.7(1).

[651] Maxwell (ed.), para.1–018, n.59, booklet I.6, 9.

[652] Liberalisation Directive, para.1–007, n.23, recital 13 and Art.7(2). The Satellite Directive, para.1–006, n.13, Art.3, limited its requirement to a duty to provide information to the Commission.

[653] This objective, together with the objective of non-discriminatory access to space segment capacity, was first expressed by the Commission in its 1994 "Direct Access" Paper, Communication from the Commission of June 10, 1994 on Satellite Communications: the Provision of—and Access to—Space Segment Capacity,

1–149 Joint provision by a single operator of cable television and other electronic communications networks—At the time of the adoption of the 1998 Regulatory Framework, the Commission had already expressed concerns that the joint provision of telecommunications and cable television networks by incumbent telecommunications operators might limit the development of the telecommunications and multimedia markets. In particular, in its 1998 Cable Review Communication, the Commission considered that joint ownership of both types of infrastructure may have had the effect of reducing the incentives of an incumbent telecommunications operator to undertake the necessary investment to upgrade its cable network to achieve the bi-directional capacity required to supply electronic communications and multimedia services. Indeed, there was no intrinsic financial benefit in upgrading a cable television network to deliver voice and data transmissions, which would have then competed for customers with the incumbent's core telecommunications business.[654] In addition, incumbent operators' ownership of both telecommunications and cable television networks within the same geographical market was considered by the Commission as likely to reduce infrastructure competition, by removing an alternative source of access to the local loop. This, in turn, would have also restricted competition in telecommunications services such as voice telephony and broadband interactive services. It was also found that when cable operators wished to develop innovative services, the dominant telecommunications operator, on which they were dependent for many elements, often restricted this development. This was even more likely if this telecommunications operator also was a joint owner of the cable operator.[655] The Commission concluded that joint ownership of telecommunications and cable networks by dominant incumbent operators was then the single most important factor holding back market development and the pro-competitive effects of liberalisation.[656] However, the Commission did not impose ownership separation in the different directives which successively addressed these issues.

1–150 ***Measures adopted by the Commission***—The Commission has adopted several measures to address the concerns it has raised regarding incumbent operators operating both telecommunications and cable television networks.[657] In the First Cable Directive (of 1995), it imposed accounting separation for the two network businesses.[658] The Liberalisation Directive, incorporating the amendments made to the Services Directive by the Second Cable Directive (of 1999),[659]

COM(94) 210. In relation to the application of EU competition law to the restructuring of international satellite organisations, see paras.7–180 and 7–651 *et seq.*, below.

[654] Communication from the Commission of March, 7, 1998 concerning the review under competition rules of the joint provision of telecommunications and cable TV networks by a single operator and the abolition of restrictions on the provision of cable TV capacity over telecommunications networks, O.J. 1998 C71/4 ("Cable Review Communication"), paras.30–33.

[655] *ibid.*, paras.34–35.

[656] *ibid.*, para.36.

[657] For a detailed description of these different measures, see Nikoiinakos, para.1–002, n.5, 197–208.

[658] First Cable Directive, para.1–007, n.17, Art.2, which considered the situations in which an operator having an exclusive right to provide public telecommunications network infrastructure also provided a cable television network and in which an operator having an exclusive right to provide a cable television network also acted as a network capacity provider for telecommunications purposes: see Klotz, "The Liberalisation of the EU Telecommunications Markets", in Koenig, Bartosch, Braun and Romes (eds.), para.1–002, n.5, 53, 82.

[659] Services Directive, para.1–006, n.14, Art. 9, as introduced by the Second Cable Directive, para.1–007, n.17, Art.1.

requires the legal separation[660] of cable television and other electronic communications networks when they are both operated by the same operator.[661] In practice, this means that some operators are required to operate their cable television and public communications networks through different legal entities, although they can continue to control and own both companies.[662] This obligation, however, only applies if the operator: (i) is controlled by a Member State or benefits from special rights;[663] (ii) is dominant in a substantial part of the common market in the provision of public electronic communications networks and publicly available telephone services; and (iii) operates a cable television network established under special or exclusive rights in the same geographic area.[664] The Commission may withdraw this legal separation requirement in those Member States in which there is sufficient competition in the provision of local loop infrastructure and services.[665]

1–151 ***Application of competition rules***—At the time of the 1998 Cable Review, the Commission made clear its intention to apply the EU's competition rules, on a case-by-case basis, to prevent anti-competitive effects arising from continuing ownership of cable television networks by incumbent operators. Where this was the only means of facilitating the creation of a competitive market, the Commission would also require the divestment of cable television networks by incumbent telecommunications operators. The Commission applied this policy in *British Interactive Broadcasting*, in which it required British Telecom to divest its remaining interest in cable networks in the United Kingdom as a condition for granting an individual exemption under Article

[660] On the issue of the conceptual relationship between the different forms of separation and the concept of "structural separation", see paras.1–088 and 1–145, above and paras.1–240 and 1–284, below. The Cable Review Communication, para.1–149, n.654, announced a policy of legal separation (which was subsequently introduced by the Second Cable Directive, para.1–007, n.17), stating that "the Commission will bring forward a measure to structurally separate jointly owned dominant telecommunications operators and cable TV companies" (*ibid.*, para.65). It also stated that structural separation means the operation of telecommunications and cable TV networks in clearly distinct legal entities (*ibid.*, para.48) and discussed other measures of separation, including divestiture and ownership separation (*ibid.*, para.27): see also Nikolinakos, para.1–002, n.5, 201–205.

[661] Liberalisation Directive, para.1–007, n.23, Art.8.

[662] With regard to the problems encountered (*i.e.* that an operator running both a public narrowband telecommunications network and a broadband cable TV network, would have no incentive to upgrade both networks to create an integrated broadband communications network capable of delivering voice, data and images at high bandwidth, see recital 10 of the Second Cable Directive, para.1–007, n.17, which indicated that ownership separation would have been the preferred solution, with legal separation being the minimum requirement.

[663] For the definition of "special rights", see para.1–138, n.617.

[664] Liberalisation Directive, para.1–007, n.23, Art.8(1).

[665] *ibid.*, Art.8(3)–(4). According to Art.8(5) of the Liberalisation Directive, the Commission was required to review the application of the legal separation obligation not later than December 31, 2004. This review was launched in 2005, at the start of the 2006 Review. Although the Liberalisation Directive was not, as such, subject to the 2006 Review, interested parties were invited to give their views on the necessity of maintaining the legal separation obligation or whether there was sufficient competition in the provision of the local loop infrastructure to allow for its repeal: Working Document from DG Information Society and Media of November 25, 2005, *Call for input on the forthcoming review of the EU regulatory framework for electronic communications and services including review of the Recommendation on relevant markets*, November 25, 2005, ("Commission 2005 Call for Input"), para.1–025, n.90, 2, n.8, available at *http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/past/index_en.htm*. The Commission gave no further follow-up to the few observations received.

101(3) [ex 81(3)].[666] Likewise, in *Telia/Telenor*, the Commission cleared a merger between the two incumbent operators in Norway and Sweden only after they had both committed to divest their cable television interests.[667]

1–152 ***Joint provision under the SMP regime: TeleDanmark***—The issue of the joint provision of cable TV and copper networks by one operator has also been considered in the context of the application of the SMP procedure applicable under the Framework Directive. In its notification to the Commission under Article 7 of the Framework Directive[668] of its analysis of market 5 of the Second Relevant Markets Recommendation (*i.e.* the market for wholesale broadband access)[669] the Danish NRA, the National IT and Telecom Agency—"NITA", found that TDC, the Danish incumbent fixed network operator also jointly controlled (with other companies) the largest cable television network in Denmark.[670] NITA considered that, in Denmark, cable exerted a direct competitive constraint on the supply of broadband connections via copper networks. As a result, this created potential disincentives for TDC to invest in the expansion of its copper network in those areas in which it could provide higher bandwidth connections to end users using its cable TV network.[671] NITA was of the view that alternative operators would therefore need to switch to either fibre networks (offered by certain power supply companies) or cable networks in order to continue competing with the higher bandwidth retail products increasingly offered by TDC via its cable network. Alternative operators confirmed that, based on the existing wholesale access products provided by TDC, they would not be able to compete effectively in the future, as, in the absence of wholesale cable broadband access products, they would be unable to offer high-speed broadband internet services to end-users in those areas where TDC did not upgrade its copper network. TDC seemed unwilling to upgrade its copper network, as it was indeed already slowing down its investment in the PSTN network. NITA therefore proposed to designate TDC as having SMP on the wholesale broadband access market[672] and, consequently, to impose upon TDC an obligation to provide to competitors bitstream access to its copper network and also wholesale access to its cable TV network. It considered that, in the absence of appropriate regulatory remedies for wholesale cable broadband access, TDC's control over the largest cable TV network in Denmark would enable it to maintain or even to strengthen its dominant position on the retail broadband markets. The Commission approved NITA's intention to impose regulatory obligations on TDC's copper and cable activities.[673] It found that, in view of TDC's joint control over both parallel networks and the existence of competition between the different infrastructures at the retail level (as both met the same consumer needs), there was a real risk that TDC would invest only in one of the two infrastructures, *i.e.* that which would not be subject to *ex ante* regulation.[674] Therefore, in such a situation and in the absence of appropriate obligations to provide access to its cable network, TDC would have had the incentive and the ability to circumvent existing regulation (which was limited to traditional copper-based wholesale broadband access products) and thereby be able to distort competition by preventing its wholesale customers (which were reliant on its DSL bitstream access products) from matching the high bandwidth retail offers that TDC provided via its cable network.[675]

[666] Case IV/36.539, *British Interactive Broadcasting (Open)*, O.J. 1999 L312/1, discussed in para.7–685 *et seq.*, below.

[667] Case M.1439, *Telia/Telenor*, Commission Decision of October 13, 1999, discussed in para.7–251 *et seq.*, below. See also *Telia/Sonera*, para.1–145, n.635, in which the Commission's approval was conditional upon Telia divesting its cable television business in Sweden (discussed in para.7–281 *et seq.*, below).

[668] See generally, para.1–116 *et seq.*, below.

[669] Second Relevant Markets Recommendation, para.1–021, n.77, Annex. According to the Recommendation, market 5 comprises non-physical or virtual network access, including bitstream access, at a fixed location. This market is situated downstream from the physical access market (market 4), in that wholesale broadband access can be constructed using this input combined with other elements. On the definition of markets under the Electronic Communications Regulatory Framework, see in particular para.4–017*et seq.*, below.

[670] Case DK/2008/0862: *Wholesale broadband access in Denmark*, Commission Comments of March 9, 2009.

[671] *ibid.*, 2.

[672] In 2007, TDC's wholesale broadband access market share was 73% (including self-supply) and 89% (excluding self-supply). On the retail broadband access market TDC had, in 2008, a 58% market share (of which approximately 421% was via DSL and 15% via cable), *ibid.*, 4.

2. Access to markets: the principle of general authorisation

1–153 **Introduction**—Building on the opening to competition of the electronic communications markets foreseen by the Liberalisation Directive, the Authorisation Directive lays down the legal framework for the conditions under which electronic communications networks and services may be provided.[676] Under the Authorisation Directive, electronic communications networks and services[677] may, in principle, be provided either without any authorisation at all, or on the basis of a "general authorisation".[678] A general authorisation is a legal framework established by the Member State ensuring rights for the provision of electronic communications networks or services and laying down sector-specific obligations that may apply to all or to specific types of electronic communications networks and services.[679] In principle, an individual licence, in the sense of an individual decision or another administrative act by the NRA, is no longer required to provide electronic communications networks and services; this is so even in situations when the provider is subject to particular obligations (*e.g.* regarding the provision of universal service) or enjoys particular rights (*e.g.* rights of way). Thus, in practice, any undertaking active on the market for the provision of public and non-public electronic communications networks and services can provide these networks and services either without authorisation or subject only to compliance with the applicable general authorisation. The use of individual authorisations must be limited only to those circumstances in which the applicant needs to be given access to (scarce) resources (*i.e.* numbers, frequencies and rights of way). Therefore, the provision of networks and services requiring access to numbers and, when provided over wireless networks, to frequencies, may in certain

[673] Although, based on an analysis of the competitive constraints, the Commission expressed doubts on whether it was justified to include cable in the relevant market (particularly as cable-based wholesale broadband access might be a supplement to, rather than a substitute for, DSL bitstream access products), it considered that, taking account of the exceptional circumstances unique to the Danish broadband access market, even if cable was not part of the relevant wholesale broadband access market, the competitive constraints identified by NITA necessitated an adequate regulatory intervention: *ibid.*, 8.

[674] *ibid.*, 8; in this context, the Commission also made a direct reference to *Telia/Telenor*, para.1–151, n.667.

[675] Case DK/2008/0862, para.1–152, n.670, 9.

[676] Authorisation Directive, para.1–019, n.65, Art.3(1), which confirms the principle of freedom of provision also included in the Liberalisation Directive: see para.1–138 *et seq.*

[677] The Authorisation Directive refers to the definition of electronic communications networks and services in the Framework Directive: see paras.1–045 and 1–046 *et seq.*, above.

[678] Authorisation Directive, para.1–019, n.65, Art.3(2).

[679] *ibid.*, Art.2(2)(a).

circumstances still be subject to the requirement to obtain an individual authorisation under the form of a grant of so-called "individual rights of use".

1–154 General authorisation—The general authorisation regime aims to remove the barriers to market entry which could result from lengthy, inconvenient or unreasonable licensing procedures, and to ensure that all undertakings may benefit from objective, transparent, non-discriminatory and proportionate rights, conditions and procedures. It is considered as the least onerous authorisation system possible in order to stimulate the development of new electronic communications services and pan-European communications networks and services and to allow service providers and consumers to benefit from the economies of scale of the internal market.[680] The granting of a general authorisation[681] does not require an explicit decision of, or any other administrative act by, the NRA prior to the start of the provision of an electronic communications network or service.[682] By contrast, the granting of an individual licence, which was foreseen in certain circumstances under the 1998 Regulatory Framework,[683] did require an explicit decision by the NRA prior to the operator starting operations, and, in addition, included the granting of specific rights to and/or the imposition of specific obligations on, the licensee. Subject to making any necessary notifications to the NRA, an operator may avail of a general authorisation if it meets the conditions that are laid down for that authorisation.[684] Under a general authorisation, an undertaking has : (i) the right to commence the activities covered by the general authorisation; (ii) the right to apply for access to public or private land to install facilities (rights of way or wayleaves);[685] and, if it provides electronic communications networks or services to the public, (iii) the right to negotiate and, where applicable, obtain interconnection with other providers;[686] and (iv) the opportunity to be designated by the NRA as a provider of different elements of universal service.[687]

1–155 Procedures relating to general authorisations—In order to be entitled to provide the relevant communications services or networks covered by a general authorisation, it is, in principle, sufficient that an undertaking meets the conditions set by the general authorisation, without

[680] 2002 Authorisation Directive, para.1–019, n.65, recital 7.

[681] A "general authorisation" is the "legal framework established by the Member State ensuring rights for the provision of electronic communications networks or services and laying down sector specific obligations that may apply to all or to specific types of electronic communications networks and services, in accordance with [the Authorisation Directive]": Authorisation Directive, para.1–019, n.65, Art.2(2)(a).

[682] 2002 Authorisation Directive, para.1–019, n.65, recital 8; and Authorisation Directive, para.1–019, n.65, Art.3(2).

[683] See para.1–012, above.

[684] See para.1–156, below.

[685] Art.9 of the Authorisation Directive requires NRAs, upon the request of any operator, to issue a standardised declaration, within one week from the request, confirming that the operator has submitted a notification/declaration for the purposes of a general authorisation, and detailing the circumstances under which any undertaking providing electronic communications networks or services under the general authorisation has the right to apply for rights to install facilities, negotiate interconnection, and/or obtain access or interconnection in order to facilitate the exercise of those rights, for instance, at other levels of government or in relation to other undertakings (including service providers in other Member States). Where appropriate, such declarations may also be issued as an automatic reply following the notification by the concerned applicant. See also 2002 Authorisation Directive, para.1–019, n.65, recital 25.

[686] See para.1–236 *et seq.*, below.

[687] Authorisation Directive, para.1–019, n.65, Art.4.

requiring a decision to that effect from the relevant NRA.[688] However, Member States may require undertakings to notify the NRA of their intention to provide the relevant services and/or networks, as well as the information relating to the service or network concerned that is necessary for the NRA to ensure compliance with the applicable conditions of the relevant general authorisation. Such a notification should not involve more than a declaration of the undertaking's intention to commence the provision of the service and/or network and the submission of information that is necessary to identify the provider, in order to allow the NRA to keep a register or list of undertakings operating under the relevant general authorisation.[689] Information concerning the procedures relating to general authorisations must be published in an appropriate manner, so as to provide easy access to it.[690]

1–156 Conditions that may be attached to a general authorisation—NRAs may only attach conditions to a general authorisation where the conditions are objectively justified in relation to the network or service concerned and comply with the principles of non-discrimination, proportionality and transparency. Part A of the Annex to the Authorisation Directive sets out an exhaustive list of conditions that are specific to the electronic communications sector[691] and may be imposed by Member States pursuant to a general authorisation:

(i) conditions relating to financial contributions to the provision of universal service;
(ii) conditions relating to administrative charges;
(iii) conditions relating to the interconnection of networks and the interoperability of services;
(iv) conditions relating to the accessibility by end users to numbers from the national numbering plan, numbers from the European Telephone Numbering Space, Universal International Freephone Numbers and, where technically and economically feasible, numbers from numbering plans of other Member States, and conditions that are in conformity with the Universal Service Directive;
(v) conditions relating to the execution of infrastructure works in accordance with environmental and town and country planning requirements and linked to the granting of rights of way, co-location and facility sharing;
(vi) conditions relating to "must carry" requirements;
(vii) conditions relating to the processing of personal data and the protection of privacy;

[688] *ibid.*, Art.3(1).

[689] *ibid.*, Art.3(3). This information must be limited to that which is necessary for the identification of the provider, such as its company registration number, its address and a contact person, a short description of the network or service to be provided, and an estimated date for starting the activity. At the authorisation stage, NRAs are, in particular, not allowed to ask for extensive information such as that which operators are required to provide in order to allow the NRA to conduct specific tasks (*e.g.* compliance verification, market analyses): *ibid.*, Art.11 and para.1–165, below. See also Framework Directive, para.1–019, n.64, Art.5(1); and para.1–097, above.

[690] Authorisation Directive, para.1–019, n.65, Art.15.

[691] The general authorisation should, consequently, not be subject to conditions which are already applicable by virtue of other provisions of national law which are not specific to the electronic communications sector: *ibid.*, Art. 6(3). For example, a cable operator can offer both an electronic communications service (*e.g.* the conveyance of television signals) and services not within the scope of the Electronic Communications Regulatory Framework (*e.g.* television channels or programming), and, therefore, additional obligations (not listed in the Annex) can be imposed on this undertaking in relation to its activity as a content provider: *ibid.*, recitals 18 and 20.

(viii) conditions, specific to the electronic communications sector, relating to consumer protection, as well as special arrangements for the disabled;
(ix) restrictions in relation to the transmission of illegal or harmful content;
(x) conditions regarding the provision of information under a notification procedure or which is required for the NRAs' market analyses for the purposes of *ex ante* regulation, as well as the verification of compliance with applicable conditions and for statistical purposes;
(xi) conditions relating to legal interception by the competent national authorities in conformity with the E-Privacy Directive and the Framework Data Protection Directive;[692]
(xii) conditions relating to the provision of public warning communications, *i.e.* the terms of use for communications from public authorities to the general public for warning the public of imminent threats and for mitigating the consequences of major catastrophes;
(xiii) conditions relating to the provision of emergency services, *i.e.* the terms of use during major disasters or national emergencies to ensure communications between emergency services and authorities and broadcasts to the general public;
(xiv) conditions relating to the protection of users and subscribers to limit the exposure to electromagnetic fields caused by sites or antennas;
(xv) access obligations, other than those imposed under the Access and Universal Service Directives;[693]
(xvi) conditions to ensure the maintenance of the integrity of public communications networks;
(xvii) arrangements for the security of public networks against unauthorised access to data pursuant to the E-Privacy Directive;
(xviii) conditions for the use of radio frequencies, where such use is not subject to the granting of individual rights;
(xix) measures designed to ensure compliance with the standards and specifications that the Commission may introduce in order to ensure interoperability between network interfaces;[694] and
(xx) transparency obligations (in relation to public communications network providers providing electronic communications services available to the public), to ensure end-to-end connectivity, in conformity with the objectives and principles set out in Article 8 of the Framework Directive, disclosure regarding any conditions limiting access to and/or use of services and applications where such conditions are allowed by Member States in conformity with EU law, and, where necessary and proportionate, access by national regulatory authorities to such information needed to verify the accuracy of such disclosure.

These conditions generally refer to provisions of the Electronic Communications Regulatory Framework, or to specific provisions of the E-Commerce[695] or Audiovisual Media Services

[692] See para.1–402, below.
[693] See para.1–236 *et seq.*, below.
[694] Framework Directive, para.1–019, n.64, Art.17; see para.1–216 *et seq.*, below.
[695] E-Commerce Directive, para.1–048, n.184.

Directives[696] (in relation to the transmission of illegal or harmful content), or the RTTE Directive[697] (in relation to radio frequencies). The general authorisation and the potential conditions that may be imposed pursuant thereto cover all electronic communications networks and services, whether or not they are provided to the public. However, fewer and lighter conditions may be applied if an undertaking does not provide electronic communications networks and services to the public.[698] The specific *ex ante* obligations which may be imposed on operators designated as possessing SMP (and in the exceptional cases where such obligations may be imposed on operators without SMP)[699] must not be included in the rights and obligations contained in general authorisations; these obligations must be imposed separately on individual operators. In order to achieve transparency for undertakings, NRAs are, however, required to set out in the general authorisation the criteria and procedures for imposing such specific obligations.[700]

1–157 Non-compliance with the conditions attached to a general authorisation—NRAs monitor and supervise compliance with the conditions of general authorisations, specific access obligations on wholesale or retail markets and universal service obligations.[701] They have the power to require undertakings to provide all information necessary to fulfil this supervisory function.[702] If an undertaking does not comply with the conditions attached to a general authorisation or with specific access or universal service obligations, the NRA must first inform the undertaking in question and give it the opportunity to state its views, within a reasonable time limit.[703] The relevant authority has the power to require the cessation of the breach, either immediately or within a reasonable time limit, and to impose specific measures to ensure compliance. Once the reasoned measures have been communicated to the undertaking concerned, it must be given a reasonable period to comply with the measures. Such measures must be appropriate and proportionate to the infringement. They can, notably, consist of dissuasive (periodic) financial penalties, which may have retroactive effect. NRAs are empowered to impose orders to cease or delay the provision of a service or a bundle of services which, if the breach were to continue, would result in significant harm to competition, pending compliance with access obligations imposed following its SMP analysis.[704] Only in cases of serious and repeated breaches and where other measures aimed at ensuring compliance have failed, may the NRA prevent the undertaking concerned from operating under the general authorisation,[705] by adopting a reasoned decision within two months of its initial intervention. Moreover, if a breach of the conditions of the general authorisation represents an immediate and serious threat to public safety, public security or public

[696] Audiovisual Media Services Directive, para.1–053, n.206. See para.1–054, above, in relation to the links between the regulation of the transmission of broadcasting signals and of broadcast content.
[697] RTTE Directive, para.1–015, n.50; see generally, para.1–057, above.
[698] Authorisation Directive, para.1–019, n.65, Arts.1(1) and 4; 2002 Authorisation Directive, para.1–019, n.65, recitals 4 and 16.
[699] See paras.1–236 *et seq.*, below.
[700] Authorisation Directive, para.1–019, n.65, Art.6(2).
[701] See paras.1–244 *et seq.*, below (in relation to access obligations) and paras.1–294 *et seq.*, below (in relation to universal service obligations).
[702] Authorisation Directive, para.1–019, n.65, Art.10(1), in relation with Art.6(2). NRAs' powers to require information are exercised in compliance with Art.11 of the Authorisation Directive; see para.1–165. See also Framework Directive, para.1–019, n.64, Art.5(1) and para.1–097, above. Financial penalties may be imposed on undertakings that fail to provide the required information: Authorisation Directive Art.10(4).
[703] *ibid.*, Art.10(2).
[704] *ibid.*, Art.10(3); regarding NRAs' SMP analysis, see para.1–220 *et seq.*, below.
[705] *ibid.*, Art.10(5).

health or will create serious economic or operational problems for other providers or users of electronic communications networks or services, the NRA may take urgent interim measures to remedy the situation in advance of reaching a final decision.[706] The undertaking concerned must have a right of appeal against such measures before a body that is independent of the NRA.[707]

1–158 Administrative charges for general authorisations—In order to not distort competition or create unjustified barriers to entry, any administrative charges or fees imposed on undertakings for a general authorisation must be structured so that they cover only the actual administrative costs incurred by the NRA in the management, control and enforcement of the applicable general authorisation scheme and any related individual rights of use of frequencies and/or numbers and/or specific access and universal service obligations.[708] These fees must be imposed in an objective, transparent and proportionate manner[709] which minimises additional administrative costs and attendant charges;[710] they should also be published in an appropriate and sufficiently detailed

[706] *ibid.*, Art.10(6).

[707] *ibid.*, Art.10(7); on appeals against an NRA's decisions, see para.1–094 *et seq.*, below.

[708] *ibid.*, Art.12(1)(a). Permissible activities that may be included within the costs of administering a general authorisation include those incurred for international cooperation (*e.g.* radio frequencies, numbering schemes), harmonisation and standardisation, market analysis, monitoring compliance and other market control, as well as regulatory work involved in the preparation and enforcement of secondary legislation and administrative decisions, such as decisions on access and interconnection.

[709] The Commission has opened an infringement procedure against Latvia concerning administrative charges levied for covering the administrative costs of controlling the usage of radio spectrum, which it considers have not been imposed in an objective, transparent and proportionate way. In particular, the Commission is challenging a significant increase of these charges in 2007 (more than six-fold compared to the rate for 2006) and discounts of up to 50% that have been offered to state defence and security institutions, for deployment of the state private electronic communications network and for companies implementing projects receiving state or EU funding, are also challenged by the Commission: see Commission Press Release, *Telecoms: Latvia warned over administrative charges in telecoms sector*, IP/09/1009 (June 25, 2009).

[710] Authorisation Directive, para.1–019, n.65, Art.12(1)(b). Under a general authorisation system, it is not possible to attribute administrative costs (and hence charges) to individual undertakings, except for the granting to specific undertakings of rights to use numbers or radio frequencies and rights to install facilities on land. Regarding the proportionate allocation of these costs among market participants, recital 31 of the 2002 Authorisation Directive, para.1–019, n.65, indicates that, as an individual *per capita* attribution is no longer possible, a turnover-related charge may be appropriate, except when administrative charges are very low, in which case a charge combining a flat rate charge and a turnover-related element could also be appropriate. However, the Court of Justice has held that Italy had infringed Arts.6 and 11 of the previously-applicable ONP Licensing Directive, para.1–012, n.40, by imposing financial charges on licence holders that were calculated on the basis of their turnover, as such a charge considerably increased the fees and charges which Member States are expressly authorised to impose and created significant obstacles to the freedom to provide telecommunications services: see Joined Cases C-292/01 and 293/01, *Albacom SpA and Infostrada SpA v Ministero del Tesoro and Ministero delle Comunicazioni* [2003] E.C.R. I-9449. Arts.6 and 11 of the ONP Licensing Directive were repealed and replaced by the provisions of the Authorisation Directive (in particular, Arts.12 on administrative charges and 13 on fees for rights of use and rights to install facilities), but their substance has not changed. Hence, although this judgment applied to the implementation of the ONP Licensing Directive, the principles established by the Court remain valid for the interpretation of the equivalent provisions of the Authorisation Directive. Notwithstanding these requirements regarding administrative charges, Member States remain free to impose taxes on activities provided for in licences and authorisations granted to operators. Such taxes must, however, comply with EU law, in particular with the freedom to provide services (Art.56 [ex 49]). Indeed, neither the Authorisation Directive nor Art.56 preclude the introduction, by the legislation of a national or local government, of taxes which apply without distinction and in the same way to national operators and to those established in other Member States (such as taxes on infrastructure), unless the cumulative effect of such taxes could compromise the freedom to provide electronic

manner, so as to be readily accessible. For this purpose, NRAs must publish an annual report showing the total charges collected and the administrative costs incurred, in order to allow verification that the charges and fees reflect the costs incurred by the NRA. This effectively requires accounting separation for the costs generated in permitted activities. If there is a difference between the charges collected and the administrative costs incurred, appropriate adjustments must be made, *e.g.* by reviewing charges for the following year.[711]

1–159 Voice-over-IP—Under the Framework Directive, in conjunction with the Authorisation Directive,[712] voice services provided over networks based wholly or partly on the internet protocol (*i.e.* VoIP services)[713] may be considered as electronic communications services. They are, therefore, in principle, covered by the general authorisation scheme. The exact qualification of a specific VoIP service (*i.e.* as to whether it is considered as electronic communications service and/or as publicly available telephone service) and the precise definition of the obligations applicable to this service (*e.g.* regarding emergency services) depends on the exact features offered by the service provider.[714]

1–160 No pan-European one-stop-shopping procedure—Undertakings providing electronic communications networks and/or services in more than one Member State must comply with the conditions of the general authorisation in—and, when required, notify the NRA of –each Member State in which they operate. Undertakings providing cross-border electronic communications services to undertakings located in several Member States are, however, subject to no more than one notification per Member State concerned.[715] Nevertheless, in so far as general authorisations are concerned, because notification is no longer necessarily a prerequisite to commencing the activity, any new entrant on a national market for the provision of electronic communications networks and services that fulfils the conditions laid down in Part A of the Annex to the Authorisation Directive,[716] is entitled to commence that activity in that Member State. The Authorisation Directive provides a general framework for the provision of electronic communications networks and services across the EU that, once national regimes are harmonised in accordance with the provisions of the Regulatory Framework, would in practice make the need for a one-stop-shopping procedure less relevant. This is not the case, however, for the grant of

communication services: see Joined Cases C-544/03 and C-545/03, *Mobistar SA v Commune de Fléron and Belgacom Mobile SA v Commune de Schaerbeek* [2005] E.C.R. I-7723 (on the application of Art.56, and of the Satellite and Full Competition Directives, see generally para.1–006 *et seq.*, above).

[711] *ibid.*, Art.12(2) and 2002 Authorisation Directive, para.1–019, n.65, recital 30.

[712] Framework Directive, para.1–019, n.64, Art.2(a) and (c) and Authorisation Directive, para.1–019, n.65, Arts.2(2) and 3.

[713] WIK-Consult & Cullen International, "The Regulation of Voice over IP (VoIP) in Europe—Study for the European Commission" (March 19, 2008), 6. According to the European Commission, "VoIP" is used as the generic term for the conveyance of voice, fax and related services partially or wholly over packet-switched, IP-based networks: Commission Staff Working Document of June 14, 2004, "The Treatment of Voice over Internet Protocol (VoIP) under the EU Regulatory Framework, An Information and Consultation Document", ("Commission Working Document on VoIP"), 5. As far as the IP-based part of the network is concerned, the VoIP packets from the calling user to the called user may be transmitted over public internet segments, managed IP networks, or both: European Regulators Group, ERG Common Position on VoIP, ERG (07) 56rev2 (December 6–7, 2007) ("ERG Common Position on VoIP"), 4.

[714] *ibid.* See also Communications Committee Working Document of March 23, 2006, Regulatory Treatment of Voice over IP Services (Results of VoIP Questionnaire (COCOM05-52)), COCOM06-14. For further developments on VoIP, see para.1–317, below.

[715] Authorisation Directive, para.1–019, n.65, Art.3(2), para.2.

[716] See para.1–156, above.

individual rights to use frequencies and/or numbers, although, as will be discussed further below, Member States must respect strict time limits for the granting of these rights[717] and the attached conditions cannot be duplicated.[718] In this regard, it should also be noted that NRAs are required to make information concerning the usage of such frequencies publicly available to all interested parties, including other NRAs.[719]

3. Access to markets: frequencies, numbers and rights of way

1–161 This section deals with the assignment to undertakings of rights of use for frequencies and numbers, as well as with the granting of rights of way. All the conditions applicable to the general authorisations or rights of use defined in this section must be determined in accordance with the provisions of the Electronic Communications Regulatory Framework relating to the harmonisation of radio frequency allocation[720] and numbering resources[721] within the EU, and the technical implementing measures adopted in these fields.

1–162 Requirements for individual rights to use numbers and/or frequencies—Rights to use numbers and/or frequencies and the conditions attached to their use should, in principle, be included in a general authorisation. This facilitates access to radio frequency resources for market players and will contribute to removing barriers to market entry. However, Member States may make the use for scarce resources, such as frequencies and/or numbers, used to provide electronic communications networks and services subject to the granting of an individual right of use (or authorisation), where this is necessary to ensure their efficient use. In the case of frequencies, the necessity of doing so must be assessed by reference to the following objectives: (i) avoiding harmful interference; (ii) ensuring technical quality of service; (iii) safeguarding the efficient use of spectrum; and (iv) fulfilling other objectives of general interest as defined by Member States in conformity with EU law.[722] However, the requirement for an individual right of use, which generally *prima facie* restricts the freedom to provide services (which is prohibited by Article 56 [ex 49]), will nevertheless be lawful and does not constitute the granting of special rights (which is prohibited by

[717] Authorisation Directive, para.1–019, n.65, Art.5(3), which provides that a decision on usage rights must be taken within six weeks from the date of application (in the case of radio frequencies) and within three weeks (in the case of numbers).

[718] *ibid.*, Art.6(4). See paras.1–164 and 1–165, below.

[719] *ibid.*, Art.15. In addition, the general duty on NRAs to exchange information with other NRAs under Art.7(2) of the Framework Directive may also encompass information on those operators that have already been granted an individual right of use in a Member State, provided that this is with the aim of consolidating the internal market for electronic communications.

[720] See para.1–201 *et seq.*, below.

[721] See para.1–183, below. See also Political Intelligence, "Policy implications of convergence in the field of naming, numbering and addressing—Final Report for the European Commission" (September 2003), which provides a broad orientation into key issues applicable to numbering, including: (i) the strategic value of converged naming, numbering and addressing schemes; (ii) the role of the traditional organisations for the management of these key resources in converged networks; and (iii) the extent of industry self-regulation in this area of regulation. Further information is available at: *http://ec.europa.eu/information_society/policy/ecomm/doc/library/ext_studies/index_en.htm/*.

[722] Authorisation Directive, para.1–019, n.65, Art.5(1), and Better Regulation Directive, para.1–019, n.64, recital 52. If individual rights to use radio frequencies are granted for 10 years or more without being transferable or leasable (see para.1–177, below), the necessity of the right of use must be regularly reassessed and may be reviewed: Authorisation Directive, Art.5(2), fifth sub-para.

the Liberalisation Directive[723]), provided that the rights of use are granted to the beneficiaries in accordance with objective, transparent, non-discriminatory and proportionate criteria.[724] In the case of numbers, individual rights of use should be used only for ensuring the efficient use of numbers, including short codes, from the national numbering plan.[725]

1–163 Procedures for the granting of individual rights of use—Individual rights of use (or authorisations) must be granted by the competent national authorities[726] to undertakings for the provision of electronic communications networks or services[727] through open, objective, transparent, non-discriminatory and proportionate procedures and within reasonable time limits.[728] The selection procedure must be designed in a way that allows effective competition between operators.[729] An inadequate granting of rights of use for frequencies could increase operators' costs and affect, especially for new entrants, their ability to compete in the market. Member States must, therefore, identify the most appropriate procedure for assigning frequencies, in their specific national context and on the basis of a thorough evaluation of market requirements.[730] The types of procedures to be applied by the Member States are not prescribed by EU law; therefore, Member States may use comparative or competitive selection procedures, such as "beauty contests" or

[723] Liberalisation Directive, para.1–007, n.23.

[724] *Centro Europa 7*, para.1–063, n.258, paras.94, 103, 108 and 116.

[725] While frequencies may be considered as a scarce resource, this is, in principle, no longer the case for numbers, since Member States are required to ensure that adequate numbers and numbering ranges are available for all electronic communications services: Framework Directive, para.1–019, n.64, Art.10(1). However, there are certain numbers which distinguish themselves from all other numbers in a given number range because they are attractive, easy to learn or to remember, subjectively pleasing or well known by (a part of) the public. These so-called "golden numbers" may have an exceptional commercial value and, therefore, may be viewed as a scarce resource: see Commission Staff Working Document of October 18, 2000, "Europe's Liberalised Telecommunications Market—A Guide to the Rules of the Game", 22, available at *http://ec.europa.eu/archives/ISPO/infosoc/telecompolicy/en/userguide-en.pdf*. Accordingly, an individual right of use would, in practice, always be required for the allocation of "golden numbers". Art.5(4) of the Authorisation Directive, para.1–019, n.65, requires Member States that wish to grant such usage rights through a competitive or comparative selection procedure to follow the consultation process under Art.6 of the Framework Directive. For a more comprehensive analysis of the cases in which (and the procedures by which) Member States may limit the number of individual rights of use, see para.1–168, below. For the consultation procedure under Art.6 of the Framework Directive, see para.1–077, above.

[726] The grant of rights of use is not necessarily undertaken by NRAs, but may be the responsibility of another public authority: see paras.1–075, above and 1–188, n.818, below in the case of frequencies. See however Framework Directive, para.1–019, n.64, Art.10, and para.1–183, below, regarding the role of NRAs in the management of numbering resources.

[727] See however para.1–179, below, regarding the possibility to grant rights of use for radio frequencies to radio or television broadcast content providers. The 2002 Authorisation Directive expressly provided for the possibility to assign rights of use not only to electronic communications network operators or service providers, but generally also to entities that *use* electronic communications networks or services, such as broadcast content providers: 2002 Authorisation Directive, para.1–019, n.65, Art.5(2) and recital 12. However, with the 2009 amendments to the Regulatory Framework, this possibility seems to have been removed, except in the specific case of broadcast content providers: Authorisation Directive, para.1–019, n.65, Art.5(2).

[728] *ibid.*, Art.5(2), second sub-para.

[729] Liberalisation Directive, para.1–007, n.23, Art.4(2).

[730] As regards fees for rights of use, see 2002 Authorisation Directive, para.1–019, n.65, recital 32.

auctions, which imply a limitation on the number of rights of use (or authorisations) available and which must, therefore, comply with the requirements of Article 7 of the Authorisation Directive.[731]

1–164 The responsible national authorities must inform applicants of their decision and make it public as soon as possible, but no more than three weeks after receiving an application in the case of numbers that have been allocated for specific purposes within the national numbering plan, and no more than six weeks in the case of radio frequencies.[732] National authorities may only extend to six weeks the time limit for the assignment of numbers after consultation with the interested parties and only in the case of numbers of exceptional economic value (so-called "golden numbers"), which must be granted through either competitive or comparative selection procedures.[733] Where a competitive or comparative bidding procedure is used, the time limit for the assignment of frequencies may be extended for the time necessary to ensure that such procedures are fair, reasonable, open and transparent to all interested parties, but by no longer than eight months.[734] The procedures for granting individual rights of use must be published in an appropriate manner, so as to be readily accessible.[735] Any undertaking that meets the conditions laid down by the Member State must be granted an individual licence, unless the number of available frequencies is limited in compliance with the Electronic Communications Regulatory Framework.[736]

1–165 As with general authorisations, NRAs may only require undertakings to provide information under an individual authorisation for rights of use that is proportionate and objectively justified for: (i) verification of compliance with universal service obligations; (ii) the imposition of administrative charges and usage fees; (iii) the effective and efficient use of frequencies and numbers; (iv) case-by-case verification of compliance with conditions of the general authorisation; (v) market analyses for the imposition of conditions applied to operators having SMP; (vi) procedures for the assessment of requests for granting rights of use; (vii) clearly defined statistical purposes; (viii) conditions regarding the provision of information required for the verification of compliance with applicable conditions; (ix) publication of comparative overviews of quality and price of services for the benefit of consumers; and (x) evaluating future network or service developments that could have an impact on wholesale services made available to competitors. This information may not be required prior to, or as a condition for, market access, except for the ones that are proportionate and objectively justified for procedures for and assessment of requests for granting rights of use.[737] Where such information has already been provided for the purposes of a general authorisation in the same Member State, it would appear to be disproportionate for an applicant to be asked to provide the same information again.

[731] Authorisation Directive, para.1–019, n.65, Art.5(4), second sub-para.; 2002 Authorisation Directive, para.1–019, n.65, recital 21. For the requirements for limiting the number of rights of use for frequencies, see para.1–168, below.

[732] Authorisation Directive, para.1–019, n.65, Art.5(3). The requirement to publish decisions on the granting of rights of use may be fulfilled by making these decisions publicly accessible via a website: *ibid.*, recital 19.

[733] *ibid.*, Art.5(4).

[734] *ibid.*, Art.7(4).

[735] Liberalisation Directive, para.1–007, n.23, Art.4(2).

[736] See para.1–168, below.

[737] Authorisation Directive, para.1–019, n.65, Art.11(1). NRAs requiring undertakings to provide such information must inform them of the specific purpose for which this information is to be used: *ibid.*, Art.11(2). With regard to the general obligation to provide information, see para.1–097, above. This is, however, without prejudice to other information and reporting obligations under national legislation other than the general authorisation: *ibid.*

1–166 Conditions attached to individual rights of use for frequencies—In addition to the conditions that can be attached to a general authorisation,[738] the only conditions which may be attached to individual rights of use for radio frequencies are those listed in Part B of the Annex to the Authorisation Directive. These conditions may be imposed only where they are justified, are in accordance with the principles of non-discrimination, proportionality and transparency, and meet the requirements of Article 9 of the Framework Directive regarding spectrum management.[739] Permissible conditions include:

(i) the obligation to provide a service or to use a type of technology for which the rights of use has been granted, including, where appropriate, coverage and quality requirements;
(ii) conditions relating to the effective and efficient use of frequencies;
(iii) technical and operational conditions that are necessary for the avoidance of harmful interference and for the limitation of exposure of the general public to electromagnetic fields, where such conditions are different from those imposed by generally applicable environmental and town and country planning law or the conditions contained in a general authorisation;
(iv) a maximum duration for the usage right;
(v) conditions for the transfer of rights at the initiative of the right holder and the conditions for such a transfer;
(vi) usage fees; and
(vii) any commitments which the undertaking obtaining the usage right has made in the course of a competitive or comparative selection procedure.[740]

1–167 Conditions attached to individual rights of use for numbers—In addition to the conditions that can be attached to a general authorisation,[741] the only conditions which may be attached to individual rights of use for numbers, where justified and in accordance with the principles of non-discrimination, proportionality and transparency, are those listed in Part C of the Annex to the Authorisation Directive. Permissible conditions include:

(i) the designation of the service for which the numbers shall be used, including any requirements linked to the provision of that service and, for the avoidance of doubt, tariff principles and maximum prices that can apply in the specific number ranges for the purposes of ensuring consumer protection;
(ii) conditions relating to the effective and efficient use of numbers;
(iii) conditions regarding number portability requirements;
(iv) the obligation to provide public directory subscriber information for the purposes of Articles 5 and 25 of the Universal Service Directive;
(v) a maximum duration for the right of use, without prejudice to any changes in the national numbering plan;

[738] Member States must not duplicate the conditions of the general authorisation if they grant individual rights of use for radio frequencies or numbers: *ibid.*, Art.6(4).

[739] See paras.1–186 *et seq.*, below.

[740] Authorisation Directive, para.1–019, n.65, Annex B.

[741] Member States must not duplicate the conditions of the general authorisation where they grant licences to radio frequencies or numbers: *ibid.*, Art.6(4).

(vi) conditions for the transfer of rights at the initiative of the right holder and the conditions for such a transfer;
(vii) usage fees;
(viii) any commitments which the undertaking obtaining the usage right has made in the course of a competitive or comparative selection procedure; and
(ix) conditions imposing obligations under relevant international agreements relating to the use of frequencies or numbers.[742]

1–168 Limiting the number of individual rights of use for frequencies—Limitations on the number of usage rights available for frequencies may create barriers to entry in electronic communications markets and distort competition. Member States may therefore only restrict the number of these rights to the extent that this is required to ensure the efficient use of radio frequencies and having given due weight to the need to maximise benefits for users and to facilitate the development of competition. Such limitations must be reviewed at reasonable intervals or at the reasonable request of affected undertakings.[743] Member States must use objective, transparent, non-discriminatory and proportionate selection criteria in awarding a limited number of individual rights of use for frequencies. Competitive selection procedures may be used.[744] Any decision to limit the number of individual usage rights for frequencies, and the reasons for doing so, must be published. Member States must give all interested parties, including end-users and consumers, the opportunity to comment on a draft decision to limit the rights of use within a reasonable period prior to inviting applications for these rights.[745] Any limitation would, however, be without prejudice to the right of the licensee to transfer its allocated numbers or frequencies, provided that such a possibility exists.[746]

1–169 Duration of rights of use—Member States must ensure that the duration of and the right of use is appropriate for the service concerned, in view of the objective pursued and taking due account of the need to allow for an appropriate period for the amortisation of investments made by the beneficiary.[747] A possible extension of the initial duration may be included in the terms of the rights of use; any other extension (which would take place without being foreseen by these terms) would need to comply with requirements of Article 7 of the Authorisation Directive.[748] The restriction or withdrawal of rights of use for radio frequencies before the expiry of the period for which they have been granted is not permitted, except for a justified reason and, where applicable, in conformity with the conditions attached to the rights of use and relevant national legislation regarding compensation for the withdrawal of rights.[749] Nevertheless, individual rights to use radio frequencies that have been granted for more than ten years and that may not be transferred or

[742] Authorisation Directive, para.1–019, n.65, Annex, Part C.
[743] Liberalisation Directive, para.1–007, n.23, Art.4(1); Authorisation Directive, para.1–019, n.65, Arts.5(5) and 7(1).
[744] Authorisation Directive, para.1–019, n.65, Art.7(3) and (4).
[745] *ibid.*, Art.7(1), read in conjunction with the Framework Directive, para.1–019, n.64, Art.6.
[746] Authorisation Directive, para.1–019, n.65, Art.7(5). For the possibilities for spectrum trading, see Framework Directive, para.1–019, n.64, Art.9b, and para.1–177, below.
[747] Authorisation Directive, para.1–019, n.65., Art.5(2), fourth sub-para. As an individual right of use that is not tradable has restrictive impact on free access to radio frequencies, its duration should be limited in time: Better Regulation Directive, para.1–019, n.64, recital 69.
[748] Authorisation Directive, para.1–019, n.65, Art.7(1). See para.1–168, above, regarding the requirements laid down under this provision.
[749] Authorisation Directive, para.1–019, n.65, Art.14(2).

leased between undertakings must be reviewed by the competent national authorities, in particular if the holder of the right makes a justified request, to ensure that the criteria for granting individual rights of use apply and are complied with the duration of the licence. If the criteria for the granting of individual rights of use are no longer applicable, this review can lead to changing the individual rights of use into a general authorisation or permitting the transfer or lease of these rights[750] between undertakings.[751]

1–170 Amendments to the conditions attached to individual rights of use—Member States may amend the conditions attached to an individual usage right only in objectively justified cases and in an appropriate manner, taking into consideration, where appropriate, the specific conditions applicable to transferable rights of use for radio frequencies. Except where the proposed amendments are minor and have been agreed with the holder(s) of the rights of use, a Member State must give appropriate notice of its intention to amend the conditions and enable interested parties, including end-users and consumers, to express their views on the proposed amendments during a minimum period of, in principle, four weeks.[752] Any such changes would likely need to comply with the requirements of the Authorisation Directive.

1–171 Non-compliance with the conditions attached to individual rights of use—If the beneficiary of an individual right of use does not comply with the conditions attached to it, the NRA may take, in compliance with Article 10 of the Authorisation Directive and in an appropriate and proportionate manner, specific measures to ensure the licensee's compliance.[753] In cases of serious or repeated breaches, the right to use a frequency and/or number may ultimately be suspended and withdrawn. The undertaking concerned must be given the opportunity to state its views on the NRA's position that it has infringed the conditions and to remedy any breach within a reasonable time limit. NRAs may, however, take immediate action, before reaching a final decision, in the event of breaches that represent an immediate and serious threat to public safety, public security or public health or create serious economic or operational problems for other providers or users of electronic communications networks or services or other users of the radio spectrum.[754] Member States must provide the undertaking with a right of appeal before a body that is independent of the NRA.[755]

1–172 Fees for rights of use—As it is the case for general authorisations,[756] administrative charges imposed on undertakings as part of the licensing procedures for individual rights of use

[750] In accordance with the Framework Directive, para.1–019, n.64, Art.9b. On spectrum trading, see paras.1–177 and 1–178, below.
[751] Authorisation Directive, para.1–019, n.65, Art.5(2), fifth sub-para.
[752] *ibid.*, Art.14(1). This requirement does not apply in case of minor amendments which are mainly administrative in nature and do not change the substantive nature of the general authorisation and individual rights of use, and thus cannot create any competitive advantage for other undertakings: Better Regulation Directive, para.1–019, n.64, recital 70.
[753] See para.1–157, above, in relation to identical measures that NRAs may take for non-compliance with the conditions attached to a general authorisation; see also Framework Directive, para.1–019, n.64, Art. 21a and para.1–097, above.
[754] In its final decision, the relevant national authority may, where appropriate, confirm the interim measures, which shall be valid for a maximum period of three months, but which may, if the enforcement procedures have not been completed, be extended for a further period of up to three months: Authorisation Directive, para.1–019, n.65, Art. 10(6).
[755] *ibid.*, Art.10(7). This procedure is subject to the requirements of Art.4 of the Framework Directive: on these requirements, see para.1–094 *et seq.*, above.
[756] See para.1–158, above.

may only cover the administrative costs incurred in the issue, management, control and enforcement of the applicable authorisations or licences.[757] However, in the case of the assignment of (scarce) resources, *i.e.* rights to use numbers or frequencies, Member States may impose fees that reflect the need to ensure the optimal use of these resources, and that do not hinder the development of innovative services and competition in the market.[758] Although these charges must be objectively justified, non-discriminatory, transparent, proportionate in relation to their intended purpose and take into account the need to foster the development of innovative services and competition, this provision enables the competent national authorities to impose substantial charges for the acquisition of usage rights for frequencies,[759] which may be determined through competitive or comparative selection procedures.[760] Moreover, in opposition to administrative charges, Member States remain free to use these fees for any purpose whatsoever.[761]

1–173 No one-stop-shopping procedure—The introduction of the general authorisation procedure has facilitated the introduction of pan-European networks and services that are provided in more than one Member State.[762] However, it does not provide for the establishment of a one-stop-shop procedure for the granting of individual rights of use. In practice, in so far as networks and services that require access to (scarce) resources are concerned, an application to obtain the applicable rights of use is still required in each Member State in which these resources are required. The granting of individual rights of use remains within the exclusive competence of the Member States. Whilst the Commission may put in place appropriate technical implementing measures regarding the harmonisation and allocation of radio spectrum,[763] this does not cover authorisation and licensing procedures, nor the decision of whether to use competitive or comparative selection procedures for the allocation of radio frequencies.[764] The Authorisation Directive does, however, contain provisions concerning common assignment procedures in which the usage of radio frequencies has been harmonised,[765] access conditions and procedures have been agreed, and undertakings to which the radio frequencies shall be assigned have been selected in accordance with international agreements and EU rules. In this case, Member States must grant the right of use for

[757] Authorisation Directive, para.1–019, n.65, Art.12. On administrative charges, see para.1–158, above.

[758] *ibid.*, Art.13 and 2002 Authorisation Directive, para.1–019, n.65, recital 32.

[759] See *Omnitel*, para.1–035, n.151, and *Second Spanish GSM Licence*, para.1–035, n.151, in which the Commission did not object to the substantial level of the fees levied on the new mobile operators in Italy and Spain, respectively, but did object to the discriminatory nature of the fees (as compared to existing operators) and therefore found an infringement of the competition rules: see paras.5–124 and 5–125, respectively, below. See also Case NN.42/2004, *Modification retroactive des redevances dues par Orange et SFR au titre des licences UMTS*, O.J. 2005 C275/3 (*French UMTS Licence Auctions*) and Case C-431/07P, *Bouygues v Commission*, 3 C.M.L.R. 13 (discussed in para.6–325 *et seq.*, below), concerning the application of the state aid rules to a modification of the fees for an individual right to use radio frequencies.

[760] In this case, where the fees for rights of use for radio frequencies consist entirely or partly of a one-off amount, payment arrangements should ensure that such fees do not in practice lead to selection on the basis of criteria unrelated to the objective of ensuring optimal use of radio frequencies: 2002 Authorisation Directive, para.1–019, n.65, recital 32.

[761] *ibid.*, recital 32.

[762] See para.1–160, above.

[763] See para.1–201 *et seq.*, below.

[764] See Radio Spectrum Decision, para.1–019, n.69, recital 11. This is without prejudice to CEPT's continuing mandate to establish a one-stop-shop procedure for the authorisation of services which by their nature are cross-border: *ibid.*, recital 24. Should CEPT be able to agree on a one-stop-shopping procedure, the Commission could then mandate it under the procedure established by the Radio Spectrum Decision, Art.2.

[765] See para.1–201 *et seq.*, below.

such radio frequencies in accordance with such harmonised procedures, without imposing any further conditions, additional criteria or procedures which would restrict, alter or delay the correct implementation of the common assignment of such radio frequencies, provided that all national conditions attached to the right to use the frequencies concerned have been satisfied in the case of the common selection procedure.[766]

1–174 The creation of an efficient procedure for undertakings requiring rights of use to provide pan-European services was one of the main challenges faced by the Commission in its 2007 review of the 2002 Electronic Communications Regulatory Framework.[767] This objective has not been fulfilled, as its proposals relating to the adoption of a common selection procedure for granting rights of use and to the harmonisation of national rules concerning individual rights of use were rejected by the Council and the European Parliament. The Commission has, however, experimented with a number of alternative solutions to facilitate the provision of certain pan-European services, *i.e.* mobile services on aircraft and mobile satellite services.

1–175 Authorisation of Mobile Communications Services on Aircraft and on Board Vessels—In order to simplify and speed up market access for providers of mobile communications services on aircraft ("MCA services") and on board vessels ("MCV services"), the Commission has designed specific regulatory environments for these services, by adopting two spectrum decisions relating to the technical parameters for, respectively, in-flight mobile phone use and mobile communications on board vessels (within Member States' territorial seas) throughout the EU.[768] In parallel, two recommendations were adopted by the Commission to establish harmonised approaches to licensing which promote mutual recognition of national authorisations for MCA and MCV services. According to these recommendations, the provision of MCA and MCV services should only be subject to a general authorisation and the responsibility for defining the conditions attached to the authorisation should lie with the country of registration of the aircraft or of the vessel, in accordance with that country's authorisation regime.[769]

1–176 ***Single selection procedure for mobile satellite services***—The Commission has adopted a decision on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services.[770] To complement this spectrum allocation measure, a specific Decision (based on Article 114 [ex 95]) provides the basis for a single comparative selection process throughout all Member States to select the operators of mobile satellite systems who will be authorised to use these bands, which has been organised by the

[766] Authorisation Directive, para.1–019, n.65, Art.8.

[767] See Commission Proposal for a Better Regulation Directive, para.1–026, n.96, 6.

[768] Commission Decision 2008/294 of April 7, 2008 on harmonised conditions of spectrum use for the operation of mobile communication services on aircraft (MCA services) in the Community ("MCA Decision"), O.J. 2008 L98/19; and Commission Decision 2010/166 of March 19, 2010 on harmonised conditions of use of radio spectrum for mobile communication services on board vessels (MCV services) in the European Union ("MCV Decision"), O.J. 2010 L72/38.

[769] Commission Recommendation 2008/295/EC of April 7, 2008 on authorisation of mobile communication services on aircraft (MCA services) in the European Community ("MCA Recommendation"), O.J. 2008 L98/24; and Commission Recommendation 2010/167/EC of March 19, 2010 on the authorisation of systems for mobile communication services on board vessels (MCV services) ("MCV Recommendation"), O.J. 2010 L72/42.

[770] Commission Decision 2007/98 of February 14, 2007 on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services, O.J. 2007 L43/32.

Commission in cooperation with the Member States.[771] The selected operators are subsequently to be authorised in each Member State, in accordance with a coordinated authorisation regime.[772] This selection and authorisation scheme is intended to promote the emergence of pan-European mobile satellite services.

1–177 Spectrum trading—Once the rights to use frequencies have been assigned by Member States to undertakings, the question arises as to whether, and under what conditions, these rights holders can sell or lease their spectrum rights on a "secondary market". The Electronic Communications Regulatory Framework and the Commission promote spectrum trading, as it increases the flexibility and the technical and economic efficiency of the use of the available frequency spectrum.[773] Under the 2002 Regulatory Framework, Member States were allowed (but not obliged) to introduce provisions and procedures to allow undertakings to transfer rights to use radio frequencies, after notifying the responsible NRA.[774] Under the revised Framework Directive, the Commission may identify the frequency bands for which usage rights may be transferred or leased.[775] Member States must then ensure that undertakings may transfer or lease their individual rights of use relating to the frequencies within these bands, in accordance with national procedures. Member States may, however, determine that rights of use may not be transferred or leased if the rights were initially obtained free of charge.[776] In other bands, Member States may also (but are not *obliged* to) make provision for undertakings to transfer or lease individual rights to use radio frequencies in accordance with national procedures. When granting individual rights of use, Member States must specify whether those rights can be transferred by the holder of the rights and, if so, under which conditions.[777]

1–178 Conditions originally attached to rights of use for frequencies, including those related to the allocation of the frequency band in question,[778] still apply after their transfer or lease unless

[771] Decision 626/2008 of the European Parliament and of the Council of June, 30 2008 on the selection and authorisation of systems providing mobile satellite services (MSS) ("MSS Decision"), O.J. 2008 L172/19. An action for the annulment of this Decision has been brought before the General Court: Case T-441/08, *ICO Services Limited v Parliament and Council*, O.J. 2009 C6/33, pending. As a result of the comparative selection procedure provided for in this Decision, two providers (Inmarsat Ventures Limited and Solaris Mobile Limited) were selected: see Commission Decision 2009/449 of May 13, 2009 on the selection of operators of pan-European systems providing mobile satellite services (MSS), O.J. 2009 L149/65. An action for the annulment of this Decision is pending before the General Court: Case T-350/09, *ICO Satellite Limited v Commission*, O.J. 2009 C267/76.

[772] In this case, Member States must grant the right of use for such radio frequencies in accordance with the common selection procedures, without imposing any further conditions, additional criteria or procedures which would restrict, alter or delay the correct implementation of the common assignment of such radio frequencies: Authorisation Directive, para.1–019, n.65, Art.8; see para.1–173, above.

[773] See paras.1–192 and 1–195, below.

[774] 2002 Framework Directive, para.1–019, n.64, Art.9(3) and (4). The most advanced measures in this regard are found in the United Kingdom, where the Communications Act 2003, s.168 lays down the basic principles for spectrum trading. In December 2004, OFCOM launched licence trading for an initial set of licence classes, which included mobile radio and data networks. The majority of licences issued by OFCOM are now tradable: see *http://www.ofcom.org.uk/radiocomms/ifi/trading/*.

[775] Framework Directive, para.1–019, n.64, Art.9b(1) and (3). These technical implementing measures are adopted with COCOM being involved under the regulatory procedure with scrutiny, as foreseen by Art.22(3) Framework Directive: see above, para.1–114, above.

[776] *ibid.*, Art.9b(1), third sub-para.

[777] Authorisation Directive, para.1–019, n.65, Art.5(2), third sub-para.

[778] See para.1–201 et *seq.*, below.

otherwise specified by the competent national authority.[779] If the use of frequencies has been harmonised at the EU level,[780] a transfer or lease must not result in a change of use of that radio frequency. An undertaking intending to transfer or lease its rights to use radio frequencies, as well as the effective transfer or lease thereof, must be notified to the competent national authority responsible for granting individual rights of use in accordance with national procedures.[781]

1–179 Broadcasters' rights to use frequencies—The Authorisation Directive, as with the entire Electronic Communications Regulatory Framework, is applicable to all types of transmission services and networks, including those used for the transmission of broadcasting. However, it takes into account the specific audiovisual policy objectives applicable to the broadcasting sector, *e.g.* the promotion of cultural and linguistic diversity and the protection of media pluralism.[782] In this sector, Member States may therefore make an exception to the requirement of open procedures in awarding individual rights of use, by restricting the award of such rights to well-defined undertakings providing radio or television broadcast content services.[783] Certain general interest obligations imposed on broadcasters may require the use of specific criteria for the granting of rights of use[784] if this is necessary for the achievement of a Member State's general interest objectives, as defined by it in conformity with EU law.[785] Furthermore, the eventual obligation to use the assigned frequency band for the provision of specific audiovisual services may be attached to rights of use for radio frequencies.[786] Finally, to ensure the respect of these specific criteria,

[779] Authorisation Directive, para.1–019, n.65, Art.9b(1).

[780] Through the application of the Radio Spectrum Decision, para.1–019, n.69, Arts.4(2)–(5). Under the Radio Spectrum Decision, the Commission, in coordination with the Radio Spectrum Committee (and in certain matters with CEPT), may adopt technical implementing measures to harmonise the allocation and use of frequencies across the EU: see para.1–201 et *seq.*, below. In doing so, the Commission may, where appropriate, authorise transitional periods and/or spectrum sharing arrangements.

[781] Authorisation Directive, para.1–019, n.65, Art.9b(2).

[782] See para.1–054, above and paras.1–193 and 1–194, below.

[783] Given the specific objectives pursued, some rights to use frequencies may be considered as being granted *intuitu personae*. Nevertheless, the procedures associated with the pursuit of general interest objectives should in all circumstances be transparent, objective, proportionate and non-discriminatory, in accordance with Art.5(2), second para. of the Authorisation Directive: Better Regulation Directive, para.1–019, n.64, recital 68.

[784] The Authorisation Directive, para.1–019, n.65, Annex, Part A, point 9 expressly permits Member States to impose restrictions on the authorisation with regard to the transmission of harmful content, in accordance with Art.2a(2) of the Audiovisual Media Services Directive, para.1–053, n.206.

[785] Authorisation Directive, recital 12 and Art.5(2), second sub-para. A licensing system which restricts the number of operators in the national territory may be justified by general interest objectives, provided that the restriction is structured on the basis of objective, transparent, non-discriminatory and proportionate criteria. This precludes, in television broadcasting, a system which makes it impossible for an operator holding rights to broadcast because the available frequency rights are strictly limited to existing channels: *Centro Europa 7*, para.1–063, n.258.

[786] *ibid.*, Annex, Part B, point 1. At the stage of frequency allocation, Member States may restrict the application of the principles of technology and service neutrality, by reserving some frequency bands for certain technologies uses, *e.g.* to promote cultural and linguistic diversity and media pluralism: see paras.1–193 and 1–194, below.

Member States remain free to allow (or not) the transfer or lease of rights to use broadcasting frequencies.[787]

1–180 Ensuring efficient and effective use of spectrum and preventing distortions of competition—The competent national authorities must ensure that radio frequencies are used efficiently and effectively and in accordance with the coordinated or harmonised approaches and conditions in the field of spectrum management at the EU level.[788] That implies, in particular, that Member States must avoid distortions of competition through spectrum being left unused as a result of the transfer or accumulation of rights of use for radio frequencies (*i.e.* spectrum hoarding) by holders of individual rights of use. Member States may take all appropriate measures to ensure this, such as setting out strict deadlines for the effective exploitation of the rights of use by the holder of the rights or mandating the sale or the lease of rights to use radio frequencies.[789]

1–181 Existing rights of use—Member States must ensure that all general authorisations and individual rights of use that were awarded before December 31, 2009, are brought into conformity with the requirements of the revised 2009 Authorisation Directive by December 18, 2011 at the latest. Where this would result in a reduction of the rights or an extension of the general authorisations and individual rights of use already in existence, Member States may extend the validity of those authorisations and rights until September 30, 2012 at the latest, provided that the rights of other undertakings under EU law are not affected. Member States must notify such extensions to the Commission and state the reasons for granting the extension.[790] The implementation of the principles of technological and service neutrality[791] is, however, subject to specific transitional rules: Member States must take all appropriate measures to ensure that general authorisations and individual rights of use granted after May 25, 2011 conform to these principles.[792] However, with regard to the rights of use for frequencies which were granted before that date and which will remain valid for a period of not less that five years after that date, Member States may allow holders of rights of use, for a period of five years starting from May 25, 2011, to submit an application to the competent national authority for a reassessment of the restrictions on their rights so that the restrictions conform to these neutrality principles.[793] By May 24, 2016, Member States must ensure that the neutrality principles apply to all remaining general authorisations or individual rights of use and spectrum allocations used for electronic communications services which existed on May 25, 2011.[794]

[787] The Commission's competence to identify the bands for which usage rights may be transferred or leased is expressly excluded in respect of rights of use granted by Member States for broadcasting services: Framework Directive, para.1–019, n.64, Art.9b(3).

[788] *ibid.*, Arts.8(2) and 9(2).

[789] Authorisation Directive, para.1–019, n.65, Art.5(6); Framework Directive, para.1–019, n.64, Arts.9(7) and 9a(3). See ERG-RSPG Report on radio spectrum competition issues of June 2009, ERG (09) 22, RSPG09-278 Rev 2.

[790] Authorisation Directive, para.1–019, n.65, Art.17.

[791] See paras.1–193 and 1–194, below.

[792] Framework Directive, para.1–019, n.64, Art.9(6).

[793] *ibid.*, Art.9a(1). Before adopting its decision, the competent national authority must notify the right holder of its reassessment of the restrictions, indicating the extent of the right after reassessment. The right holder then has the opportunity, within a reasonable period, to withdraw his application, which implies that the right will remain unchanged until its expiry or until the end of the five year period, whichever is the earlier.

[794] *ibid.*, Art.9a(2). Measures adopted in applying this Article do not constitute the granting of new rights of use and are not subject to the relevant provisions of Art.5(2) of the Authorisation Directive, para.1–019, n.65; *ibid.*, Art.9a(4).

1–182 RLAN Recommendation—Radio local area networks ("RLANs", also called Wireless Local Area Networks, or "WLANs"), are data communications systems, such as WiFi networks, that have been implemented as an extension (or an alternative) to a wired local area network within a building or a wider area, such as an airport. Using electromagnetic waves, RLANs/WLANs transmit and receive data, minimising the need for users to have wired connections. Since 1995, RLANs/WLANs have gained strong popularity in a number of end-use industries, including the health care, retail, manufacturing, warehousing, and academic sectors, thereby becoming a *de facto* standard. RLANs/WLANs are complementary to 3G technology, in light of the applications that might be provided using these two technologies. However, RLANs/WLANs can only be used in a defined local area, while 3G networks offer fully mobile applications throughout a Member State and, through roaming, beyond. RLAN/WLAN systems may currently use the 2.4 GHz and 5 GHz bands.[795] Under the Authorisation Directive, the use of radio frequencies should, wherever possible (in particular where the risk of harmful interference is negligible), be subject to a general authorisation and not an individual right of use.[796] If the possibility of interference between users of the 2.4 GHz and 5 GHz bands and between different coexisting RLAN/WLAN systems is accepted by the parties involved, Member States should then normally allow the provision of public RLAN/WLAN access without authorisation, or if justified, subject to a general authorisation.[797]

1–183 Management of numbering resources —The availability of sufficient individual telephone numbers and an appropriate numbering system is an essential requirement for effective competition in electronic communications markets. Member States must, therefore, ensure the provision of adequate numbers and numbering ranges for all publicly available electronic communications services.[798] They must also give NRAs the power to control the granting of rights of use for all national numbering resources and the management of the national numbering plans, in order to guarantee equal treatment for all providers of publicly available electronic communications services[799] and, in particular, to ensure that an undertaking to which a right of use for a range of numbers has been granted does not discriminate against other service providers as regards the number sequences used to give access to their services.[800] Member States must ensure that the

[795] See para.1–208, below.

[796] See para.1–162, above.

[797] See Commission Recommendation of March 20, 2003, on the provision of public R-LAN access to public electronic communications networks and services in the European Community, O.J. 2003 L78/12 ("RLAN Recommendation"); see also Commission Press Release, *European Commission adopts Recommendation to promote public wireless broadband services in Europe*, IP/03/418 (March 20, 2003).

[798] Framework Directive, para.1–019, n.64, Art.10(1).

[799] In this regard, an important challenge for Member States is to take into account the need to foster competition and to stimulate the emergence of emerging innovative services, such as those based on VoIP technology. Therefore, the Commission encourages the Member States to give access to geographic and non-geographic numbers on a non-discriminatory basis to any undertaking providing or using electronic communication networks or services that applies for them: see Commission Working Document on VoIP, para.1–159, n.713, 7.

[800] Framework Directive, para.1–019, n.64, Art.10(2). This does not confer any responsibility on NRAs in the field of internet naming and addressing: 2002 Framework Directive, para.1–019, n.64, recital 20. The assignment of the national numbering resources and the management of national numbering plans must be regarded as regulatory functions within the meaning of Art.3 of the Framework Directive. As a consequence, where those functions are to be discharged, even partially, by ministerial authorities, the Member States must ensure that those authorities are neither directly nor indirectly involved in "operational functions" within the

procedures for allocating individual numbers are transparent, equitable and timely and that the allocation is carried out in an objective, transparent and non-discriminatory manner.[801] Member States remain free to allow (or not) the transfer of rights of use for numbers.[802] The Universal Service Directive requires that number portability (*i.e.* the possibility for a subscriber to keep his telephone number while changing operator, type of service or location) in fixed and mobile networks be available throughout the EU.[803]

1–184 Harmonisation of numbering resources—The harmonisation of specific numbers or numbering ranges within the EU is envisaged by the Framework Directive, if this will promote both the functioning of the internal market and support the development of pan-European services.[804] Accordingly, the Commission, in collaboration with the NRAs, may adopt appropriate technical implementing measures on these matters.[805] For instance, the Commission has decided to reserve the numbering range beginning with "116" in national numbering plans for harmonised services of social value.[806] Moreover, where this is appropriate to ensure full global interoperability of services within the common market, Member States are under a duty to coordinate their position in international organisations competent in the fields of numbering, naming and addressing.[807]

1–185 Rights of way and installation of facilities—Providers of electronic communications networks may need to access public and private property to install equipment and cables to build their networks. Under the Authorisation Directive, the right to make an application for the necessary rights to install facilities is part of the rights for undertakings derived from the general authorisation.[808] Member States and the national competent authorities[809] must not discriminate between providers of communications networks in the granting of rights of way. In order to guarantee the conditions for fair and effective competition, they must consider any application for

meaning of the Framework Directive (in respect of which, see para.1–088, above). Member States are not required to, but may, allocate these different functions to separate regulatory authorities, provided that the allocation of the tasks is made public, easily accessible and notified to the Commission: *Comisión del Mercado de las Telecomunicaciones v Administración del Estado*, para.1–075, n.328.

[801] See further para.1–163 *et seq.*, above.

[802] The possibility to transfer the rights and, where applicable, the conditions under which such a transfer would be possible must be specified in the general authorisation: Authorisation Directive, para.1–019, n.65, Art.5(2), third sub-para. and Annex, Part C, (vi).

[803] Universal Service Directive, para.1–019, n.67, Art.30; see para.1–334, below.

[804] See para.1–340 *et seq.*, below on the European Telephony Numbering Space ("ETNS"), created in parallel to existing national numbering spaces in order to promote pan-European services.

[805] Framework Directive, para.1–019, n.64, Arts.10(4) and 19(3)(b); see also para.1–126, above.

[806] See 116 Decision, para.1–022, n.79. See para.1–342 *et seq.*, below and, on the European emergency number '112', para.1–336 *et seq.*, below.

[807] Framework Directive, para.1–019, n.64, Art.10(5). This Directive does not establish any new areas of responsibility for the NRAs in the field of internet naming and addressing: 2002 Framework Directive, para.1–019, n.64, recital 20. See also para.3–006 *et seq.*, below, regarding naming and addressing.

[808] See para.1–154, above. Authorisation Directive, para.1–019, n.65, Art.4. NRAs must, at the request of an undertaking, issue a standardised declaration, confirming, where applicable, that the undertaking has submitted a notification under the general authorisation, in order to facilitate the exercise of the right to apply to any competent authority for rights of way: *ibid.*, Art.9; see para.1–154, n.685, above. Member States are required to create a user-friendly overview of information on the procedures and conditions applicable to rights to install facilities, including information on the relevant levels of government involved and the responsible authorities: Authorisation Directive, para.1–019, n.65, Art.15(2).

[809] The granting of rights of way, linked to town and country planning, is usually not undertaken by NRAs and may be the responsibility of another public authority.

rights of way on, over or under public or private property for the purpose of providing public and non-public communications networks on the basis of simple, efficient, transparent and publicly available procedures.[810] These procedures must be applied in a transparent way, without discrimination[811] and without delay, *i.e.* in any event within six months of the application, except in cases of expropriation. In practice, however, the procedures may differ depending on whether or not the applicant is providing a public communications network. The applicant must be granted the right of appeal before an independent body.[812] In addition, NRAs are able to impose obligations to share infrastructure to ensure that operators have access, on reasonable terms, to the facilities of other operators, taking full account of the principle of proportionality and in particular where the protection of the environment or town and country planning objectives means that an operator cannot be granted rights of way.[813]

4. Spectrum management

(a) Introduction

1–186 The radio spectrum is an essential resource for many electronic communications services, including mobile, wireless and satellite communications, TV and radio broadcasting, transport, radio location services (*e.g.* GPS and Galileo), and many other applications (*e.g.*, alarms, remote controls, hearing aids, microphones and medical equipment). Radio technology also supports public services such as defence, security/safety and scientific activities (*e.g.*, meteorology, earth observation, radio astronomy and space research). The demand for radio spectrum has increased over the last years.

1–187 Spectrum management—Spectrum is a scarce and finite public resource. Therefore, spectrum management aims at providing an appropriate framework for ensuring the optimal use of spectrum, taking account of the fact that radio frequencies are a public good that has an important social, cultural and economic value.[814] From a technical point of view, the role of spectrum management is to avoid harmful interference between services and applications[815] and, thereby, ensure the quality of services using spectrum resources. The efficient use and the effective management of radio frequencies are important vectors for the promotion of competition in the provision of electronic communications networks, electronic communications services and associated facilities and services.[816] Spectrum policy is generally considered to have two important aspects: the assignment of frequencies to users, where appropriate through the granting of rights of

[810] Framework Directive, para.1–019, n.64, Art.11(1); see Communications Committee Working Document of October 10, 2006 on Rights of Way, COCOM06-32.

[811] Member States must ensure that where public or local authorities that retain ownership or control of operators, there is effective structural separation of the function responsible for granting the rights of way from activities associated with ownership or control: Framework Directive, para.1–019, n.64, Art.11(2).

[812] *ibid.*, Art.11(3); see also para.1–094, above.

[813] *ibid.*, Art.12. Co-location and facility sharing are further addressed in para.1–239, below.

[814] *ibid.*, Art.9(1), and Better Regulation Directive, para.1–019, n.64, recital 24.

[815] Harmful interference is interference which endangers the functioning of a radionavigation service or of other safety services or which otherwise seriously degrades, obstructs or repeatedly interrupts a radiocommunications service operating in accordance with the applicable international, Community or national regulations: Framework Directive, para.1–019, n.64, Art.2(r). Technological progress is reducing the risk of harmful interference in certain frequency bands and therefore reducing the need for individual rights of use.

[816] *ibid.*, Art.8(2)(d).

use, which is principally covered by the Authorisation Directive[817] and the allocation of spectrum for specific uses or services under specified technical conditions.

1–188 National competences must be exercised in conformity with EU law—Spectrum management is a matter for Member States and their national authorities[818] under national law.[819] However, spectrum management, strongly linked to EU policies in other sectors, such as electronic communications, transport and research & development, and is, as a result, significantly and increasingly influenced by EU legislation. Accordingly, in 1998, the Commission published a Green Paper on the development and introduction of a EU framework for spectrum policy.[820] The political objectives mentioned in the Green Paper included, in particular, the stimulation of technological innovation and competition in radio-based services, mobile telephony and wireless local loops, and to pursue the EU's aims relating to spectrum policy, under conditions that are foreseeable and provide legal certainty. The Green Paper was followed by the adoption of the 2002 Regulatory Framework, which, as modified and complemented in 2009, contains important provisions regarding spectrum management and policy.

1–189 A new approach to spectrum management—The traditional administrative approach to spectrum management is based on planning and on the long-established principle of "command and control", with the avoidance of harmful interference being the primary objective. Under this approach, the competent national authorities first allocate spectrum by determining the type of use that is permitted within different frequency bands, *i.e.* the technology to be used and the services that may be provided. Subsequently, they assign the frequencies to undertakings or users, for a certain period of time and under determined conditions. However, this single method is no longer fully suitable, as it prevents society from benefitting from the dynamic environment created by the rapid development of technology and the convergence of telecommunications, media content and electronic devices.[821] Accordingly, the Commission has advocated the development of a more market-based and flexible approach that will respond to and fulfil the increasing and various demands placed on spectrum.

[817] See para.1–161 *et seq.*, above, on these rights of use and their assignment.

[818] The relevant provisions of the Framework Directive, para.1–019, n.64, and the Authorisation Directive, para.1–019, n.65, generally indicate that spectrum management tasks are to be exercised by the "competent national authorities" (see also para.1–163, n.726 above). These authorities are thus not subject to the strict requirements applicable to NRAs under the Regulatory Framework: see para.1–074 *et seq.*, above. Accordingly, governmental bodies of the Member States may continue to maintain their spectrum management functions, which also relate to other policies, *e.g.* defence, emergency services and civil aviation. Regardless of which authority is designated to undertake spectrum management activities, it must realise its tasks in conformity with the provisions of the Regulatory Framework regarding spectrum management, *e.g.* by granting rights of use through open, objective, transparent, non-discriminatory and proportionate procedures: see para.1–163, above. NRAs have, however, the duty to encourage the efficient use of spectrum and numbering resources, in order to ensure their effective management and to promote competition in the electronic communications sector: Framework Directive, para.1–019, n.64, Art.8(2)(d).

[819] See Better Regulation Directive, para.1–019, n.71, recital 28, which confirms that spectrum management remains within the competence of the Member States.

[820] Commission Green Paper of December 9, 1998 on Radio Spectrum Policy in the context of European Community policies such as telecommunications, broadcasting, transport and R&D, COM(1998) 596 final. See also Communication from the Commission of November 10, 1999, "Next Steps in Radio Spectrum Policy—Results of the Public Consultation on the Green Paper", COM(1999) 538.

[821] Better Regulation Directive, para.1–019, n.64, recital 32. See Cave, Doyle and Webb, *Essentials of Modern Spectrum Management* (Cambridge University Press, 2007) and Nikolanikos, para.1–002, n.5, 403–450.

1–190 One of the main objectives of the Commission's 2006 Review of the 2002 Regulatory Framework was to move towards a new approach to spectrum management, to facilitate access to frequency resources, to foster innovation and to develop an internal market for electronic communications networks and services using radio spectrum.[822] This led to the adoption of the Better Regulation Directive. New rules were adopted in the fields of strategic planning,[823] spectrum trading[824] and service neutrality.[825] However, the 2006 Review failed to lead to the adoption of new provisions relating to the harmonisation of the conditions imposed on rights of use and the procedures for the granting of rights of use,[826] which the Commission proposed in order to promote the introduction of pan-European services.[827]

(b) Principles governing radio spectrum management

1–191 Objectivity, transparency, non-discrimination and proportionality—Recognising the importance of radio spectrum for the development of electronic communications markets, the Electronic Communication Regulatory Framework refers to the need to base spectrum management measures on objective, transparent, non-discriminatory and proportionate criteria,[828] which must be applicable both to the allocation process and to the assignment procedures.[829]

1–192 Flexibility—In order to make the distribution of spectrum use more flexible, the Commission has advocated a balanced common EU-wide approach, using a combination of models to manage frequency allocation in way that is appropriate to the type of wireless application envisaged.[830] The approach includes increasing the supply of spectrum by ensuring, through market-based mechanisms, that the assignment of spectrum for individual use is efficient.[831] At the same time, flexibility may be increased in some frequency bands by making their use unlicensed (under a model of collective, or common, use), *i.e.* not assigning individual rights for particular applications or for parts of the spectrum, where this is not necessary[832] and shared usage represents the best use of resources.[833] Traditional management processes, where the use of the spectrum is tightly regulated by the Member States, will continue to be applied selectively in areas where

[822] Commission Proposal for a Better Regulation Directive, para.1–026, n.96, 2; see also paras.1–025 and 1–029, above.

[823] See para.1–200, below.

[824] See para.1–177 *et seq.*, above.

[825] See para.1–194, below.

[826] See para.1–173, above on the absence of one-stop-shopping licensing procedure.

[827] Commission Proposal for a Better Regulation Directive, para.1–026, n.96, 11.

[828] 2002 Framework Directive, para.1–019, n.64, recital 19 and Framework Directive, para.1–019, n.64, Art.9(1), first sub-para.

[829] See paras.1–163 and 1–168, above, regarding the application of these criteria to assignment procedures.

[830] This new approach was launched with the adoption of the Communication from the Commission of September 6, 2005, on a forward-looking radio spectrum policy for the European Union, COM(2005) 411 final.

[831] See para.1–195, below.

[832] See para.1–162, above.

[833] The licence-free use of spectrum in some frequency bands, open to an unlimited number of users, has fostered innovation in rapidly evolving applications, such as short-range devices (*e.g.* WiFi). In this model, harmful interference is avoided as a result of limitations in transmission power and other technical measures. Some EU measures follow this model, *e.g.* for Ultra-Wide Band (UWB) technologies (see para.1–212, below) or WLAN (see para.1–182, above; and para.1–208, below). See also the RSPG Opinion of November 18, 2008 on aspects of a European approach to 'collective use of spectrum', RSPG08-244.

security and safety-of-life considerations are paramount (*e.g.*, defence, public security, emergency services and aviation). With regard to spectrum allocation, two general principles apply in the EU spectrum policy to promote flexibility and "liberalise" spectrum use: technology neutrality and service neutrality.

1–193 ***Technology neutrality***—Member States must ensure that all types of technology used for electronic communications services may be used in the radio frequency bands that are available for electronic communications services in accordance with their National Frequency Allocation Plans and the ITU Radio Regulations. Therefore, it is for the market to determine which technology should be used for a particular purpose, subject to proportionate and non-discriminatory restrictions in certain circumstances. Generally, the commitment to technological neutrality does not prevent the Commission or Member States from recommending or mandating particular technology standards if this is strictly necessary to ensure the interoperability of services or to improve freedom of choice for users.[834] Under the Framework Directive, the allocation of a given frequency exclusively for exploiting a specific technology is permitted only where this is necessary in order to: (i) safeguard the efficient use of spectrum; (ii) avoid harmful interference; (iii) protect public health against electromagnetic fields; (iv) ensure technical quality of service; (v) maximise the sharing of radio frequencies; or (vi) fulfil a general interest objective as defined by a Member State in conformity with EU law (*e.g.* safety of life; the promotion of social, regional or territorial cohesion; the avoidance of inefficient use of radio frequencies; and the promotion of cultural and linguistic diversity and media pluralism, for example by the provision of radio and television broadcasting services). The necessity of such restrictions must be reviewed regularly and the results of these reviews must be made public.[835] In light of the general principle of technology neutrality that underlies the Electronic Communications Regulatory Framework,[836] this provision (which is an exception to this principle) should be interpreted restrictively.

1–194 ***Service neutrality***—Extending the concept of technology neutrality, the principle of service neutrality implies that Member States must ensure that any electronic communications service can be offered in any frequency band that is available for electronic communications services. This means that the choice of services offered via spectrum usage rights is made by the holder of those rights (and not by the Member States). Service neutrality will encourage spectrum trading[837] and, ideally, spectrum usage should migrate towards the applications that have the highest economic value. Proportionate and non-discriminatory restrictions on the types of electronic communications services that may be provided in a particular frequency band may, however, be imposed in order to ensure the fulfilment of a general interest objective as defined by Member States in conformity with EU law. Such general interests include, but are not limited to: safety of life; the promotion of social, regional or territorial cohesion; the avoidance of inefficient use of radio frequencies; and the promotion of cultural and linguistic diversity and media pluralism, for example by the provision of radio and television broadcasting services. The necessity of the restrictions must be reviewed regularly and the results of these reviews must be made public. Except where necessary to protect safety of life or, exceptionally, to fulfil other general interest objectives as defined by Member States in accordance with EU law, exceptions to the principle of

[834] See para.1–216 *et seq.*, below.

[835] Better Regulation Directive, para.1–019, n.64, recitals 34, 35 and 38; Framework Directive, para.1–019, n.64, Art.9(3) and (5); Authorisation Directive, para.1–019, n.65, Art.6(1) and Annex, Part B, point 1.

[836] Framework Directive, para.1–019, n.64, Art.8(1), second sub-para; see para.1–068, above.

[837] See para.1–177 *et seq.*, above.

service neutrality should not result in certain services having exclusive use of particular frequencies, but should rather grant them priority, so that other services may coexist in the same frequency band.[838]

1–195 **Market-based approach**—Spectrum trading, combined with flexibility in the use of spectrum, is considered to contribute to a greater economic efficiency in spectrum use.[839] Under this model, rights holders have the right to trade spectrum in the secondary market. The Commission may adopt appropriate technical implementing measures to identify the frequency bands for which usage rights may be transferred or leased in all Member States.[840] This approach will give market participants more freedom to decide how spectrum should be used and should therefore create incentives for spectrum rights holders to apply their spectrum for the highest valued uses demanded by the market. Furthermore, it should lower the barriers to access for spectrum rights, by making it possible for new entrants to acquire rights to use spectrum from other users, which have an economic incentive to sell or lease unused spectrum. Finally, new technologies could be deployed in pace with technological developments and thereby stimulate innovation. The Authorisation Directive also permits competitive or comparative selection procedures to be used for the granting of rights of use for frequencies.[841] Auctions are, therefore, an admissible mean of granting broadcasting frequencies.

(c) EU measures concerning spectrum allocation

1–196 According to the Electronic Communications Regulatory Framework, spectrum allocation is the process of spectrum management consisting of designating a given frequency band for use by one or more types of radiocommunications services, where appropriate under specified conditions.[842] Member States do this through establishing, in coordination with other countries, a National Frequency Allocation Table which sets out what radio services can use which frequency bands and under what conditions. At the EU level, the Framework Directive has introduced different provisions regarding cooperation, coordination, harmonisation and strategic planning in the field of spectrum allocation, in order to ensure that spectrum users derive the full benefits of the internal market.

1–197 **International context**—Many aspects of spectrum management, in particular spectrum allocation, are dealt with within the framework of international organisations. At the international level, the allocation of radio frequencies is coordinated within the International Telecommunication Union ("ITU").[843] The use of frequencies is governed by an international treaty, the ITU Radio Regulations. The ITU Radio Regulations include a Table of Frequency Allocations that

[838] Framework Directive, para.1–019, n.64, Arts.9(4) and 9(5); Better Regulation Directive, para.1–019, n.64, recital 36. See para.1–181 above for the transitional provisions for existing rights of use that were granted before the adoption of the Better Regulation Directive.

[839] See Communication from the Commission of September 14, 2005, on a market-based approach to spectrum management in the European Union, COM(2005) 400 final; see also Better Regulation Directive, para.1–019, n.64, recitals 34 and 39.

[840] See para.1–177, above.

[841] See para.1–163, above.

[842] Framework Directive, para.1–019, n.64, Art.2(q). However, the Framework Directive does not deal with the allocation of frequencies for purposes other than electronic communications, in contrast to the Radio Spectrum Decision: see para.1–201, below.

[843] One of the three sectors of the ITU (see para.1–041, n.164, above) is dedicated to spectrum management (ITU-R): see *http://www.itu.int/ITU-R*.

governs the use of radio frequency bands and lays down rules for the coordination, notification and registration of frequencies.[844] In Europe, the coordination of frequencies is further undertaken within the framework of the European Conference of Postal and Telecommunications Administrations ("CEPT").[845] In applying the provisions of the Electronic Communications Regulatory Framework relating to spectrum management, Member States are required to respect the work of these international and regional organisations dealing with radio spectrum management, so as to ensure the efficient management and harmonisation of the use of spectrum across the EU and between Member States and third countries that are party to the ITU Radio Regulations.[846] Reciprocally, Member States may not enter into international commitments which would not be compatible with EU law.[847] Whenever necessary for ensuring the effective coordination of the Community's interests in the international organisations that are competent in radio spectrum matters, the Commission, taking utmost account of the opinion of the Radio Spectrum Policy Group, may propose common policy objectives to the European Parliament and the Council.[848]

1–198 Former approach: Harmonisation directives—With the aim of ensuring the availability of common frequency bands that would be allocated by each Member State, thereby ensuring pan-European operation, the Council first adopted, in the late 1980s and early 1990s, a number of harmonisation directives. These directives, based on Articles 114 [ex 95] and 115 [ex 94] , reserved some frequency bands for the coordinated introduction of specific services, namely the pan-European cellular digital land-based mobile communications (Global System for Mobile Communications, or GSM) in the 905–914 and 950–959 MHz bands,[849] digital radio paging (European

[844] The ITU Radio Regulations are reviewed and revised at the World Radiocommunications Conferences ("WRC") and at the Regional Radiocommunication Conference ("RRC"), under the auspices of the ITU. The WRC is an international forum in which member countries meet to revise the ITU Radio Regulations, which lay down the allocation of frequencies for over 40 radiocommunications services and specify the technical, operational and regulatory conditions for the use of the radio frequency spectrum and satellite orbits. The WRC is held every two to three years, with the purpose of reaching consensus on changes to the Radio Regulations.

[845] CEPT comprises 46 European countries, including all Member States. Within CEPT, the Electronic Communications Committee ("ECC") was established in September 2001 as a result of the merger between ECTRA (responsible for general telecommunications matters) and ERC (responsible for radiocommunications matters). The main tasks of the ECC are to develop policies on electronic communications activities in a European context, to forward plan and harmonise the efficient use of the radio spectrum, satellite orbits and numbering resources within Europe and to develop European positions in the WRC process. A European Radiocommunications Office ("ERO") was created to support the work of the ECC: see *http://www.cept.org* and *http://www.ero.dk*.

[846] Framework Directive, para.1–019, n.64, Art.9(1), second sub-para.; Better Regulation Directive, para.1–019, n.64, recital 30.

[847] Radio Spectrum Decision, para.1–019, n.69, recital 19: "Member States should accompany any act of acceptance of any agreement or regulation within international fora in charge of, or concerned with, radio spectrum management by a joint declaration stating that they will apply such agreement or regulation in accordance with their obligations under the [Treaty on the Functioning of the European Union]".

[848] Framework Directive, para.1–019, n.64, Art.8a(3). The Commission regularly adopts positions on what needs to be achieved at these conferences: see, *e.g.*, Communication from the Commission of July 2, 2007, on the ITU World Radiocommunication Conference 2007 (WRC-07), COM(2007) 371 final; and Commission Communication on the EU spectrum policy priorities for the digital switchover in the context of the upcoming ITU Regional Radiocommunication Conference 2006 (RRC-06), COM(2005) 461 (September 29, 2005).

[849] Directive 87/372 of June 25, 1987 on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications (GSM) in the Community, O.J. 1987 L196/85 ("GSM Frequencies Directive"), amended by Directive 2009/114 of September 16, 2009, O.J. 2009 L274/25: see para.1–207, below.

digital radio-messaging system, or ERMES) in the 169.4–169.8 MHz band[850] and digital European cordless telecommunications (DECT) in 1880–1900 MHz band.[851] The GSM Frequencies Directive and the DECT Frequencies Directive are still in force. The reserved spectrum identified at that time was based on a model where voice services were considered to be the major source of traffic, and only limited data rate services were envisaged at that time. Furthermore, with the introduction of new generations of mobile and wireless communications systems (for example UMTS or 3G), this approach is not consistent with the more flexible approach outlined in the Framework and Authorisation Directives regarding spectrum management.[852]

1–199 Cooperation—Although spectrum management remains within the competence of the Member States, the Electronic Communications Regulatory Framework urges them to cooperate with each other and with the Commission in the strategic planning, coordination and, where appropriate, harmonisation of the use of radio spectrum across the EU. This cooperation is intended to ensure that spectrum users derive the full benefits of the internal market and that the EU's interests can be effectively defended globally, in a manner that is consistent with ensuring the effective and efficient use of radio spectrum and achieving consumer benefits, such as economies of scale and the interoperability of services. To this end, Member States should optimise the use of radio spectrum and the avoidance of harmful interference, by taking into consideration the economic, safety, health, public interest, freedom of expression, cultural, scientific, social and technical aspects of EU policies, as well as the various interests of radio spectrum users.[853]

1–200 EU strategic planning—The Commission may submit legislative proposals to the European Parliament and the Council to establish multiannual radio spectrum policy programmes, setting out the policy orientations and objectives for the strategic planning and harmonisation of the use of radio spectrum in accordance with the Regulatory Framework. Common policy objectives may also be proposed by the Commission whenever this is necessary to ensure the effective coordination of the EU's interests in international organisations that are competent in radio spectrum matters. In doing so, the Commission must take utmost account of the opinion of the Radio Spectrum Policy Group.[854]

1–201 Coordination and harmonisation of spectrum use—The coordination and harmonisation of spectrum use is undertaken at the EU level within the framework of the Radio Spectrum Decision, which is part of the 2002 Regulatory Framework. The aim of the Radio Spectrum Decision is to establish an EU policy and legal framework for ensuring the coordination of policy and, where appropriate, harmonised conditions with regard to radio spectrum[855] and the avail-

[850] Directive 90/544 of October 9, 1990 on the frequency bands designated for the coordinated introduction of pan-European land-based public radio paging (ERMES) in the Community, O.J. 1990 L310/28, repealed by Directive 2005/82 of December 14, 2005, O.J. 2005 L344/38. ERMES failed to develop and its frequency band has been reallocated to different use: see para.1–213, n.894, below.

[851] Directive 91/287 of June 3, 1991 on the frequency bands designated for the coordinated introduction of digital European cordless telecommunications (DECT) into the Community, O.J. 1991 L144/45 ("DECT Frequencies Directive").

[852] See para.1–207, below, regarding in particular the refarming process of the GSM bands, which led to the amendment of the GSM Frequencies Directive (see para.1–198, n.849, above).

[853] Framework Directive, para.1–019, n.64, Arts.8a(1), 8a(2) and 9(2). Better Regulation Directive, para.1–019, n.64, recital 28.

[854] Framework Directive, para.1–019, n.64, Arts.8a(3) and (4). Regarding the Radio Spectrum Policy Group, see para.1–204, below.

[855] Radio spectrum for the purpose of the Radio Spectrum Decision includes radio waves in frequencies between 9 kHz and 3000 GHz: Radio Spectrum Decision, para.1–019, n.69, Art.2.

ability and efficient use of the radio spectrum required for the establishment and functioning of an internal market in electronic communications, but also in other areas such as transport and R&D.[856]

1–202 The scope of the Radio Spectrum Decision includes: (i) the promotion of an EU policy with regard to the strategic planning and harmonisation of the use of radio spectrum, taking into consideration the economic, safety, health, public interest, freedom of expression, cultural, scientific, social and technical aspects of EU policies, as well as the various interests of radio spectrum users, to optimise the use of radio spectrum and avoid harmful interference; (ii) the effective implementation of a radio spectrum policy in the EU, through the establishment of a Radio Spectrum Committee ("RSC")[857] to assist the Commission in adopting appropriate mandatory technical implementing measures;[858] (iii) the coordinated and timely provision of information concerning the allocation, availability and use of radio spectrum in the EU from the competent national authorities and operators; and (iv) the effective coordination of the EU's interests in international negotiations in which radio spectrum use affects the EU's policies.[859] With regard to the EU's participation in international negotiations, the Commission should consult the European Parliament and the Council with a view to obtaining a mandate from the Member States on the EU policy objectives to be achieved and on the position to be taken by the Member States at the international level.[860]

1–203 For the development of technical implementing measures that fall within the remit of CEPT, the Commission must issue mandates to CEPT, setting out the tasks to be performed and the related timetable.[861] The Commission may directly require the Member States to apply the results of CEPT's work and set deadlines for their implementation by the Member States. If the Commission, or any of the Member States, considers CEPT's work to be unsatisfactory, the Commission can itself adopt the measures that it considers to be necessary to achieve the EU'spolicy objectives. In these cases, and for any other matters that fall outside of CEPT's remit,[862] the RSC assists the Commission in the elaboration of binding implementing measures

[856] *ibid.*, Art.1(1).

[857] The Radio Spectrum Committee performs two primary functions: prior consultation with the Commission before the formulation, preparation and implementation by the Commission of measures of the EU's radio spectrum policy; and the prior submission by the Commission to the Committee of draft technical implementing measures. The RSC works in parallel (and under the same rules as) the Communications Committee (see para.1–114, above): *ibid.*, Arts.3 and 4.

[858] *ibid.*, recital 11. Radio spectrum technical management includes the harmonisation and allocation of radio spectrum. This harmonisation should reflect the requirements of general policy principles identified at the EU level. Radio spectrum technical management does not cover procedures for the allocation, assignment and licensing of frequencies, nor decisions on whether to use competitive selection procedures for the allocation of radio frequencies. The assignment of frequencies through the grant of usage rights falls within the scope of the Authorisation Directive, para.1–019, n.65: see para.1–161 *et seq.*, above.

[859] Radio Spectrum Decision, para.1–019, n.69, Art.1(2).

[860] *ibid.*, recital 19. Two annual reports on activities undertaken under the Radio Spectrum Decision have been issued: Communication from the Commission of July 20, 2004 (COM(04) 507 final) and Communication from the Commission of September 5, 2005, "A forward-looking radio spectrum policy for the European Union (COM(05) 411 final).

[861] *ibid.*, Art.4(2). See, for example, the Commission mandates relating to WAPECS (see para.1–206, below) and to mobile communications services on vessels (see para.1–209, below).

[862] In particular, under Art.4(5) of the Radio Spectrum Decision, para.1–019, n.69, a transitional period and/or radio spectrum sharing arrangement in a Member State may be approved, subject to the Commission's prior approval.

laying down harmonised conditions for the availability and efficient use of radio spectrum.[863] The Commission has to decide whether the results of the work carried out pursuant to the mandates shall apply in the EU, by way of particular Decisions[864] to be transposed by Member States into national law.[865] Such technical management measures may include the harmonisation and allocation of radio spectrum, but do not cover assignment and licensing procedures, nor the decision of whether to use competitive selection procedures for the allocation of radio frequencies.[866]

1–204 Radio Spectrum Policy Group—The Commission has also established a Radio Spectrum Policy Group ("RSPG") with consultative powers, like the former European Regulators Group (ERG).[867] The RSPG comprises high-level governmental experts from the Member States and high-level representatives from the Commission. CEPT is an observer of the RSPG. The RSPG may invite other persons to attend meetings as appropriate, including NRAs, national competition authorities, market participants, users and consumer groups.[868] The RSPG assists and advises the Commission, the European Parliament and the Council[869] on radio spectrum policy issues (such as radio spectrum availability; the provision of information concerning the allocation, availability and use of radio spectrum; the granting of rights to use spectrum; the refarming, relocation, valuation and efficient use of radio spectrum; and the protection of human health), on the coordination of policy approaches, on the preparation of multiannual radio spectrum policy programmes and, where appropriate, on harmonised conditions with regard to the availability and efficient use of radio spectrum that are necessary for the establishment and functioning of the internal market. It also assists the Commission in proposing common policy objectives for ensuring the EU's interests in international organisations dealing with spectrum matters.[870] The RSPG should not, however, interfere with the work of the RSC.[871]

1–205 Availability of information regarding spectrum use—The availability of appropriate information on the use of radio spectrum in the EU is essential, since the removal of unnecessary restrictive measures and the introduction of spectrum trading require clear, reliable, comparable and up-to-date information regarding the actual use of spectrum in each Member State. Member States must ensure that their national radio frequency allocation table and information on the

[863] *ibid.*, Art.4. The majority of RSC documents, as well as detailed information on the activities of the RSC, including its rules of procedure, membership and committee documents are available at: *http://circa.europa.eu/Public/irc/infso/radiospectrum/home*.

[864] See para.1–207 *et seq.*, below.

[865] Radio Spectrum Decision, para.1–019, n.69, Art.4(3). The implementation of these decisions by the Member States does not, however, appear to be fully effective: 14th Implementation Report, para.1–033, n.134, 14. See *http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/documents/legislation/* concerning the implementation of the Decisions in the Member States.

[866] *ibid.*, recital 11. This is without prejudice to CEPT's continuing mandate to establish a one-stop-shop procedure for the authorisation of services which by their nature are cross-border, such as 3G mobile services (UMTS) and satellite broadcasting: *ibid.*, recital 24. Should CEPT be able to agree on a one-stop-shop procedure, the Commission could then mandate it under the procedure established by the Radio Spectrum Decision: *ibid.*, Art.2.

[867] See para.1–100 *et seq.*, above.

[868] See RSPG Decision, para.1–022, n.78, Arts.3, 4 and 5. The RSPG's documents and opinions are available at: *http://rspg.groups.eu.int*.

[869] *ibid.*, Art.4. The possibility for the European Parliament and the Council to request an opinion or report from the RSPG was introduced in 2009.

[870] RSPG Decision, para.1–022, n.78, Art.2. The RSPG Decision was amended in 2009, in order to adapt the tasks of the Group to the new provisions introduced by the Better Regulation Directive.

[871] *ibid.*, recital 7.

rights, conditions, procedures, charges and fees concerning the use of radio spectrum are published in order to ensure the coordination and/or harmonisation of spectrum policy approaches in the EU.[872] A single information database, presented in a harmonised format, has therefore been developed to allow easy access to spectrum information throughout the EU.[873]

1–206 WAPECS—Originally proposed by the RSPG,[874] the Wireless Access Policy for Electronic Communications Services ("WAPECS") foresees the implementation within the existing regulatory framework of a more flexible approach to spectrum management, based on the principles of technological and service neutrality.[875] The Member States are encouraged to apply the concept of flexibility and to liberalise the use of a wide range of frequency bands. However, the WAPECS initiative has focused on an initial set of bands, so as to achieve practical results in the shortest term and to tackle current challenges:

Figure 1.1
Uses of frequency bands under WAPECS

Frequency bands	Current use	Challenges and intended other uses
470–862 MHz	Broadcasting services	Digital dividend Convergence of broadcasting and mobile services
880–915/925–960 MHz 1710–1785/1805–1880 MHz	GSM mobile services (2nd generation)	Lifting the restrictions imposed by the GSM Frequencies Directive 3G mobile services
1900–1980/2010–2025/2110–2170 MHz	3G mobile services (IMT-2000/UMTS)	Broadcasting services Broadband connections in residential and rural areas
2500–2690 MHz (2.6 GHz)	—	3G mobile services broadband using other technologies
3.4–3.8 GHz	Broadband connections to the customer's premises	Mobile services Satellite communications

[872] Radio Spectrum Decision, para.1–019, n.69, Art.5.

[873] Commission Decision 2007/344/EC of May 16, 2007 on harmonised availability of information regarding spectrum use within the Community, O.J. 2007 L129/67. See also Commission Press Release, *New Commission Decision creates a single reference point for uniform EU radio spectrum information*, IP/07/677 (May 16, 2007). The ERO Frequency Information System ("EFIS") has been established as the single information point and national authorities are required to upload all relevant information regarding spectrum use to this database, which is publicly available: see *http://www.efis.dk*.

[874] RSPG Opinion of November 23, 2005 on Wireless Access Policy for Electronic Communications Services (WAPECS) (A more flexible spectrum management approach), RSPG05-102 final.

[875] Communication from the Commission of February 8, 2007, on rapid access to spectrum for wireless electronic communications services through more flexibility, COM(2007) 50. See Akalu, "Harmonizing Spectrum Policy in the EU—The WAPECS Concept" (2006) 63 *Communications & Strategies* 157.

Avoiding radio interference in the bands subject to liberalisation remains the main challenge to this new policy. The Commission has therefore given a mandate to CEPT to develop the least restrictive conditions for the use of the frequency bands listed above.[876] In its draft report in response to this mandate, CEPT confirmed that the WAPECS approach was feasible for all bands, but gave the highest priority to the liberalisation of the 3.4–3.8 GHz and 2.6 GHz bands.[877]

1–207 Refarming of the GSM frequency bands—The GSM Frequencies Directive required Member States to reserve the spectrum in the 900 MHz band exclusively for public pan-European GSM systems.[878] The GSM Frequencies Directive has certainly contributed to the success of the deployment of GSM networks and services in the EU. However, to respond to technological changes and to the emergence of new communications services, the Commission adopted a Decision to make the 900 MHz and 1800 MHz bands available for the provision of UMTS mobile services and, potentially, on a technologically-neutral basis, any other terrestrial systems capable of providing pan-European electronic communications, whilst preserving the continued and co-existing operation of GSM in the EU.[879] The adoption of this Decision took place together with the amendment of the GSM Frequencies Directive to open up the 900 GHz band to additional pan-European communication services.[880]

1–208 Wireless access systems—Radio or Wireless Local Area Networks (RLANs or WLANs, respectively), in particular WiFi networks, usually use the ISM 2.4 GHz band, which is available worldwide for these applications.[881] Although already recommended by the Commission since 2003,[882] the designation of the 5 GHz frequency band for the implementation of all types of (public and private) wireless access systems ("WAS")—including RLANs and WLANs—in the EU is now recognised by the specific WAS/RLANs Decision, which was adopted in 2005.[883] The availability

[876] Commission Mandate to CEPT to develop least restrictive technical conditions for frequency bands addressed in the context of WAPECS (July 5, 2006), available at: *http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/_document_storage/mandates/ec_to_cept_wapecs_06_06.pdf*.

[877] Draft Final Report from CEPT in response to the EC mandate on WAPECS, RSCOM07-94 (December 5, 2007), 59. This draft report specifies minimal technical conditions to avoid interference in these two bands.

[878] See para.1–198, n. 849, above.

[879] Commission Decision 2009/766 of October 16, 2009 on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community, O.J. 2009 L274/32.

[880] Directive 2009/114 of September 16, 2009 amending Council Directive 87/372 on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community, O.J. 2009 L274/25. When implementing this Directive, Member States must examine whether the existing assignment of the 900 MHz spectrum to the competing mobile operators in their territory is likely to distort competition in the mobile markets concerned and, where justified and proportionate, they shall address such distortions by amending the conditions attached to individual rights of use, in accordance with Art.14 Authorisation Directive (see para.1–170, above). However, a literal reading of the GSM Frequencies Directive before its amendment did not preclude Member States from introducing new technologies in the 900 MHz band, which some of them indeed did: 14th Implementation Report, para.1–033, n.134, 14.

[881] Originally reserved internationally by the ITU for industrial, scientific and medical (ISM) purposes other than communications, these bands have also been successfully shared with licence-free and low power communications applications such as W-LANs: see ERC Decision on harmonised frequencies, technical characteristics and exemption from individual licensing of short range devices used for local area networks (RLANs) operating in the frequency band 2.400–2.483,5 MHz, ERC/DEC/(01)07 (March 12, 2001).

[882] See para.1–182, above.

[883] Commission Decision 2005/513 of July 11, 2005 on the harmonised use of radio spectrum in the 5 GHz frequency band for the implementation of wireless access systems including radio local area networks (WAS/

of this band for such purposes should relieve congestion in the 2.4 GHz band and stimulate the development and emergence of improved RLAN technologies,[884] applications and devices.

1–209 Mobile communications on aircraft and vessels—As airliners in Europe typically cross several borders during flights, harmonisation and coordination at the European level was crucial to create a unified environment for the provision of truly pan-European mobile communications services on board aircraft ("MCA services"). To this end, in 2008, the Commission adopted the MCA Decision, which lays down harmonised technical parameters for on-board equipment for in-flight mobile phones used throughout the EU.[885] MCA services cover the in-flight use of normal mobile phones and other devices to make calls, send and receive messages and use email, and are currently limited to the GSM 1800 MHz technology. In addition, the Commission adopted a Recommendation for a harmonised approach to the licensing of MCA services, which applies in parallel with the MCA Decision and promotes mutual recognition of national authorisations for MCA services.[886] As there might be added value in providing similar services on ships, for which a coordinated approach was also worthwhile, the Commission adopted an equivalent decision regarding mobile communications services on vessels ("MCV services") within Member States' territorial seas.[887]

1–210 Terrestrial systems in the 3.4–3.8 GHz and 2.5–2.6 GHz bands—Identified as a priority band for the implementation of the WAPECS policy, these frequency bands have been designated and made available, on an non-exclusive and technology-neutral basis, for terrestrial systems capable of providing electronic communications services in the EU.[888] These bands are of particular interest for the provision of broadband wireless access and 4G mobile services.[889]

RLANs), O.J. 2005 L187/22, as amended by Commission Decision 2007/90 of February12, 2007, O.J. 2007 L41/10. See also Commission Press Release, *Wireless Access Systems (WAS) including Radio Local Area Networks (RLANs): Frequently Asked Questions*, MEMO/05/256 (July 14, 2005).

[884] Such as those based on the IEEE standard 802.11n or the HiperLAN (High Performance Radio LAN) standard, an alternative for the international IEEE WiFi standards defined by the European Telecommunications Standards Institute ("ETSI"): see ERC Decision on the harmonised frequency bands to be designated for the introduction of High Performance Radio Local Area Networks (HIPERLANs), ERC/DEC/(99)23 (November 29, 1999).

[885] MCA Decision, para.1–175, n.768.

[886] MCA Recommendation, para.1–175, n.769.

[887] MCV Decision, para.1–175, n.768. As for MCA services, the MCV Decision were complemented by a recommendation aiming to coordinate national authorisation conditions and procedures relating to the use of the radio spectrum for MCV services: MCV Recommendation, para.1–175, n.769.

[888] Commission Decision 2008/411 of May 21, 2008 on the harmonisation of the 3400–3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community, O.J. 2008 L144/77; Commission Decision 2008/477 of June 13, 2008 on the harmonisation of the 2500–2690 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community, O.J. 2008 L163/37. See also Commission Decision 2009/1 of December 16, 2008 granting a derogation requested by the Republic of Bulgaria pursuant to Decision 2008/477, O.J. 2009 L2/6; and Commission Decision 2009/740 of October 6, 2009 granting a derogation to France pursuant to Decision 2008/477, O.J. 2009 L263/35. The Commission has opened an infringement procedure against Germany for failing to transpose Decision 2008/477: see Commission Press Release, *Telecoms: Legal action against Germany for not implementing the Commission Decision on the harmonisation of the 2500–2690 MHz frequency band in the Community*, IP/09/1614 (October 29, 2009).

[889] Several Member States (including Germany, Ireland, Italy, Latvia, Portugal, Romania and Sweden) have launched or completed assignment procedures in these bands aiming notably at wireless broadband applications and 4G mobile services: Accompanying Document to the 14th Implementation Report, para.1–033, n.134, part 2, 58. Two competing technologies are currently expected to support the rollout of the next generation mobile networks (4G): LTE ("Long Term Evolution") and WiMax.

1–211 Mobile Satellite Services—Mobile satellite services ("MSS services") enable the provision of an innovative, alternative platform for various types of national and pan-European telecommunications and broadcasting services, including high-speed internet access, mobile TV or public protection and disaster relief services. MSS services could, in particular, improve broadband coverage in rural and remote areas within the EU. To facilitate the deployment of this technology platform, the Commission's MSS Decision reserves the 2 GHz frequency bands (specifically the 1980–2010 MHz and 2170–2200 MHz bands, together, the "S-band") throughout the EU for the implementation of systems providing MSS,[890] in accordance with the ITU Radio Regulations. To complement the MSS Decision (which focuses on spectrum usage conditions), the Commission created a procedure for the common selection of operators of mobile satellite systems that use the 2 GHz band, who are subject to a coordinated authorisation regime.[891]

1–212 Ultra-wide band technologies—Ultra-wide band ("UWB") is a wireless technology providing short-range, very high-speed wireless communication between wireless devices (*e.g.*, laptops, printers and digital cameras) in a personal area network, as a wireless alternative to cables offering the same data rates. The Commission's UWB Decision outlines the mandatory conditions for using this technology in the next generation of wireless devices, allowing for a mass market for these products to develop in the EU.[892] UWB devices transmit data at very high rates over very broad frequency ranges already used by other applications. However, the extremely low transmission power of UWB signals ensure that harmful interference with these applications is avoided.

1–213 Other frequency band harmonisation decisions—The Commission has adopted, on the basis of the Radio Spectrum Decision, several other decisions related to the harmonisation of the frequency bands in the EU. They respectively relate to the 79 GHz and 24 GHz ranges for the use of automotive short-range radar equipment;[893] the former 'ERMES' band (169.4–169.8125 MHz) for the use of hearing aids, social alarms, meter reading systems, low power transmitters for tracking and asset tracing systems and paging systems;[894] Short-Range Devices ("SRD");[895] Radio

[890] MSS Decision, para.1–176, n.771.

[891] See para.1–176, above.

[892] Commission Decision 2007/131 of February 21, 2007 on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community, O.J. 2007 L55/33, as amended by Commission Decision 2009/343 of April 21, 2009, O.J. 2009 L105/9. See also Commission Press Releases, *The European Commission's Decision on Ultra-Wideband Technologies: Frequently Asked Questions*, MEMO/07/72 (February 21, 2007) and *Commission takes important step towards a single market for next generation wireless devices*, IP/07/213 (February 21, 2007).

[893] Commission Decision 2004/545 of July 8, 2004 on the harmonisation of radio spectrum in the 79 GHz range for the use of automotive short-range radar equipment in the Community, O.J. 2004 L241/66 and Commission Decision 2005/50 of January 17, 2005 on the harmonisation of the 24 GHz range radio spectrum band for the time-limited use by automotive short-range radar equipment in the Community, O.J. 2005 L21/15. See also, regarding the implementation of the latter Decision, the radio astronomy stations to be protected pursuant to Art.6(2) of Decision 2005/50, O.J. 2006 C292/2.

[894] Commission Decision 2005/928 of December 20, 2005 on the harmonisation of the 169.4–169.8125 MHz frequency band in the Community, O.J. 2005 L344/47, as amended by Commission Decision 2008/673 of August 13, 2008, O.J. 2008 L220/29. See also Directive 2005/82 of December 14, 2005 repealing Directive 90/544 on the frequency bands designated for the coordinated introduction of pan-European land-based public radio paging in the Community, O.J. L344/38.

[895] Commission Decision 2006/771 of November 9, 2006 on harmonisation of the radio spectrum for use by short-range devices, O.J. 2006 L312/66, as amended by Commission Decision 2008/432 of May 23, 2008, O.J. 2008 L151/49; and by Commission Decision 2009/381 of May 13, 2009, O.J. 2009 L119/32. See also

Frequency Identification devices ("RFIDs") operating in the Ultra High Frequency (UHF) band;[896] and the 5875–5905 MHz frequency band for safety-related applications of Intelligent Transport Systems ("ITS").[897]

1–214 Digital switchover in broadcasting and the digital dividend—The Commission has urged the Member States to accelerate the transition from analogue to digital broadcasting and has recommended a deadline of January 1, 2012 for phasing out traditional analogue terrestrial broadcasting.[898] Digital broadcasting brings many advantages for consumers: improved picture quality, better sound, better mobile reception and more TV and radio channels, as well as enhanced information services. In addition, as digital broadcasting uses the radio spectrum more efficiently, it will free up more capacity in the bands traditionally allocated to radio and television services. This released valuable spectrum (known as the "digital dividend") can be used for new broadcasting services (as HDTV), but also for other types of communications (such as wireless broadband).

1–215 ***Use of the digital dividend***—The switchover to digital broadcasting raises important challenges in terms of spectrum allocation. Indeed, the use of the digital dividend for new applications and services has become a key issue in this field. The existing international arrangements reserving the UHF band (470–862 MHz) to broadcasting use were revised during the Regional Radiocommunication Conference in 2006 (RRC-06) and the World Radio Conference in 2007 (WRC-07). These instruments have allocated the use in Europe of part of the UHF band (the 790–862 MHz sub-band) to mobile services, in addition to broadcasting and fixed services from 2015 (or even earlier, subject, where necessary, to technical coordination with other countries).[899]

Commission Decision 2009/812 of October 26, 2009 granting a derogation requested by France pursuant to Decision 2006/771, O.J. 2009 L289/19.

[896] Commission Decision 2006/804 of November 23, 2006 on harmonisation of the radio spectrum for radio frequency identification (RFID) devices operating in the ultra high frequency (UHF) band, O.J. 2006 L329/64. See also Commission Decision 2007/346 of May 16, 2007 granting a derogation requested by France pursuant to Decision 2006/804, O.J. 2007 L130/43.

[897] Commission Decision 2008/671 of August 5, 2008 on the harmonised use of radio spectrum in the 5875–5905 MHz frequency band for safety-related applications of Intelligent Transport Systems (ITS), O.J. 2008 L220/24. See also Commission Decision 2009/159 of February 25, 2009 granting a derogation to Austria pursuant to Decision 2008/671/EC, O.J. 2009 L53/74.

[898] Commission Recommendation 2009/848 of October 28, 2009, "Facilitating the release of the digital dividend in the European Union", O.J., 2009 L308/24 ("Digital Dividend Recommendation"), point 1. See also Commission Staff Working Documents of October 28, 2009, "Digital Dividend Recommendation, Impact Assessment", SEC(2009) 1436 and "Executive Summary of the Impact Assessment", SEC(2009) 1437; and Communication from the Commission of September 17, 2003, on the transition from analogue to digital broadcasting (from digital "switchover" to analogue "switch-off"), COM(03) 541 final and Commission Communication on accelerating the transition from analogue to digital broadcasting, COM(05) 204 final (May 24, 2005).

[899] The ITU Radio Regulations and, at the European regional level, the GE06 agreement enable mobile services to operate anywhere in the 470–862 MHz frequency range, subject to bilateral agreement between the countries that might be affected in order to avoid harmful interference: see *http://www.itu.int/ITU-R/index.asp?category=conferences&rlink=rrc-06&lang=en*. However, this flexibility is limited under existing technical conditions and, in practice, the current situation is not conducive to the allocation of this spectrum to more efficient alternative uses: see the preparatory Communication from the Commission of September 2009, 2005, on EU spectrum policy priorities for the digital switchover in the context of the upcoming ITU Regional Radiocommunication Conference 2006 (RRC-06), COM(05) 461 and Commission document on the follow-up to this Communication, RSPG05-107 (November 13, 2005).

Nevertheless, some Member States have decided to start using this capacity earlier than 2015,[900] in accordance with their timetable for the digital switchover.[901] In these circumstances, the Commission has stressed the importance of adopting a coordinated approach and a common spectrum plan at the EU level, if the full benefits of the digital dividend are to be realised and the establishment of a single market for services and equipment is to be promoted. The Member States have, therefore, been invited to favour a flexible approach and to facilitate the introduction of new services by working together, and with the Commission, to identify common spectrum bands in the digital dividend that can be optimised by clustering that spectrum into three sub-bands for the three most common types of networks, *i.e.* unidirectional fixed broadcasting services, unidirectional mobile multimedia services and bi-directional fixed and mobile broadband access services.[902] In its 2009 Digital Dividend Recommendation, the Commission recommended the Member States to support regulatory efforts towards harmonised conditions of use in the EU of the 790–862 MHz sub-band for electronic communications services other than, and in addition to, broadcasting services.[903] This objective should be achieved through the adoption of a Commission decision based on the Radio Spectrum Decision[904] and setting harmonised technical requirements for the refarming of this sub-band. However, this decision should not oblige Member States to open the sub-band for new uses other than broadcasting.[905] Such a strategic orientation, which could result in the end of high-power broadcasting in the 790–862 MHz sub-band, would require the involvement of the European Parliament and the Council.[906]

[900] Some Member States (Finland, France and the United Kingdom) decided to allocate the released frequencies for mobile broadband services, while several other Member States (Denmark, Estonia, Latvia, Lithuania, Malta, the Netherlands and Spain) have indicated their intentions to keep all or most of the digital dividend for broadcasting applications, including, in some cases, mobile TV: Accompanying Document to the 14th Implementation Report, para.1–033, n.134, part 2, 57.

[901] Information on some Member States' digital switchover plans are available at: *http://ec.europa.eu/information_society/policy/ecomm/current/broadcasting/switchover/national_plans*.

[902] Communication from the Commission of November 13, 2007, "Reaping the full benefits of the digital dividend in Europe: A common approach to the use of the spectrum released by the digital switchover", COM(2007) 700 final. See also Council Conclusions on this Commission Communication, 10820/08 (June 12, 2008); and the European Parliament non-legislative Resolution, "Reaping the full benefits of the digital dividend in Europe: a common approach to the use of the spectrum released by the digital switchover (2008/2099 (INI))", P6_TA(2008)0451 (September 24, 2008).

[903] Digital Dividend Recommendation, para.1–214, n.898, point 2.

[904] *ibid.*, recital 12; see para.1–201 *et seq.*, above.

[905] Communication from the Commission of October 28, 2009, "Transforming the digital dividend into social benefits and economic growth", COM(2009) 586/2 and related Commission Staff Working Documents of October 28, 2009, "Impact Assessment", SEC(2009) 1436 and "Executive Summary of the Impact Assessment", SEC(2009) 1437. This is in line with the position of the RSPG in this matter: RSPG Opinion of September 18, 2009 on the digital dividend, RSPG09-291. Before such a specific harmonisation measure is proposed, the Commission should carry out an impact assessment on the costs and benefits of the proposed measure, such as the realisation of economies of scale and the interoperability of services for the benefit of consumers, the impact on efficiency of spectrum use, or the demand for harmonised use in the different parts of the EU: Better Regulation Directive, para.1–019, n.64, recital 27.

[906] Communication from the Commission of October 28, 2009, para.1–215, n.905, 8–9. This strategic orientation should also concern the adoption of a common EU position on the use of the digital dividend for the World Radio Conference (WRC) in 2012.

5. Standardisation

1–216 Standardisation—Standards play an important role in the electronic communications sector, because they allow technical compatibility and interoperability across networks and services. The standardisation process, in which new standards are developed, should remain primarily market-driven,[907] in order to promote technological innovation. For this reason, the Commission prefers and encourages a "bottom-up" consensual approach, in which standards emerge as the result of industry cooperation.[908] Standardisation is thus a process of voluntary cooperation among industry, consumers and public authorities for the development of technical specifications based on consensus. In the EU, standards are developed by the European Standards Organisations.[909] Nevertheless, regulatory intervention may be necessary to ensure the interoperability of networks and services in the single market,[910] for the benefit of consumers and remove technical trade barriers. The Commission may, therefore, recommend or, where strictly necessary, impose the use of harmonised standards, in accordance with the Framework Directive.

1–217 European framework for the adoption of harmonised standards—The Framework Directive promotes the harmonised provision of electronic communications networks, electronic communications services, associated facilities and services. Therefore, Article 17 of the Framework Directive sets out a mechanism whereby a list of harmonised European standards and/or specifications[911] is established and published by the Commission,[912] following consultation with the Communications Committee.[913] Compliance with these standards and specifications is, in principle not compulsory; Member States are required only to encourage their use for the provision of services, technical interfaces and/or network functions, to the extent that this is strictly necessary to ensure the interoperability of services and to improve freedom of choice for users.[914] If the Commission subsequently considers that published standards and/or specifications no longer contribute to the provision of harmonised electronic communications services, that they no longer meet consumers' needs or that they are hampering technological development, it shall remove them from the list of standards and/or specifications.[915] In addition, special provisions exist for the implementation of technical standards in the field of digital interactive television services.[916]

1–218 ***Compulsory standards and specifications***—If the Commission finds that the standards or specifications have not been adequately implemented so that the interoperability of services cannot be ensured in one or more Member States, the Commission may make their implementation compulsory, provided that this is only to the extent strictly necessary to ensure such interoperability and to improve freedom of choice for users.[917] Compulsory measures may be adopted only after public consultation of all parties concerned and after seeking the opinion of the Communications Committee. The Commission will then take appropriate implementing measures and make implementation of the relevant standards compulsory by making reference to them as compulsory standards in the list of standards and/or specifications.[918] If the Commission subsequently considers that compulsory standards and/or specifications no longer contribute to the provision of harmonised electronic communications services, or that they no longer meet consumers' needs or are hampering technological development, it shall remove them from this list of standards and/or specifications.[919]

1–219 International standards—Where necessary, the Commission may request that standards be drawn up by the following European standards organisations: the European Committee for Standardisation ("CEN"), the European Committee for Electrotechnical Standardisation ("CENELEC") and the European Telecommunications Standards Institute ("ETSI").[920] If the Commission has not published a list of standards and/or specifications, Member States have to encourage the implementation of standards and or recommendations adopted by the European Standards Organisations or, if none exist, by the following International Standardisation organisations: the ITU, CEPT, the International Organisation for Standardisation ("ISO") and the International Electrotechnical Commission ("IEC").[921] Where international standards exist, Member States shall encourage the European Standards Organisations to use them, or the relevant

[907] Framework Directive, para.1–019, n.64, recital 30.
[908] Maxwell, para.1–018, n.59, booklet I.1, 32.
[909] See para.1–219, below.
[910] Framework Directive, para.1–019, n.64, recital 30.
[911] The Transparency Directive, para.1–048, n.183, Art.1, defines a technical specification as a "specification contained in a document which lays down the characteristics required of a product such as levels of quality, performance, safety or dimensions, including the requirements applicable to the product as regards the name under which the product is sold, terminology, symbols, testing and test methods, packaging, marking or labelling and conformity assessment procedures"; and a standard as a "technical specification approved by a recognised standardisation body for repeated or continuous application, with which compliance is not compulsory".
[912] Commission's List of Standards, para.1–022, n.80. The minimum set of leased lines with harmonised characteristics and associated standards, published in Commission Decision 2003/548 of July 24, 2003, O.J. 2003 L186/43, was not affected by the publication of this list of standards, although it appears to no longer be applicable, as its legal basis, Art.18 of the 2002 Universal Service Directive, para.1–019, n.67, has been repealed by the Citizens' Rights Directive, para.1–019, n.67.
[913] The standardisation procedures under the Framework Directive are without prejudice to the provisions of the RTTE Directive, para.1–015, n.50: Framework Directive, para.1–019, n.64, Art.17(7). At the national level, Member States are subject to the provisions of the Transparency Directive: see para.1–048, above.
[914] Framework Directive, para.1–019, n.64, Arts.17(1) and 17(2), first sub-para.
[915] *ibid.*, Art.17(5).
[916] *ibid.*, Art.18. Member States are required to encourage the use of an open standard API, using the Multi Home Platform ("MHP") technical specification. MHP has been developed by the DVB Project, a technical body within the framework of ETSI. The DVB standards, adopted by ETSI, are included in the Commission's List of Standards, para.1–022, n.80, above. They have also become ITU recommendations. The Commission can make the use of the MHP mandatory, using the procedure laid down in Art.17(3) of the Framework Directive.
[917] Indeed, as an exception to the principle of technological neutrality, such measures should remain limited to the minimum that is strictly necessary to ensure interoperability.
[918] Framework Directive, para.1–019, n.64, Arts.17(3) and 17(4) and Access Directive, para.1–019, n.66, recital 19, which require compliance with the Transparency Directive: para.1–048, n.183, above. The current Commission's List of Standards, para.1–022, n.80, does not contain any compulsory standards or specifications.
[919] *ibid.*, Art.17(6). The implementing measures designed to amend non-essential elements of this Directive by supplementing it referred to in Art.17(4) and (6) of the Framework Directive must be adopted in accordance with the regulatory procedure with scrutiny (see para.1–114, above): *ibid.*, Art.17(6)a.
[920] *ibid.*, Art.17(2). ETSI, created by CEPT in 1988, is officially responsible for standardisation within the information and communication technologies sector within Europe and includes manufacturers, network operators, administrations, service providers, research bodies and users. For example, it has adopted the GSM and UMTS standards. For an overview of the general procedure for the creation of standards and technical specifications within the framework of ETSI, see *http://portal.etsi.org/directives/*.
[921] *ibid.*, Art.17(2), third sub-para.

parts of them, as a basis for the standards that they develop, except where such international standards or their relevant parts would be ineffective.

E. Regulation of market power

1. The Significant Market Power regime

1–220 The three steps of the SMP regime—The regulation of undertakings[922] with significant market power is undertaken by the NRAs under the Significant Market Power regime. The SMP regime was radically reformed in 2002 in order to align it with the principles of competition law, to ensure a progressive removal of regulatory obligations as competition develops in the different markets and facilitate the transition towards the mere application of competition law when effective competition has been established and sector-specific economic regulation on this issue is no longer necessary.[923] Under the SMP regime, a three-step procedure is to be followed to impose regulatory obligations on an electronic communications operator: (i) selection and definition of the relevant market that is susceptible to *ex ante* regulation; (ii) market analysis and SMP assessment; and (iii) choice of regulatory remedies. The Commission identifies the relevant markets, which are then analysed by the NRAs in conjunction with the Commission and BEREC.[924]

1–221 The identification by the Commission of markets susceptible to *ex ante* regulation—The Commission, with the help of BEREC, is responsible, at the EU level, for identifying the markets that are susceptible to *ex ante* regulation, which it has done in a Recommendation addressed to the NRAs. The Commission has, so far, adopted two successive Recommendations.[925] The Commission has selected only those markets in which the application of competition law (including remedies) would be insufficient to address competition problems. It has done so on the basis of a test based on the three cumulative criteria: (i) the existence of high and non-transitory barriers to entry of a structural, legal or regulatory nature; (ii) a market structure which, taking account of the barriers to entry, will not tend towards effective competition within the relevant time horizon; and (iii) the insufficiency of competition law alone to adequately address the market failure(s) present on the market.[926] In addition, a safeguard clause provides that emerging markets should not be

[922] The concept of an "undertaking", unless specifically stated otherwise, refers to any entity that establishes, operates, controls or makes available electronic communications networks or services, including an operator, provider or company.

[923] For the history of the SMP regime, see the second edition of this work, para.1–019 and Larouche, para.1–012, n.42, 3–36. On the current SMP regime and the rationale for its alignment on competition law principles, see Braun and Capito, para.1–075, n.329, 343, at 348–373; Buiges, "A Competition Policy Approach", in Buiges and Rey (eds.), *The Economics of Antitrust and Regulation in Telecommunications* (Edward Elgar, 2004), 9; Cave, "Economic Aspects of the New Regulatory Regime for Electronic Communication Services", in Buiges and Rey, *ibid.*, 27; de Streel, "The Integration of Competition Law Principles in the New European Regulatory Framework for Electronic Communications" (2003) 26 *World Competition* 489; and Nihoul and Rodford, para.1–018, n.59, 175–341. See also paras.1–016 and 1–067, above.

[924] Framework Directive, para.1–019, n.64, Art.16(6).

[925] First Markets Recommendation and Second Markets Recommendation: see para.1–021, n.77.

[926] Framework Directive, para.1–019, n.64, Art.15(1) and 2002 Framework Directive, para.1–019, n.64, recital 27, elaborated by the Second Markets Recommendation, para.1–021, n.77, Art.2. See para.4–017 *et seq.*, below.

subjected to inappropriate regulation.[927] The Commission defines the selected markets on the basis of the hypothetical monopolist (or SSNIP—Small but Significant Non-transitory Increase in Price) test used in competition law.[928] The geographic dimension of the relevant markets was usually considered to be national, although the Better Regulation Directive and the Second Markets Recommendation explicitiy confirm that NRAs can define markets on a sub-national basis.[929]

1–222 ***The identification of markets by NRAs***—Taking the utmost account of the Commission's Markets Recommendation and the SMP Guidelines,[930] the 27 NRAs, in collaboration with national competition authorities, must identify the relevant markets for regulatory analysis within their national territories.[931] An NRA may select the same markets as those identified in the Commission's Markets Recommendation. It may also, on the basis of the three criteria test, and for the purpose of regulating operations on its own territory, either add additional markets or decide that a market identified by the Commission is not relevant for *ex ante* regulation in its territory.[932] After the selection, the NRA delineates the precise product and the geographic dimensions of the markets on the basis of the SSNIP test; and it should furthermore justify its conclusion according to the abovementioned three cumulative criteria.

1–223 The assessment of significant market power—Having identified the relevant market, the NRAs, in collaboration with the national competition authorities, must carry out an analysis of each relevant market to determine whether it is effectively competitive.[933] This has been equated to identifying whether there is an undertaking with significant market power,[934] which is itself equated with the competition law concept of a dominant position.[935] Thus, a finding that a relevant market is not effectively competitive involves a determination that one or more operators have a dominant position on that market. Conversely, a finding that a relevant market is effectively competitive is, in effect, a determination that no firms are either singly or jointly dominant on that market.[936]

[927] 2002 Framework Directive, para.1–019, n.64, recital 27. See SMP Guidelines, para.1–021, n.76, para.32, and Second Markets Recommendation, para.1–021, n.77, recital 7. In *Commission v Germany*, para.1–063, n.258, paras.64 and 73, the Court of Justice held that the German Law on Telecommunications was not compatible with the relevant provisions of the 2002 Regulatory Framework by excluding in principle new or emerging markets from *ex ante* regulation. See also paras.1.074, n.321; 1–083, n.371; 1–267, n.1089 and para.4–021 *et seq.*, below.

[928] Framework Directive, para.1–019, n.64, Art.15(1); see para.4–004 *et seq.*, below.

[929] Framework Directive, para.1–019, n.64, Art.8(5)(e); Better Regulation Directive, para.1–019, n.64, recitals 7 and 56; and Commission Staff Working Document of November 13, 2007, Explanatory Note Accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21 on a common regulatory framework for electronic communications networks and services (Second edition), SEC(2007) 1483/2 ("Explanatory Note to the Second Relevant Markets Recommendation"), 12. See also para.1–085, above.

[930] SMP Guidelines, para.1–021, n.76.

[931] Framework Directive, para.1–019, n.64, Arts.3(4) and 15(3).

[932] Second Markets Recommendation, para.1–021, n.77, recital 17.

[933] Framework Directive, para.1–019, n.64, Art.16(1).

[934] This is because the concept of "non-effective competition" is equated to that of SMP: *ibid.*, Art.16(3) and 16(4); 2002 Framework Directive, para.1–019, n.64, recital 27; and SMP Guidelines, para.1–021, n.76, para.19.

[935] Framework Directive, para.1–019, n.64, Art.14(2) and Annex II. A dominant position has been defined as a position of economic strength which gives the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers: Case 27/76, *United Brands v Commission* [1978] E.C.R. 207, para.65. See generally, para.5–041 *et seq.*, below.

[936] SMP Guidelines, para.1–021, n.76, para.112.

1–224 Where an undertaking is found to have SMP on a specific market, it may also be designated as having SMP on a closely related market, where the links between the two markets are such as to allow the undertaking to leverage its market power in the first market into the second market, thereby strengthening its market power.[937] However, in case of leveraging, it is generally more efficient to intervene at the level of the first market, at which the market power is present, rather than to intervene at the level of the second market, on which the effects of the leveraging are felt, as it is better to intervene at the source of the problem rather than at its consequence. Therefore, in the case of leveraging from a wholesale (access) market to a retail (service) market, only if the imposition of *ex ante* obligations on an undertaking which is dominant in the wholesale market would not result in effective competition on the retail market should NRAs examine whether the leveraging provision may apply.[938] In practice, this provision has not yet been relied upon by the NRAs.

1–225 The imposition of regulatory obligations—Having identified an undertaking (or undertakings in the case of joint or collective dominance) with SMP, the NRAs must decide on the imposition of regulatory obligations. If an operator enjoys SMP on a wholesale market, the NRA should impose on this SMP operator at least one obligation to be chosen from a list of six set out in the Access Directive: transparency, non-discrimination, accounting separation, compulsory access, price controls and cost accounting, and, ultimately and as a "last resort", functional separation.[939] NRAs may also impose other remedies, with the prior agreement of the Commission, although this possibility has not been used so far by the NRAs.[940] If an operator enjoys SMP on a retail market and if intervention at the wholesale level would not result in the achievement of the objectives set out in Article 8 of the Framework Directive (*i.e.* the promotion of effective competition, contributing to the internal market and consumer protection), the NRAs should impose, at the retail level, at least one remedy on this SMP operator. The Universal Service Directive contains examples of retail remedies that NRAs may impose, including prohibitions on excessive or predatory prices, prohibitions on unreasonable bundling of services, retail price caps and cost orientation.[941]

1–226 Mechanisms to consolidate the internal market—NRAs enjoy considerable discretionary power under the SMP regime. Therefore, two specific institutional mechanisms have, in particular, been set up to ensure a common regulatory approach across all Member States, and to ensure a common European regulatory culture and the harmonisation of regulatory approaches. The first mechanism is the Commission's review of all draft decisions prepared by NRAs concerning the SMP regime that affect trade between Member States, *i.e.* measures that influence, directly or indirectly, actually or potentially, the pattern of trade between Member States in a manner which might create a barrier to the functioning of the internal market.[942] The Commission may veto a

[937] Framework Directive, para.1–019, n.64, Art.14(3) and Better Regulation Directive, para.1–019, n.64, recital 47. This provision is intended to address leveraging situations, such as those that gave rise to the Court of Justice's judgment in Case C–333/94P, *Tetra Pak v Commission* [1996] E.C.R. I-5951. In this case, the dominant undertaking was found to have infringed Art.102 [ex Art.82] by leveraging its market power on a market so as to distort competition on a neighbouring market.

[938] SMP Guidelines, para.1–021, n.76, para.84.

[939] Framework Directive, para.1–019, n.64, Art.14(2) and Access Directive, para.1–019, n.66, Arts.8 to 13a. See ERG Revised Remedies Paper, para.1–081, n.359. See para.1–243 *et seq.*, below.

[940] Access Directive, para.1–019, n.66, Art.8(3), second sub-para.

[941] Universal Service Directive, para.1–019, n.67, Art.17. See para.1–288 *et seq.*, below.

[942] 2002 Framework Directive, para.1–019, n.64, recital 38. This direct and *ex ante* control of NRAs' decisions exists in addition to two other controls by the Commission that are derived from generally applicable EU law: a direct (and *ex post*) control through the Treaty infringement procedures before the Court

market definition that differs from those contained in its Markets Recommendation, a designation of SMP, or the finding that no operator has SMP.[943] The Commission may also adopt a recommendation on an NRA's individual choice of remedies and a decision for all NRAs on harmonised or coordinated approach towards remedies.[944] (ii) The second mechanism to enhance harmonisation is the creation of BEREC, which was established in January 2010[945] to replace the ERG (European Regulators Group) set up in 2002. BEREC is composed of the 27 NRAs and, among other objectives, aims to develop common approaches, methodologies or guidelines in the implementation of the different steps of the SMP regime.[946]

Figure 1.2 The Significant Market Power regime

Steps	Market-based approach	Role of the Commission
1. European screening	3 criteria test SSNIP test	Commission Markets Recommendation
2. National screening	3 criteria test SSNIP test	Possibility of Commission veto
+ Emerging markets	No inappropriate regulation	Possibility of Commission veto
3. Market analysis	No effective competition = SMP = dominant position	Possibility of Commission veto
	Effective competition = no SMP	Possibility of Commission veto
4. Remedies	At least one Proportionate	Possibility of Commission Recommendation and Decision, Complementary BEREC opinion

2. Access and interconnection

1–227 An essential complement to the liberalisation of the markets for electronic communications networks and services was the establishment of a regulatory framework to ensure (i) open access to the existing public networks and services operated by the incumbent operators and (ii) interconnection between networks. The 1998 Regulatory Framework continued to apply the concept of Open Network Provision and put in place measures to regulate the provision of network access and interconnection, in particular by the incumbent operators in order to develop the supply of services throughout the internal market.[947] This involved considerable regulatory intervention

of Justice under Art.258 [ex Art.226] (see para.1–032 *et seq.*, above and, *e.g. Commission v Germany*, para.1–063, n.258, para.36; and an indirect (and *ex post*) control in the form of the application of the competition rules under Arts.101, 102 and 106 [ex 81, 82 and 86] (see para.1–035, above and Chapter V).

[943] Framework Directive, para.1–019, n.64, Art.7; see also paras.1–121, above.

[944] *ibid.*, Arts.7a and 19(3)(a); see also paras.1–122 *et seq.* and 1–128, above.

[945] BEREC Regulation, para.1–028, n.113.

[946] *ibid.*, Arts.1 and 2; see also paras.1–103 *et seq.* and 1–116 *et seq.*, above.

[947] On the concept of ONP, see para.1–011, above.

by NRAs. The Electronic Communications Regulatory Framework contains measures that allow the rolling back of specific regulation of access and interconnection if markets become effectively competitive, with *ex ante* intervention being withdrawn in favour of the exclusive application of competition rules.[948]

1–228 The framework for network access and interconnection is based upon the principle that undertakings that receive requests for access or interconnection to their networks should negotiate in good faith and conclude such agreements on a commercial basis, without the intervention of the NRAs.[949] However, in those markets where an operator (usually the incumbent operator) continues to have a strong market position (equivalent to dominance), there remains a need for *ex ante* regulatory intervention, in order to facilitate the entry of new entrants into the relevant markets and prevent anti-competitive practices, such as refusals to interconnect or excessive interconnection rates. The Electronic Communications Regulatory Framework no longer uses the ONP concept, but continues its spirit with rules that: (i) give all operators the right to request interconnection with other operators, including operators from other Member States; (ii) impose a duty on operators with SMP (and in certain cases even operators without SMP) to offer access and interconnection when requested to do so by another operator; (iii) permit NRAs to impose additional obligations on operators designated as possessing SMP, including transparency, non-discrimination, accounting separation, price controls and even functional separation.

1–229 In particular, the Access Directive provides a regulatory framework containing the general principles relating to the provision of access to, and interconnection of, networks for the provision of electronic communications services. It harmonises the conditions for open and efficient access to, and use of, electronic communications networks and services at the wholesale level. The Access Directive establishes rights and obligations for undertakings granting or seeking interconnection and/or access to their networks or associated facilities. It sets out objectives for NRAs with regard to access and interconnection, and the interoperability of services, and lays down procedures to ensure that obligations imposed by NRAs on operators designated with SMP are reviewed and withdrawn once the relevant market is effectively competitive.[950]

(a) Concepts

1–230 Definition of "access"—The definition of "access" refers to the making available of all relevant facilities and/or services of a network to the requesting undertaking for the purpose of providing electronic communications services, as defined under the Framework Directive. It covers *inter alia*: (i) access to network elements and associated facilities,[951] which may involve the connection of equipment, by fixed or non-fixed means, in particular access to the local loop and to

[948] Framework Directive, para.1–019, n.64, Art.8(5)(f.)

[949] Access Directive, para.1–019, n.66, Art.3(1)

[950] *ibid.*, Art.1(2). The provisions of the Access Directive, para.1–019, n.66, in principle only apply to public networks. Non-public networks are, in principle, not taken into consideration by the Access Directive, except where, in benefiting from access to public networks, they may be subject to national conditions regarding for example the integrity of the interconnected public network: 2002 Access Directive, para.1–019, n.66, recital 1.

[951] "Associated facilities" mean "associated services, physical infrastructures and other facilities or elements associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service or have the potential to do so, and include inter alia buildings or entries to buildings, building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes, and cabinets": Framework Directive, para.1–019, n.64, Art.2(e). As the concept of "access" already includes access to associated facilities, the specification that access

facilities and services necessary to provide services over the local loop; (ii) access to the relevant software systems, including operational support systems; (iii) access to information systems or databases for pre-ordering, provisioning, ordering, maintenance and repair requests, and billing; (iv) access to number translation or systems offering equivalent functionality (as network operators who control access to their own customers do so on the basis of unique numbers or addresses from a published numbering or addressing range); (v) access to fixed and mobile networks, in particular for roaming; (vi) access to conditional access systems for digital television services;[952] and (vii) access to virtual network services.[953]

1–231 Definition of "interconnection"—Interconnection is a particular form of network access. It consists of the linking of public communications networks of the same or different undertakings in order to allow the users of one undertaking to communicate with the users of another undertaking or to access services provided by another undertaking.[954] Interconnection is thus one of the most important elements involved in creating a fully competitive and pan-European electronic communications market. For new entrants, interconnection, in particular to public switched telephone or mobile networks, and access to the end users of such networks, is essential for them to enter the market and develop their own networks and services. Operators with significant market power have an obvious incentive to impede new entrants' access to their networks and to end users, by either refusing interconnection or by providing it on excessive and/or discriminatory rates. As a result, because of the strong market position of incumbent operators of fixed public telephone networks (and also established mobile operators) and the risk of them engaging in anti-competitive behaviour, it was considered that interconnection could not be left entirely subject to commercial negotiation and that a regulatory framework was needed to ensure the appropriate regulation of operators with significant market power. This framework was originally contained in the ONP Interconnection Directive;[955] a modified framework is now contained in the Access Directive.

1–232 Access for content providers—The Access Directive applies only in relation to electronic communications services. This means that, for example, access to a cable TV network can only be requested by another operator for the purpose of providing electronic communications services. As electronic communications services exclude the provision of content, *i.e.* services providing, or exercising editorial control over content,[956] a pure broadcaster, providing exclusively content and not electronic communications services, cannot—in principle—rely on the terms of the Access Directive to seek access to *e.g.* a cable TV network,[957] although this has nevertheless been

covers also "access to physical infrastructure including buildings, ducts and masts" might appear as redundant: Access Directive, para.1–019, n.66, Art.2(a).

[952] Additional developments on conditional access systems are considered in Chapter II: see para.2–130 *et seq.*, below.

[953] Access Directive, para.1–019, n.66, Art.2(a). Resellers, which do not convey signals themselves, are however considered to be providers of electronic communications services and may therefore take advantage of access rights: see para.1–049, above.

[954] *ibid.*, Art.2(b).

[955] Para.1–011, n.36, above.

[956] Framework Directive, para.1–019, n.64, Art.2(c).

[957] In the process of the review of the 2002 Regulation Framework, the Commission originally proposed to extend the scope of the concept of access to any making available of facilities and/or services "for the purpose of providing electronic communications services *or delivering information society services or broadband services*" (emphasis added), which would have given access rights to content providers: see Commission Proposal for a Better Regulation Directive, para.1–026, n.96, 43. Nevertheless, this proposal was not included in the Better Regulation Directive, para.1–019, n.64, and access is, according to the new Art.2(a) of the Access

permitted in certain Member States.[958] The broadcaster can rely only on competition law or, if applicable, provisions of national law to obtain access. Nevertheless, under certain circumstances, content providers can fall within the scope of the Electronic Communications Regulatory Framework: (i) they can be granted certain rights of access and interconnection, for example access to application programme interfaces (APIs), access to electronic programme guides (EPGs) and conditional access services:[959] (ii) content providers may obtain rights of use for frequencies for radio or television broadcasting;[960] (iii) Member States may impose, on the basis of clearly defined general interest objectives, proportionate and transparent "must carry" obligations notably on providers of cable, terrestrial and/or satellite TV networks. Television broadcasters may be able to benefit from national "must carry" rules.[961] In relation to internet service providers, a distinction should be made between those ISPs that only provide content, *i.e.* web-based services, and those that also provide internet access services.[962] ISPs that provide internet access can rely on the provisions of the Access Directive, but ISPs that only provide web-based content cannot do so (without prejudice to the exceptions explained before), as web-based content services as such fall outside the obligations foreseen by the scope of the Access Directive.

(b) Principles

1–233 No restriction on access and interconnection—Member States must ensure that there are no restrictions preventing electronic communications operators (whether in the same or different Member States) from negotiating access and/or interconnection agreements amongst themselves. Technical and commercial arrangements for access and interconnection should, as a matter of principle, be a matter for agreement between the parties involved, subject to the over-riding provisions of the Access Directive.[963] National measures obliging operators to offer different access and/or interconnection conditions for equivalent services and/or imposing obligations not related to the actual access or interconnection services provided must not be maintained.[964]

Directive, para.1–019, n.66, still limited to access for allowing the provision of electronic communications networks and services, "including when *they are used for* the delivery of information society services or broadcast content services" (emphasis added). Access to the latter services *per se* is therefore not considered.

[958] Whilst some Members States (such as France, Poland and the United Kingdom) have strictly applied this principle and have thus excluded pure content providers (*i.e.* those not providing an electronic communications service in addition to content) from enjoying access to wholesale broadcasting transmission networks, other Member States (*e.g.* Finland) have extend the right of access also to pure broadcasters. The Commission has not objected to either approach. See Cullen International, *Study on the Regulation of Broadcasting Issues under the New Regulatory Framework, prepared for the European Commission* (December 22, 2006), 90–91, available at: *http://ec.europa.eu/information_society/policy/ecomm/library/ext_studies/index_en.htm#2008*.

[959] Access Directive, para.1–019, n.66, Arts.5 and 6: see para.1–241, below.

[960] Authorisation Directive, para.1–019, n.65, Art.5(2), second sub-para; and 2002 Authorisation Directive, para.1–019, n.65, recital 12. See also para.1–179, above.

[961] Universal Service Directive, para.1–019, n.67, Art.31: see para.2–129, below.

[962] 2002 Framework Directive, para.1–019, n.64, recital 10.

[963] Access Directive, para.1–019, n.66, Art.3(1).

[964] *ibid.*, Art.3(2). This provision is, however, without prejudice to Art.31 of the Universal Service Directive, para.1–019, n.67 (relating to national "must carry" regulations), in respect of the transmission of radio and television broadcasts and the Annex to the Authorisation Directive, para.1–019, n.65 (which lists the conditions that may be imposed under a general authorisation or a usage right): see paras.1–156 and 1–166 *et seq.*, above. On "must carry" rules, see para.2–129, below.

1–234 Interconnection by operators established in other Member States—One of the key policy objectives underlying the Electronic Communications Regulatory Framework is the development of an internal market in electronic communications services. Therefore, Member States are required to ensure that there are no restrictions on cross-border interconnection between operators in different Member States.[965] Operators authorised in one Member State must receive the same treatment when seeking access or interconnection services in order to deliver traffic to other Member States.[966] Accordingly, all points of interconnection open to national operators must also be open to operators in other Member States who wish to deliver cross-border traffic, so that access or interconnection for those operators is no longer limited to the international switching centre. An operator in another Member State who merely terminates traffic and who does not provide services or operate a network in the receiving Member State must also be able to obtain such a transmission link (*i.e.* a leased line or bulk transmission between the point of interconnection and the border) from an alternative infrastructure provider where available, without needing to be authorised or established in the destination Member State, and without affecting its status with regard to the terms and conditions for interconnection.[967]

1–235 A two-fold regime—The access regime provided by the Electronic Communications Regulatory Framework, in particular the Framework Directive and the Access Directive, is two-fold. On the one hand, it sets out the obligations that NRAs may impose on all operators, regardless of their position on, and the competitiveness of, the relevant market (*i.e.* "symmetric regulation"). On the other hand and more importantly, it lays down a regime under which NRAs can impose obligations on operators that they have found to have significant market power (*i.e.* "asymmetric regulation"). Therefore, regulation should be rolled back in the absence of significant market power, *i.e.* in markets where there is effective competition. As the Regulatory Framework enshrines the principle of deregulation, the regime of asymmetric regulation is an essential part of the Electronic Communications Regulatory Framework.

(c) General obligations applying to operators regardless of their market position

1–236 Obligation to negotiate interconnection—In order to ensure provision and interoperability of services throughout the EU, Article 4(1) of the Access Directive foresees that public electronic communications networks operators have a right and, when requested by other operators, an obligation to negotiate interconnection.[968] The obligation to negotiate is independent of whether the undertaking concerned has significant market power, and does not entail the obligation to conclude an interconnection agreement, but merely an obligation to negotiate such an agreement.[969] The Court of Justice has confirmed that the rights and obligations imposed by

[965] Access Directive, para.1–019, n.66, Art.3(1).

[966] Authorisation Directive, para.1–019, n.65, Art.4(2)(a). In addition, NRAs should provide providers of electronic communications networks and services declarations, upon request or alternatively as an automatic response to a notification after the general authorisation, to confirm the latter's rights concerning interconnection and rights of way, in particular to facilitate negotiations with other, regional or local, levels of government or with service providers in other Member States: *ibid.*, Art.9. See also the 2002 Authorisation Directive, para.1–019, n.65, recital 25.

[967] Access Directive, para.1–019, n.66, Art.3(1).

[968] This obligation is limited to interconnection and does not provide a general obligation to negotiate, in particular, access: *Commission v Poland*, para.1–063, n.258, paras.36–44.

[969] *TeliaSonera Finland*, para.1–063, n.258, para.36.

Article 4(1) apply only to operators of public communications networks, and not to service providers, such that NRAs can only impose obligations to negotiate access only on such operators.[970] However, the Court added that Article 5(1)(a) of the Access Directive permits NRAs to impose "obligations on undertakings that control access to end-users, including in justified cases the obligation to interconnect their networks" where this is necessary to ensure end-to-end connectivity. In addition, Article 5(4) of the 2002 Access Directive[971] requires that NRAs must be empowered to intervene at their own initiative in respect of access and interconnection matters,[972] so have the power to require an undertaking which did not have significant market power but which controlled access to end-users to also negotiate in good faith with another undertaking for the interoperability of SMS and MMS message services, even if that undertaking was not an operator of a public communications network.[973] Such negotiations must be carried out in good faith and NRAs may conclude that an undertaking which does not have SMP has not negotiated in good faith if it offers interconnection on unreasonable terms, *e.g.* under conditions that are likely to hinder the emergence of a competitive retail market.[974] Information exchanged during such negotiations or during the provision of interconnection services must be treated as confidential and cannot be used for any other purposes or be provided to any other parties, including other businesses or departments of the recipient if this may confer a competitive advantage.[975] This ensures that vertically integrated operators cannot use interconnection information for the benefit of their other businesses.

1–237 End-to-end connectivity and interoperability—NRAs must encourage and, where necessary, secure adequate access and interconnection, and the interoperability of services, in the interests of promoting sustainable competition, efficient investment and innovation, and maximising the benefits of end users.[976] They may set *ex ante* general conditions relating to various aspects of access and interconnection, regardless of the market power of the undertaking concerned. NRAs must ensure that the conditions and obligations imposed by them are objective, transparent, proportionate and non-discriminatory. When they intend to impose obligations, NRAs must also comply with their obligations under Articles 6 (national consultation and transparency mechanism), 7 (consolidating the internal market for electronic communications) and 7a (procedure for the consistent application of remedies) of the Framework Directive.[977] Obligations that can be imposed include:[978] (i) obligations, such as interconnection,[979] on undertakings

[970] *ibid.*, paras.34–35 and 48.

[971] Access Directive, para.1–019, n.66, Article 5(3), following the amendments introduced by the Better Regulation Directive.

[972] *TeliaSonera Finland*, para.1–063, n.258, para.60. The Court confirmed that the goal of the NRA's intervention under Art. 5(4) [now Art. 5(3)] is to secure the objectives of Art.8 of the Framework Directive, but that this provision does not define or limit the detailed rules for this intervention: see also para.52 of the Court's judgement.

[973] *ibid.*, paras.56–62.

[974] *ibid.*, paras.53 and 55.

[975] Access Directive, para.1–019, n.66, Art.4(3). This confidentiality requirement is without prejudice to the obligations imposed on undertakings by Art.11 of the Authorisation Directive, para.1–019, n.65, regarding the powers of an NRA to require information from undertakings: see para.1–097, above.

[976] *ibid.*, Art.5(1).

[977] *ibid.*, Art.5(2).

[978] *ibid.*

[979] As pointed out in para.1–228, this obligation to grant interconnection also entails an obligation to negotiate in good faith.

that control access to end users[980] in order to ensure end-to-end connectivity;[981] (ii) obligations, where necessary, on undertakings that control access to end users in order to make their services interoperable;[982] and (iii) obligations to provide access to facilities in order to ensure accessibility for end users to digital radio and television broadcasting services specified by the Member States, *e.g.* by providing access to Application Program Interfaces ("APIs") and Electronic Programme Guides ("EPGs").[983] Article 5 of the Access Directive provides NRAs with a general power for the purpose of achieving the objectives of Article 8 of the Framework Directive in the specific context of access and interconnection.[984] Furthermore, Member States must ensure that NRAs are empowered to intervene, on their own initiative, in the situations specified above.[985] Despite the broad discretion granted to the NRAs, Article 5 of the Access Directive must be used with caution, taking into account the general principle of the Electronic Communications Regulatory Framework that regulation should only be imposed when necessary and must in any event be proportionate to the market failure identified.[986] In particular, NRAs should take into account the strict requirements for this provision to apply, namely: (i) that mandatory access and interconnection

[980] According to recital 6 of the 2002 Access Directive, para.1–019, n.66, control of means of access may entail ownership or control of the physical link to end users (either fixed or mobile), and/or the ability to change or withdraw the national number or numbers needed to access an end user's network termination point. This would be the case, for example, if network operators were to restrict unreasonably end users' choice of access to internet portals and services.

[981] Access Directive, para.1–019, n.66, Art.5(1) second sub-para. (a).

[982] Art.5(1), second sub-para., point (ab) of the Access Directive, para.1–019, n.66 (introduced by the Better Regulation Directive: para.1–019, n.64, Art.2(a)(ii)). This point deals with the services level, whilst Art.5(1), second sub-para. point (b) addresses the network level. See also *TeliaSonera Finland*, para.1–063, n.258, paras.59–62: according to Art.5(1), first sub-para. of the Access Directive, NRAs are responsible for ensuring adequate access and interconnection and also interoperability of services by means which are not exhaustively listed in this provision and, according to Art.5(4) (new Art.5(3)) may intervene to secure the objectives of Art.8 of the Framework Directive, by imposing an obligation on an operator to negotiate interoperability of services when requested to do so by a service provider. In finding that the Access Directive imposes this obligation, the Court of Justice did not need to rely upon the new second sub-para., (ab), of Art.5(1) (obligations regarding interoperability of services). This specification might therefore be considered as unnecessary given the Court of Justice's broad interpretation of NRAs' powers under Art.5(1), first sub-para. Art.25(3) of the Universal Service Directive, para.1–019, n.60, enables NRAs to impose obligations on undertakings that control access to end-users for the provision of directory enquiry services, in order to ensure the interoperability of services. Although Art.25(3) refers to the Access Directive, Art.5(1), without specifying, it may be considered as an application of Art.5(1), second sub-para., point (ab) of the Access Directive.

[983] See para.2–138, below.

[984] *Commission v Poland*, para.1–063, n.258, para.65.

[985] Access Directive, para.1–019, n.66, Art.5(3).

[986] The Commission considers that NRAs should use their powers under Art.5 of the Access Directive only in clearly defined circumstances in order to avoid over-regulation and legal uncertainty: see European Commission, Second Report on the Article 7 Mechanism, para.1–116, n.526, 13. NRAs have applied Art.5(1) only in a few cases notified under the Article 7 Procedure. For example, the Netherlands notified a draft decree that imposed on all providers of publicly available telephone services and operators of the underlying networks a general obligation to ensure end-to-end connectivity: Case NL/2003/17: *Draft Interoperability Decree*, Commission Comments of December 3, 2003. Other examples include: Case FR/2007/0608: *Obligations imposed on operators that control access to end users for the delivery of value added services, to ensure end-to-end connectivity in France*, Commission Comments of April 4, 2007, 4; Case PL/2007/0745: *Remedies imposed on Telekomunikacja Polska S.A. with regard to the internet peering exchange*, Commission Comments of February 4, 2008, 3; and Case RO/2007/0653: *Obligations imposed on an operator that controls access to end users for the purpose of call termination on its public fixed telephone network, to ensure end-to-end connectivity*, Commission Comments of July 20, 2007, 3.

and interoperability of services shall only be ensured where appropriate; (ii) that NRAs must exercise their responsibilities and powers in a way that promotes sustainable competition, efficient investment and innovation, and maximises the benefits to end-users; and (iii) that obligations imposed by NRAs shall be objective, transparent, proportionate and non-discriminatory.[987]

1–238 Other obligations for improving competition—NRAs may also impose the following obligations on operators that do not have SMP: (i) obligations to provide co-location and sharing of network elements and associated facilities for providers of electronic communications networks;[988] (ii) obligations for accounting separation or for structural separation on undertakings providing electronic communications services that also enjoy special or exclusive rights in other sectors;[989] (iii) obligations to provide access to conditional access systems;[990] (iv) obligations required to comply with the EU's international commitments;[991] and (v) minimum tariff regulation for mobile roaming services, such as roaming calls, SMS and data, under the Roaming Regulation.[992]

1–239 ***Co-location and the sharing of associated facilities***—Electronic communications networks should be established and developed in a fair, efficient and environmentally responsible way. Improved facility sharing[993] can significantly increase competition and lower the overall financial and environmental costs of deployment for undertakings, in particular new entrants. It is of particular importance for the roll-out of Next Generation Access Networks.[994] Agreements for facility sharing are, in the first instance, a matter for commercial and technical agreement between the parties concerned. However, in certain circumstances, NRAs, where relevant, in coordination with competent authorities, in particular local authorities, must be empowered to impose on all operators providing electronic communications networks that have the right to install facilities on, over or under public or private property, or that may profit from a procedure for the expropriation or use of property, regardless of their market power,[995] an obligation to share facilities or property (including buildings, entries to buildings, building wiring, masts, antennae, towers and other

[987] Case UK/2003/0019: *Access control services for digital television*, Commission Comments of January 22, 2004, 2.
[988] Framework Directive, para.1–019, n.64, Art.12.
[989] *ibid.*, Art.13.
[990] Access Directive, para.1–019, n.66, Art.6.
[991] *ibid.*, Art.8(3), first sub-para., third indent.
[992] See para.1–348 *et seq.*, below.
[993] Art.12 of the Framework Directive, para.1–019, n.64, focuses on the sharing of associated facilities, rather than the sharing of passive network elements, *e.g.* dark fibre. The Parliament proposed to extend the scope of facility sharing to also cover passive network elements, although the Commission disagreed, on the basis that it would not be proportionate for undertakings without SMP to be required to provide access to all passive network elements. Consequently, obligations to share passive network elements, such as dark fibre, can in principle only be imposed upon undertakings with SMP. However, recital 43 of the Better Regulation Directive, para.1–019, n.64, mentions the power of NRAs to impose the sharing of network elements and it is possible that the Court of Justice may give a broad interpretation to Art.12 of the Framework Directive to include the sharing of network. In addition, Art.12 of the Framework Directive also covers in-building wiring, which could create an ambiguity, in-building wiring might be considered as a network element, *i.e.* the terminating part of the network: see also para.1–051, n.201, above.
[994] Framework Directive, para.1–019, n.64, Art.12 and Better Regulation Directive, para.1–019, n.64, recital 43.
[995] Associated facility and network element sharing can also be imposed on SMP operators under Art.12 of the Access Directive, para.1–019, n.66; see paras.1–259 *et seq.*, below.

supporting constructions, ducts, conduits, manholes and cabinets).[996] Such obligations must be imposed by NRAs in an objective, transparent, non-discriminatory and proportionate way.[997] Obligations to share associated facilities may be imposed on operators without SMP in order to protect the environment, public health, public security or to meet town and country planning objectives.[998] However, with regard to the sharing of wiring inside buildings or up to the first concentration or distribution point (where this is located outside the building), the key criterion for imposing an obligation to share appears to be that duplication of such infrastructure would be economically inefficient or physically impracticable.[999] In each case, NRAs must first hold a public consultation during which all interested parties are given the opportunity to state their views. In addition, the sharing arrangements may include rules for apportioning the costs of the facilities or property sharing, which in the case of the sharing of in-building wiring can, where this is appropriate, be adjusted in order to provide an appropriate return on investment.[1000] In order to facilitate sharing to the maximum extent possible, the competent authorities should be able to establish a detailed inventory of the nature, availability and geographical location of the facilities and make it available to interested parties. Undertakings may be required to provide the information necessary to this end.[1001]

1–240 ***Accounting separation or structural separation for public network and service providers with exclusive or special rights in other sectors***—As a result of the liberalisation of the electronic communications market, undertakings with special or exclusive rights in sectors other than electronic communications (for example railways and utilities) have been able to provide public electronic communications networks or publicly available electronic communications services, including by using their own infrastructure. Member States are required to ensure that these undertakings keep separate financial accounts for their activities associated with the provision of electronic communications networks and services, as if these activities were carried out by legally independent companies, so that all costs and relevant elements associated with such activities can be identified, including fixed assets and structural costs. As an alternative to accounting separation, the Framework Directive permits Member States to impose structural separation obligations.[1002] Such measures are intended to prevent operators with special or exclusive rights in other sectors from potentially having a competitive advantage in the provision of electronic communications services, including new services such as broadband internet, by using revenues from their monopoly activities to cross-subsidise their communications activities. The structural separation envisaged by Article 13 of the Framework Directive does not necessarily entail legal separation of the different businesses.[1003] It comprises several possibilities of intervention in the structure of the undertakings concerned. However, such structural separation must be substantial and permanent.[1004]

[996] Framework Directive, para.1–019, n.64, Art.12(1).
[997] *ibid.*, Art.12(5).
[998] *ibid.*, Art.12(2).
[999] *ibid.*, Art.12(3).
[1000] *ibid.*, Arts.12(2) and (3).
[1001] *ibid.*, Art.12(4).
[1002] *ibid.*, Art.13(1)(a) and (b).
[1003] Legal separation may be required by the Liberalisation Directive in respect of the joint provision by a single operator of cable television and other electronic communications networks: see para.1–149 *et seq.*, above. With regard to vertically integrated public undertakings, see para.1–145, above.
[1004] Nihoul and Rodford, para.1–018, n.59, 729–730: "substantial" separation means that the entities involved must be autonomous in their functioning and that the exercise of one activity may not have an influence on the performance of the other(s).

If such undertakings have an annual turnover from their electronic communications activities of less than EUR 50 million, Member States may choose not to apply these accounting or structural separation obligations.[1005]

1–241 ***Conditional access systems and other facilities for broadcasters***—If a broadcaster does not have its own transmission network (such as a satellite platform), it needs access to ancillary services in order to provide its services over networks. These ancillary services include some or all of conditional access services, APIs and EPGs. Although the Regulatory Framework involves a separation between the regulation of transmission networks and the implementation of audio-visual policy (including the regulation of content),[1006] this does not prejudice NRAs taking account of the links existing between them, in particular in order to guarantee media plurality, cultural diversity and consumer protection.[1007] The application of EU competition law may not be sufficient to ensure cultural diversity and media plurality in the area of digital television. Sector-specific regulation is thus needed to ensure that a wide variety of programming and services is available and that end users can access specific digital broadcasting services.[1008] Therefore, where it is necessary to ensure that digital radio and television broadcasting services are accessible to end users, broadcast network operators must provide access to their APIs and EPGs on fair, reasonable and non-discriminatory terms, regardless of whether they have been designated as possessing SMP.[1009] Member States are also required to ensure that, in relation to conditional access services for digital radio and television and viewers within the EU: (i) conditional access systems have the necessary technical capability for cost-effective transcontrol allowing the possibility for full control by local or regional operators of the services using such systems; (ii) that technical services are provided to broadcasters on fair, reasonable and non-discriminatory terms and in accordance with EU competition law to ensure that consumers with decoders have access to digital broadcasts; (iii) that operators keep separate financial accounts for their conditional access services; and (iv) when granting licences to manufacturers of consumer equipment, holders of industrial property rights to conditional access products and systems are to ensure that licences are granted on fair, reasonable and non-discriminatory terms, so as not to deter the inclusion in the same product of common interfaces and means specific to another access system.[1010] These obligations may be amended in the light of market and technological developments.[1011] Member States may allow NRAs to review the conditions to determine if they should be maintained, amended or withdrawn according to an SMP assessment;[1012] conditions may be amended or withdrawn if an NRA finds that: (i) one or more operators do not have SMP on the relevant market; (ii) accessibility for end users to broadcasting services and channels would not be adversely affected; and (iii) the prospects for effective competition in retail digital broadcasting services and the provision of conditional access services would not be adversely affected.[1013] Notice of amendment or withdrawal of conditions must also be given.[1014] The provisions of the Access Directive are without prejudice to national rules as to the presentational aspects of EPGs and other listing and navigational facilities.[1015]

[1005] Framework Directive, para.1–019, n.64, Art.13(2).
[1006] See para.1–053, above.
[1007] 2002 Framework Directive, para.1–019, n.64, recital 5. See also para.1–054 *et seq.*, above.
[1008] 2002 Access Directive, para.1–019, n.66, recital 10.
[1009] Access Directive, para.1–019, n.66, Art.5(1)(b), and Annex I, Part II. See also para.1–116, above.
[1010] *ibid.*, Art.6(1) and Annex I, Pt I.
[1011] *ibid.*, Arts.6(2) and 14(3).
[1012] *ibid.*, Art.6(3). On the assessment of SMP and the related market analysis, see paras.1–220 *et seq.*, above.
[1013] *ibid.*, Art.6(3)(a) and (b).

1–242 ***International commitments***—The EU and its Member States have entered into commitments on the interconnection of telecommunications networks in the context of the World Trade Organisation Agreement on Basic Telecommunications.[1016] This may be relevant to the *ex ante* obligations imposed by NRAs: the obligations that can be imposed on undertakings with SMP under Articles 9 to 13 of the Access Directive (*i.e.* transparency, non-discrimination, accounting separation, access, price control and accounting obligations) can, in principle, also be imposed on undertakings without SMP where this is necessary to comply with international commitments of the EU and its Member States.[1017] Such obligations must be notified to the Commission under the EU Consultation Procedure,[1018] although no such notifications have been made.

(d) Obligations which may be imposed upon undertakings with SMP

(1) Principles

1–243 Imposition of at least one *ex ante* obligation on operators with SMP—If an NRA decides that an operator has SMP, it must impose upon that operator at least one *ex ante* obligation.[1019] In doing so, NRAs are required to choose obligations that are proportionate to the market failure identified by them, in accordance with the objectives set by the Framework Directive.[1020]

1–244 Obligations that may be imposed at the wholesale level—The following obligations may be imposed on an operator that possesses SMP on a wholesale market: (i) transparency;[1021] (ii) non-discrimination;[1022] (iii) accounting separation;[1023] (iv) provision of mandatory access to

[1014] *ibid.*
[1015] *ibid.*, Art.6(4).
[1016] See para.1–445 *et seq.*, below.
[1017] Access Directive, para.1–019, n.66, Art.8(3), first sub-para., third indent; and 2002 Access Directive, para.1–019, n.66, recital 13. An undertaking could, in principle and without having been designated as possessing SMP, be considered as a "major supplier" under the Regulatory Principles for Basic Telecommunications attached to the Fourth Protocol to the General Agreement on Trade in Services: Council Decision 97/838 of November 28, 1997 concerning the conclusion on behalf of the European Community, as regards matters within its competence, of the results of the WTO negotiations on basic telecommunications services, O.J. 1997 L347/45 ("Decision on WTO and basic telecommunications services"); and para.1–450, below). The regulatory principles require that a "major supplier" is subject to interconnection conditions similar to those applicable to undertakings with significant market power under the Access Directive (para.1–019, n.66): Maxwell (ed.), para.1–018, n.59, booklet I.3, 11. According to the regulatory principles, a "major supplier" is a supplier which has the ability to materially affect the terms of participation (having regard to price and supply) in the relevant market for basic telecommunications services as a result of: (a) control over essential facilities; or (b) use of its position in the market.
[1018] See paras.1–116 *et seq.*, above.
[1019] Framework Directive, para.1–019, n.64, Art.16(4).
[1020] *ibid.*, Art.8 of the Framework Directive states that the key objectives of the Regulatory Framework are to enhance user and consumer benefits in terms of choice, price and quality by promoting and ensuring effective competition and the development of the internal market: see para.1–058 *et seq.*, above.
[1021] Access Directive, para.1–019, n.66, Art.9. See para.1–246 *et seq.*, below
[1022] *ibid.*, Art.10: see para.1–251 *et seq.*, below.
[1023] *ibid.*, Art.11: see para.1–255 *et seq.*, below.

specific network facilities, including access to technical interfaces, protocols or other key technologies, as well as interconnection of networks, and carrier selection and/or pre-selection services;[1024] (v) tariff regulation, including obligations that tariffs be cost-oriented and that accounting separation be maintained;[1025] and (vi) functional separation.[1026] In addition to these remedies, NRAs can, in exceptional circumstances, impose remedies that are not foreseen by the Electronic Communications Regulatory Framework. However, if they intend to do so, they must notify the Commission of the proposal, which must take a decision to approve or veto the proposal, after taking the utmost account of the opinion of BEREC.[1027]

1–245 Obligations that may be imposed at the retail level—The obligations that may be imposed by an NRA at the retail level are set out in the Universal Service Directive.[1028]

(2) Transparency

1–246 NRAs may impose obligations on operators that have been designated as possessing SMP in order to ensure, *inter alia*, that with respect to access and interconnection services provided by them: (i) they make available all necessary information (*e.g.* accounting information, technical specifications, network characteristics, terms and conditions for supply and use, including any conditions limiting access to and/or of services and applications, and prices) on request to organisations considering interconnection in an unbundled form;[1029] (ii) they publish a reference offer, which is sufficiently unbundled to ensure that other undertakings pay only for the services that they require;[1030] and (iii) they provide information relating to interconnection and/or access agreements to the relevant NRA and (except for those parts dealing with commercial strategy) also make it publicly available, according to standards set by the NRA.[1031]

1–247 Combination with other remedies—It is difficult to see many situations relating to access and interconnection in which transparency is, by itself, likely to be an effective remedy. The transparency obligation is usually used to facilitate the implementation of other remedies. There is a logical linking between the transparency requirements and accounting separation obligations, as well as that of non-discrimination. Consequently, when NRAs have imposed these two obligations, a transparency obligation has also been imposed.[1032] Furthermore, the Commission has, in its comments on three notifications, also suggested that an access obligation should be accompanied by a transparency obligation in order to make the overall access obligation more effective.[1033]

1–248 Proportionality—The obligations imposed on SMP operators shall be based on the nature of the problem identified, proportionate and justified in the light of the regulatory objectives

[1024] *ibid.*, Art.12: see para.1–259 *et seq.*, below.
[1025] *ibid.*, Art.13; see para.1–275 *et seq.*, below.
[1026] *ibid.*, Art.13a: see para.1–284 *et seq.*, below.
[1027] Access Directive, para.1–019, n.66, Art.8(3), second sub-para.
[1028] Universal Service Directive, para.1–019, n.67, Art.17.
[1029] Access Directive, para.1–019, n.66, Art.9(1).
[1030] *ibid.*, Art.9(2).
[1031] *ibid.*, Arts.9(1) and (3).
[1032] ERG Revised Remedies Paper, para.1–081, n.359, 42.
[1033] Case CZ/2006/0453: *Broadcasting transmission services, to deliver broadcast content to end users in the Czech Republic*, Commission Comments of August 8, 2006, 5; Case ES/2005/0252: *Broadcasting transmission services, to deliver broadcast content to end users in Spain*, Commission Comments of November 4, 2005, 3–4; and Case PL/2006/0382: *Access to end users for the purpose of ensuring end-to-end connectivity in Poland*, Commission Comments of May 24, 2006, 3.

laid down in Article 8 of the Framework Directive. A transparency obligation would not normally be disproportionate. Nevertheless, the Commission has considered that a transparency obligation proposed by the Polish NRA was not proportionate: in order to ensure that ISPs could offer their services to end customers, the Polish NRA proposed to require the operator with SMP (the incumbent, Telekommunikacja Polska) to provide other operators with information concerning the configuration of equipment used for the routing of IP traffic in the period of up to 90 days prior to a request for access. The Commission noted that the detailed traffic related data could be crucial to operators and in many instances would be covered by business confidentiality rules. Therefore, it appeared that the requirement to make available such data could go beyond what was necessary to ensure effective implementation of the non-discrimination obligation. Consequently, despite of lack of a veto power over remedies, the Commission suggested that the Polish NRA consider if any other form of transparency obligation would be more proportionate, for example, requiring Telekommunikacja Polska to maintain a record of router configurations with an adequate level of detail to enable the Polish NRA, upon request from an operator, to verify the compliance with the non-discrimination obligation.[1034]

1–249 Reference offer—If an obligation to make a reference offer is imposed on an SMP operator, it should provide a description of the relevant offerings, broken down into its components, according to market needs, and the associated terms and conditions, including prices.[1035] This obligation is also a complementary obligation. For example, a non-discrimination obligation would be less effective without an obligation to provide a reference offer also being imposed.[1036] In addition, a proper reference offer, together with stringent price control obligations, is key to ensuring that access to a bottleneck input, for example wholesale network infrastructure access,[1037] is effective and enables competition to develop.[1038] In the absence of such a reference offer, interconnection negotiations may be unduly prolonged and multiple disputes may arise, thus rendering an access obligation less effective.[1039] The Commission also acknowledges that the elaboration of a full reference offer for the provision of access to the physical network infrastructure is a burdensome, resource and time-consuming project because it requires the full involvement of all interested parties, in particular access seekers, and accordingly the NRAs cannot carry it out on their own. Therefore, the Commission suggests that the start of such a project could be conditional upon the involvement of sufficient access seekers.[1040]

1–250 Transparency regarding Next Generation Access networks (NGA)—The Commission published the first draft of a recommendation on regulated access to Next Generation Access

[1034] Case PL/2006/0382, *ibid.*
[1035] Access Directive, para.1–019, n.66, Art.9(2).
[1036] Case ES/2005/0252, para 1–247, n.1033, 3–4.
[1037] Access Directive, para.1–019, n.66, Art.9(4) and Annex II. Parties may decide to contract on terms other than those taken over in the reference offer, but in doing so the undertaking with SMP must then take into account its non-discrimination obligation. By its content, Annex II appears to predefine to some extent the remedies that an NRA should impose regarding the market for wholesale network infrastructure access under Art.12 of the Access Directive.
[1038] Cases ES/2008/0804 and ES/2008/0805: *Wholesale (physical) network infrastructure access and wholesale broadband access in Spain*, Commission Comments of November 13, 2008, 6–7.
[1039] Case PL/2006/0382, para.1–247, n.1033, 3.
[1040] Cases ES/2008/0804 and ES/2008/0805, para 1–249, n.1038, 6–7.

networks in 2008,[1041] with a second draft being published in 2009.[1042] It has not yet been formally adopted by the Commission. Although the draft Recommendation mainly concerns access obligations, it would require NRAs to accompany these access obligations with transparency obligations, in the form of reference offers. According to the draft Recommendation, an operator with SMP must publish reference offers if obligations are imposed requiring it to grant alternative operators access to its civil engineering infrastructure,[1043] to its terminal segment (in the case of Fibre to the Home[1044] ("FTTH")),[1045] to its fibre loop (in the case of FTTH)[1046] and/or to its loop in the case of Fibre to the Node ("FTTN").[1047]

(3) Non-discrimination

1–251 NRAs may impose non-discrimination obligations on SMP operators in order to ensure that those operators apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and provide services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners.[1048]

1–252 Combination with other remedies—In contrast to the transparency obligation, a non-discrimination obligation could be imposed alone, although in order for it to be an effective remedy, or to make other remedies effective, it likely needs to be imposed together with a number of other obligations.[1049] Transparency is a natural complement to non-discrimination obligations, as the identification of discriminatory behaviour depends on the ability to have access to the necessary information.[1050] Furthermore, an access obligation needs, as suggested by the Commission, to be accompanied by non-discrimination and transparency obligations, in order to be more effective.[1051]

1–253 Proportionality—Non-discrimination obligations should be imposed according to the nature of the problems identified, proportionate and justified in the light of the objectives set out in Article 8 of the Framework Directive. On the market for fixed telephony termination, the Hungarian NRA proposed to impose a non-discrimination obligation in order to tackle a refusal by the

[1041] First Draft NGA Recommendation, para.1–084, n.379. See also Commission Staff Draft Working Document of September 18, 2008, Explanatory Note, Accompanying document to the Commission Draft Recommendation of September 18, 2008 on regulated access to Next Generation Access Networks (NGA) and Commission Press Release, *Broadband: Commission consults on regulatory strategy to promote high-speed Next Generation Access networks in Europe*, IP/08/1370 (September 18, 2008).

[1042] Second Draft NGA Recommendation, para.1–051, n.194. See also Commission Press Release, *Broadband: Commission consults on regulatory strategy to promote very high speed Internet*, IP/09/909 (June 12, 2009) and Commission Press Release, *Broadband: Commission consults on regulatory strategy to promote very high speed Internet in Europe—frequently asked questions*, MEMO/09/274 (June 12, 2009).

[1043] *ibid.*, para.13.

[1044] FTTH is an access network consisting of optical fibre lines in both the feeder and the drop segments of the access network, *i.e.* connecting a customer's premises (the house or, in multi-dwelling units, the apartment) to the MPoP by means of optical fibre: *ibid.*, para.11.

[1045] *ibid.*, para.16.

[1046] *ibid.*, para.21; see para.1–271 *et seq.*, below.

[1047] *ibid.*, para.31; see para.1–270 *et seq.*, below.

[1048] Access Directive, para.1–019, n.66, Art.10(2).

[1049] ERG Revised Remedies Paper, para.1–081, n.359, 43.

[1050] Case ES/2005/0252, para 1–247, n.1033, 6–7.

[1051] Case CZ/2006/0453, para 1–247, n.1033, 5.

SMP operator to send calls to a new entrant via a third-party transit provider. Nevertheless, the Commission envisaged that even if such dispute were to arise, the Hungarian NRA still had all legal means necessary to remedy such a market failure in a dispute resolution procedure pursuant to Article 5(1) of the Access Directive. Consequently, the Commission maintained that it was not appropriate to oblige SMP operators in call termination markets to contract with a transit provider selected by the new entrant to hand over traffic for outgoing calls.[1052] In another case concerning mobile call termination, the Belgian NRA proposed to impose internal non-discrimination obligations on Belgacom Mobile and Mobistar to identify the internal transfer price for the cost of "on net" calls, thereby avoiding the cross-subsidisation of their respective downstream activities. Despite of the risk of unfair cross-subsidies, the Commission considered that that problem could be remedied by the implementation of an effective price control mechanism, which was also proposed by the Belgian NRA, to ensure that termination rates were no higher than the real costs of termination. Against this background, it was not proportionate to impose an internal non-discrimination obligation.[1053]

1–254 Specific non-discrimination obligations in Commission recommendations —The Commission has, in its recommendations, adopted specific requirements for NRAs to impose or maintain non-discrimination obligations. For example, NRAs should ensure that operators with SMP in the provision of leased lines,[1054] include the following items in their contracts: (i) enforceable agreements that cover all relevant aspects of the wholesale leased line service, such as ordering, migration, delivery, quality, repair time, reporting and dissuasive financial penalties; (ii) the contractual delivery time for wholesale leased lines, which can be based on the limits determined by the Commission; and (iii) specific financial penalties for breach.[1055] Furthermore, in its Second Draft NGA Recommendation, the Commission proposes a set of strict and specific non-discrimination rules to ensure that third parties can obtain access on the same terms as the retail arm of the operator of an NGA that has SMP. In principle, SMP operators should provide the same level of information on its civil engineering infrastructure and distribution points to third parties within the same time scales as to its internal businesses. SMP operators should ensure proper access to information by publishing a reference offer. In addition, in order to ensure that third parties receive access to and use of the SMP operator's civil engineering infrastructure on an equivalent basis, service level indicators and target service levels should be defined by the access seekers and the SMP operator. Finally, if an SMP operator has prior knowledge of third parties' deployment plans, it should not share such information with its retail business.[1056]

[1052] Case HU/2007/0727: *Call termination on individual public telephone networks provided at a fixed location in Hungary*, Commission Comments of December 5, 2007, 4–5.

[1053] Case BE/2006/0433: *Voice call termination on individual mobile networks in Belgium*, Commission Comments of August 4, 2006; and Case BE/2007/0665: *Amendment to the price control remedy and further justification of the internal non-discrimination remedy related to the decision concerning voice call termination on individual mobile networks in Belgium*, Commission Comments of August 14, 2007, 6.

[1054] Commission Recommendation of January 21, 2005 on the provision of leased lines in the European Union (Part 1—Major supply conditions for wholesale leased lines), O.J. 2005 L24/39.

[1055] The Commission recommends ceilings for the contractual delivery times for different categories of leased line: (i) for 64 Kbit/s leased lines: 18 calendar days; (ii) for 2 Mbit/s leased lines unstructured: 30 calendar days; (iii) for 2 Mbit/s leased lines structured: 33 calendar days; and (iv) for 34 Mbit/s leased lines unstructured: 52 calendar days: *ibid.*, Annex and para.1.

[1056] Second Draft NGA Recommendation, para.1–051, n.194, Annex II. See also para.1–235, above.

(4) Accounting separation

1–255 NRAs may require operators that have been designated as possessing SMP to keep separate accounts for each activity, in a format and using a methodology specified by the NRA.[1057] This has two principal purposes. The first is to assist NRAs in setting cost-based tariffs for access and interconnection. The second is to assist them in preventing undue discrimination and unfair cross-subsidisation of different activities. NRAs can request that accounting records are provided, so that they can verify compliance with the transparency and non-discrimination obligations. These records can include details of payments received from third parties. NRAs may publish such accounting information if this will contribute to an open and competitive market, provided that they respect EU and national rules on protecting commercial confidentiality.[1058]

1–256 Combination with other remedies—Accounting separation obligations are, by their nature, not a stand-alone remedy, but are used to support the obligations of transparency and non-discrimination. Accounting separation can also be used to support the implementation of price controls and cost accounting obligations.[1059] Given its complementary nature, the Commission is usually concerned about the non-imposition of an obligation of accounting separation when other remedies are proposed. In two notifications concerning retail fixed telephony, the NRAs concerned proposed only price control obligations, without accompanying this with accounting separation obligations. The Commission considered that, without an accounting separation obligation, it would be difficult for the NRAs concerned to effectively exercise and enforce the price control obligations.[1060] In another notification, the NRA concerned did not propose an accounting separation obligation, despite the risk of cross-subsidies within the vertically integrated company in question. The Commission therefore invited that NRA to impose accounting separation as a separate obligation for the purpose of rendering more visible any possible cross-subsidies.[1061] In addition, the Commission has also suggested that it is appropriate to complement a cost-orientation obligation by also imposing an accounting separation obligation.[1062]

1–257 Extending accounting separation to markets on which the undertaking does not have SMP—When an accounting separation obligation is imposed on an operator that has SMP on one or more markets, this obligation may also cover markets on which the operator does not have SMP.[1063] In the wholesale market for broadband access in the Netherlands, the Dutch NRA found that no undertaking had SMP on the market for low-quality wholesale broadband access and consequently rolled back regulation on that market. Nevertheless, the Commission was concerned with the possibility that KPN (the largest undertaking on that market) could leverage its market power on the low-quality wholesale broadband access market into downstream markets. However, since KPN did not have SMP on this market, the Commission agreed with the Dutch NRA's proposal not to impose any obligation on KPN.[1064] Subsequently, in another notification related to wholesale unbundled access in the Netherlands, the Commission reminded the Dutch NRA of the possibility to extend the scope of the accounting separation proposed for the market for local loop unbundling to cover also the provision of low-quality wholesale broadband access, in order to avoid the possible problem of leveraging in the latter market.[1065]

1–258 Commission Recommendation on accounting separation—The Commission has adopted a Recommendation relating to the implementation of accounting separation and cost accounting systems. According to this Recommendation, NRAs, when imposing an accounting separation obligation, should require undertakings with SMP to provide a profit and loss statement and statement of capital employed for each of the regulatory reporting entities, based on the relevant markets and services. The undertakings must provide detailed information on transfer charges or purchases between markets and services. This financial report can also be consolidated into a profit and loss statement of capital employed for the undertaking concerned as a whole. Furthermore, all these statements should be audited by an independent auditor or the NRA.[1066]

(5) Access to and use of specific network facilities

1–259 It is important that service providers have access to, and for other network operators to be interconnected with, the networks of operators with SMP. In an effectively competitive market, network operators normally have an incentive to grant third parties access and/or interconnection. Nevertheless, in the case of markets with imperfect competition, operators often have the ability and incentive to refuse access and interconnection in order to foreclose other markets. Furthermore, a non-discrimination obligation, together with transparency and accounting separation obligations, only ensures that the SMP operator applies equivalent conditions in equivalent circumstances concerning other undertakings and/or it own services. However, these obligations may not be sufficient to ensure equivalent access conditions in a new economic and technological context. Against this background, NRAs may require operators that have been designated as

[1057] Access Directive, para.1–019, n.66, Art.11. Under Art.13 of the Framework Directive, para.1–019, n.64, accounting separation is also required for organisations which operate public communications networks and/or publicly available electronic communications services and have special or exclusive rights in other sectors: see para.1–240, above.

[1058] *ibid.*, Access Directive, Art.11(2).

[1059] ERG Revised Remedies Paper, para.1–081, n.359, 44.

[1060] Case DE/2006/0402: *Remedies related to access to the public telephone network at a fixed location and publicly available telephone services provided at a fixed location*, Commission Comments of June 14, 2006, 3; and Case LV/2007/0565: *Access to the public telephone network at a fixed location for residential customers in Latvia*, Case LV/2007/0566: *Access to the public telephone network at a fixed location for non-residential customers in Latvia*, Case LV/2007/0567: *Publicly available local and/or national telephone services provided at a fixed location for residential customers in Latvia*, Case LV/2007/0568: *Publicly available international telephone services provided at a fixed location for residential customers in Latvia*, Case LV/2007/0569: *Publicly available local and/or national telephone services provided at a fixed location for non-residential customers in Latvia*, and Case LV/2007/0570: *Publicly available international telephone services provided at a fixed location for non-residential customers in Latvia*, Commission Comments of January 26, 2007, 3–4. See also, Case LV/2009/0994: *Market for access to the public telephone network at a fixed location for residential customers and non-residential customers*, Commission Comments of November 18, 2009, 4–5.

[1061] Cases DE/2005/0233-0235: *Remedies relating to call origination on the public telephone network provided at fixed location, call termination on individual public telephone networks provided at fixed location and transit services in the fixed public telephone network*, Commission Comments of September 14, 2005, 4.

[1062] Case PL/2006/0379: *Voice Call Termination on Individual Mobile Networks*, Commission Comments of May 29, 2006, 4; and ERG Revised Remedies Paper, para.1–081, n.359, 112.

[1063] Accounting Separation Recommendation, para.1–022, n.81, recital 5.

[1064] Case NL/2005/0281: *Wholesale Broadband Access in the Netherlands*, Commission Comments of December 2, 2005, 8–9.

[1065] Case NL/2005/0280: *Wholesale unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services*, Commission Comments of December 2, 2005, 4.

[1066] Accounting Separation Recommendation, para.1–022, n.81, para.4.

possessing SMP to: (i) when requested by third parties, provide access to specified network elements and/or facilities, including access to network elements which are not active, and/or unbundled access to the local loop, to *inter alia* allow carrier selection and/or pre-selection and/or subscriber line resale offers; (ii) negotiate in good faith with undertakings that request access; (iii) not withdraw access to facilities already granted; (iv) provide specified services on a wholesale basis for resale by third parties, including the provision of leased line capacity to other suppliers of electronic communications networks or services; (v) grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual networks; (vi) provide co-location or other forms of sharing of associated facilities;[1067] (vii) provide specified services needed to ensure the interoperability of end-to-end services to users, including facilities for intelligent network services or roaming on mobile networks; (viii) provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services; (ix) interconnect networks or network facilities, and (x) provide access to associated services such as identity, location and presence service.[1068] Access must be provided on a fair, reasonable and timely basis. The purpose of such obligations is to ensure the emergence of competitive markets at the retail level: if operators with SMP were to refuse to give such access, to provide it only on terms and conditions that are unfair or unreasonable, and/or to delay providing it, competing retail suppliers would not be able to enter the market and provide effective competition. This would be to the detriment of end users' interests.

1–260 Combination with other remedies—Although an access obligation can be a stand alone remedy, it is generally imposed together with other remedies. It is, in particular, likely to be accompanied by a transparency obligation, perhaps in the form of a reference offer, as well as a non-discrimination obligation, in circumstances in which vertically integrated operators with SMP are able to leverage their market power from the upstream (wholesale) market to the downstream (retail) market, to that operator's advantage.[1069]

1–261 Transparency and legal certainty—The regulatory measures imposed by NRAs should provide adequate transparency and legal certainty for market players, which is particularly critical for access obligations, for which access to detailed technical information is of vital importance. In several notifications, the Commission has been concerned with the uncertainty related to the proposed access obligations. For example, regarding the notification related to the wholesale broadband access market in Slovakia, the Commission asked the Slovakian NRA to clarify at which level (*e.g.* in the form of IP, ATM and possibly also DSLAM access)[1070] the access obligation

[1067] Art.12 of the Framework Directive, para.1–019, n.64, also imposes certain obligations to share on undertakings, regardless of whether they possess SMP: see paras.1–051 and 1–239, above.

[1068] Access Directive, para.1–019, n.66, Art.12(1).

[1069] See paras.1–247 and 1–252, above. See also Case CZ/2009/0959: *Voice call termination on individual mobile networks*, Commission Comments of September 11, 2009, 4–5.

[1070] In general, there are four levels of bitstream access, which from the lowest to the highest level are: (i) DSLAM access; (ii) ATM access; (iii) managed access at the IP level; and (iv) managed access at the www IP level. The choices of alternative operators to differentiate their services from the undertakings providing access services are increasingly limited the further away access is provided from the end user premises: alternative operators with DSLAM access enjoy the most choice, whilst those gaining access at the www IP level can, in principle, only provide the same services as the undertaking providing bitstream access: see ERG Revised Common Position on wholesale bitstream access, ERG (03) 33rev2 (April 2, 2004 and amended on May 25, 2005), 5.

would be imposed by it.[1071] In another case, the Commission was not satisfied by the German NRA's proposal, as it did not specify exactly where co-location must be provided.[1072]

1–262 Proportionality—The NRA's decision to impose access obligations must be carefully balanced in order, on the one hand, to ensure service-based competition in the short term, and on the other hand, to promote the incentives of competitors to invest in alternative facilities that will secure infrastructure-based competition in the long term.[1073] For this purpose, NRAs must take a number of criteria into account in deciding if specific network facilities must be made available to third parties: (i) the technical and economic viability of using or installing competing facilities, in the light of the rate of market development, taking into account the nature and type of interconnection and/or access involved, including the viability of other upstream access products, such as access to ducts; (ii) the feasibility of providing the access proposed, in relation to the capacity available; (iii) the initial investment by the facility owner, bearing in mind any public investment made and the risks involved in making the investment; (iv) the need to safeguard competition in the long term, with particular attention to economically efficient infrastructure-based competition; (v) where appropriate, any relevant intellectual property rights; and (vi) the provision of pan-European services.[1074] In the context of the review mechanism contained in the Framework Directive, the Commission has provided its observations on the first, second and fourth criteria.

1–263 ***Technical and economic viability***—The most important factor that should be taken into account by the NRAs in deciding upon access remedies is the technical and economic viability of those seeking access using or installing competing facilities. More specifically, NRAs should decide at which point on the investment ladder access should be granted to alternative operators. This factor is in particularly important in relation to the wholesale markets for LLU and broadband access. With regard to wholesale broadband access markets, a vast majority of NRAs have imposed access obligations requiring the provision of bitstream access at the ATM level, in addition to access at the IP level.[1075] Nevertheless, two NRAs, the Czech and Luxembourg NRAs, proposed to impose an access obligation only at the IP level.[1076] The common features of the two markets were that the incumbents had substantial market shares and there was demand for access at a lower level than the IP level. Based on these market circumstances, the Commission suggested that the two NRAs should impose access obligations at a lower level than IP, such as ATM access or DSLAM access, in order to allow alternative operators to be able to differentiate their services as compared to those of the incumbents. Furthermore, the Commission required the two NRAs to analyse the architecture of the incumbents' networks to establish whether the prevailing technical and operational conditions could make the provision of ATM and/or DSLAM access possible. In addition, the fact that an NRA considers a specific technology to be outdated and will therefore

[1071] Case SK/2006/0465: *Wholesale broadband access market in the Slovak Republic*, Commission Comments of August 28, 2006, 3–4.

[1072] Case DE/2007/0646: *Wholesale unbundled access (including shared access) to metallic loops and sub-loops*, Commission Comments of June 25, 2007, 6.

[1073] ERG Revised Remedies Paper, para.1–081, n.359, 45; see also para.1–081 *et seq.*, above.

[1074] Access Directive, para.1–019, n.66, Art.12(2).

[1075] Case CZ/2006/0449: *Wholesale broadband access in the Czech Republic*, Commission Comments of August 11, 2006, 4–5.

[1076] *ibid.* and Case LU/2006/0510: *Wholesale broadband access in Luxembourg*, Commission Comments of October 30, 2006, 3–4.

not attract investment is, in itself, not a sufficient reason for drawing the conclusion that mandating access over that technology would be disproportionate.[1077]

1–264 ***Feasibility in relation to the capacity available***—The imposition of an access obligation should depend on the feasibility of providing the access proposed, in relation to the network capacity available. In relation to the market for broadcasting transmission services, the Estonian NRA proposed an access obligation that would have required the SMP undertaking to give access to all its network elements. However, the Commission found that the SMP undertaking did not provide signal transmission from the studio to the mast by way of leased line services. Therefore, it asked the Estonian NRA to clarify the scope of the access obligation and, in particular, to exclude this service from the scope of the access obligation.[1078]

1–265 ***Safeguarding competition in the long term***—NRAs must also take into consideration the need to safeguard competition in the long term, with particular attention to ensuring economically efficient infrastructure-based competition. In considering the notification related to access and call origination on public mobile telephone networks in Cyprus, the Commission concurred with the Cypriot NRA's proposal not to impose obligations to give access to Mobile Virtual Network Operators (MVNOs), because the entry of MVNOs would have made it more difficult for the only alternative mobile network operator to acquire the necessary customer base to be an effective competitor and to support the further rolling out of its network.[1079] In a separate decision, the Commission suggests that, in order for long-term competition to be promoted, lenient access obligations can be imposed in relation to infrastructure that may potentially be more easily duplicated.[1080]

1–266 **Local loop unbundling**—By its very nature, the local loop[1081] presents all the characteristics of a natural monopoly (*i.e.* an essential facility). New entrants do not have widespread alternative local access infrastructures and are unable, with traditional technologies, to match the economies of scale and scope, and the coverage, of operators that have been designated as having SMP. This is because the operators with SMP are incumbent operators and have rolled out their metallic local access infrastructures over significant periods of time when they were protected by exclusive rights and were able to cross-subsidise their network investment costs through monopoly rents on certain services. Therefore, unbundling of the local loop is important for alternative operators at the initial stage of market opening. After the entry into force of the 2002 Regulatory Framework in 2003, the LLU Regulation[1082] was, as a transitional measure, applicable in parallel to the regulation of operators with SMP under the Framework and Access Directives, with LLU being a remedy that could be imposed on the wholesale markets for access to network infra-

[1077] Case CZ/2006/0449, para.1–263, n.1075, 4–5.

[1078] Case EE/2007/0666: *Broadcasting Transmission Services in Estonia*, Commission Comments of August 17, 2007, 4.

[1079] Case CY/2006/0333: *Access and call origination on public mobile telephone networks* and Case CY/2006/0334: *Voice call termination on individual mobile networks*, Commission Comments of February 2, 2006, 4–5.

[1080] Case PL/2006/0455: *Wholesale broadcasting transmission services in Poland*, Commission Comments of August 17, 2006, 5.

[1081] The local loop is the physical circuit connecting the network termination point to a distribution frame or equivalent facility in the fixed public electronic communications network: Access Directive, para.1–019, n.66, Art.2(e). In the 2002 Access Directive, para.1–019, n.66, Art.2(e), it was defined slightly differently, as the physical circuit connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network.

[1082] LLU Regulation, para.1–013, n.44.

structure.[1083] The NRAs of all Member States have now analysed these markets at least once and imposed access obligations. Therefore, the LLU Regulation has become redundant and was repealed by the Better Regulation Directive.[1084] Furthermore, the significance of the copper wire local loop network is being challenged by NGA networks. Therefore, in the Access Directive, as amended in 2009, the concept of local loop is enlarged to include the physical circuit connecting the network termination point to a distribution frame (rather than a main distribution frame, as in the 2002 Access Directive) or equivalent facility in the fixed public electronic communications network, in order to cover NGA networks.[1085]

1–267 **Access to next generation access networks**—One of the main objectives of the 2009 reforms to the Regulatory Framework is to encourage competition and investment in NGAs.[1086] NGAs[1087] are access networks which consist wholly or in part of optical elements and which are capable of delivering broadband access services with enhanced characteristics (such as higher throughput) as compared to those provided over already existing copper networks.[1088] The Electronic Communications Regulatory Framework is, in principle, applicable to NGAs, pursuant to the underlying principle of technological neutrality.[1089] Nevertheless, the emergence of NGAs may result in practical regulatory challenges in ensuring a level playing field for all competitors. These challenges rest on the fact that the rolling out of NGAs can change the existing structure of the topology[1090] of the current network (*i.e.* the copper networks), which nevertheless serves as a significant factor for the remedies imposed by NRAs.[1091] Therefore, two questions are of particular

[1083] Second Markets Recommendation, para.1–021, n.77, Annex.

[1084] Better Regulation Directive, para.1–019, n.64, recital 74.

[1085] Access Directive, para.1–019, n.66, Art.2(e).

[1086] Commission MEMO/09/513, para.1–083, n.370, point 12. Art.12 of the Framework Directive, para.1–019, n.64, and Art.12 of the Access Directive, para.1–019, n. 66, lay down general principles on access to NGAs. They do not, however, provide specific guidance, which is why the Commission is proposing a recommendation on NGAs. On NGAs and the related principles and rules, see paras.1–051, 1–083 and 1–084, above and para.1–268 *et seq.*, below. On recommendations providing for guidance and harmonisation, see paras.1–021 and 1–125, above. See also, BEREC Report on NGA, para.145, n.178.

[1087] The development of NGA networks is relevant not only to the Access Directive, but also to the EU's state aid rules, as many NGA networks have received or will receive funding from public sources: see para.6–106 *et seq.*, below.

[1088] Second Draft NGA Recommendation, para.1–051, n.194, para.2. Attention may be paid to another related concept, next generation network ("NGN"), which covers the modernisation of the "core" part of the network (*i.e.* moving to an all-IP architecture), and the "access" part of the network (*i.e.* rolling out optical fibre all or part of the way to customers' premises): Explanatory Note to the Second Relevant Markets Recommendation, para.1–221 n.929, 16. This second draft led to comments from many interested parties during the public consultation in 2009, which are available at: *http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/nga_2/index_en.htm#responses*. It is therefore likely that, taking into account the comments received, the Commission will publish a third draft during 2010.

[1089] See para.1–068, above. The Court of Justice has held that a "regulatory holiday" granted to Deutsche Telekom when installing new street cabinets with VDSL DSLAMs, which was implemented by Germany by amending its Telecommunications Law to state that emerging markets should in principle not be subject to regulation, was not consistent with Germany's obligations under the Regulatory Framework, which clearly establishes that emerging markets should in principle be regulated: *Commission v Germany*, para.1–063, n.258, paras.64 and 73; see also para.1–074, n.321, para.1–083, n.371 and para.1–221, n.927, above and para.4–021 *et seq.*, below.

[1090] For example, the current LLU obligation can be granted at the MDF level. Nevertheless, the MDF will disappear within the deployment of fibre networks.

[1091] This suggests that the principle of technological neutrality is not always respected consistently in the regulation of the electronic communications sector.

relevance: (i) whether the existing obligations based on the copper networks can be immediately and seamlessly applicable to the emergence of NGAs;[1092] and (ii) how access remedies can be designed to encourage both efficient investment in NGAs and effective competition at the same time.[1093] Furthermore, regulation of NGAs should be mainly based on the SMP regime, *i.e.* the imposition of remedies should be dependent on the designation of SMP.[1094] According to the SMP regime, the imposition of regulatory obligations is conditioned on the identification of distinct markets that involve specific regulatory concerns. Therefore, it is particularly important to first consider on which markets the rolling out of NGAs is relevant and then to assess whether changes should be made to the regulatory remedies that are in place. Two obvious candidate markets are the markets for wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location (Market 4) and wholesale broadband access (Market 5).[1095] In addition, attention should be paid to the different architectures that are, or will be, used to build NGAs, *i.e.* the different extent to which NGAs will wholly or in part replace the existing metallic local loops. The regulatory implications of these different architectures are also different. Two basic types of architectures are identified for this purpose, *i.e.* FTTN and FTTH.[1096]

1–268 Wholesale (physical) network infrastructure access (Market 4)—Being defined as wholesale access to network infrastructure, Market 4 foresees NGA networks.[1097] In principle, the existing access obligations imposed in relation to Market 4 should also be extended to an operator with SMP on Market 4 that deploys and operates an NGA network. Nevertheless, the deployment of NGAs does require changes to the current LLU remedies, which are based on the copper networks.

1–269 ***Access to civil engineering infrastructure***—The civil engineering infrastructure comprises the physical local loop facilities deployed by an electronic communications operator to host local loop cables, such as copper wires, optical fibre and co-axial cables. It typically refers, but is not limited, to subterranean or above-ground assets, such as sub-ducts, ducts,[1098] manholes[1099] and poles. It may be significant for alternative operators to roll out parallel NGA networks. NRAs should assess the availability of the SMP operator's civil engineering infrastructure for the purpose of allowing alternative operators to deploy their own NGA networks.[1100] Nevertheless, since the

[1092] Second Draft NGA Recommendation, para.1–051, n.194, recital 7.
[1093] *ibid.*, recital 1.
[1094] Art.5 of the Access Directive, para.1–019, n.66, gives NRAs power to impose obligations of access and interconnection even upon undertakings without SMP and can also play an important role in regulating NGA networks, as it is applicable to NGAs, since its application is not dependent on technologies at all: see para.1–273, below.
[1095] Second Markets Recommendations, para.1–021, n.77. In addition, NGAs can also affect the retail market for access to the public telephone network at a fixed location for residential and non-residential customers: see ERG Opinion on Regulatory Principles of NGA, ERG (07) 16rev2, 29–31 ("ERG Opinion on NGA"). See also para.4–032, below.
[1096] In order to make access obligations concerning NGAs effective, other complementary obligations may be also necessary, such as transparency and price control obligations: see para.1–250, above and para.1–280, below.
[1097] Explanatory Note to the Second Relevant Markets Recommendation, para.1–221, n.929, 31–35.
[1098] A duct is an underground pipe or conduit used to house (fibre, copper or coaxial) cables of either core or access networks: Second Draft NGA Recommendation, para.1–051, n.194, para.2.
[1099] A manhole is a hole, usually with a cover, through which a person may enter an underground utility vault used to house an access point for making cross-connections or performing maintenance on underground electronic communications cables: *ibid.*
[1100] *ibid.*, para.9.

costs of deploying parallel fibre access networks are very high, it is appropriate for the NRAs to consider the views of all market players and assess the market demand for such access before mandating it.[1101] NRAs can use their powers under Article 5 of the Framework Directive to obtain all relevant information. If market demand exists, NRAs should mandate access to civil engineering infrastructure.[1102] In addition, NRAs should encourage, or, where legally possible under national law, oblige the SMP operator, when building its civil engineering infrastructure, to install sufficient capacity for other operators to make use of these facilities.[1103]

1–270 ***Access to FTTN***—Since FTTN replaces only part of the existing network and maintains the copper lines from the node to subscriber's premises, copper network-based LLU is not obsolete.[1104] Nevertheless, new possible barriers that are created by NGAs, in particular related to co-location and backhaul services,[1105] imply necessary changes to the regulatory regime for alternative competitors.[1106] Therefore, the Commission requires NRAs to assess the potential demand from operators seeking unbundled access to the copper sub-loop as well as the SMP operator's costs in providing such access, including street cabinet co-location.[1107] Having done so, NRAs should impose an obligation to meet reasonable requests for unbundled access to the copper sub-loop.[1108] Where necessary, obligations to provide backhaul services and ancillary measures should also be imposed.[1109]

1–271 ***Access to FTTH***—FTTH is more complex than FTTN, since it involves a complete replacement of the copper network with a new fibre network.[1110] The ERG has established two scenarios for FTTH: point-to-point FTTH (*i.e.* each subscriber is provided with a dedicated optical fibre) and point-to-multipoint FTTH (*i.e.* a group of subscribers share one optical fibre through passive splitters).[1111] A point-to-point FTTH network could be unbundled, since there is a dedicated single optical fibre per end user, which is similar to the system used for the copper local loop.[1112] However, a point-to-multipoint FTTH network could not be easily unbundled, because of the absence of a dedicated link to each end user.[1113] In view of this problem, the most significant change suggested by the Commission is that NRAs should encourage, or, where legally possible under national law, oblige operators with SMP to deploy multiple fibre lines in the terminating segment.[1114] The installation of multiple fibre lines means that the network operator will deploy more fibre lines than are needed for its own purpose in both the feeder and the drop segments of

[1101] *ibid.*, recital 11.
[1102] *ibid.*, para.11.
[1103] *ibid.*, para.14.
[1104] ERG Opinion on NGA, para.1–267, n.1095, 31.
[1105] Backhaul services refer to duct access, dark fibre, wavelength division multiplexing services and managed capacity (Ethernet (L2/L3), SDH): see ERG Report on Next Generation Access—Economic Analysis and Regulatory Principles, ERG (09) (June 17, 2009), 13.
[1106] Street cabinets represent a barrier to entry because of their scarcity as a place for co-location. Once co-location is possible, alternative operators still need a backhaul link to connect their equipment from the place of co-location to their own transmission networks. However, sometimes it is not economically viable for access seekers to self-provide the backhaul link: see ERG Opinion on NGA, para 1–267, n.1095, 34–37.
[1107] Second Draft NGA Recommendation, para.1–051, n.194, para.28.
[1108] *ibid.*, para.29.
[1109] *ibid.*, para.30.
[1110] ERG Opinion on NGA, para 1–267, n.1095, 10.
[1111] *ibid.*, 11.
[1112] *ibid.*, 42.
[1113] *ibid.*, 43.
[1114] Second Draft NGA Recommendation, para.1–051, n.194, para.18. The terminating segment is the

the access network.[1115] Although this costs more than single fibre networks, multiple fibre lines allow each alternative operator to control its own connection up to the end user and are conducive to the development of long-term sustainable competition.[1116] Since multiple fibre lines result in extra (and unused) fibre lines, unbundling of the FTTH loop is technically possible, regardless of whether it is a point-to-point or a point-to-multipoint FTTH, *i.e.* this is technologically neutral. Accordingly, NRAs can impose obligations to unbundle access to the fibre loop and also other accompanying measures, such as the provision of co-location and backhaul. The Commission stresses that access should be given at the most appropriate point in the network, which is normally the Metropolitan Point of Presence ("MPoP").[1117] Furthermore, NRAs should also mandate access to the terminating segment of the SMP operator's access network, including wiring inside buildings, taking into account the fact that any distribution point[1118] will need to host a sufficient number of end user connections to be commercially viable for the access seekers.[1119]

1–272 ***Wholesale broadband access (Market 5)*** — Market 5 is defined to include all kinds of bitstream services, without regard to the technologies employed.[1120] Accordingly, remedies imposed on operators with SMP in Market 5 should, in principle, be maintained also for FTTN and FTTH networks.[1121] The Commission underlines that wholesale broadband access over VDSL should be considered as a chain substitute to existing wholesale broadband access over copper loops. Nevertheless, if there are clear indications of a break in the chain of substitution, services provided over NGA networks should not be considered as incremental upgrades, but as a new market, and therefore existing access obligations would cease to be applicable. In such cases, inappropriate wholesale obligations should not be imposed.[1122] Furthermore, NRAs should not normally impose an obligation to provide wholesale bitstream access where there is effective access to the unbundled fibre loop of the SMP operator's network and access is likely to result in effective competition on the downstream market. [1123] Attention should be paid to the priority that the

segment of an NGA network which connects an end user's premises to the first distribution point: *ibid.*, para.2.

[1115] ERG Opinion on NGA, para.1–267, n.1095, para.2.

[1116] Second Draft NGA Recommendation, para.1–051, n.194, recital 19.

[1117] *ibid.*, paras.19–20. An MPoP is the point of interconnection between the access and core networks of an NGA network operator. It is equivalent to the Main Distribution Frame ("MDF") in the case of the copper access network. All NGA subscribers' connections in a given area (usually a town or part of a town) are centralised to the MPoP on an Optical Distribution Frame ("ODF"). From the ODF, NGA loops are connected to the core network equipment of the NGA network operator or of other operators, possibly via intermediate backhaul links where equipment is not co-located at the MPoP: *ibid.*, para.2.

[1118] A distribution point is an intermediary node in an NGA network from where one or several fibre cables coming from the MPoP (the feeder segment) are split and distributed to connect to end users' premises (the terminating or drop segment). A distribution point generally serves several buildings or houses. It can be located either at the base of a building (in case of multi-dwelling units), or in the street. A distribution point hosts a distribution frame mutualising the drop cables, and possibly un-powered equipment such as optical splitters. See *ibid.*, para.2.

[1119] *ibid.*, para.15.

[1120] ERG Opinion on NGA, para.1–267, n.1095, 32–33.

[1121] Second Draft NGA Recommendation, para.1–051, n.194, para.32.

[1122] Explanatory Note to the Second Relevant Markets Recommendation, para.1–221, n.929, 17–18.

[1123] Second Draft NGA Recommendation, para.1–051, n.194, para.41. In circumstances where unbundled access to local loop or sub-loop is not technically or economically feasible, NRAs may have recourse to obligations for the provision of non-physical or virtual network access: Better Regulation Directive, para.1–019, n.64, recital 60.

Regulatory Framework gives to the obligation to provide local loop unbundling, rather than to the obligation to provide bitstream access.

1–273 Although the Commission has not yet finalised its third draft recommendation on NGA, some NRAs have already started to develop their own approaches to regulating NGA networks. For example, the Belgian NRA has extended the remedies imposed in the wholesale broadband access market to VDSL; the Dutch NRA has regulated fibre connections in the markets for wholesale physical infrastructure access and wholesale broadband access; and the Spanish NRA, in addition to the obligation of the incumbent SMP operator to provide access to its passive infrastructure, has imposed an obligation to provide bitstream access to the SMP operator's fibre network for speeds of up to 30 Mbit/s.[1124] Furthermore, the French NRA, ARCEP, has imposed symmetric access regulation on all operators of fibre networks, irrespective of whether they have SMP, which has been approved by the Commission.[1125] This is the first time that the Commission has approved symmetric regulation of access to NGA networks and may be an indication of the Commission's future approach to the regulation of access to NGA networks. In its proposal (made on the basis of Article 12 of the 2002 Framework Directive, in conjunction with Article 5 of the 2002 Access Directive, which the Commission considered as the appropriate basis[1126]), ARCEP differentiated between access obligations applicable only in the "very dense" areas, where it would be economically viable for several operators to roll out their own fibre networks, and those applicable in the rest of France. In areas other than the "very dense" areas, any in-building operator, which has rolled out, or foresees rolling-out, in-building fibre lines must meet reasonable requests for passive access to its fibre lines and associated facilities at a local connection point, as well as the appropriate maintenance and management services. If an operator obtains authorisation to equip a building with optical fibre, it must inform all other operators of the details regarding the relevant building within the relevant time period. By contrast, in the "very dense" areas, operators are obliged both to install an additional fibre if another operator agrees to share the total installation cost and to guarantee the installation of a distribution panel inside or in the proximity of the local connection point. These provisions will allow other operators to choose either a point-to-point or a point-to-multipoint network architecture. Access pricing must be established in line with the principles of non-discrimination, objectivity, relevance and efficiency of investment. These obligations are applicable to all operators of in-building fibre, regardless of their market power. The Commission has invited ARCEP to monitor carefully the development of investment and competition in NGA networks in France; in particular, if NGA-based infrastructure competition does not develop as envisaged, ARCEP may need to consider asymmetric forms of access to fibre infrastructure.

1–274 **Carrier selection and carrier pre-selection**—In a multi-operator environment, users must be able to access the operators of their choice simply and cheaply, even where this operator does not provide a direct line into the users' premises. This is particularly important given the limited competition in the provision of local loop access networks. As a result, NRAs are required to

[1124] Accompanying Document to the 14th Implementation Report, para.1–033, n.134, Volume 1, Part 2, 37.

[1125] Case FR/2009/0993: *Terms and conditions for access to fibre optic electronic communication lines and location of the local connection point*, Commission Comments of November 5, 2009.

[1126] Under the amended Regulatory Framework this issue could be dealt with under Art.12 of the Framework Directive, para.1–019, n.64: see para.1–051, para.1–239 and para.1–259, n.1067, above.

impose call-by-call carrier selection[1127] and carrier pre-selection[1128] obligations on operators of public electronic communications networks that have SMP.[1129] These two obligations, coupled with appropriate remedies at the wholesale level, are key to reducing entry barriers and thus enhancing competition in the markets for telephone calls from fixed locations. Nevertheless, the Commission considers that these two obligations alone cannot resolve competition problems in the access markets for fixed telephony. Accordingly, it has asked NRAs to impose additional remedies, taking into account that the wholesale remedies, such as LLU, may not be effective immediately.[1130] Carrier selection and carrier pre-selection obligations apply equally to operators of fixed networks and to mobile operators. NRAs must ensure that the pricing of the interconnection services needed for the provision of carrier pre-selection facilities is cost-orientated and that direct charges to consumers, if any, do not act as a disincentive to the use of carrier selection and preselection services.

(6) Price controls and cost accounting

1–275 Introduction—In an effectively competitive market, price control obligations are not necessary, since undertakings can, in principle, negotiate in good faith and on a commercial basis their access and interconnection agreements. Under this situation, even if commercial negotiations fail, undertakings may resort to a dispute settlement mechanism or other *ex post* measures, *e.g.* competition law,[1131] in particular Article 102 of the TFEU. Under Article 102, excessive or below-cost pricing may constitute an abuse of a dominant position. However, past experience of the application of competition law has shown that it is not straightforward to apply Article 102 to excessive pricing in the electronic communications markets, in particular to determine whether a price is excessive and unfair, *i.e.* excessive in relation to the economic value of the service provided.[1132] For these reasons there has been relatively little examination of excessive prices on the part of the Commission, and the European Courts' case law is not particularly developed or clear.[1133] Therefore, given the historic dominance of incumbent operators in the provision of public electronic communications networks and services and the inability of new entrants to challenge such a position in the short term, when the EU's electronic communications markets were

[1127] Call-by-call carrier selection is an easy-access method of carrier selection, whereby the default carrier is the local access provider, but the customer may choose another operator for a specific long distance or international call by dialling a prefix.

[1128] Carrier pre-selection is an equal access method for carrier selection that allows the customer to select its own default carrier for long distance and international services, while retaining the option of selecting a different provider on a call-by-call basis.

[1129] Access Directive, para.1–019, n.66, Art.12(1)(a). Within the 2002 Regulatory Framework, the legal basis for carrier selection and carrier pre-selection was the 2002 Universal Service Directive, para.1–019, n.67, Art.19.

[1130] Case EE/2007/0635: *Publicly available local and/or national telephone services provided at a fixed location for residential customers in Estonia* and Case EE/2007/0636: *Publicly available local and/or national telephone services provided at a fixed location for non-residential customers in Estonia*, Commission Comments of June 14, 2007, 3–4.

[1131] Case AT/2004/0099: *Voice call termination on individual mobile networks*, Commission Comments of October 7, 2004, 3–4.

[1132] Case 26/75, *General Motors v Commission* [1975] E.C.R. 1367; *United Brands v Commission* para.1–223, n.935, and Case 226/84, *British Leyland v Commission* [1986] E.C.R. 3263. See generally, para.5–062, *et seq.*, below.

[1133] See para.5–062 *et seq.*, below.

liberalised, it was recognised that specific *ex ante* regulatory measures were needed, in addition to the application of competition law, to ensure the development and protection of dynamic competition. In particular, *ex ante* price control obligations could be imposed where competition on a market, or the application of competition law, was limited and insufficient to prevent excessive pricing or price squeezes.[1134] Nevertheless, imposing appropriate *ex ante* price regulation within the regulatory regime is not easy: whilst the imposition of price controls on incumbents guarantees that consumer prices are kept low, regulation that is too stringent may make it difficult for new entrants to compete effectively with the incumbent, and may therefore endanger the development of infrastructure competition in the longer term.[1135]

1–276 Circumstances in which price controls and cost accounting obligations may be imposed—The Access Directive permits NRAs to impose price controls upon SMP undertakings, including obligations that prices be cost-oriented and obligations concerning the use of cost accounting systems for the provision of interconnection and/or access.[1136] The conditions under which NRAs can impose such obligations are, however, a matter of national law, provided that applicable provisions of EU law, including the legislation comprising the Electronic Communications Regulatory Framework, are respected. Nevertheless, the Commission recommends that the following factors may be taken into account by NRAs in deciding whether to impose price-related obligations: (i) high market shares,[1137] which show that the SMP undertaking faces limited competition and therefore is able to engage in excessive pricing or price squeezes; (ii) limited infrastructure competition, which obliges new entrants to rely on the SMP undertaking's infrastructure;[1138] (iii) high prices compared with the EU average, which gives scope for price squeezes and/or excessive pricing;[1139] (iv) a history of past anti-competitive behaviour and/or the initiation of other national procedures against anti-competitive behaviour;[1140] and (v) lack of countervailing buying power.[1141] In addition, the mere fact that no complaints have been made concerning high prices (or margin squeezes) on the relevant markets does not of itself mean that these practices are not occurring.[1142]

1–277 International benchmarking—The Access Directive does not specify which cost recovery mechanism or pricing methodology should be used to implement price controls. NRAs may,

[1134] Case MT/2006/0373: *Minimum set of leased lines in Malta*, Case MT/2006/0374: *Wholesale terminating segments of leased lines in Malta* and Case MT/2006/0375: *Wholesale trunk segments of leased lines in Malta*, Commission Comments of May 19, 2006, 7.

[1135] *ibid.*

[1136] Access Directive, para.1–019, n.66, Art.13(1).

[1137] Case EE/2007/0637: *Access to the public telephone network at a fixed location for residential customers in Estonia* and Case EE/2007/0638: *Access to the public telephone network at a fixed location for non-residential customers in Estonia*, Commission Comments of June 14, 2007, 3–4; Case DE/2006/0402, para.1–256, n.1060, 3; and Case DE/2007/0619: *Remedies relating to the market for the minimum set of leased lines in Germany*, Commission Comments of May 3, 2007, 3.

[1138] Case SI/2005/0274: *Transit services in the fixed public telephone network (wholesale market) in Slovenia*, Commission Comments of November 25, 2005, 4.

[1139] Case FI/2006/0547: *Wholesale unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services in Finland* and Case FI/2006/0548: *Wholesale broadband access in Finland*, Commission Comments of December 22, 2006, 5.

[1140] Case DE/2006/0457: *Remedies relating to the Market for IP bitstream access with handover at IP level at different places in the network hierarchy, including HFC broadband access with handover at IP level*, Commission Comments of August 21, 2006, 5; Case AT/2004/0099, para.1–275, n.1131; and Case FI/2006/0547, para.1–276, n.1139.

[1141] Case AT/2004/0099, para.1–275, n.1131.

[1142] Case SI/2005/0274, para.1–276, n.1138, 4.

therefore, impose any cost recovery mechanism, provided that it serves to promote efficiency and sustainable competition and maximise consumer benefits, so fulfilling the objectives of the Regulatory Framework.[1143] Nevertheless, the Access Directive suggests that NRAs take into account prices in comparable competitive markets in other Member States.[1144] Since the entry into force of the 2002 Regulatory Framework in 2003, a number of national practices to regulate prices have been implemented based on international benchmarking. In this regard, the most important issue is to identify and implement an appropriate international benchmark. The Commission, within the mechanism of the notification procedure laid down by the Framework Directive, has requested NRAs to select carefully the most appropriate countries of reference on the basis of objective criteria, and to clearly justify the reasons why they believe that the relevant market(s) in those countries are most suited for such a comparison.[1145] Price controls based on international benchmarks were particularly used in regulating mobile termination rates, as a harmonised approach for setting termination rates was not then available. With regard to the provision of mobile call termination, the Commission has considered that prices in other Member States are an appropriate basis for comparison only if they have been set on the basis of an appropriate cost accounting model and relevant cost accounting data, so that the prices are cost-oriented. In addition, NRAs should also take into account differences in the nature of competition between the conditions prevailing on the relevant market(s) in the Member States used for comparisons and their home market.[1146] Nevertheless, the use of benchmarking alone cannot be a substitute for the use of a cost methodology, although it may still form part of an NRA's overall analysis as to whether an operator's tariffs are cost-oriented and reasonable. Furthermore, the Commission recently seems to prefer NRAs employing cost accounting or cost orientation, rather than relying on international benchmarks.

1–278 Cost orientation—In order to check an operator's compliance with its cost orientation obligations, NRAs are entitled to require the operator to justify its prices. The operator must prove that its charges are derived from its actual costs, including a reasonable rate of return.[1147] The NRA may, however, use an accounting method that is different from the one used by the operator concerned in verifying this and in calculating the cost of the provision of access and interconnection services by an efficient operator.[1148] Nevertheless, this method does not prohibit operators from increasing their prices, provided that the increased prices are derived from and based on fully justified and relevant costs. This is the case, in particular, if there is reliable evidence from cost accounting analysis as approved by the relevant NRA that the proposed price would be below the efficient costs of the underlying network elements and the services being requested including a reasonable rate of return.[1149] Two other Commission comments are relevant in respect

[1143] Access Directive, para.1–019, n.66, Art.13(2).
[1144] *ibid.*
[1145] Case DK/2005/0204: *Wholesale Voice Call Termination on Individual Mobile Networks in Denmark*, Commission Comments of August 12, 2005, 3; and Case EE/2009/0883: *Voice call termination on individual mobile networks in Estonia*, Commission Comments of March 13, 2009, 4.
[1146] Case LU/2005/0321: *Voice call termination on individual mobile networks in Luxembourg*, Commission Comments of January 13, 2006, 4; Case MT/2008/0790: *Voice call termination on individual mobile networks in Malta*, Commission Comments of August 27, 2008, 3; and Case MT/2009/0926: *Voice call termination on individual mobile networks in Malta*, Commission Comments of June 26, 2009, 4.
[1147] Access Directive, para.1–019, n.66, Art.13(3).
[1148] *ibid.*
[1149] Case SK/2006/0386: *Wholesale terminating segments of leased lines in Slovakia*, Commission Comments of June 2, 2006, 3–4.

of the application of the principle of cost orientation. First, the Commission does not support using a "retail minus" methodology to regulate wholesale prices in cases where the prices in the related retail markets are well above the EU average[1150] or the prices in neighbouring Member States,[1151] as to do so would result in a regulated wholesale price that exceeds costs. In such cases, the Commission recommends a cost orientation obligation, which ensures both equality in the conditions of competition between alternative operators and fair prices for consumers.[1152] Second, in some cases, NRAs have claimed that cost orientation could only be achieved over time, following a transitional period. Whilst the Commission has, in principle, not objected to this approach, it has stressed that the transitional period must not be unreasonably long.[1153] For example, in commenting on the notification related to the wholesale market for analogue broadcasting transmission services in Lithuania, the Commission observed that the proposed transitional period of four years was overly long, taking into account the time normally required for an undertaking of the size of the SMP undertaking in question to develop such a cost accounting model, *i.e.* from six to 12 months.[1154]

1–279 ***Cost orientation regarding leased lines***—The Commission has adopted a Recommendation on imposing cost orientation obligations upon providers of leased line part circuits,[1155] in order to protect new entrants. NRAs should ensure that the prices concerned reflect only the cost of the underlying network elements and the services being requested, plus a reasonable rate of return. In particular, the tariff structure may include one-off connection prices and monthly prices. This Recommendation introduces pricing ceilings for different leased line part circuits, according to bandwidth and distance.[1156] Nevertheless, NRAs can deviate from these pricing ceilings if it can be shown that this would result in a price level below the efficient costs of the underlying network elements and the services being requested, including a reasonable rate of return.[1157]

1–280 ***Cost orientation of NGA networks***—The Commission's draft Recommendation on NGAs proposes that access obligations for NGA should be accompanied by cost orientation obligations, in respect of the following obligations: (i) access to civil engineering infrastructure;[1158] (ii) access to terminating segments;[1159] (iii) access to unbundled fibre loops, in the case of

[1150] Case LU/2006/0526: *Access to the public telephone network at a fixed location for residential customers in Luxembourg* and Case LU/2006/0527: *Access to the public telephone network at a fixed location for non-residential customers in Luxembourg*, Commission Comments of December 5, 2006, 4.
[1151] Case LU/2006/0510, para.1–263, n.1076, 3–4.
[1152] *ibid.*
[1153] Case PL/2008/0855: *Wholesale voice call termination on the individual mobile network of full virtual mobile network operator Cyfrowy Polsat in Poland*, Commission Comments of December 23, 2008, 3–4; and Case PL/2006/0379, para.1–256, n.1062, 4.
[1154] Case LT/2006/0376: *Wholesale broadcasting transmission services in Latvia*, Commission Comments of June 23, 2006, 5.
[1155] A leased line part circuit is a dedicated link between the customer's premises and the point of interconnection of the other authorised operator at (or close to) the network node of the notified operator, and should be regarded as a particular type of a wholesale leased line which can be used by the other authorised operator to provide services to retail users, other operators or for its own use such as, but not limited to, leased lines, connections to the switched telephone network, data services or broadband access: Commission Recommendation of March 29, 2005 on the provision of leased lines in the European Union—Part 2—pricing aspects of wholesale leased lines part circuits, O.J. 2005 L83/52, para.1(a).
[1156] *ibid.*, Annex.
[1157] *ibid.*, para.2.
[1158] Second Draft NGA Recommendation, para.1–051, n.194, para.12.
[1159] *ibid.*, para.17.

FTTH;[1160] (iv) access to unbundled copper sub-loops, in the case of FTTN;[1161] and (v) wholesale broadband access.[1162] Exceptions are proposed for SMP operators that provide unbundled fibre loops (in the case of FTTH) and wholesale broadband access in the following two scenarios: (i) NRAs should not impose cost orientation obligations if the SMP operator has deployed an FTTH network based on multiple fibre lines and has granted effective and fully equivalent access to at least one independent alternative provider of electronic communications services competing on the downstream market;[1163] and (ii) NRAs should not impose cost-orientation obligations if the SMP operator has, jointly with at least one other provider of electronic communications services competing on the downstream market deployed, an FTTH network based on multiple fibre lines.[1164] However, this does not mean that, in such circumstances, the SMP operator can adopt anti-competitive prices, in particular through a margin squeeze. NRAs should, at the request of access seekers or on their own initiative, verify the SMP operator's pricing behaviour by applying a properly specified margin squeeze test. This test should ensure that the prices set by the SMP operator allow a sufficient margin that will support the market entry of an efficient competitor.[1165] In addition, in the case of coordinated anti-competitive behaviour between providers of electronic communications services having access to or joint control of an FTTH network based on multiple fibre lines, NRAs should impose cost-oriented access obligations.[1166]

1–281 Cost accounting—A cost accounting obligation aims to ensure that an operator's costs are allocated to services in accordance with fair, objective and transparent criteria if it is subject to price control or cost-oriented prices obligations.[1167] Under the Access Directive, NRAs are entitled to choose different methods of cost accounting, but must publish a description that shows the main categories under which costs are grouped and the rules to be used for the allocation of costs. Furthermore, undertakings must publish an annual statement confirming their compliance with the cost accounting obligations, which must be verified by an independent qualified body.[1168] The Commission's Recommendation on Accounting Separation and Cost Accounting imposes other requirements on NRAs concerning the cost accounting obligations. When assessing the features and specifications of a cost accounting system, NRAs should review the capability of that system to analyse and present cost data in a way that supports regulatory objectives. In particular, the system should be capable of differentiating direct costs[1169] from indirect costs,[1170] and only take into account direct costs. If an NRA adopts a cost accounting system based on current costs, it should

[1160] *ibid.*, para.22.
[1161] *ibid.*, para.31.
[1162] *ibid.*, para.36.
[1163] *ibid.*, paras.23 and 37.
[1164] *ibid.*, paras.24 and 38.
[1165] *ibid.*, para.25 and 39.
[1166] *ibid.*, para.27.
[1167] Accounting Separation Recommendation, para.1–022, n.81, para.1(2).
[1168] Access Directive, para.1–019, n.66, Art.13(4).
[1169] Direct costs are those costs wholly and unambiguously incurred against specified activities. Accounting Separation Recommendation, para.1–022, n.81, para.3(1). For example, the relevant costs for the purposes of calculating cost-based charges for wholesale interconnection services should be the costs which are directly incurred in the provision of those services. Nevertheless, personnel and indirect investment costs may not necessarily be directly incurred in the provision of wholesale interconnection and wholesale voice call termination services: Case AT/2009/0909: *Dispute settlement related to call origination, transit and call termination on public telephone networks provided at a fixed location*, Commission Comments of May 20, 2009, 4.
[1170] Indirect costs are those costs that require apportionment using a fair and objective attribution methodology: *ibid.*

set clear deadlines and a base year for the undertaking concerned to implement this new system. When implementing a current cost accounting methodology, emphasis should be placed on the valuation of network assets (on a forward-looking or current basis) of an efficient operator, which is done by estimating the costs of equivalent operators if the market were to be effectively competitive. This requires the depreciation charges included in the operating costs to be calculated on the basis of the current valuation of the modern equivalent assets. Reporting on the capital employed also needs to be on a current cost basis. The valuation of network assets at their forward-looking or current value may be complemented by the use of a cost accounting methodology such as long-run incremental costs ("LRIC").[1171] In addition, NRAs should pay adequate attention to price and competition issues, in particular in case of LLU. Further adjustments to the financial information should also be made when using cost data to inform pricing decisions, since the use of cost accounting systems may not fully reflect efficiently incurred or relevant costs; factors that may be taken into account include an evaluation of different network topologies and architectures, depreciation techniques and/or the technology used or planned for use in the network.[1172]

1–282 Fixed and mobile termination rates—The Commission has adopted a Recommendation on harmonising the approach to regulating fixed or mobile termination rates. The fundamental principle of this recommendation is that the NRAs should link termination rates with the costs incurred by an efficient operator.[1173] The evaluation of costs of an efficient operator should be based on its current costs (rather than historical costs) and be calculated according to a bottom-up modelling approach using LRIC. Otherwise, the calculation would risk considerably overestimating the costs of the efficient operator, since operators which are compensated through the regulated wholesale tariffs on the basis of their actual costs incurred may have fewer incentives to increase efficiency and any resulting inefficiencies may then be passed on to final consumers through higher retail prices.[1174] When evaluating incremental costs, NRAs should identify the difference between the total long-run costs of an operator providing its full range of services and the total long-run costs of this operator in the absence of providing wholesale call termination services to third parties. A distinction should also be made between traffic-related costs and non-traffic-related costs. The allocation of non-traffic-related costs to the provision of termination services would not provide the correct cost signal to operators to increase efficiency and could lead to competitive distortions resulting from above-cost termination rates. Therefore, only traffic-related costs should be taken into account for the purpose of calculating termination rates.[1175] In

[1171] Long-Run Incremental Costs: see para.1–282, below.
[1172] Accounting Separation Recommendation, para.1–022, n.81, para.3
[1173] Termination Rates Recommendation, para.1–022, n.81, para.1. See, *e.g.* Case PL/2009/0904: *Voice call termination on individual mobile networks in Poland*, Commission Comments of May 15, 2009, 4. The ERG has prepared a draft common position, which would propose a new method, namely "Bill & Keep", as the most promising call termination regime in the long term. Under this regime, termination rates would be set to zero and each network operator would bear its own termination costs: see ERG, Draft Common Position on Next Generation Networks Future Charging Mechanism/Long Term Termination Issues, ERG(09)34 (October 2009).
[1174] Case SK/2009/0902: *Market for voice call termination on individual mobile networks in Slovakia*, Commission Comments of April 24, 2009, 4.
[1175] Traffic-related costs are all those fixed and variable costs which rise with increased levels of traffic: Termination Rates Recommendation, para.1–022, n.81, para.5(b). Non-traffic costs which would not be avoided if the wholesale call termination service was no longer provided, *e.g.* certain marketing costs, costs relating to the provision of data services, wholesale fees paid for the usage of third party networks or non-traffic related spectrum costs, should not be attributed to wholesale call termination services: see Case NL/

addition to costs, economies of scale are another important factor for an efficient operator and the following principles should be taken into consideration in determining an appropriate minimum efficient scale for the efficient operator: (i) whilst the Commission does not indicate a minimum market share for fixed network operators, it is recommended that NRAs should take into account that fixed networks operators should have the opportunity to build their networks in particular geographic areas and to focus on high-density routes and/or acquire relevant network inputs from the incumbent; (ii) for mobile operators, the Commission suggests setting the minimum efficient scale at a 20 per cent market share, unless an NRA can prove that market conditions would imply a different minimum efficient scale.[1176]

1–283 ***Asymmetric termination rates***—The above approaches imply that termination rates should, in principle, be symmetric. Nevertheless, the Electronic Communications Regulatory Framework does not prevent the imposition of asymmetric termination rates upon operators active on the same relevant market.[1177] However, the Commission has indicated that any deviation from the symmetric approach should be justified by objective cost differences between the operators concerned that are outside of their control. Objective cost differences may include uneven spectrum assignments,[1178] different network topologies (due to the use of specific frequency bands) and substantial differences in the dates of market entry, each of which could justify higher termination rates for some operators for a reasonable transition period.[1179] Furthermore, asymmetric termination rates should be imposed only for a limited transition period, at the end of which symmetric rates should be imposed. The persistent use of asymmetric termination rates would not be justified after a period that is long enough for the operator to adapt to market conditions and become efficient, since it could even discourage smaller operators from seeking to expand their market shares through investment and competition.[1180] Therefore, for a new mobile operator that is operating at below the minimum efficient scale, the imposition of asymmetric termination rates may be justified for a limited transitional period, which should not exceed four years after its market entry.[1181]

(7) Functional separation

1–284 **Introduction**—Functional separation was formally introduced into the Regulatory

2009/0978: *Wholesale price caps for telephony services, interconnecting leased lines (ILL), MDF access and co-location services in the Netherlands*, Commission Comments of November 4, 2009, 4; and Case SK/2009/0955: *Remedies relating to the market for voice call termination on individual mobile networks*, Commission Comments of September 4, 2009, 4.

[1176] *ibid.*, para.6 and Annex.

[1177] The ERG Common Position on symmetry of fixed call termination rates and symmetry of mobile call termination rates, ERG (07) 83 final 080312 (February 28, 2008), 3–6.

[1178] Termination Rates Recommendation, para.1–022, n.81, para.9.

[1179] Case IT/2007/0659: *Remedies relating to the market for voice call termination on individual mobile networks in Italy*, Commission Comments of August 2, 2007, 3.

[1180] Case FR/2006/0461: *Price control obligation related to voice call termination on individual mobile networks in metropolitan France*, Commission Comments of September 4, 2006, 3–4.

[1181] Termination Rates Recommendation, para.1–022, n.81, para.10. See also: Case ES/2009/0937: *Voice call termination on individual mobile networks—Details of the price control remedy*, Commission Comments of July 22, 2009, 4–5; Case FR/2009/0927: *Wholesale voice call termination on individual mobile networks in the French overseas territories*, Commission Comments of June 29, 2009, 5–6; and Case DK/2009/0945: *Voice call termination on individual mobile networks—Details of the price control remedy*, Commission Comments of August 28, 2009, 3–4.

Framework with the 2009 amendment of the Access Directive[1182] The Commission considers it one of the most prominent of the 2009 reforms to the Regulatory Framework, by adding a new "last resort" remedy to NRAs' toolboxes for overcoming persistent competition problems.[1183] Functional separation involves the reorganisation of a vertically-integrated operator, with the purpose of establishing a separate, distinct functional business entity that will supply wholesale access products and services to all undertakings (including other businesses and undertakings within its group of companies).[1184] Compared with legal separation,[1185] functional separation has the advantage that there is, in principle, no forced creation of a new and specific legal entity and, compared with accounting separation, it has the advantages of significantly reducing the incentives for discrimination and making it easier for NRAs to verify and enforce compliance with non-discrimination obligations.[1186] However, there are also a number of risks associated with functional separation: (i) it may not always result in the achievement of the expected benefits, because of, *e.g.*, high implementation costs or reduced incentives of the SMP undertaking to invest;[1187] (ii) it may reduce incentives for new entrants to invest in alternative infrastructure and thereby inhibit the development of infrastructure-based competition, as all market players would share the same infrastructure (of the SMP operator) under exactly the same conditions;[1188] and (iii) it is, to a certain extent, incompatible with the fundamental deregulatory objective of the Regulatory Framework, given its feature of permanently changing the structure of a company (although it may also lessen the need for long-term intrusive *ex ante* regulation, by removing the conditions that necessitate such regulation). Functional separation may, indeed, require a substantial restructuring of the vertically-integrated SMP operator's business organisation and functioning in order to set up adequate "Chinese walls". The new separate business unit must be responsible for the management of assets under its administration, staff, operational support and management information systems; employees cannot work for both the new access network business unit and other departments of the undertaking, and must work in physically separated offices.[1189]

1–285 **An exceptional measure**—As functional separation requires significant changes to the business structure of an SMP operator and may have certain other disadvantages, the Access Directive emphasises that functional separation should be imposed only as an exceptional measure when other access-related obligations (*i.e.* transparency, non-discrimination, accounting separation, access and price controls) have failed to achieve effective competition, in particular infrastructure-based competition, and there are important and persisting competition problems and/or

[1182] Nevertheless, functional separation could, in principle, already be imposed under the 2002 Regulatory Framework: Art.8(3), second sub-para., of the 2002 Access Directive, para.1–019, n.66, (maintained in substance by the Better Regulation Directive, para.1–019, n.64) permitted NRAs to impose remedies other than those foreseen by Arts.9–13 of the 2002 Access Directive, although this would have been subject to the prior approval of the Commission. Nevertheless, the ERG considered (in 2007) that "[a]t present the [Regulatory] Framework does not contemplate the use of the functional separation remedy": ERG Opinion of October 3, 2007 on Functional Separation, ERG (07) 44, 2007, 1 ("ERG Opinion on Functional Separation").

[1183] Commission MEMO/09/513, para.1–083, n.370, point 10.

[1184] Access Directive, para.1–019, n.66, Art.13a(1).

[1185] On different forms of "separation", see paras.1–088 *et seq.*, 1–145, 1–149 *et seq.*, 1–240 and 1–255, above and 1–286 *et seq.*, below.

[1186] Cave, "Six Degrees of Separation", para.1–145, n.634, at 90–91. Note, that the concept of "operational" separation is used as an equivalent to "functional" separation.

[1187] ERG Opinion on Functional Separation, para.1–284, n.1182, 8–9.

[1188] Impact Assessment to the Commission's 2007 regulatory proposals, para.1–026, n.95, 35.

[1189] ERG Opinion on Functional Separation, para.1–284, n.1182, 6–7. See also para.1–145, above.

market failures.[1190] Before imposing functional separation, NRAs must notify in advance the Commission of its draft measure. Within the notification, NRAs must demonstrate that the imposition of functional separation is objectively justified. In particular, they must provide: (i) evidence to justify their conclusions; (ii) a reasoned assessment that there is no or little prospect of effective and sustainable infrastructure-based competition being established within a reasonable timeframe; (iii) an analysis of the expected impact on the NRA concerned, the undertaking in question, the incentives to invest of undertakings in the sector as a whole, and on consumer welfare; and (iv) an analysis of the reasons justifying that the imposition of functional separation would be the most efficient means to enforce remedies to address the competition problems and market failures identified.[1191] Furthermore, the NRA concerned is required to include the following information in the draft measure: (i) the precise nature and level of separation, specifying in particular the legal status of the separate wholesale business entity; (ii) an identification of the assets of the separate wholesale business entity and the products or services to be supplied by it, (iii) the governance arrangements that will ensure the independence of the staff employed by the separate wholesale business entity and the corresponding incentive structure; (iv) rules for ensuring compliance with the separation obligations; (v) rules for ensuring transparency of operational procedures, in particular towards other stakeholders; and (vi) a monitoring programme to ensure compliance, including the publication of an annual report.[1192] The Commission then adopts a decision authorising or preventing the proposed functional separation, after taking utmost account of the opinion of BEREC.[1193] In a second step, and after a coordinated analysis of the different markets related to the access network, the NRA then imposes upon the undertaking other appropriate obligations (*i.e.* transparency, non-discrimination, accounting separation, access and/or price control and cost accounting obligations or any other obligations according to the second sub-paragraph of Article 8(3) of the Access Directive), in addition to functional separation.[1194]

(8) Voluntary separation

1–286 Voluntary separation under the Access Directive—A vertically integrated SMP undertaking can opt for a voluntary transfer of its local access network, or a substantial part of it, to a separate legal entity under different ownership,[1195] or for the establishment of a separate business entity that provides fully equivalent access products to all retail providers, including its own retail arm. The possible reasons for doing so include pressure for the imposition of mandatory functional separation by an NRA or a potential advantage to increase the overall value of the entity (by better matching assets with investors, as the potentially high-growth retail division would be separated from the more stable and cash-generating, but lower growth, wholesale division).[1196] After making the decision to implement voluntary separation, the undertaking concerned must inform in

[1190] Access Directive, para.1–019, n.59, Art.13a(1).
[1191] *ibid.*, Art.13a(2).
[1192] *ibid.*, Art.13a(3). This information comprises the key elements necessary to ensure that functional separation can be effectively implemented.
[1193] *ibid.*, Art.8(3), second sub-para.
[1194] *ibid.*, Art.13a(4) and (5).
[1195] This form of separation is different from the legal separation used within this chapter, as legal separation refers to the establishment of distinct legal entities which may be under common ownership: see para.1–145, n.634, above.
[1196] Impact Assessment to the Commission's 2007 regulatory proposals, para.1–026, n.95, 37.

advance its NRA about the intended voluntary separation. The NRA concerned must then assess the effect of the intended separation on the existing regulatory obligations of the undertaking on all markets which would be affected by the separation. Following this assessment, the NRA can impose, maintain, amend or withdraw regulatory obligations on both the entities operating the separated and retained businesses.[1197] Unlike functional separation, voluntary separation, despite firstly appearing in the amended Regulatory Framework, is not completely new. Two cases of voluntary separation were successfully implemented under the 2002 Regulatory Framework. In the United Kingdom, in the first case of voluntary separation, BT Group voluntarily established a functionally separated access network division in January 2006 (albeit to avoid the risk of a reference by OFCOM to the Competition Commission under United Kingdom competition law, which would have investigated the effect on competition of BT Group's vertically integrated structure and could have imposed its own remedies to resolve any competition issues that it might have identified). On the basis of binding undertakings signed in June 2005 by BT Group and OFCOM, Openreach is a separately managed business entity which supplies wholesale network access and backhaul services to alternative operators and BT's own retail division, whilst ensuring genuinely equivalent treatment of all its customers. The "access network" connects a local exchange to a network termination point on an end user's premise. The "backhaul network" connects local exchanges to other BT local exchanges, to the core network or to an alternative communications provider's network.[1198] Second, in Italy, the obligations imposed on Telecom Italia in order to reinforce its non-discrimination and equal treatment obligations on the markets for retail access, wholesale physical infrastructure access and wholesale broadband access, finally resulted into the creation of Open Access, a separate business division dealing with access services for alternative operators and Telecom Italia's own retail businesses.[1199]

1–287 Voluntary separation under the Universal Service Directive—Voluntary separation is also possible under the Universal Service Directive. An undertaking designated as a provider of universal service[1200] may voluntarily dispose of a substantial part or all of its local access network to a separate legal entity under different ownership. Before doing so, it must inform in advance the relevant NRA in a timely manner, in order to allow that NRA to assess the effect of the intended separation on continuity of the provision of universal service (e.g. provision of access at a fixed location and provision of telephone services over that network connection).[1201] Nevertheless, the NRA's assessment should not prejudice the completion of the transaction,[1202] although it may, as a reaction, impose, maintain, amend or withdraw specific obligations related to the universal service provision.[1203]

[1197] Access Directive, para.1–019, n.66, Art.13b.
[1198] OFCOM, Final statements on the Strategic Review of Telecommunications, and undertakings in lieu of a reference under the Enterprise Act 2002 (September 22, 2005), 46–111; for the definitions, see *ibid.*, 57–58, available at *http://www.ofcom.org.uk/consult/condocs/statement_tsr/statement.pdf*. See also WIK, Next Generation Networks, para.1–145, n.635, 62.
[1199] Joined Cases IT/2009/0890-0892: *Access to the public telephone network at a fixed location for residential and non-residential customers, wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location, and wholesale broadband access*, Commission Comments of April 14, 2009 and Joined Cases IT/2009/0987- 0989, para.1–074, n.314. See also para.1–145, n.635, above.
[1200] The designation of undertakings as providers of universal service does not depend on their market power, despite the fact that, in general, undertakings with SMP have also usually been designated as having obligations to provide universal service: see para.1–304 *et seq.*, below.
[1201] Universal Service Directive, para.1–019, n.67, Art.8(3).
[1202] Citizens' Rights Directive, para.1–019, n.67, recital 10.
[1203] Authorisation Directive, para.1–019, n.65, Art.6(2).

3. Regulatory controls on retail services

1–288 Retail obligations on SMP operators—The Universal Service Directive permits NRAs to impose obligations at the retail level.[1204] Although the Commission's Second Market Recommendation removes most of the retail markets from the scope of markets susceptible to *ex ante* regulation, one retail market is still retained, as it is in general still not effectively competitive in the EU, *i.e.* the retail market for access to the public telephone network at a fixed location for residential and non-residential customers.[1205] NRAs can impose retail obligations only when they determine that the retail market in question is not effectively competitive and the obligations of transparency, non-discrimination, accounting separation, access and price controls at the wholesale level under the Access Directive would not be sufficient to remedy a lack of competition at the retail level.[1206]

1–289 Insufficiency of wholesale remedies—Within the review of national notifications under the consultation procedure within the Framework Directive, the Commission has paid particular attention to the significance of the insufficiency of wholesale remedies in justifying the imposition of remedies on retail markets. Although the Commission embraces deregulation in retail markets, it does not permit NRAs to roll back retail remedies where wholesale remedies are not sufficient to secure competition on the relevant retail market. For example, in relation to the retail fixed telephone access markets, the Commission has maintained that the only relevant wholesale regulation is LLU, but that, as LLU requires time and high investments to implement, the risk of excessive prices or price squeezes at the retail level cannot be excluded if the undertaking with SMP has a high market share.[1207] Therefore, the Commission has not been convinced by proposals to withdraw retail price controls in cases where there has been little or no competition in a large part of a Member State.[1208] It has also considered that the fact that an SMP undertaking does not currently charge excessive prices cannot be a justification for relaxing retail price regulation, since the SMP undertaking's current behaviour may be constrained by the existing regulation.[1209] Even when retail prices are among the lowest in the EU, retail price controls remain necessary if the low retail prices may lead to only too low a margin for alternative operators (*i.e.* the SMP operator may implement a price squeeze).[1210] The Commission has also commented on the proportionality of retail remedies. In the markets for fixed telephone calls, the Italian NRA required the SMP undertaking concerned not to differentiate its prices of local, national and fixed to mobile calls according to the networks of the alternative network operators. Although the Commission did not raise serious doubt on this obligation, it considered that operators should have the ability to recoup

[1204] Universal Service Directive, para.1–019, n.67, Art.17.
[1205] Second Markets Recommendation, para.1–021, n.77, Annex.
[1206] Universal Service Directive, para.1–019, n.67, Art.17(1).
[1207] Cases EE/2007/0637 and EE/2007/0638, para.1–276, n.1137, 3–4.
[1208] Case ES/2008/0815: *Access to the public telephone network at a fixed location for residential and non-residential customers in Spain*, Commission Comments of December 1, 2008, 5.
[1209] Case CZ/2008/0755: *Partial withdrawal of remedies related to the retail market for access to the public telephone network at a fixed location for residential customers in the Czech Republic*, Commission Comments of March 18, 2008, 3.
[1210] Case SI/2005/0264: *Publicly available national telephone services provided at a fixed location for residential customers in Slovenia* and Case SI/2005/0265: *Publicly available national telephone services provided at a fixed location for non-residential customers in Slovenia*, Commission Comments of November 11, 2005, 3.

their higher regulated wholesale costs by setting differentiated retail prices, without having to have recourse to restrictive practices.[1211]

1–290 Choice of retail remedies—The Universal Service Directive gives NRAs a broad discretion in their choices of remedies at the retail level, including: (i) retail price caps; (ii) measures to control individual tariffs; (iii) cost-orientation obligations; and (iv) tariffs based on an international benchmarking of comparable markets to protect end-users whilst promoting effective competition.[1212] NRAs may impose these requirements to prevent undertakings with SMP from charging excessive prices, inhibiting market entry or restricting competition by charging predatory prices, showing undue preference to specific end users or unreasonably bundling services. NRAs may require these operators to provide fixed telephony services at affordable and cost-orientated prices, and to separate their tariffs for access to, and use of, the public communications network from the type of application that the users implement unless they require different services or facilities. Tariffs for facilities or services that are additional to the provision of a connection to the public communications network and public communication services must be sufficiently unbundled so that the user is not required to pay for facilities which are not necessary for the service requested. Discount schemes must be fully transparent, published and applied in accordance with the principle of non-discrimination. Measures may include the imposition of retail price caps or measures to control individual tariffs.[1213] If NRAs impose retail price controls, they may specify the format and methodology to be used for cost accounting.[1214] They can also relax the requirement for cost orientation and implementation of cost accounting systems once the intensity of competition is sufficient to maintain prices at the competitive level.[1215]

F. Universal service and other services of general economic interest

1–291 The Electronic Communications Regulatory Framework, in particular the Universal Service Directive, aims to ensure that end-users have access to a number of services of general economic interest.[1216] In relation to telecommunications services, these cover universal services that are harmonised at the EU level and additional mandatory services imposed under national law. In the broadcasting sector, this covers "must carry" obligations.[1217]

1. European universal service

1–292 Introduction—A major principle underlying the liberalisation of the electronic communications sector was that a minimum level of "universal" services should be available to all EU

[1211] Case IT/2006/0407: *Retail market for publicly available local and/or national telephone services provided at a fixed location for residential customers* and Case IT/2006/0408: *Retail market for publicly available local and/or national telephone services provided at a fixed location for non-residential customers*, Commission Comments of June 29, 2006, 5–6.
[1212] Universal Service Directive, para.1–019, n.67, Art.17(2).
[1213] *ibid.*
[1214] *ibid.*, Art.17(4).
[1215] *ibid.*, Art.17(5).
[1216] On the general approach of EU law regarding services of general interest, see the Communication from the Commission of November 20, 2007, "Services of general interest, including social services of general interest: a new European commitment", COM(2007) 725.
[1217] See para.2–129, below.

citizens at an affordable price. In a monopoly environment, public communications operators cross-subsidised less profitable or loss-making services and customers with the revenues from more profitable ones. Concerns were expressed that, in a liberalised and competitive market, those operators would either pass on all the full costs of service provision to these services or customers, or cease to provide them at all. As a result, it was feared that those living in rural areas (which are expensive to serve) and/or with special social needs (who generally have limited incomes) might have been unable to afford those services or that operators would not be able to afford to continue serving them. The necessity of imposing universal service obligations on some or all operators as part of the liberalisation of the telecommunications sector was therefore widely accepted, leading to the adoption of the Universal Service Directive, although there continues to be controversy over how universal services should be funded.[1218]

1–293 Principles governing the provision of universal service—The Universal Service Directive provides that any measure taken to guarantee universal service should meet the principles of objectivity, transparency, non-discrimination and proportionality.[1219] It should also fulfil two important but subtly different principles: competition should not be distorted and distortions within markets should be minimised.[1220] The first principle, which stems directly from the Treaty on the Functioning of the European Union, means that universal service measures may not distort competition between undertakings active on the same market. This, in turn, implies that all undertakings active on a relevant market could be designated as a universal service provider, or that each provider that incurs a net cost for doing so should be compensated. At the same time, even if the state of competition may not be altered by universal service measures, markets are often nonetheless distorted, as if universal services have to be provided at prices that depart from normal commercial conditions (*i.e.* at below market prices or even below their costs of provision); and the provision of such services may require subsidising, which in turn may require taxes or levies to be imposed. Therefore, in accordance with the second principle, these markets distortions have to be minimised. This implies that the least costly way of ensuring the provision of universal service should be chosen by the Member State and, if compensation is to be provided from within the sector, the base of contributors should be as wide as possible.[1221] The principle of the minimisation of market distortions should be seen as a gateway for the economic principle of efficiency to enter the policy and regulatory arena.[1222]

[1218] See Bartosch, "The liberalisation of European telecommunications and broadcasting markets—The road from monopolies to competition and universal service", in Koenig, Bartosch and Braun (eds.), *EC Competition and Telecommunications Law* (Kluwer, 1st ed., 2002), 71; Laffont and Tirole, *Competition in Telecommunications* (MIT Press, 2000), 217–264; Nihoul and Rodford, para.1–018, n.59, 491–627. On the implementation of the universal service provisions in the Member States, see the Commission's yearly Implementation Reports, which are available at *http://ec.europa.eu/information_society/policy/ecomm/library/communications_reports/index_en.htm*.

[1219] Universal Service Directive, para.1–019, n.67, Art.3(2).

[1220] *ibid.*, Arts.1(2) and 3(2) and Liberalisation Directive, para.1–007, n.23, Art.6(1). See Cawley, "Universal Service: specific services on generic networks—some logic begins to emerge in the policy arena", presented at the 2001 TPRC Conference and available at *http://tprc.si.umich.edu/tprc01/Program01.HTM*.

[1221] 2002 Universal Service Directive, para.1–019, n.67, recitals 4 and 23.

[1222] This principle was heavily relied upon by the Court of Justice in Case C-220/07, *Commission v France* [2008] E.C.R. I-95, paras.29 and 31.

(a) Scope of universal service obligations

1–294 Current scope of universal service—Defining the scope of the universal service involves a delicate balance between protecting end-users and promoting competition. If universal service is defined too narrowly, some citizens may be excluded from participation in important aspects of society that are accessed through electronic communications networks and services. If it is defined too broadly, it will lead to a significant net cost that may be recovered from operators and service providers, which may deter new players from entering the market and others from investing, with a resulting lack of competition and product innovation.[1223] The Universal Service Directive includes four elements in the scope of universal service obligations ("USOs"): (i) provision of access at a fixed location, including telephone and "functional" internet services; (ii) directories and directory enquiry service; (iii) public pay telephones and other public voice telephony access points; and (iv) measures for disabled users. If the Member States may define the precise contents of the universal service in their countries according to their national circumstances, they cannot unilaterally modify the scope of the universal service under the Universal Service Directive.[1224] However, Member States can require operators to provide additional mandatory services.[1225] Whilst the provision of universal service may be financed through a fund financed from within the electronic communications sector, additional mandatory services imposed at the national level may not.

1–295 ***Provision of access at a fixed location (including telephone and functional internet services)***—The scope of universal service requires the provision of reasonable access for a connection to the public communications network at fixed location, which may be restricted to the end-user's primary residence.[1226] This connection should be capable of supporting voice and facsimile services and data communications at rates that are sufficient to permit functional internet access. Each Member State must define the minimum data rates for data services, taking due account of specific national circumstances, such as the prevailing bandwidth used by the majority of subscribers. Therefore, the universal service may include broadband connections, although the transmission speed may vary.[1227] As the Universal Service Directive is technologically neutral, the connection at the fixed location (or address) could be fulfilled via wired or wireless technologies,[1228] provided they allow voice, facsimile and data communications to be carried out and that the tariffs for outgoing and incoming communications are structured in such a way as to meet the affordability criterion. Moreover, Member States should choose the least expensive technologies among those available, because the provision of the universal service should minimise market distortions.

[1223] See WIK-Consult, Study on the re-examination of the scope of universal service in the telecommunications sector of the European Union in the context of the 1999 Review—Study for the Commission, April 2000.

[1224] Case C-384/99, *Commission v Belgium* [2000] E.C.R. I-10633, para.13.

[1225] See para.1–312, below.

[1226] Citizens' Rights Directive, para.1–019, n.67, recital 4.

[1227] *ibid.*, recital 5, which has removed the previous ceiling of 56 Kbits/s contained in the 2002 Universal Service Directive, para.1–019, n.67, recital 8. Therefore, with the entry into force of Citizens' Rights Directive, the provision of broadband internet access could, in some Member States, become part of the universal service obligation.

[1228] *ibid.*, recital 4.

1–296 ***Directories and directory enquiry services***—The scope of universal service also covers the provision of at least one comprehensive and regularly updated directory that comprises in a non-discriminatory way all fixed and mobile subscribers who wish to be included; the directory should be available in a printed and/or electronic form that is approved by the NRA.[1229] A directory enquiry service should also be available to all end-users, including users of public pay telephones.

1–297 ***Public pay telephones or other voice telephony access points***—Sufficient public pay telephones or other public voice telephony access points should be available to meet the reasonable needs of end-users in terms of geographical coverage.[1230] It should also be possible to make emergency calls from those public pay phones free of charge.[1231] To ensure minimum regulation, an NRA may decide not to impose obligations relating to this component of the universal service if, after public consultation, it considers that these facilities or comparable services are widely available.[1232] In particular, more and more Member States are removing public payphones from the scope of the universal service, given the almost ubiquitous availability of mobile phones, the declining use of public payphones and the high costs of their provision.[1233]

1–298 ***Measures for disabled users***—Universal service requires that disabled users should have a level of access to, and affordability of, telephone services, directory enquiry services and directories equivalent to that enjoyed by other end users.[1234] For example, specific services such as textphones for deaf or speech-impaired people, or billing in specific formats (such as Braille for the blind or partially sighted), could be required to be made available free of charge.[1235] Moreover, as specific measures may be enacted to ensure that the disabled can take advantage of the same choice of service providers available to the majority of end-users, and thus benefit from the forces of competition, Member States may give vouchers or subsidies directly to disabled users for this purpose. This is a very efficient way of ensuring universal access, as it allows consumers freedom of choice and empowers them to benefit from competition between firms.

1–299 Review of the scope of universal service—The harmonised European universal service is an evolving concept. The Commission must review its scope every three years in the light of social, economic and technological developments, and when appropriate, propose to the European Parliament and Council legislative proposals to reform it.[1236] The Commission's proposal shall be made in accordance with two socio-economic criteria: (i) are specific services available to and used by a majority of consumers and does the lack of availability or non-use by a minority of consumers result in social exclusion?; and (ii) does the availability and use of specific services convey a general net benefit to all consumers, such that public intervention is warranted in circumstances where the

[1229] Universal Service Directive, para.1–019, n.67, Art.5. In *Commission v Portugal*, para.1–034, n.143, Portugal was found to have failed to comply with its obligations to make available to all end-users at least one comprehensive directory and at least one comprehensive directory enquiry service, as the directory and directory enquiry services then available in Portugal only contained the subscriber data of some operators. The directory must also meet the requirements of Art.12 of the E-Privacy Directive, para.1–019, n.68, which provides for an opt-in system: see para.1–414, below.

[1230] *ibid.*, Art.6(1).

[1231] *ibid.*, Art.6(3).

[1232] *ibid.*, Art.6(2).

[1233] Commission Staff Working Document accompanying the European Commission's *Progress Report on the Single European Electronic Communications Market 2008 (14th Report)*, SEC(2009) 376/2, 44.

[1234] Universal Service Directive, para.1–019, n.67, Arts.7 and 23a.

[1235] 2002 Universal Service Directive, para.1–019, n.67, recital 13.

[1236] Universal Service Directive, para.1–019, n.67, Art.15.

specific services are not provided to the public under normal commercial conditions?[1237] The Commission undertook its first review of the scope of the universal service in 2005 and 2006. It concluded that there were no grounds for modifying its scope.[1238] The Commission found, in particular, that there was no need to extend its scope to mobile services, as they were widely available under normal commercial conditions, nor to broadband services, as the penetration rate was not very high. The Commission undertook a second review in 2008. Again, it concluded that there was no need to change the scope of universal service, but that a debate should be launched for a general discussion in 2009–2010.[1239]

(b) Characteristics of universal service obligations

1–300 In the European context, universal service implies not only accessibility, but also affordability. Moreover, it implies a certain specified quality of service. On the determination of both of these characteristics, Member States enjoy some flexibility to ensure, in accordance with the principle of subsidiarity, that universal service fits national circumstances.

1–301 Affordability of universal service—Tariffs for the universal service should be affordable, in the light of specific national conditions, in particular in relation to national consumer prices and income.[1240] However, the criteria for determining affordability are not specified in the Universal Service Directive and thus need to be determined by each Member State. For instance, affordable tariffs may be linked to the penetration rate or to the price of a basket of basic services related to the disposable income of specific categories of customers. Particular attention should be paid to the needs and capacities of vulnerable and marginalised groups. To achieve affordability, Member States may require that the designated universal service providers offer tariffs which depart from those offered under normal commercial conditions (*i.e.* which are at lower prices or even below cost), that they comply with a price cap, or that they offer similar tariffs across the whole territory. Direct support (*e.g.*, by providing vouchers) may also be provided to consumers having low income or special social needs. Among all these possibilities, Member States should choose the combination that minimises market distortions.[1241]

[1237] *ibid.*, Annex V.

[1238] Communication from the Commission of May 24, 2005 on the Review of the Scope of Universal Service, COM(2005) 203, and Communication from the Commission of April 7, 2006 regarding the outcome of the Review of the Scope of Universal Service, COM(2006) 163.

[1239] Communication from the Commission of September 25, 2008 on the second periodic review of the scope of universal service in electronic communications, COM(2008) 572, Commission Universal Service Questionnaire, para.1–083, n.367; and also Commission Press Release, *Telecoms: Consultation on Future Universal Service in Digital era*, IP/10/218, March 2, 2010. On the future of universal service, see the series of papers in (2008) 10 *Info*, in particular Feijoo and Milne, "Re-thinking European universal service policy for the digital era: Editors' conclusions", 4; Competition Economists Group, Reforming Universal Service Policy (Report for GSMA, 2008); and OECD, *Rethinking universal service for next generation network environment* (2006).

[1240] Universal Service Directive, para.1–019, n.67, Art.9.

[1241] It has been shown that self-selected tariffs (where the universal service provider proposes a suite of tariff plans that consumers can choose, depending on their consumption pattern) may be efficient, as it gives consumers an incentive to reveal their preferences and limits the subsidy to those subscribers that are really in need. Moreover, subsidies that are targeted to a specific group of citizens or specific area are more efficient than a general geographical averaging of tariffs. It might also be appropriate to choose two different mechanisms, one for uneconomic areas and one for uneconomic customers in economic areas. In the first case, tariffs below costs could be imposed on the designated operator(s), whereas in the second one, vouchers could

1–302 Empirical evidence has shown that affordability is not only linked to the level of expenditure, but also to the way customers can control it. Therefore, the universal service providers should also offer, at no additional cost, facilities and services that enable subscribers to monitor and control expenditure and avoid unwarranted disconnections.[1242] In addition, to limit the expenses of the subscribers, universal service providers may not require consumers to subscribe for additional facilities or services which are not necessary or not required for the service requested.[1243]

1–303 Quality of universal service—Quality of service is a factor that is as important as price. Therefore, information on service quality should be made available and NRAs may impose credible performance targets, taking into account the views of interested parties.[1244] Providers of universal service should thus publish adequate and up-to-date quality of service information, based on both standardised parameters[1245] and any other parameters developed by the NRA, in particular those that take into account the specific needs of disabled users. Moreover, NRAs can set performance targets, and persistent failure to meet these would result in sanctions being taken against the universal service providers.[1246]

(c) Operators designated as being subject to universal service obligations

1–304 If necessary, Member States may designate one or more undertakings to guarantee the provision of universal service, so that the whole of the national territory is covered.[1247] In order to fulfil the principle of avoiding distortions of competition, the method used to designate providers should be transparent, objective and non-discriminatory. Hence, all undertakings that are able to provide the universal service (including mobile or cable operators, provided they attain a sufficient regional coverage) should be entitled to participate in the designation process and be aware of

be distributed to those specified customers, who could then themselves choose between providers and benefit from competition between them: Cheffert, "Universal service: Some observations relating to future European debates?", (2000) 2 *Info* 241.

[1242] Universal Service Directive, para.1–019, n.67, Art.10(2) and Annex I, Part A. The additional facilities and services are: (a) itemised billing; (b) selective call barring for outgoing calls, premium SMS or MMS or, where technically feasible, other kinds of similar applications; (c) pre-payment systems; (d) phased payment of connection fees; (e) "soft" disconnection in case of non-payment of bills; (f) advice on tariffs; and (g) cost control mechanisms. Nevertheless, to ensure minimum regulation, each NRA should be able to waive these requirements in all or part of its national territory if it is satisfied these facilities are widely available: *ibid.*, Art.10(3).

[1243] *ibid.*, Art.10(1).

[1244] *ibid.*, Art.11.

[1245] *ibid.*, Annex III, which provides for indicators related to: (i) supply time for an initial connection; (ii) fault rate per access line; (iii) fault repair times, and also related to (i) call set-up times; (iv) response times for directory enquiry services, (v) proportion of coin and card operated public payphones in working order; (vi) handling of complaints about billing errors, and (vii) the ratio of unsuccessful calls.

[1246] Such sanctions can be imposed in accordance with Art.21a of the Framework Directive, para.1–019, n.64, and Art.10 of the Authorisation Directive, para.1–019, n.65, which provide for financial penalties or, for serious and repeated failures, even withdrawal or non-renewal of authorisations.

[1247] Universal Service Directive, para.1–019, n.67, Art.8. Member States do not need to designate a universal service provider in part or all the national territory if the market itself ensures the objectives of universal service objectives or if vouchers or subsidies are provided directly to citizens who may then use them to choose their provider. However, in such cases, the NRAs should monitor the evolution and level of retail prices for the services falling within the scope of the universal service: Citizens' Rights Directive, para.1–019, n.67, recital 17.

it.[1248] In order to fulfil the principle of minimising market distortions, the method of designating operators should ensure that universal service is provided in a cost-effective manner, *i.e.* in the least costly way. If it is efficient, different undertakings could be designated to provide different elements of universal service and/or to cover different parts of the national territory.[1249]

1–305 In practice, a whole range of designation mechanisms is allowed, from direct designation to auctions and tendering (similar to public procurement procedures). Auctions can be appealing,[1250] but may be problematic, due to the difficulty of ensuring that sufficient undertakings are in a position to bid against the incumbent (as new entrants would need to use alternative network infrastructure or use the incumbent's assets) and because of the asymmetry of information between the incumbent and potential entrants, *e.g.* concerning the net costs and benefits of serving particular groups of subscribers. Therefore, auctions should be used only when there is already sufficient competition on the local access market.

(d) Financing universal service obligations

1–306 Calculation of the costs of universal service provision—Once the providers of universal service have been designated, NRAs shall determine the net costs of its provision, in order to ascertain to what extent this designation represents an unfair burden for the designated undertaking(s).[1251] Two different calculation methods could be applied, depending on the designation mechanism used.

1–307 ***Calculation of the net cost in case of auctions***— If an auction or a similar method has been used to designate the provider(s) of universal services, and provided the procedure was sufficiently efficient, the net cost is directly revealed during the auction and amounts to the lowest bid received and selected (*i.e.* the auction determines the minimum subsidy required).

1–308 ***Calculation of the net cost in case of other designation mechanisms***—When designation mechanisms other than auctions are used, the net cost of universal service provision should be

[1248] In Case C-324/98, *Telaustria Verlags GmbH and Telefonadress GmbH v Telekom Austria AG* [2000] E.C.R. I-10745, paras.60–62, the Court of Justice held that even if public service concession contracts fall outside the scope of the EU's public procurement directives, the public bodies responsible for ensuring the provision of the universal service are bound to comply with the fundamental principles of EU law, thereby ensuring transparency and sufficient advertising for any potential tenderers, to enable the markets for electronic communications services to be opened up to competition and to enable a review of the impartiality of the procurement procedures to be undertaken.

[1249] To guarantee the principles of non-discrimination and the minimising of market distortions, national law may not require that the provider of the universal service should be able to cover the entire national territory: Case C-220/07, *Commission v France* [2008] E.C.R. I-95, para.34. See also Case C-154/09, *Commission v Portugal*, O.J. 2009 C153/28, pending, which concerns the compatibility with the requirements of the Universal Service Directive of Article 121 of the Portuguese Law on Electronic Communications (Law No.5/2004), which designated the incumbent operator, PT Comunicações, as the universal service provider until 2025 without relying on an efficient, objective, transparent and non-discriminatory procedure.

[1250] For a typology of auctions and the criteria to be taken into account when designing an auction for universal service obligations, see Sorana, "Auctions for universal service subsidies" (1998) 18 *Journal of Regulatory Economics* 33; Nett, "Auctions: an alternative approach to allocate universal service obligations" (1998) 22 *Telecommunications Policy*, 661; and Competition Economists Group, para.1–299, n.1239, 33–36. See also Weller, "Auctions for universal service obligations" (1999) 23 *Telecommunications Policy* 645, who details the scheme proposed by GTE in the United States for an auction leading to in-market competition, which was criticised by Laffont and Tirole, para.1–2923, n.1218, 244–260.

[1251] Universal Service Directive, para.1–019, n.67, Art.12 and Annex IV.

calculated as such and correspond to the net costs that the undertaking could have avoided, had it not been designated as a universal service provider (*i.e.* the net avoidable cost). This requires a specific and complex calculation, each step of which needs to be verified by the NRA and be made publicly available.[1252] The calculation of the net avoidable cost is based upon the costs attributable to those elements of the services or those specific end-users, which can only be provided at a loss or under a price structure which falls outside normal commercial standards. This category includes service elements such as access to emergency telephone services, the provision of public pay telephones and other public voice telephony access points and the provision of certain services and equipment for disabled people or people with low incomes or special needs. The costs of universal service also cover costs attributable to specific end-users who, taking into consideration the cost of providing the specified network and service and the revenue generated, can only be served at a loss under cost conditions falling outside normal commercial standards. This includes end-users, or groups of end-users, who would not be served by a commercial operator in the absence of an obligation to provide universal service, for instance because those customers are located in rural or sparsely-populated areas. From these costs, the intangible benefits (the estimate, in monetary terms, of the indirect benefits that an undertaking derives by virtue of its position as provider of universal service, such as brand image or ubiquity) should then be deducted.[1253] The methodology approach should be forward-looking, rather than based on historical costs. In *Commission v France*,[1254] the Court held that the French financing regime set up by French Decree 97-475 was not compatible with the requirements of EU law, because it: (i) wrongly required France Télécom's new competitors to contribute to the financing of its universal service obligations in 1997, before the French market was liberalised; (ii) failed to comply with the requirement that incumbent operators should rebalance their tariffs; (iii) included within the net costs of universal service provision costs which should not have been included (*i.e.* the costs of supply profitable residential subscribers); and (iv) failed to comply with the requirement for a specific calculation of each component of the net cost of universal service provision in a transparent and published manner, because these components were fixed on a flat-rate basis, such that it was impossible to distinguish between the profitable and unprofitable elements of the services covered by the net cost calculation.

1–309 Compensation of the universal service providers—When an NRA finds that the net costs of universal service provision represent an unfair burden on the designated providers of universal service, they can be compensated, upon request.[1255] Given the broad discretionary power of NRAs in this respect, it may be quite difficult for electronic communications operators subject to universal

[1252] If the Member State directly subsidises end users, the amount of the subsidy cannot be part of the calculation of the net costs of universal service provision, as no burden is imposed on the designated undertaking(s).

[1253] Universal Service Directive, para.1–019, n.67, Annex IV, Part A and 2002 Universal Service Directive, para.1–019, n.67, recitals 19 and 20. On the methodology for determining costs, see the Communication from the Commission of November 27, 1996 on the Assessment Criteria for National Schemes for the Costing and Financing of Universal Service in Telecommunications and Guidelines for Member States on Operation of such Schemes, COM(96) 608 and WIK, Costing and Financing Universal Service Obligations in a Competitive Telecommunications Environment in the European Union—Study for the Commission, October 1997; see also Case C-222/08, *Commission v France* [2008] E.C.R. I-95, paras.45–46.

[1254] Case C–146/00, *Commission v France* [2001] E.C.R. I-9767. See also Case C-384/99, *Commission v Belgium* [2000] E.C.R. I-10633.

[1255] Universal Service Directive, para.1–019, n.67, Art.13(1). See *Commission v Belgium*, para.1–075, n.335, pending, and *BASE et al v Council of Ministers*, para.1–075, n.335, pending, both of which concern the compatibility with EU law of Belgian legislation that determines, as a matter of law, that the imposition of

service obligations to require NRAs to establish a funding mechanism and they will, in any event, need to show that the net costs of universal service represent an unfair burden, which may be difficult to assess.[1256]

1–310 ***Sources of compensation***—The compensation mechanism may be financed either from public funds and/or funds raised from within the electronic communications sector.[1257] In each case, the compensation mechanism should be notified to the Commission,[1258] and be in conformity with EU law, in particular with the state aid rules.[1259] EU law does not specify what should happen when contributions to financing mechanisms exceed the net costs of universal service provision. It would seem that, in such a case, the amount exceeding the net costs should be refunded *pro rata* to those operators that have contributed to the funding. Any amount in excess of the net costs would, arguably, constitute an unlawful state aid under Article 107 [ex 87].[1260]

1–311 ***Universal service fund***—If a Member State decides to establish a sectoral fund to finance universal service, it should be financed by all electronic communications networks and services operators who provide services in the territory of the Member State, and therefore include operators of fixed, mobile and cable TV networks, providers of electronic communications services even internet service providers.[1261] The funding mechanism must meet the standard principles of avoiding or minimising market distortions, avoiding distortions of competition, proportionality, non-discrimination and transparency. To ensure that market distortions are minimised, contributions should be recovered in a way that minimises as far as possible the impact of the financial burden falling on end-users, for example by spreading contributions as widely as possible among electronic communications operators.[1262] To ensure proportionality, Member States may choose not to require contributions from undertakings whose national turnover is less than a set limit established under national law.[1263] To guarantee non-discrimination with regard to vertical structures, the contribution method should avoid any double imposition falling on both inputs and outputs, or any accumulated impositions (*e.g.* service providers should not be required to

universal service obligations on the incumbent operator, Belgacom, automatically represented an unfair burden on it, without an assessment having been made that this was in fact the case.

[1256] Communication from the Commission of November 27, 1996, para.1–308, n.1253, para.2.3. As of 2009, only a few Member States have decided to compensate designated universal service providers: Belgium (for social tariffs only), Czech Republic, France, Italy, Latvia, Romania, and Spain: Commission 14th Implementation Report, para.1–033, n.134, 45.

[1257] Universal Service Directive, para.1–019, n.67, Art.13(1). Economic literature has shown that, unless there are significant inefficiencies within Member States' taxation systems, compensation via the general budget is less distortive of competition and markets and more efficient than the use of a sectoral fund, as the taxable basis is broader and the distortive effect of the taxes is accordingly smaller: Competition Economists Group, para.1–299, n.1239, 43–50. However, in practice, only one Member State (Finland) relies on a public fund to compensate any unfair burden imposed on providers of universal services: Commission 14th Implementation Report, para.1–033, n.134, 45.

[1258] Liberalisation Directive, para.1–007, n.23, Art.6(2).

[1259] See para.6–298 *et seq.*, below.

[1260] See para.6–301, below.

[1261] Universal Service Directive, para.1–019, n.67, Arts.13(2)–(4). Therefore, there is no link between the operators entitled to receive compensation (*i.e.* those designated with universal service obligations in accordance with the Universal Service Directive) and the undertakings required to participate in the universal service fund (*i.e.*, all providers of electronic communications networks and services, as defined in Framework Directive, para.1–019, n.64, Art.2).

[1262] 2002 Universal Service Directive, para.1–019, n.67, recital 23.

[1263] Universal Service Directive, para.1–019, n.67, Art.13(3).

contribute on the basis of their own activities and in relation to wholesale inputs purchased from other operators).[1264] Finally, to ensure objectivity and transparency, the fund should be administrated by the NRA or an independent body under its supervision, and a report giving the cost of the universal service and the contribution of each operator should be published annually.[1265]

2. Additional mandatory services at the national level

1–312 The harmonised universal service is a safety net which comprises a cornerstone set of minimum services that should be available and affordable across the whole EU, the net costs of which can be financed from the general budget and/or by a fund levied from within the electronic communications sector. An individual Member State may decide to go beyond this minimum set of services and make additional services available and affordable on its territory when markets do not fulfil the perceived needs of the citizens. For example, in the context of the i2010 Strategy,[1266] Member States may decide that schools or health care establishments should have high speed internet access at a price that is below market prices. In this case, any compensation mechanism must meet the requirements of EU law, in particular the state aid rules,[1267] and cannot be financed from within the electronic communications sector.[1268] Indeed, the use of sectoral funding should be limited, as concentrating the financing of services of general interest obligations on a particular sector creates significant market distortions and risks slowing down the development of a fundamental sector of the economy.

G. End-users' rights and consumer protection

1. Scope and concepts

1–313 **Scope**—Chapter IV of the Universal Service Directive[1269] ensures a minimum set of services for end users, consumers and subscribers.[1270] A number of other issues are relevant in the

[1264] *ibid.*, Annex IV, Part A.

[1265] *ibid.*, Arts.13(2) and 14.

[1266] See para.1–024, n.88, above. For the achievements of the i2010 Strategy, see Communication from the Commission of August 4, 2009, "Europe's Digital Competitiveness Report", COM(2009) 390.

[1267] See para.6–298 *et seq.*, below.

[1268] Universal Service Directive, para.1–019, n.67, Art.32.

[1269] See para.1–019, n.67.

[1270] The Universal Service Directive, para.1–019, n.67, differentiates between the three concepts. Art.2 of the Framework Directive, para.1–019, n.64, defines a "consumer" as any natural person who uses or requests a publicly available electronic communications service for purposes which are outside his or her trade, business or profession, an "end user" as a legal entity or natural person using or requesting a publicly available electronic communications service but which does not provide itself such services, and a "subscriber" as any natural person or legal entity that is party to a contract with the provider of publicly available electronic communications services for the supply of such services. In these definitions, "end user" appears as a broader concept, which includes that of "consumers". As far as a "subscriber" is concerned, the concept is of different nature than the two other concepts. The key criteria here is indeed the existence (or not) of a contract and not the legal status (*i.e.* natural person or legal entity) and the electronic communications related activity (*i.e.* provider or not, and use outside or inside of trade). It should be noted that with regard to the provisions concerning "end user interests and rights", the Universal Service Directive focuses on the protection of recipients of publicly available electronic communications services and, generally, treats consumers

context of the protection of the rights of end-users and consumers, including: Voice over Internet Protocol, network neutrality, minimum contractual rights and transparency, quality of service, availability of services in case of force majeure, equivalent access and choice for disabled users, telephone directory enquiry services, telephone numbers, additional facilities and out-of-court dispute resolution procedures. This minimum level of protection does not depend on the designation of one or more undertakings as having significant market power or as provider(s) with universal service obligations. It is also complementary to those rights derived from universal service obligations. Furthermore, several other horizontal EU measures relating to consumer protection are applicable in parallel with the Universal Service Directive, in particular the Unfair Terms in Consumer Contracts Directive[1271] and the Distance Contracts Directive.[1272] In the context of the 2006 Review, there was growing awareness that the need for enhanced consumer protection rules,[1273] in addition to generally-applicable competition law, had become more important for the electronic communications sector.[1274] Consequently, the relationship between sector-specific electronic communications regulation and competition law is about to expand to also include consumer protection rules.

and other end users alike. In this context, the regulatory difference between consumers and end users is, therefore, not significant. On the relationship between the concept of "user" (including end-user/consumer) on the one hand and subscriber on the other, see Maxwell, para.1–018, n.59, Booklet I.4, 26–27. Art.20 of the Universal Service Directive as amended in 2009, no longer explicitly foresees different regimes for "end users" and for "consumers".

[1271] Council Directive 93/13 of April 5, 1993 on unfair terms in consumer contracts, O.J. 1993 L95/29 ("Unfair Terms in Consumer Contracts Directive").

[1272] Directive 97/7 of May 20, 1997 on the protection of consumers in respect of distance contracts, O.J. 1997 L144/19 ("Distance Contracts Directive"), as amended by Directive 2002/65 of September 23, 2002 concerning the distance marketing of consumer financial services and amending Council Directive 90/619 and Directives 97/7 and 98/27, O.J. 2002, L271/16, by the Unfair Commercial Practices Directive, 1–026, n.97; and by Directive 2007/64 of November 13, 2007 on payment services in the internal market, amending Directives 97/7, 2002/65, 2005/60 and 2006/48 and repealing Directive 97/5/EC, O.J. 2007 L319/1.

[1273] Commission 2005 Call for Input, para.1–025, n.90, 4; 2006 Review Communication, para.1–025, n.90, 10, according to which the delivery of substantial consumer benefits is a central goal of the regulatory framework. See also the 2007 Reform Proposals Communication, para.1–026, n.95, 4 and 10–12, which states that "connecting with citizens" is one of the three pillars of the reform and that in a rapidly changing market environment, new measures are needed for preserving and enhancing consumer protection and user rights. In this context, the European Parliament's Rapporteur, Malcolm Harbour MEP identified the further enhancements made in the reform proposals regarding consumer protection and access to communications services for disabled users: European Parliament Committee on the Internal Market and Consumer Protection, Report on the proposal for a directive amending Directive 2002/22 on universal service and users' rights relating to electronic communications networks, Directive 2002/58 concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation 2006/2004 on consumer protection cooperation (COM(2007)0698—C6-0420/2007—2007/0248(COD)), A6-0318/2008, July 18, 2008 ("Harbour Report 2008").

[1274] The references to the Unfair Terms in Consumer Contracts Directive and the Distance Contracts Directive have been transferred from Art.20 of the 2002 Universal Service Directive (contracts) to Art.1 of the Universal Service Directive (subject matter). An explicit reference to the Unfair Commercial Practices Directive, para.1–026, n.97, has not been inserted into the Universal Service Directive, despite the suggestion made by the Commission: see Amended proposal of November 11, 2008 for a directive amending Directive 2002/22 on universal service and users' rights relating to electronic communications networks, Directive 2002/58 concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation 2006/2004 on consumer protection cooperation, COM(2008) 723, 9.

1–314 Towards enhanced end-user empowerment and protection—End-users and consumers already enjoyed a number of important rights under the 2002 Universal Service Directive,[1275] including transparency in the tariffs of electronic communications services, the single European emergency number "112", dispute resolution mechanisms and minimum contractual rights. Nevertheless, despite further liberalisation of the electronic communications sector after the entry into effect of the 2002 Electronic Communications Regulatory Framework in 2003, end-users and consumers have remained unable to reap the full benefits of dynamic and increasing competition; for example, they did not always get a good deal, or were still confronted with difficulty in switching operators.[1276] Given these remaining problems, the Citizens' Rights Directive amends the Universal Service Directive, to strengthen end-users' rights and empower consumers' freedom of choice. The Citizens' Rights Directive thus introduced four major reforms[1277] regarding end-user and consumer protection : (i) increased transparency and the publication of additional information (*e.g.* comparative tariffs) for end-users; (ii) number portability in one working day (for both fixed and mobile networks); (iii) new guarantees for an open and more "neutral network"; and (vi) improved emergency services and access to the "112" call number. Other enhanced end-user rights include facilitating equivalent access for disabled end-users, basic connectivity and quality of service, a harmonised number for harmonised services of social value ("116" numbers) and greater consumer participation in public consultation mechanisms.

1–315 Improved protection for disabled end-users—The needs of disabled end-users were already given specific consideration under the 2002 Universal Service Directive, *e.g.* by requiring Member States, where appropriate, to take specific measures to ensure disabled end-users' access to and the affordability of publicly available telephone services. Particular attention was paid to the needs of disabled end-users in the 2006 Review, in order to ensure that they could also enjoy the benefits of liberalisation and competition. Facilitating disabled end-users' access was, accordingly, one of the specific objectives of the Citizens' Rights Directive.[1278] The rights of disabled end-users have thus been enhanced and are now explicitly dealt with in the Universal Service Directive in relation to transparency,[1279] quality of service[1280] and equivalent access and choice for disabled end-users.[1281] Furthermore, in the course of the legislative process, the concept of "comparable access" to describe the extent to which access for disabled end-users should be provided in comparison with other end-users, was systematically replaced by the concept of "equivalent access", in order to improve further the rights of disabled end-users.

1–316 Publicly available telephone services—The concept of "publicly available telephone service" is important: under the 2002 Universal Service Directive, a majority of obligations to protect end-users' interests were imposed upon undertakings providing publicly available telephone services. Under the 2002 Universal Service Directive, this concept included four core elements: (i) a service available to the public (ii) for originating and receiving national and international phone calls (iii) that gives access to emergency services (iv) through a number or

[1275] 2002 Universal Service Directive, para.1–019, n.67, Chapter IV.
[1276] European Commission, "2007 EU Telecoms Reform Fact Sheet No.4, Empowering European Consumers" (November 13, 2007), available at: *http://ec.europa.eu/information_society/newsroom/cf/itemlongdetail.cfm?item_id=3723*.
[1277] See Commission Press Release, MEMO/09/513 (November 20, 2009), para.1–083, n.370.
[1278] Commission Proposal for a Citizens' Rights Directive, para.1–026, n.98, 3.
[1279] Universal Service Directive, para.1–019, n.67, Art.21, as amended by the Citizens' Rights Directive.
[1280] *ibid.*, Art.22.
[1281] *ibid.*, Art.23a.

numbers in a national or international telephone numbering plan.[1282] However, this definition was circular, as providers of publicly available telephone service providers are required to offer emergency calls, but undertakings become providers of publicly available telephone service only if they offer emergency calls. Therefore, the Universal Service Directive, as amended by the Citizens' Rights Directive, deletes the third element (access to emergency services) and the definition of a publicly available telephone service is changed to that of (i) a service made available to the public (ii) for originating and receiving, directly or indirectly, national or national and international calls (iii) through a number or numbers in a national or international telephone numbering plan.[1283] A related concept, "publicly available electronic communications service", has a broader scope than that of the publicly available telephone service. The 2002 Universal Service Directive was amended by the Citizens' Rights Directive in order to extend some obligations, *e.g.* minimum contractual rights and transparency or obligations on quality of service, beyond providers of publicly available telephone services to cover also providers of publicly available electronic communications services. Nevertheless, providers of publicly available telephone services remain subject to specific obligations under the Universal Service Directive, such as regarding directory enquiry services and network integrity, that do not apply to other providers of publicly available electronic communications services.

1–317 Voice over Internet Protocol—Voice over Internet Protocol ("VoIP") consists in the delivery of voice and other services over networks based wholly or partly on Internet Protocol ("IP"). The European Regulators Group ("ERG"), succeeded by BEREC, has divided VoIP services into four categories: (i) a service where E.164 numbers[1284] are not provided and from which there is no access to or from the public switched telephone network ("PSTN") (Category 1); (ii) a service where there is outgoing access to the PSTN only and E.164 numbers are not provided (Category 2); (iii) a service where there is incoming access from the PSTN, mobile networks or via IP and E.164 numbers are provided (Category 3); and (iv) a service where there is both incoming and outgoing access to the PSTN or mobile networks, and E.164 numbers are provided (Category 4).[1285] Whilst only VoIP services in Category 4 are within the scope of the definition of publicly available telephone service, it is without doubt that VoIP services in Categories 2, 3 and 4, once provided to the public, fall within the scope of publicly available electronic communications

[1282] 2002 Universal Service Directive, para.1–019, n.67, Art.2(c).
[1283] Universal Service Directive, para.1–019, n.67, Art.2(c), as amended by the Citizens' Rights Directive.
[1284] "E.164" refers to the international telephone numbering plan set out in the International Telecommunications Union's ITU-T Recommendation E.164, The international public telecommunication numbering plan, 02/2005, available at *http://www.itu.int/rec/T-REC-E.164-200502-I/en*. See Commission Working Document on VoIP, para.1–159, n.713.
[1285] ERG Common Position on VoIP, para.1–159, n.713, 4–5. Different regulatory approaches are adopted by different Member States due to uncertainty on the regulatory treatment of Category 1 services, which include different implementations, from pure "peer-to-peer" (based simply on VoIP software which uses users' computers as nodes of the connection) to more centralised architectures (based on call management servers, databases and routers provided by the VoIP operator). It is not clear whether Category 1 services can, in general, be considered as electronic communication services under the Framework Directive. However, both the ERG and the Commission consider that PC-to-PC software-based VoIP, with no ongoing provision of a service, should not be considered to be an electronic communications service, as consumers have different expectations of PC-to-PC services and these services are not substitutable for other voice services: see ERG Common Position on VoIP, 21 and Commission Working Document on VoIP, para.1–159, n.713, 7. See also ERG, VoIP—Action Plan to Achieve Conformity with ERG Common Position, ERG(09)19, June 2009, which contains information on the implementation of the ERG Common Position on VoIP within all the 27 Member States.

services. The legal consequences of this distinction are as follows. First, providers of VoIP services in Categories 2, 3 and 4 must comply with some obligations in Chapter IV of the Universal Service Directive concerning end-users' interests and rights, which apply both to telephone service providers and to providers of publicly available electronic communications services, in particular provisions related to minimum contractual rights,[1286] transparency,[1287] quality of service[1288] and ensuring equivalence in access and choice for disabled users.[1289] Second, since the provisions related to network integrity,[1290] telephone directory enquiry services[1291] and additional facilities[1292] apply only to providers of publicly available telephone services, only VoIP providers falling into Category 4 will be subject to these rules. Third, the obligation to provide access to emergency services (including the "112" number),[1293] which is imposed upon operators providing originating national calls to a number or numbers in a national telephone numbering plan, may be applicable to VoIP providers falling into Categories 2 and 4, if this is technically feasible.[1294] Fourth, as the obligation of number portability[1295] only concerns numbers from a national telephone numbering plan, this will only apply to Categories 3 and 4, as Category 2 VoIP does not require such a number.[1296] VoIP services in Category 1 are not subject to any of these obligations.

1–318 Network Neutrality—Network neutrality (also known as "net neutrality", "net freedom" or "internet neutrality") refers to a policy principle regarding access for online content and services on broadband networks. In principle, network neutrality implies a general and *ex ante* obligation of non-discrimination by operators of electronic communications networks when granting access to internet content providers[1297] and end-users. The possible incorporation of such an obligation into law was first fiercely debated in the United States, before it rapidly gained increased attention throughout the world, including the EU. This debate is generally considered to be triggered by the technology of traffic management (also known as "traffic shaping" or "access tiering"). Traffic management can improve the quality of service for high-demand users by providing prioritised broadband access. However, it can also potentially have negative effects, as it gives operators of electronic communications networks the ability to: (i) block the ability of particular internet content providers to use broadband services ("blockage"); (ii) degrade the

[1286] Universal Service Directive, para.1-019, n.67, Art.20.
[1287] *ibid.*, Art.21.
[1288] *ibid.*, Art.22.
[1289] *ibid.*, Art.23a.
[1290] *ibid.*, Art.23.
[1291] *ibid.*, Art.25.
[1292] *ibid.*, Art.29.
[1293] *ibid.*, Art.26.
[1294] See para.1–337, below and Citizens' Rights Directive, para.1–019, n.670, recital 40. For non-nomadic VoIP emergency calls, all providers should route the emergency call to the emergency centre responsible for serving the area of the VoIP user. This can be achieved by a lookup in the address database maintained by the VoIP service provider and containing the VoIP user's address. It is more complex to route emergency calls from nomadic VoIP to the correct emergency centre, because routing for fixed services and networks is based on geographical knowledge of the NTP through E.164 geographic numbers: see ERG Common Position on VoIP, para.1–159, n.713, 10.
[1295] Universal Service Directive, para.1–019, n.67, Art.30.
[1296] A distinction should be made between VoIP access from the PSTN and from mobile networks. The former should be regarded as fixed numbers and the latter as mobile numbers; it should be borne in mind that number portability is not required to take place between fixed numbers and mobile numbers.
[1297] "Internet content providers" are operators that provide content, applications and services based on the platform of the Internet, *e.g.* Google, Yahoo and YouTube.

ability of particular internet content providers to use broadband services in order to favour affiliated ones ("discriminatory degradation"); (iii) degrade access for customers with a basic level of demand in order to provide prioritised access (or "tiered access") to customers with high demand ("general degradation"); (iv) impose unreasonable restrictions on connecting certain devices or on which applications may be used on their networks; and (v) reserve prioritised access to affiliated internet content providers ("exclusive prioritisation"). Although the 2002 Electronic Communications Regulatory Framework was sufficient to deal with the first two problems (*i.e.* blockage and discriminatory degradation), it could not easily, if not at all, be adapted to tackle the last three problems (*i.e.* general degradation, unreasonable restrictions on equipment and applications and exclusive prioritisation).[1298] Therefore, the amendment of the 2002 Electronic Communications Regulatory Framework to deal with problems of network neutrality was among the major changes proposed by the Commission regarding the reform of the 2002 Universal Service Directive,[1299] and is one of the 12 most prominent reforms introduced by the 2009 reforms to the Electronic Communications Regulatory Framework.[1300] A number of specific provisions of the Universal Service Directive[1301] and the Framework Directive[1302] are dedicated to solving these problems.

2. Contracts and transparency

1–319 Minimum contractual rights—Even in a competitive environment, providers of electronic communications networks and services still enjoy considerable bargaining power *vis-à-vis* their customers, particularly consumers. In this context, consumers, and other end-users if they so request, have a right to a contract when they subscribe to services providing connection to a public communications network and/or publicly available electronic communications services.[1303] The Universal Service Directive also provides the minimum content of these contracts. In particular, undertakings must specify in a clear, comprehensive and easily accessible form: (i) the identity and

[1298] Valcke, Hou, Stevens and Kosta, "Network Neutrality: Legal Answers from an EU Perspective", (2008) 32 *Revue du Droit des Technologies de l'Information* 323.
[1299] Common Position 16/2009 adopted by the Council on 16 February 2009 with a view to the adoption of a Directive 2009/.../EC amending Directive 2002/22, Directive 2002/58 and Regulation 2006/2004, Statement of the Council's reasons, O.J. 2009 C103/40, May 5, 2009 ("Common Position for a Citizens' Rights Directive").
[1300] Commission MEMO/09/513 (November 20, 2009), para.1–083, n.370, point 4.
[1301] Universal Service Directive, para.1–019, n.67, Arts.20–22: see paras.1–313 and 1–315, above; and also Art.1(3).
[1302] Framework Directive, para.1–019, n.64, Art.8. Prioritised access can provide advantages in terms of guaranteed quality of service to internet content providers and thus may be misused by electronic communications network operators to distort competition, especially in order to exclude unaffiliated internet content providers. This issue is not addressed in the Universal Service Directive, but in Art.8(2)(b) of the Framework Directive, which states that NRAs shall promote competition by ensuring that there is no distortion of competition in the electronic communications sector, including the transmission of content. Therefore, exclusive prioritisation that has the effect of foreclosing other content providers should, in principle, be prevented: See paras.1–054, 1–059 and 1–061, above.
[1303] Consumers have a right to a contract with all undertakings providing a connection to a public communications network and/or publicly available electronic communications services. Under the 2002 Universal Service Directive, consumers were only entitled to a contract with undertakings providing connection and/or access to the public telephone network; undertakings offering electronic communications services other than connection and/or access to the public telephone network (*e.g.* simple resellers) were not obliged to conclude contracts with consumers: 2002 Universal Service Directive, para.1–019, n.67, Art.20(3).

address of the undertaking; (ii) the services to be provided, including access to, or limitations on access to, emergency services, caller location information and customer support services; the types of maintenance services offered; (iii) the subscriber's options as to whether or not to be included in a directory and the data that will be included; (iv) information on prices and tariffs (including any minimum usage required to benefit from promotional terms and any charges related to number portability) and on how up-to-date information on tariffs, maintenance charges and payment methods can be obtained; (v) the duration of the contract; (vi) the conditions for renewing or terminating the contract, including any charges to terminate the contract; (vii) compensation and/or refund arrangements if the contracted service quality levels are not met; (viii) procedures for out-of-court dispute resolution; and (ix) the type of action that might be taken by the undertakings in reaction to security incidents or threats and vulnerabilities, as well as compensation arrangements in case of security or integrity incidents. Contracts may also include information on the use of electronic communications networks and services to engage in unlawful activities or to disseminate harmful content, and on the means of protection against risks to personal security, privacy and personal data.[1304] Before modifying the contract's terms, the supplier must give its customers at least one month's notice, the format of which is to be specified by the NRAs, and subscribers must be allowed to withdraw from a contract without penalty.[1305] In addition, the NRAs have the power to impose further specific measures, including per call tariff information.[1306]

1–320 Minimum contract periods—In order to take full advantage of the competitive environment within the electronic communications sector, consumers should be able to make informed choices and to change providers when they want.[1307] It is essential to ensure that consumers can do so without being hindered by contractual obstacles. Reasonable minimum contractual periods may be written in consumer contracts. However, Member States must ensure that the contracts do not include an initial commitment period that exceeds 24 months. They shall also ensure that undertakings offer users the possibility to subscribe to a contract with a maximum duration of 12 months.[1308] Without prejudice to any minimum contractual period, conditions and procedures for contract termination should not act as a disincentive against changing service providers.[1309]

1–321 Transparency—Under the Electronic Communications Regulatory Framework (which minimises *ex ante* intervention, in favour of the application of competition rules), NRAs are provided with powers to intervene if a competitive market does not satisfy users' and consumers' needs. The availability of transparent, up-to-date and comparable information on offers and services is a key element for existing or new consumers in competitive markets, and thus to providing consumers with better information, and is also one of the most prominent reforms made to the Electronic Communications Regulatory Framework.[1310] The Universal Service Directive differentiates between transparency obligations towards the public generally (including potential subscribers) and transparency obligations only to existing subscribers and foresees a specific role for NRAs in this field.

[1304] Universal Service Directive, para.1–019, n.67, Art.20(1).
[1305] *ibid.*, Art.20(2).
[1306] There is no requirement that users be informed about the price of a call immediately afterwards ("advice of duration and charge"). However, at least for the use of mobile networks, the market is already responding to customers' demands to provide such information.
[1307] Citizens' Rights Directive, para.1–019, n.67, recital 47.
[1308] Universal Service Directive, para.1–019, n.67, Art.30(5).
[1309] *ibid.*, Art.30(6).
[1310] Commission Press Release, MEMO/09/513, para.1–083, n.370, point 2.

1–322 ***Transparency to the public generally***—Undertakings providing public electronic communications networks or publicly available electronic communications services are obliged to publish the following information in a clear, comprehensive and easily accessible form: (i) transparent, comparable, adequate and up-to-date information on prices and tariffs; (ii) any charges due on termination of a contract; and (iii) standard terms and conditions on access to, and use of, services to end-users and consumers. NRAs may specify additional requirements regarding the form for publishing this information.[1311] End-users and consumers of electronic communications services should be able to easily and independently compare the prices of various services offered on the market. In order to facilitate such price comparisons, NRAs should encourage the provision of the necessary information, for instance by means of interactive guides or similar techniques. In cases where such information is not available free of charge or at a reasonable price, NRAs can make such guides or techniques available, either themselves or through a third party. Third parties can use the published information free of charge for the purposes of selling or making available such interactive guides or similar techniques.[1312] According to the Commission, in most cases it is the NRAs who have undertaken the role of providing price comparison services, including in Belgium, Denmark, Lithuania, Ireland, Portugal and Sweden. In some Member States, information on quality comparison has also been published. For example, the Spanish and Portuguese regulators publish quality of service parameter comparisons on their websites; in the United Kingdom both fixed and mobile operators run voluntary industry schemes for the online comparison of quality of service information; and in Belgium a web-based tool for comparing quality of service parameters is being implemented.[1313] In addition, undertakings may also be required to publish public interest information free of charge. In such cases, this information should cover: (i) the most common uses of electronic communications services to engage in unlawful activities or to disseminate harmful content, particularly where it may prejudice respect for the rights and freedoms of others, including infringements of copyright and related rights, and the legal consequences of such infringements: and (ii) the means of protection against risks to personal security, privacy and personal data when using electronic communications services.[1314]

1–323 ***Transparency to existing subscribers***—Besides the information required in subscription contracts, undertakings providing public electronic communications networks and/or publicly available electronic communications services must also: (i) provide applicable tariff information regarding any services that are subject to particular pricing conditions; (ii) regularly remind subscribers of the conditions for accessing emergency services or caller location information; (iii) inform subscribers of any change to the conditions limiting access to and/or use of services and applications; (iv) provide information on any procedure to measure and shape traffic, so as to avoid filling or overfilling a network link and on how those procedures could impact on service quality; (v) inform subscribers of their right to determine whether or not to include their personal data in a directory and of the types of data that will be included; and (vi) regularly inform disabled subscribers of details of products and services designed for them. For this purpose, NRAs, if they deem it appropriate, may promote self- or co-regulatory measures, prior to imposing any binding obligations.[1315]

[1311] Universal Service Directive, para.1–019, n.67, Art.21(1).
[1312] *ibid.*, Art.21(2) and Citizens' Rights Directive, para.1–019, n.67, recital 32.
[1313] Accompanying Documents to the 14th Implementation Report, para.1–033, n.134, Volume 1, Part 2, 42–43.
[1314] Universal Service Directive, para.1–019, n.67, Art.21(4).
[1315] *ibid.*, Art.21(3).

1–324 Unreasonable restrictions on equipment and applications[1316]—The 2002 Regulatory Framework was not sufficient to prevent network operators imposing unreasonable restrictions on connecting certain devices to their networks or on the applications that could be used on a specific network.[1317] In order to close this gap, the Regulatory Framework was modified in 2009 to enshrine the freedom of end-users to decide which services, applications, hardware and software they require to use for such purposes, except where restrictions are justified to preserve the integrity and security of networks and services. End-users should be fully informed of any limitations imposed on the use of electronic communications services by the service and/or network provider.[1318] In particular, electronic communications providers are obliged to inform consumers, in the subscription contracts, of: (i) any conditions limiting access to and/or use of services and applications; (ii) the minimum service quality levels offered, namely the time for the initial connection and, where appropriate, other quality of service parameters, as defined by the NRAs;[1319] (iii) information on any procedures put in place by the undertaking to measure and shape traffic so as to avoid filling or overfilling a network link and on how those procedures could impact on service quality; and (iv) any restrictions imposed by the provider on the use of terminal equipment.[1320] This increase in transparency should be a good safeguard in ensuring not only that electronic communications network operators do not jeopardise consumers' rights but also that broadband markets remain or become competitive.[1321]

3. Quality of service

1–325 Quality of service—The Regulatory Framework lays down harmonised rules concerning the quality of service of all publicly available electronic communications networks and/or services; this concept is different from the quality of service levels applicable to designated universal service providers pursuant to Article 11 of the Universal Service Directive.[1322] NRAs should, after taking account of the views of interested parties,[1323] be able to require undertakings providing publicly available electronic communications networks and/or services to publish comparable, adequate and up-to-date information for end-users on the quality of their services and measures taken to ensure equivalence in access for disabled end-users.[1324] NRAs may specify the quality of service parameters (*e.g.* supply time for initial connection, fault rate per access line, fault repair time,

[1316] This is one aspect of network neutrality: see paras.1–061 and 1–318. Other aspects of network neutrality are discussed in paras.1–054, 1–059 and 1–326.

[1317] See para.1–318, above.

[1318] Citizens' Rights Directive, para.1–019, n.67, recital 28 and Framework Directive, para.1–019, n.64, Art.8(4)(g).

[1319] Universal Service Directive, para.1–019, n.67, Art.20(1)(b).

[1320] *ibid.*, 21(3)(c)and Art.21(3)(d).

[1321] OECD, "Internet Traffic Prioritisation: An Overview" (2007), DSTI/ICCP/TISP(2006)4/FINAL, 31, available at: *http://www.oecd.org/dataoecd/43/63/38405781.pdf*.

[1322] See para.1–303, above.

[1323] Interested parties include end users, consumers (including, in particular, disabled end users), manufacturers and undertakings that provide electronic communications networks and/or services. They may provide their views on issues related to all end users and consumer rights concerning publicly available electronic communications services, in particular where they have a significant impact on the market. NRAs may develop mechanisms to improve the general quality of service provision by developing and monitoring codes of conduct and operating standards: Universal Service Directive, para.1–019, n.67, Art.33.

[1324] *ibid.*, Art.22(1).

response time for operator or directory services and billing accuracy) to be measured, and the content, form and manner of the information to be published, in order to ensure that end-users, including disabled end-users, can have access to comprehensive, comparable, reliable and user-friendly information.[1325]

1–326 Minimum quality of service requirements and degradation[1326]—Once network operators reserve part of their existing capacity for prioritised access, there is, accordingly, a general degradation for consumers with non-prioritised access.[1327] The 2002 Regulatory Framework was insufficient to solve this problem. In order to prevent such general degradation of networks and the hindering or slowing down of traffic over networks, the Universal Service Directive now provides that the NRAs should be able to impose minimum quality of service requirements on undertakings providing public communications networks. Before adopting such requirements, the NRA must notify the Commission and the BEREC[1328] of the grounds for action by it, the envisaged requirements that it will impose and the proposed course of action. The Commission may make comments or recommendations in order to ensure that the requirements do not adversely affect the functioning of the internal market. The NRA should take the utmost account of the Commission's comments or recommendations when finalising the requirements.[1329] This should help to prevent serious degradation problems.

4. Availability of services in case of force majeure

1–327 In future IP networks, the provision of a service may be separated from the provision of the network and ensuring the availability of electronic communications services will be of great importance. Therefore, the Universal Service Directive requires Member States to ensure the fullest possible availability of publicly available telephone services provided over public communications networks in the event of catastrophic network breakdown or in cases of force majeure. It also requires operators providing publicly available telephone services at a fixed location to take all reasonable steps to ensure uninterrupted access to emergency services.[1330] Operators and service providers should also specify in their contracts with end-users, consumers and subscribers the type of action that will be taken in case of security or integrity incidents, threats or vulnerabilities.[1331]

5. Ensuring equivalence in access and choice for disabled end-users

1–328 One of the goals of the 2006 review of the Electronic Communications Regulatory Framework was to further improve the accessibility and choice of disabled end-users, including elderly end-users. Therefore, the Universal Service Directive highlights the protection of the

[1325] *ibid.*, Art.22(2).

[1326] Universal Service Directive, para.1–019, n.67, Art.22(3); Citizens' Rights Directive, para.1–019, n.67, recital 34. Other aspects of network neutrality are considered in paras.1–054, 1–059, 1–061, 1–318 and 1–324, above.

[1327] See para.1–318, above.

[1328] BEREC Regulation, para.1–028, n.113, Art.2(c).

[1329] Valcke, Hou, Stevens and Kosta, "Guardian Knight or Hands off: the European Response to Network Neutrality, Legal Consideration on the Electronic Communications Reform" (2008) 72 *Communications & Strategies* 89 105.

[1330] Universal Service Directive, para.1–019, n.67, Art.23 and Citizens' Rights Directive, para.1–019, n.67, recital 35.

[1331] *ibid*, Universal Service Directive, Art.20 and Citizens' Rights Directive, recital 25.

interests of disabled users in respect of the provision of a number of services, such as the emergency service ("112" number)[1332] and harmonised services of social value ("116" number),[1333] in particular in order to guarantee equivalence in disabled end-users' access to services on the same basis as other end-users.[1334] In principle, access to those services should be functionally equivalent, so that disabled end-users benefit from the same usability of services as other end-users, where necessary by different means.[1335] Member States may take specific measures, taking account of national circumstances, to ensure that disabled end-users can also take advantage of the choice of undertakings and service providers available to the majority of end-users.[1336] In the context of implementing measures for disabled end-users, operators and service providers should be encouraged to comply with the relevant standards or specifications published according to the Framework Directive.[1337] The Regulatory Framework also pays special attention to the provision of universal services to disabled end-users, for example with regard to public payphones and directory enquiry services.[1338]

1–329 Furthermore, the relevant national authorities can also impose specific requirements upon undertakings providing publicly available electronic communications services in order to ensure that disabled end-users have access to electronic communications services equivalent to those enjoyed by the majority of end-users and benefit from the choice of undertakings and services that are available to the majority of end-users. Member States shall also encourage the availability of terminal equipment that provides the necessary services and functions for disabled end-users.[1339] Such requirements may include, in particular, that disabled end-users can take advantage of services on the same terms and conditions, including prices and tariffs, as those offered to other end-users, despite any additional costs incurred by operators in servicing them.[1340] Undertakings providing electronic communications services must regularly inform their disabled subscribers of details of products and services especially designed for use by them.[1341]

6. Telephone directories and enquiry services

1–330 Directories and associated information services are an essential means of accessing public electronic communications services. They have traditionally been closely associated with the provision of voice telephony services and are considered to be one of the basic elements of universal service. Accordingly, early in the process of the liberalisation of the telecommunications sector, measures were taken at the EU level to ensure that the introduction of a competitive environment in telecommunications services involved an extension of the regulatory framework both to include directories and to secure the maintenance of a universal directory and information service accessible to all users at an affordable price.[1342]

[1332] *ibid*, Universal Service Directive, Art.26 and Citizens' Rights Directive, recital 41.
[1333] *ibid*, Universal Service Directive, Art.27 and Citizens' Rights Directive, recital 45.
[1334] *ibid*, Universal Service Directive, Art.7(1) and Citizens' Rights Directive, recital 8.
[1335] *ibid*, Citizens' Rights Directive, recital 12.
[1336] *ibid*, Universal Service Directive, Art.7(2).
[1337] *ibid.*, Art.7(3).
[1338] *ibid.*, Arts.6(1) and 5. See para.1–296 *and seq.*, above.
[1339] *ibid.*, Art.23a.
[1340] Citizens' Rights Directive, para.1–019, n.67, recital 36.
[1341] Universal Service Directive, para.1–019, n.67, Art.21(3)(f).
[1342] ONP Voice Telephony Directive, para.1–011, n.35, Art.6.

1–331 Directory enquiry services—Directory information and directory service constitute an essential access tool for publicly available telephone services and form part of the harmonised universal service.[1343] Member States must ensure that at least one comprehensive directory is available (in printed and/or electronic form) throughout their territory and that it is updated regularly.[1344] They must also ensure that all users of publicly available communications services, including users of public payphones, have access to at least one comprehensive telephone directory enquiry service.[1345] These obligations may be imposed upon all undertakings that assign telephone numbers to subscribers,[1346] to ensure that all end-users provided with a publicly available telephone service have access to directory services, regardless of the network to which they are connected. In order to guarantee this access, NRAs can impose obligations and conditions under Article 5 of the Access Directive on undertakings that control access to end-users for the provision of directory enquiry services.[1347] Furthermore, there should be no regulatory restrictions to the provision of EU-wide access to directory enquiry services and access to operators and directory services in other Member States.[1348] In order to enable the provision of directory services, providers of publicly available telephone services must meet all reasonable requests to make available their subscribers' information in an agreed format on terms which are fair, cost-oriented and non-discriminatory.[1349] The issue of access by new entrants to incumbent operators' raw subscriber data has given rise to a number of disputes. In particular, new entrants have argued that incumbent operators have abused their dominant positions by either refusing to supply, or charging excessive prices for the supply of, their subscriber information. These disputes have necessitated the intervention of NRAs and the Commission to force incumbent operators to supply data and/or reduce the price for the supply of subscriber information.[1350] According to the Commission, the establishment of directory services including both fixed and mobile subscribers is not an easy task in many Member States. The Commission has opened 11 infringement proceedings in this regard, whilst, for different reasons, directory services were not available in Bulgaria, Portugal and Romania until the beginning of 2009.[1351]

[1343] Universal Service Directive, para.1–019, n.67, Art.5.
[1344] *ibid.*, Art.5(1)(a). In *Commission v Portugal*, para.1–034, n.143, Portugal was found to have failed to comply with its obligations to make available to all end-users at least one comprehensive directory and at least one comprehensive directory enquiry service, as the directory and directory enquiry services then available in Portugal only contained the subscriber data of some operators.
[1345] Universal Service Directive, para.1–019, n.67, Art.5(1)(b). See also para.1–296, above.
[1346] *ibid.*, Art.25(2).
[1347] *ibid.*, Art.25(3). The Access Directive, para.1–019, n.66, Art.5(1), second sub-para., specifies that NRAs must be able to impose on undertakings that control access to end-users obligations to make their services interoperable: see para.1–229, above.
[1348] *ibid.*, Arts.25(2) and 25(4).
[1349] *ibid.*, Art.25(2).
[1350] In particular, following a complaint by ITT Promedia, the Commission investigated the prices of Belgacom, the Belgian incumbent operator, for access to subscriber data required for the publication of telephone directories. It was alleged that Belgacom's prices were excessive and discriminatory and thereby infringed Art.102. The Commission's investigation was closed following a settlement, pursuant to which Belgacom agreed to a substantial reduction in these prices, so that they were cost-oriented and did not contain variable components related to the turnover or portability of the competing directory publishers, thereby allowing Belgacom to recover its costs plus a reasonable profit margin, but no more. See Case 36.001, *ITT Promedia/Belgacom*, XXVII Report on Competition Policy (1997), point 67 and Commission Press Release, *Settlement reached with Belgacom on the publication of telephone directories—ITT withdraws complaint*, IP/97/292 (April 11, 1997); see also para.5–063, below.
[1351] See European Commission14th Implementation Report, para.1–033, n.134, Volume 1, Part 2, 45.

1–332 Protection of privacy—Subscribers should have the right to have their information included in publicly available directories.[1352] At the time of the conclusion of subscription contracts, customers must be informed by their suppliers in a clear, comprehensive and easily accessible form of their options as to whether or not, free of charge, to include their personal data in such directories.[1353] Once a customer chooses to be included in a directory, she or he must have the right to verify, correct or withdraw her/his personal data, and should also be informed of the systems which allow information to be included in the directory database, without such information being disclosed to users of directory services.[1354] Personal data contained in printed or electronic directories of subscribers that are available to the public must be limited to the extent necessary to identify a particular subscriber (*i.e.* name and address), unless the subscriber has given his or her unambiguous consent to the publication of additional data. Furthermore, wholesale measures ensuring the inclusion of end-user data (both fixed and mobile) in databases should comply with the safeguards for the protection of personal data, in particular Article 12 of the E-Privacy Directive.[1355]

1–333 Database protection for directories—Directories are databases and benefit as such from the protection of the Database Directive, as the collection and updating of the subscribers information represents a substantial investment.[1356] Directories might also qualify for copyright protection to the extent that they show some originality in the selection and arrangement of their content,[1357] as well as for the *sui generis* protection afforded by the Database Directive.

7. End-user interests and numbers

1–334 Number portability—In order to take full advantage of the competitive environment, consumers should be able to change network and service providers when it is in their interests to do so. It is essential to ensure that they can do so without being hindered by legal, technical or practical obstacles. The ability to retain their number, through number portability, is a particularly key facilitator of consumer choice and effective competition in competitive markets for electronic communications.[1358] Accordingly, the Universal Service Directive requires that number portability (*i.e.* the possibility for a subscriber to keep his telephone number while changing operator, type of service or location) should be available for all subscribers which have been allocated numbers from the national telephone numbering plan.[1359] Operators that assign to their subscribers numbers from

[1352] Universal Service Directive, para.1–019, n.67, Art.25(1).
[1353] *ibid.*, Arts.20(1)(c) and 21(3)(e).
[1354] *ibid.*, recital 33.
[1355] *ibid.*, recital 38.
[1356] Directive 96/9 of March 11, 1996 on the legal protection of databases, O.J. 1996 L77/20: see also para.3–068 *et seq.*, below.
[1357] See para.3–062 *et seq.*, below.
[1358] Citizens' Rights Directive, para.1–019, n.67, recital 47.
[1359] Under the ONP Interconnection Directive, para.1–011, n.36, number portability obligations were imposed only on operators of fixed networks. Subsequently, the 2002 Universal Service Directive, para.1–019, n.67, extended the scope of number portability to all subscribers of publicly available telephone services, thereby covering also mobile operators. In order to ensure that consumers can fully benefit from number portability, the Commission has proposed that the right to number portability should be no longer limited to publicly available telephone services, but should instead be linked to the right to be assigned a number from the national telephone numbering plan: see Commission Proposal for a Citizens' Rights Directive, para.1–026, n.98, 9. This proposal was, eventually, included within the Citizens' Rights Directive.

the national telephone numbering plan are required to offer number portability, regardless of whether they have been designated as possessing SMP or are subject to universal service obligations.[1360] This applies both to fixed and mobile operators, although portability is not mandated between a fixed network and a mobile network.[1361] Number portability is required at a specific location for geographic numbers[1362] and at any location for non-geographic numbers.[1363] The ported number should be activated within the shortest possible time, which in any case cannot exceed one working day. This fixed time limit is one of the most prominent reforms to the Regulatory Framework introduced in 2009.[1364] Member States may establish global processes for the porting of numbers, after considering national provisions on contracts, technical feasibility and the need to maintain continuity of service for subscribers (in any event loss of service during the process of porting shall not exceed one working day). In practice, the solutions used for managing the national number portability system have so far varied among Member States, including bilateral agreements, a central database managed by the NRAs, or a central database managed by one of the major operators.[1365] Furthermore, measures adopted by NRAs must ensure that subscribers are protected throughout the switching process and are not switched against their will. National law must provide appropriate sanctions in case of delays in porting or abuses of porting.[1366]

1–335 ***Costs of number portability***—The costs charged between operators and/or service providers related to the provision of number portability should be cost-oriented and should not act as a disincentive to subscribers changing service providers.[1367] This pricing must include the traffic costs of the ported number and the set-up costs incurred by operators to implement requests for number portability.[1368] NRAs may impose retail tariffs for the porting of numbers,[1369] *e.g.* by defining a maximum price that may be charged by the donor operator to the recipient operator for its set-up costs. These tariffs must not distort competition, and must be fixed on the basis of the

[1360] Universal Service Directive, para.1–019, n.67, Art.30(1).
[1361] Citizens' Rights Directive, para.1–019, n.67, Annex I, Part C. Nevertheless, Member States are not prevented from adopting national rules for porting numbers between fixed operators and mobile operators: 2002 Universal Service Directive, para.1–019, n.67, recital 40.
[1362] *ibid*, Annex I, Part C. A geographic number is a number from the national numbering plan where part of its digit structure contains geographic significance (*e.g.* the local area code, such as "020" for London, "01" for Paris or "02" for Brussels) used for routing calls to the physical location of the network termination point of the subscriber to whom the number has been assigned.
[1363] *ibid.* Non-geographic numbers are (national) number ranges that do not identify a specific geographic location. Such numbers include mobile numbers, and freephone, local rate, national rate and premium rate services. Member States must ensure that end users located in other Member States can access non-geographic numbers within their territory where this is technically feasible, except where the subscriber to which a non-geographic number has been assigned has chosen for commercial reasons to receive calls only from calling parties located in specific geographic areas.
[1364] Commission Press Release, MEMO/09/513, para.1–083, n.370, point 1. According to the Commission, the average time for number portability in the EU was 7.5 days (for fixed networks) and 8.5 days (for mobile networks), with much longer periods in some Member States: *ibid.*
[1365] Accompanying Documents to the 14th Implementation Report, para.1–033, n.134, Volume 1, Part II, 47–48.
[1366] Universal Service Directive, para.1–019, n.67, Art.30(4).
[1367] *ibid.*, Art.30(2).
[1368] *Mobistar v IBPT*, para.1–095, n.423, para.30.
[1369] Universal Service Directive, para.1–019, n.67, Art.30(3).

costs in such a way that consumers are not dissuaded from making use of the facility of number portability.[1370]

1–336 The single European emergency number ("112")—The single European emergency number, "112", was originally set up as a number which could be used by citizens who travel abroad, as they would only have to remember one number, wherever they travelled in the EU. This pan-European emergency number has considerable potential benefits for EU citizens in the context of the single market and is of critical importance.[1371] Therefore, measures to guarantee improved access to this emergency service became one of the most prominent reforms to the Regulatory Framework introduced in 2009.[1372] NRAs must ensure that undertakings that offer an electronic communications service for originating national calls to a number or numbers in a national telephone numbering plan provide end-users, including users of public payphones, with access to emergency services free of charge.[1373] These emergency services could include information on emergency numbers, hospitals, directory information on hospitals, calls to report forest fires, calls to a police immediate response number, and any other national emergency call number which is specified by an NRA. All Member States must use and promote the awareness of the "112" number as the single European emergency calls number[1374] and citizens should be adequately informed about the existence and the use of the "112" number.[1375] It has been suggested that Member States' emergency services should gradually be able to handle calls in several languages and that best practices should be exchanged at the national or EU level.[1376] At the beginning of 2009, calls could be handled in at least English in most Member States.[1377] Calls to "112" should be appropriately answered and handled in the manner that best suits the national organisation of emergency systems, and at least as expeditiously and effectively as calls to the national emergency number or numbers currently in use.[1378] Disabled users should be served equivalently.[1379]

1–337 Caller location information in emergency calls—Undertakings providing access to emergency services must make caller location information available free of charge to the authority handling emergency calls as soon as the call reaches that authority.[1380] Member States, in the

[1370] *Mobistar v IBPT*, para.1–095, n.423, para.37.

[1371] Commission Press Release, *Saving Travellers' Lives: Commission Urges Member States to Improve Their Response to 112 Emergency Calls*, IP/05/1239 (October 11, 2005).

[1372] Commission Press Release, MEMO/09/513, para.1–083, n.370, point 6.

[1373] Universal Service Directive, para.1–019, n.67, Arts.26(1) and 26(2).

[1374] The "112" number was originally introduced by Council Decision 91/396 of July 29, 1991 on the introduction of a single European emergency call number, O.J. 1991 L217/31, which was repealed by the Framework Directive, para.1–019, n.64, Art.26. The single European emergency call number is now dealt with in the Universal Service Directive. The "112"number is used in place of or in addition to any national emergency numbers, *e.g.* "999" in the United Kingdom.

[1375] Universal Service Directive, para.1–019, n.67, Art.26(6).

[1376] Communications Committee Working Document of March 18, 2005 on Implementation of the single European emergency number 112: follow-up, COCOM05-07, 3.

[1377] Germany, Spain, France and Slovakia have stated that English may not be available in all cases in all public safety answering points ("PSAPs") and its availability depends on the linguistic resources of the PSAPs. In Bulgaria and Latvia, calls in English may be forwarded for processing to another (central) PSAP where competent staff are available. See Communications Committee Working Document of March 24, 2009, Implementation of the European emergency number 112—Results of the second data-gathering round, COCOM09-11, 7.

[1378] Universal Service Directive, para.1–019, n.67, Art.26(3).

[1379] *ibid.*, Art.26(4).

[1380] *ibid.*, Art.26(5).

context of "112" services, should not only establish an appropriate regulatory framework, but also ensure that the information on the location of all callers to the "112" number is actually transmitted to the emergency services. The provision of caller location information may be limited by technical feasibility issues.[1381] However, a lack of investment and delays in acquiring the technical equipment necessary for that purpose cannot be regarded as a lack of technical feasibility.[1382] Furthermore, internal organisational difficulties cannot be used by Member States as a justification for non-compliance with their obligations regarding "112" services.[1383] In order to ensure effective access to "112" services, the Commission, after consulting BEREC, may adopt technical implementing measures. However, these technical implementing measures shall be adopted without prejudice to, and shall have no impact on, the organisation of emergency services, which remains the exclusive competence of the Member States.[1384]

1–338 ***Recommendation on the processing of caller location information***—The Commission Recommendation on Caller Location Information has clarified how caller location information should be provided. The Universal Service Directive remains silent on the method to be used to transmit information on the location of the number calling the "112" service. Member States therefore have a choice in how to support the provision of caller location information. Nevertheless, the Recommendation refers to two methods: (i) "push" (automatic transmission of the information by the authorities handling emergency calls) and (ii) "pull" (operators of publicly available telephone services provide the information solely at the request of the emergency authorities).[1385] The Commission recommends the first method, at least after a transitional period. However, given its non-binding effect, the Recommendation cannot oblige Member States to use a specific method to implement the "112" services.[1386] In addition, although the "push" method is technologically more difficult than the "pull" method, a Member State cannot justify any delay in fulfilling its obligations under Article 26(3) of the Universal Service Directive by opting for the method "push" whilst not questioning the technical feasibility of this method.[1387] Furthermore, according to the Recommendation, Member States should draw up national rules to require operators of public fixed and mobile networks to: (i) provide location information in a non-discriminatory manner, in particular as regards the quality of location information provided on

[1381] According to Art.26(3) of the 2002 Universal Service Directive, para.1–019, n.67, the provision of caller location information was clearly subject to the principle of technical feasibility. Nevertheless, Art.26(5) of the amended Universal Service Directive, para.1–019, n.67, removes the wording regarding technical feasibility in order to strengthen the obligation to provide caller location information, which may suggest that caller location information should be provided even if this is not technically feasible. Nevertheless, recital 40 of Citizens' Rights Directive, para.1–019, n.67, points out that network-independent service providers should make available caller location information only when internationally-recognised standards ensuring accurate and reliable routing and connection to the emergency services are in place, thereby indicating the currently applicability of the principle of technical feasibility to the provision of caller location information, though limited to this specific case. Additionally, undertakings that claim that providing caller location information is not technically feasible shall bear the burden of proof in demonstrating this.

[1382] *Commission v Lithuania*, para.1–034, n.140, paras.43, 46.

[1383] *Commission v Italy*, para.1–034, n.140, paras.11–12.

[1384] Universal Service Directive, para.1–019, n.67, Art.26(7) and Citizens' Rights Directive, para.1–019, n.67, recital 39.

[1385] Commission Recommendation 2003/558 of July 25, 2003 on the processing of caller location information in electronic communication networks for the purpose of location-enhanced emergency call services, O.J. 2003 L189/49 ("Recommendation on Caller Location Information"), Art.4.

[1386] *Commission v Lithuania*, para.1–034, n.140, paras.48–50.

[1387] Case C-230/07, *Commission v The Netherlands* [2008] E.C.R. I-144, sum.pub., paras. 15–18.

their own subscribers' emergency calls as opposed to other users' emergency calls (*e.g.* in the case of fixed networks other users may include users of public payphones; and in the case of mobile networks, roamers or visited users);[1388] (ii) send together with any caller location information an identification of the network on which the call originates;[1389] (iii) keep sources of caller location information, including address information, accurate and up-to-date;[1390] (iv) provide public safety answering points and emergency services with the capability of renewing the location information through a call back functionality for the purpose of handling the emergency;[1391] and (v) use a common open interface standard to facilitate data transfer, and in particular the common data transfer protocol adopted by the standardisation body ETSI, where this is available.[1392] In addition, operators of fixed public telephone networks should make available the installation address of the line from which the emergency call is made.[1393] As the implementation of such a system at national level might result in additional costs for operators of fixed and mobile public networks, the Commission encourages Member States to minimise the overall implementation costs through increased cooperation and the development of common solutions in dialogue with those operators.[1394]

1–339 International telephone access codes ("00")—Easy access to international telephone services is considered to be vital for European citizens and businesses. Therefore, Member States must, in accordance with the Universal Service Directive, continue to ensure that the "00" code is the standard international access code.[1395] NRAs may specify requirements for the purpose of ensuring that special arrangements for making calls between adjacent locations across borders between Member States may be established or continued and that end-users of publicly available telephone service in these locations should be fully informed of such arrangements.[1396]

1–340 European telephone numbering space ("3883")—On the basis of the "388" country code, the prefix "3883" (*i.e.* European Country Code 388 and European Service Code 3) has been assigned to the European Telephone Numbering Space ("ETNS").[1397] Accordingly, the use of numbers using "3883" as a first element would enable pan-European services, such as freephone

[1388] Recommendation on Caller Location Information, para.1–338, n.1385, Art.6.
[1389] *ibid.*, Art.7.
[1390] *ibid.*, Art.8.
[1391] *ibid.*, Art.9.
[1392] *ibid.*, Art.10.
[1393] *ibid.*, Art.5.
[1394] *ibid.*, recital 7. See also Commission Press Release, *Commission pushes for rapid deployment of location enhanced 112 emergency services*, IP/03/1122 (July 25, 2003).
[1395] Universal Service Directive, para.1–019, n.67, Art.27(1) and 2002 Universal Service Directive, para.1–019, n.67, recital 37. The "00" code had initially been introduced by Council Decision 92/264 of May 11, 1992 on the introduction of a standard international telephone access code in the Community, O.J. 1992 L137/21, which was repealed by the Framework Directive, para.1–019, n.64, Art.26; the relevant provisions are now to be found in the Universal Service Directive.
[1396] Universal Service Directive, para.1–019, n.67, Art.27(1).
[1397] The "3883" code was assigned in March 2000 by the International Telecommunications Union to 24 European countries in accordance with Recommendation E.164 of the International Telecommunications Union, para.1–317, n.1284 and with ITU-T Recommendation E.164.3, "Principles, criteria and procedures for the assignment and reclamation of E.164 country codes and associated identification codes for groups of countries", 09/2001, available at *http://www.itu.int/rec/T-REC-E.164.3-200109-I/en*. The countries concerned are Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and the United Kingdom, as well as Croatia and Switzerland.

services and teleshopping, to use the same prefix throughout the EU. In order to ensure connection of calls to the ETNS, all undertakings that provide publicly available telephone service allowing international calls must handle all calls bearing the "3883" prefix and ensure that they are directly or indirectly interconnected to ETNS serving networks, at tariffs similar to those applied to international calls to and from other Member States.[1398] Furthermore, Member States shall ensure that end-users are able to access all numbers from the ETNS.[1399]

1–341 During the Commission's review of the 2002 Electronic Communications Regulatory Framework, it considered that the ETNS represented an opportunity for the development of pan-European services, but that it was prevented from realising its potential by overly bureaucratic procedural requirements and a lack of coordination between national administrations. As a solution to these problems, the Commission suggested to entrust the administration (including number assignment, monitoring and development) of ETNS to the proposed European Electronic Communications Market Authority ("EECMA").[1400] The European Parliament's Internal Market and Consumer Protection Committee objected to this proposal: its rapporteur considered that this was not necessary, as the ETNS numbering space was not used and was unlikely to be used in the future due to lack of demand.[1401] Nevertheless, the European Parliament's final report partly abandoned this position and, although not considering the possible role of EECMA, stated that demand for ETNS numbers might possibly change, in particular if the ETNS was properly managed and promoted by a separate European body, in a similar way to the structure established for the ".eu" top-level domain.[1402] The Citizens' Rights Directive has amended the 2002 Universal Service Directive to achieve this objective.[1403] In order to foster the development of the ETNS, the countries to which the International Telecommunications Union has assigned the international code "3883" should, following the example of the implementation of the ".eu" top-level domain, delegate responsibility for its management, number assignment and promotion to an existing separate organisation, to be chosen by the Commission on the basis of an open, transparent and

[1398] The related interconnection agreements should be in conformity with the Universal Service Directive, para.1–019, n.67, Art.27(3) and the 2002 Universal Service Directive, para.1–019, n.67, recital 37.
[1399] This is subject to the conditions that this is technically and economically feasible and that a called subscriber has not chosen to limit access by calling parties located in a specific geographical area: Universal Service Directive, para.1–019, n.67, Art.28(1).
[1400] Commission Proposal for an EECMA Regulation, para.1–026, n.998, recital 21 and Art.1(16). Art.8(1) of this proposal explicitly foresaw that the EECMA would, as one of its tasks, be responsible for the administration and development of the ETNS.
[1401] Harbour Report 2008, para.1–313, n.1273, Amendments 7 and 45.
[1402] *ibid.*, Amendments 21 and 93. On the ".eu" top-level domain, see Regulation 733/2002 of April 22, 2002 on the implementation of the .eu Top Level Domain, O.J. 2002 L113/1 and Commission Regulation 874/2004 of April 28, 2004 laying down public policy rules concerning the implementation and functions of the .eu Top Level Domain and the principles governing registration, O.J. 2004 L162/40 as amended by Commission Regulation 1654/2005 of October 10, 2005 amending Regulation 874/2004 of April 28, 2004, O.J. 2005 L266/35 and by Commission Regulation 1255/2007 of October 25, 2007 amending Regulation 874/2004 of April 28, 2004, O.J. 2007 L282/16. See further, para.3–019, below.
[1403] The Citizens' Rights Directive did not take into account EECMA (which during the legislative procedure has become BEREC: see para.1–099, above), for administration of the ETNS. The BEREC Regulation, para.1–028, n.113, does not give decisional powers concerning the ETNS and numbering issues to BEREC. With regard to numbering, BEREC is to be consulted on draft measures Commission relating to effective access to the emergency call number "112" and to the effective implementation of the "116" numbering range: BEREC Regulation, para.1–028, n.113, Art.3(1)(i and j). BEREC may also, provide assistance to NRAs on issues relating to fraud or misuse of numbering resources within the EU.

non-discriminatory selection procedure. That organisation should also be in charge of developing proposals for public service applications using ETNS for common European services, such as a common number for reporting the theft of mobile handsets.[1404,1405]

1–342 Harmonised numbers for harmonised services of social value ("116" series numbers)—The possible restructuring of national numbering plans on a common basis has been considered at the EU level. The Framework Directive empowers the Commission to adopt binding implementing measures in order to harmonise specific numbers or numbering ranges within the EU, where this promotes both the functioning of the internal market and the development of pan-European services.[1406] This also applies to the development of a European numbering plan. The only example of such a measure relates to the reservation of the "116" numbering range for services of social value. Harmonised services of social value are services meeting a common description that can be accessed by individuals via a freephone number, which is potentially of value to visitors from other countries to answer a specific social need. It can, in particular, contribute to the well-being or safety of citizens, or particular groups of citizens, or help citizens in difficulty.[1407] Member States should ensure that national numbers within the "116" numbering range are not occupied for other purposes in national numbering plans, but only for harmonised numbers for harmonised services of social value.[1408] These numbers should be freephone numbers, though operators are not obliged to carry calls to "116" at their own expense. As with the "112" emergency number, the Universal Service Directive requires Member States to ensure that citizens are adequately informed of the existence and use of services provided under the "116" numbering range, in particular through initiatives specifically targeting persons travelling between Member States, as well as disabled persons.[1409] The correct use of harmonised numbers for harmonised services of social value should meet the following conditions: (i) the service provides citizens with information, assistance and/or a reporting tool; (ii) the service is open to all citizens without any need for prior registration; (iii) the service is not time-limited; (iv) neither payment, nor a payment commitment, may be required as a prerequisite for using the service; and (v) calls do not contain advertising, entertainment, marketing and/or selling of commercial services.[1410] In order to ensure the effective implementation of the "116" numbering range, in particular the missing children hotline number "116000" and access for disabled end-users, the Commission, after consulting BEREC, may adopt technical implementing measures. However, these technical implementing measures must be adopted without prejudice to,

[1404] Universal Service Directive, para.1–019, n.67, Art.27(2) and Citizens' Rights Directive, para.1–019, n.67, recital 42.

[1405] The ETNS was managed under the auspices of the CEPT. The relevant ETNS website (*http://www.ero.dk/etns*) states that "all the ETNS service providers who have been assigned with ETNS numbers have been contacted in writing during the spring 2009 to request the withdrawal of the assigned ETNS numbers as of December 31, 2009. No ETNS number shall be active or in operation on January 1, 2010 and onwards." The ETNS will be organised and closely followed under the framework of the Universal Service Directive. However, the Commission has not designated any other organisation to take over the management of the ETNS.

[1406] Framework Directive, para.1–019, n.64, Arts.10(4) and 19(3)(b). When the Commission adopts such measures, it shall be assisted by the Communications Committee under the regulatory procedure with scrutiny: see para.1–114, above.

[1407] 116 Decision, para.1–022, n.79, Art.2.

[1408] *ibid.*, Art.3(c).

[1409] Universal Service Directive, para.1–019, n.67, Art.27a(3).

[1410] 116 Decision, para.1–022, n.79, Art.3.

and shall have no impact on, the organisation of these services, which remains the exclusive competence of the Member States.[1411]

1–343 ***Harmonised 116 numbers***—So far five numbers in the "116" numbering range have been harmonised at the European level: (i) "116000", (ii) "116006", (iii) "116111", (iv) "116117" and (v) "116123".[1412] The "116000" number has been assigned to hotlines for missing children. This service receives calls reporting missing children and passes them on to the police, offers guidance and support to the parents or guardians of the missing child, and supports the investigation. The "116000" service should be continuously available (*i.e.* 24 hours a day, 7 days a week and nationwide). Member States should make every effort to ensure that citizens have access to the service.[1413] The "116006" number has been allocated to helplines for victims of crime. This service enables victims of crime to get emotional support, to be informed about their rights and about ways to claim their rights, and to be referred to the relevant organisations. In particular, it provides information about local police and criminal justice proceedings, possibilities for compensation and insurance matters. It also provides support in finding other sources of help relevant to the victims of a crime. The "116111" number has been allocated to child helplines, which help children in need of care and protection and link them to services and resources. It also provides children with an opportunity to express their concerns, talk about issues directly affecting them and to call for help in an emergency situation. The "116117" number has been allocated to a service offering non-emergency medical on-call service and directing callers to the medical assistance appropriate to their needs, which are urgent but non-life-threatening, especially, but not exclusively, outside normal office hours, over the weekend and on public holidays. The service connects callers to skilled and supported call-handlers, or connects the caller directly to a qualified medical practitioner or clinician. The "116123" number has been reserved for emotional support helplines that offer support to callers who are suffering from loneliness, in a state of psychological crisis, or contemplating suicide. This service can enable the caller to benefit from a genuine human relationship based on non-judgmental listening. The last four 116 services may be not continuously available; nevertheless, the service provider must ensure that information about its availability is made publicly available in an easily accessible form, and that during periods of unavailability callers to the service are advised when the service will become available afterwards. In addition, the number "116112" is, in practice, also occupied, as it can be neither assigned nor used for any service.[1414]

8. Additional facilities and services

1–344 Under the 1998 regulatory framework, the provision of additional facilities, such as itemised billing, tone dialling and selective call barring (*i.e.* the facility whereby the subscriber can, on request to the telephone service provider, bar outgoing calls of defined types or to defined types of numbers) was mandatory for operators that were subject to universal service obligations, which often coincided with a designation of SMP. Under the Universal Service Directive, all undertakings providing publicly available telephone services and/or operating public communications networks must make available tone dialling (or dial-tone multi-frequency operation), calling-line

[1411] Universal Service Directive, para.1–019, n.67, Art.27a(5).

[1412] 116 Decision, para.1–022, n.79, Annex.

[1413] Universal Service Directive, para.1–019, n.67, Art.27a(4); and Citizens' Rights Directive, para.1–019, n.67, recital 43.

[1414] 116 Decision, para.1–022, n.79, Art.3(c).

identification and services in the event of theft and protection software, as long as it is technically feasible and economically viable.[1415] This obligation may be waived if such facilities are sufficiently available.[1416]

1–345 Additional obligations concerning disconnection may also be imposed on all undertakings providing access to public communications networks and/or publicly available telephone services. First, operators subject to universal service obligations[1417] should, in the case of non-payment of bills, send due warning before taking any proportionate, non-discriminatory and published measures, such as the interruption of service or disconnection. If a dispute remains unresolved, recourse must be had to out-of-court dispute resolution procedures.[1418] Except in cases of fraud, persistent late payment or non-payment, it should be ensured, as far as technically feasible, that any service interruption is confined to the service concerned. In appropriate cases of non-payment, Member States should allow a period of restricted service, during which only calls not incurring a charge to the subscriber (such as emergency calls and incoming calls) are permitted, and only after further non-payment can a total disconnection be made. Access to emergency services through the "112" number may be blocked in the event of repeated misuse by the user. NRAs must ensure that these procedures provide for a transparent decision-making process, in which due respect is given to the rights of both parties (*i.e.* both parties must be given the opportunity to state their case, the decision must be substantiated and notified to the parties promptly, and compensation or reimbursement must be granted). Second, all undertakings providing electronic communications services should offer means for subscribers to control the costs of telecommunications services, including free-of-charge alerts in the event of abnormal consumption patters. Third, an undertaking may, once a year, provide subscribers with alternative lower-cost tariffs on the basis of usage patterns for the previous six months, provided that this has been requested and the subscriber has consented to the undertaking retaining the data necessary to provide the facility.[1419]

9. Out-of-court dispute resolution

1–346 Out-of-court, or alternative, dispute resolution schemes have been developed across Europe to help consumers who have disputes with businesses, but have been unable to reach agreement directly with the seller. These schemes usually use a third party, such as an arbitrator, mediator or ombudsman, to help the consumer and the seller to reach a solution. The advantages of these schemes lie in their transparency, flexibility, simplicity and low costs. Therefore, out-of-court dispute resolution is encouraged in the Universal Service Directive. Such procedures should be available for disputes between consumers and undertakings that provide electronic communications networks and/or services under the Universal Service Directive and the disputes relate to the contractual conditions and/or performance of contracts concerning the supply of those networks and/or services; these procedures may also be possibly extended to include disputes involving other end-users.[1420] The means of initiating such procedures should be clearly contained in the

[1415] Universal Service Directive, para.1–019, n.67, Art.29(1) and Annex I, Part B.
[1416] *ibid.*, Art.29(2).
[1417] *ibid.*, Art.8.
[1418] *ibid.*, Art.34: see para.1–346, below.
[1419] *ibid.*, Art.29(1) and Annex I, Part A(e–g).
[1420] *ibid.*, Art.34(1). See also Roaming Regulation, para.1–019, n.64, Art.8: in the event of an unresolved dispute involving a consumer or end-user and concerning an issue falling within the scope of the Roaming

subscription contracts.[1421] Independent dispute resolution bodies must be established, either based on existing dispute resolution bodies or new bodies, and such procedures should conform at least to the minimum principles established by the Commission on the out-of-court settlement of consumer disputes.[1422] Member States should make every effort to ensure that those procedures are transparent and exercised impartially, and that disputes are settled fairly and promptly. Additionally, a system of reimbursement and/or compensation may also be established, where warranted. Where such disputes involve parties in different Member States, the relevant national authorities shall coordinate their efforts in order to resolve the dispute.[1423] Nevertheless, such procedures shall not deprive consumers of the legal protections afforded by national law.[1424] An Italian court has made four references for a preliminary ruling to the Court of Justice on whether the 2002 Universal Service Directive allowed for a mandatory out-of-court procedure which must be followed before resort may be had to legal proceedings.[1425] In her Opinion, Advocate General Kokott considered that the 2002 Universal Service Directive did not indicate whether or not a mandatory out-of-court procedure was permissible and that the issue therefore must be considered as one of effective judicial protection. The Advocate General considered that a mandatory out-of-court dispute resolution procedure did not constitute a disproportionate infringement upon the right to effective judicial protection, but could only constitute a minor infringement of the right to judicial enforcement of consumer rights by the courts, which is outweighed by the opportunity to end the dispute quickly and inexpensively. Her opinion was supported by the Court of Justice.[1426]

1–347 According to the Commission, in a majority of Member States, out-of-court procedures have been provided by the NRAs, while in some Member States (*e.g.* France, Hungary, Italy, Latvia, Poland, Portugal, Romania, Spain and the United Kingdom) other bodies are responsible for procedures involving consumer protection that are also applicable to resolving consumer disputes in the electronic communications market. Furthermore, a number of measures aiming at facilitating the resolution of consumer complaints have been introduced across the EU. For example, in the United Kingdom, the NRA, OFCOM, has proposed to simplify operators' complaints handling procedures by adopting a single complaints code of practice. In Poland, the NRA organises a helpful service in the form of a consumer information call centre and in the

Regulation, the Member States must ensure that the out-of-court dispute resolution procedures laid down in Art.34 of the Universal Service Directive are available.
[1421] Universal Service Directive, para.1–019, n.67, Art.20(1)(g).
[1422] Commission Recommendation 98/257 of March 30, 1998 on the principles applicable to the bodies responsible for out-of-court settlement of consumer disputes, O.J. 1998 L115/31. This Recommendation aims to offer a minimum number of quality guarantees such as independence, transparency, efficiency and the respect of law.
[1423] Universal Service Directive, para.1–019, n.67, Art.34(3). Each Member States notifies the Commission of the names of the bodies responsible for the out-of-court resolution of disputes. This information is of interest not only to consumers and professionals who wish to submit a dispute to an out-of-court body, but also to the out-of-court bodies themselves, which can in this way be familiar with structure and operation of their counterparts in other Member States. This information collected by the Commission is easily accessible and available to consumers who wish to bring their case before the competent foreign out-of-court body via the corresponding entity in their own country. The Commission's aim is to enhance confidence between out-of-court bodies in the different Member States and to promote their networking and effective collaboration, with a view to resolving cross-border disputes.
[1424] *ibid.*, Art.34(4).
[1425] Joined Cases C-317/08, C-318/08, C-319/08 and C-320/08, *Alassini and others*, judgment of March 18, 2010, not yet reported.
[1426] *ibid*, Opinion of Advocate General Kokott of November 19, 2009, paras.36 and 57.

Netherlands a special online complaint form on call prices and queuing is available on a joint consumer information portal.[1427]

H. Roaming

1–348 International roaming involves the making of calls, the sending of text messages or surfing the web via a mobile phone whilst being a "guest" on the network of an operator located in a different country.[1428] International roaming services provide access to a foreign mobile operator's network for mobile end-users, who when abroad keep the number of their home networks. This allows the end-user to make and receive calls, send short-message-service (SMS) messages, and/or transmit data, without having to acquire a new SIM card, or enter into another subscription contract with the foreign mobile network operator. At the wholesale level, international roaming services are provided pursuant to "roaming agreements" between mobile operators located in different countries. At the retail level, roaming services are usually automatically included in mobile service packages. Whilst international roaming tales place worldwide, this section concerns only roaming within the Union.[1429]

1. Regulatory failure before 2007

1–349 Rules applicable to roaming within the EU before 2007—Before the adoption in 2007 of the Roaming Regulation,[1430] international roaming services were regulated in accordance with the market review procedure set out in the Framework Directive,[1431] and, in particular, the Commission's First Relevant Markets Recommendation, adopted in 2003.[1432] Under this procedure, in order to regulate international roaming services, NRAs first had to define a relevant market for

[1427] Accompanying Documents to the 14th Implementation Report, para.1–033, n.134, Volume 1, Part II, 49.

[1428] Commission Press Release, *Commission acts to cut costs of texting and mobile data services abroad—Frequently asked questions*, MEMO/08/578 (September 23, 2008), 1.

[1429] EU-wide roaming means "the use of a mobile telephone or other device by a roaming customer to make or receive intra-Community calls, or to send or receive SMS messages or to use packet switched data communications, while in a Member State other than that in which his home network is located, by means of arrangements between the operator of the home network and the operator of the visited network": Roaming Regulation, para.1–019, n.64, Art.2(2)(d).

[1430] 2007 Roaming Regulation, as amended in 2009 by the Roaming Amendment Regulation: see para.1–019, n.64. On international mobile roaming, see Winkler and Baumgarten, "The Framework for Network Access and Interconnection", in Koenig, Bartosch, Braun and Romes (eds.), para.1–002, n.5, 421, at 456–462 (situation before the review of the 2007 Roaming Regulation), who criticise the use of Art.114 [ex 95] as the legal basis for the 2007 Roaming Regulation: *ibid.*, 421, 460–461. They also argue that, by setting specific maximum price levels in EU-wide legislation, the Roaming Regulation disregards the principle of proportionality : *ibid.*, 421, 461–462. Several mobile operators in the United Kingdom have challenged the validity of both the legal basis of the 2007 Roaming Regulation and the provisions on retail price regulation (the "Eurotariff"), on the basis that it infringes the principles of proportionality and subsidiarity and the English High Court has requested a preliminary ruling from the Court of Justice: *Vodafone et al v Secretary of State for Business, Enterprise and Regulatory Reform*, para.1–019, n.70). In his Opinion of October 1, 2009, Advocate General Poiares Maduro was of the view that the 2007 Roaming Regulation had been validly adopted by the European Parliament and the Council and was consistent with the principles of proportionality and subsidiarity.

[1431] 2002 Framework Directive, para.1–019, n.64, Arts.14–16.

[1432] First Markets Recommendation, para.1–021, n.77.

international roaming services, and then assess whether an undertaking, either individually or collectively with others, had SMP. Only when an NRA found that an undertaking, or undertakings, enjoyed SMP, could it impose regulatory obligations, *e.g.* price regulation, and then only upon those undertakings with SMP. If no undertaking had SMP, any existing regulation on international roaming services was to be rolled back. In 2003, the Commission considered that only wholesale markets for international roaming, *i.e.* the provision of roaming between mobile operators in different Member States, should be regulated, and therefore only defined a wholesale market for international roaming services as a market susceptible to *ex ante* regulation.[1433] No retail market for the provision of international roaming services was identified as a relevant market, since roaming services at the retail level were not purchased independently, but constituted only one element of a broader retail package. NRAs were, therefore, obliged to conduct a market review on the wholesale roaming market.

1–350 Regulatory failure and the Roaming Regulation—Only 12 Member States[1434] initiated the market review procedure on the wholesale markets for international roaming services in their territories. However, the particular structure of the roaming markets makes it difficult for NRAs to address effectively the problem of high roaming prices. This problem has several origins. First, wholesale roaming prices are imposed by foreign mobile network operators that are not selected by the roaming customers, which results in information asymmetry for those customers.[1435] Second, the roaming customer's "home" NRA has no competence to regulate the wholesale prices of a foreign visited network operator.[1436] Third, while business customers that constantly use roaming services may have incentives to negotiate favourable roaming tariffs with their home mobile network operators, residential customers that only occasionally go abroad seldom take into account roaming prices when subscribing to a mobile network operator. The result of these characteristics means that mobile network operators have no incentives to lower retail roaming prices. Therefore, all 12 Member States reached the same conclusion, *i.e.* that the wholesale market for international roaming services could not be regulated at the national level. However, the remaining problem was that both wholesale and retail prices for international roaming services remained at very high level.[1437] The 2002 Electronic Communications Regulatory Framework did not provide Member States with suitable tools to address effectively the competition problems underlying the high prices for both wholesale and retail roaming services.[1438] The Commission was, therefore, under political pressure to find ways of regulating mobile international roaming services, other than the market review procedure, in order to bring down prices.[1439] The Roaming Regulation was therefore

[1433] *ibid.*, Annex, market 17, "the wholesale national market for international roaming on public mobile networks".

[1434] Austria, Czech Republic, Denmark, Estonia, Finland, Greece, Ireland, Italy, Poland, Slovenia, Spain and Sweden.

[1435] 2007 Roaming Regulation, para.1–019, n.64, recital 7; Roaming Amendment Regulation, para.1–019, n.64, recital 45. See also De Streel, "The Scope of Economic Sector Regulation in Electronic Communications" (2006) 62 *Communications & Strategies* 147, 149.

[1436] 2007 Roaming Regulation, para.1–019, n.64, recital 8; and European Regulators Group, ERG Common Position on the coordinated analysis of the markets for wholesale international roaming, ERG(05) 20rev1 (September 22, 2005), 3–4.

[1437] 2007 Roaming Regulation, para.1–019, n.64, recital 1. See also Commission Press Release, *I'd rather switch it off: High roaming charges are deterring Europeans from using their mobile phones abroad, says new EU survey*, IP/06/1515 (November 7, 2006).

[1438] 2007 Roaming Regulation, para.1–019, n.64, recital 9.

[1439] *ibid*, recital 10.

adopted in July 2007 and was then amended in 2009 to replace the market review procedure under the 2002 Framework Directive.[1440] Correspondingly, the wholesale market for international roaming on public mobile networks was removed from the Second Relevant Markets Recommendation adopted by the Commission in December 2007.[1441]

2. Topics addressed by and scope of the Roaming Regulation

1–351 The Roaming Regulation was adopted in order to eliminate excessive prices and imposes a glide path to bring down the maximum charges that may be levied by mobile operators, at the wholesale or retail level, for the provision of roaming services within the EU. It also imposes obligations of transparency on providers of mobile services, in order to promote the awareness of end-users of public mobile communications networks of roaming prices and to help them avoid "bill shock" after using mobile communications services abroad. It also aims to contribute to the smooth functioning of the internal market, while at the same time achieving a high level of consumer protection.[1442] The services currently covered by the Roaming Regulation include roaming mobile calls,[1443] roaming SMS messages[1444] and data roaming services[1445] (roaming SMS

[1440] *ibid*, recitals 4, 11 and 12 and Framework Directive, Art.1(5), para.1–019, n.64, as introduced by Art.10 of the 2007 Roaming Regulation, *ibid*, states that the Framework Directive and the other directives of the Electronic Communications Regulatory Framework are without prejudice to any specific measure adopted for the regulation of international roaming on public mobile telephone networks within the EU. The Roaming Regulation is such a specific measure: Framework Directive, Art.1(3). The concept of "public mobile telephone network", used in the 2007 Roaming Regulation, has been replaced in the 2009 Framework Directive by the concept of "public mobile communications network" by Art.2 of the Roaming Amendment Regulation, para.1–019, n.64.

[1441] Second Markets Recommendations, para.1–021, n.77.

[1442] Roaming Regulation. para.1–019, n.64, Arts.1(1), (2) and (4); and Roaming Amendment Regulation, para.1–019, n.64, recital 9.

[1443] A "regulated roaming call" is "a mobile voice communications call made by a roaming customer, originating on a visited network and terminating on a public communications network within the Community or received by a roaming customer, originating on a public communications network within the Community and terminating on a visited network": Roaming Regulation, para.1–019, n.64, Art.2(2)(e). It does not include fax or data calls (e.g. using VoIP over a mobile internet connection): see ERG, International Roaming Regulation—ERG Guidelines, ERG(09)24final, 2009 ("ERG Guidelines on Roaming"), 10.

[1444] A "regulated roaming SMS message" is "an SMS message sent by a roaming customer, originating on a visited network and terminating on a public communications network within the Community or received by a roaming customer, originating on a public communications network within the Community and terminating on a visited network": Roaming Regulation, para.1–019, n.64, Art.2(2)(j). An "SMS message" is "a Short Message Service text message, composed principally of alphabetical and/or numerical characters, capable of being sent between mobile and/or fixed numbers assigned in accordance with the national numbering plans": *ibid.*, Art.2(2)(i). It does not cover value-added SMS services: Roaming Amendment Regulation, para.1–019, n.64, recital 32. In addition, an SMS message is clearly distinct from other messages such as Multimedia Messaging Service (MMS) messages or e-mails. In order to ensure that the Roaming Regulation is not deprived of its effectiveness and that its objectives are fully met, any changes to the technical parameters of a roaming SMS message which would differentiate it from a domestic SMS message should be prohibited: *ibid*, recital 36.

[1445] A "regulated data roaming service" is "a roaming service enabling the use of packet switched data communications by a roaming customer by means of his mobile telephone or other mobile device while it is connected to a visited network. A regulated data roaming service does not include the transmission or receipt of regulated roaming calls or SMS messages, but does include the transmission and receipt of Multimedia Messaging Service (MMS) messages": Roaming Regulation, para.1–019, n.64, Art.2(2)(k). It does not include

message and data roaming services were not included in the 2007 Roaming Regulation).[1446] Infringements by mobile operators of the obligations imposed by the Roaming Regulation must be dealt with by the application of effective, proportionate and dissuasive penalties provided for under national law.[1447] In addition, in order not to stifle innovation, the application of the Roaming Regulation is justified only for a limited time period:[1448] the 2007 Roaming Regulation was originally set to expire on June 30, 2010;[1449] and the Roaming Amendment Regulation extended this until June 30, 2012.[1450] The Commission must review the functioning of the Roaming Regulation not later than June 30, 2011 (with an interim report by June 30, 2010) and report to the European Parliament and the Council on whether the application of the Roaming Regulation should be further extended.[1451]

3. Roaming mobile calls

1–352 Maximum wholesale charges for the origination of roaming calls—The regulation of wholesale charges under the Roaming Regulation concerns only the average wholesale charge charged by the operator of a visited network[1452] to the operator of a roaming customer's[1453] home network[1454] for the provision of a regulated roaming call originating on that visited network, which includes *inter alia* call origination, transit and termination costs. The Roaming Regulation establishes a reducing price cap (or "glide path") for the wholesale charges, based on the following schedule: (i) EUR 0.30 per minute initially; (ii) EUR 0.28 per minute from August 30, 2008; (iii) EUR 0.26 per minute from July 1, 2009; (iv) EUR 0.22 per minute from July 1, 2010; and (v) EUR 0.18 per minute from July 1, 2011.[1455] The calculation of the average wholesale charge was initially made by dividing the total wholesale revenues for roaming services received by the total number of wholesale roaming minutes sold by the operator of the visited network for the provision of wholesale roaming calls within the EU over a twelve month period or any such shorter period.

services provided through a WiFi connection, as a WiFi network is not a mobile network: ERG Guidelines on Roaming, para.1–351, n.1443, 10.

[1446] Roaming Regulation, para.1–019, n.64, Art.1(1).

[1447] *ibid.*, Art.9.

[1448] 2007 Roaming Regulation, para.1–019, n.64, recital 39.

[1449] *ibid*, Art.13.

[1450] Roaming Regulation, para.1–019, n.64, and Art.13, and Roaming Amendment Regulation, para.1–019, n.64, recital 7.

[1451] Roaming Regulation, para.1–019, n.64, Art.11.

[1452] A "visited network" is "a terrestrial public mobile communications network situated in a Member State other than that of the home network and permitting a roaming customer to make or receive calls, to send or receive SMS messages or to use packet switched data communications, by means of arrangements with the operator of the home network": *ibid.*, Art.2(2)(g).

[1453] A "roaming customer" is "a customer of a provider of terrestrial public mobile communications services, by means of a terrestrial public mobile network situated in the Community, whose contract or arrangement with his home provider permits the use of a mobile telephone or other device to make or to receive calls or to send or receive SMS messages or to use packet switched data communications on a visited network by means of arrangements between the operator of the home network and the operator of the visited network": *ibid.*, Art.2(2)(f).

[1454] A "home network" is "a terrestrial public mobile communications network located within a Member State and used by a home provider for the provision of terrestrial public mobile communications services to a roaming customer": *ibid.*, Art.2(2)(c).

[1455] *ibid.*, Art.3(1) and (2).

With effect from July 1, 2009, this method was changed in two respects: (i) the total number of wholesale roaming minutes is based on minutes actually utilised, rather than those that have been sold; and (ii) the average wholesale charge is aggregated on a per second basis, despite the operator of the visited network being permitted to apply an initial minimum charging period not exceeding 30 seconds.[1456]

1–353 Maximum retail charges for outgoing and received roaming calls—The Roaming Regulation also establishes a declining price cap (excluding VAT) for retail charges[1457] imposed by a home provider[1458] on subscribers for making outgoing and receiving incoming roaming calls. This price cap is also known as the "Eurotariff".[1459] The Eurotariff schedule for making a roaming call is a maximum charge of (i) EUR 0.49 per minute, initially; (ii) EUR 0.46 per minute from August 30, 2008; (iii) EUR 0.43 per minute from July 1, 2009; (iv) EUR 0.39 per minute from July 1, 2010; and (v) EUR 0.35 per minute from July 1, 2011. The Eurotariff schedule for calls received whilst roaming is a maximum of: (i) EUR 0.24 per minute, initially; (ii) EUR 0.22 per minute from August 30, 2008; (iii) EUR 0.19 per minute from July 1, 2009; (iv) EUR 0.15 per minute from July 1, 2010; and (v) EUR 0.11 per minute from July 1, 2011. From July 1, 2010, home providers may not impose a charge for the receipt of a roaming voice mail message, but the Roaming Regulation does not prevent them from charging for listening to messages.[1460] Since July 1, 2009 the maximum retail tariff to which the Eurotariff applies should be charged on a per second basis.[1461] Nevertheless, home providers may impose an initial minimum charging period for the making of roaming calls, not exceeding 30 seconds, which enables these operators to cover reasonable call set-up costs and to provide flexibility to compete by offering shorter minimum charging periods. However, no minimum initial charging period is justified in the case of Eurotariff calls received, as the underlying wholesale cost is charged on a per second basis and any specific set-up costs are already covered by mobile termination rates.[1462] The Eurotariff must be made available by home providers

[1456] *ibid.*, Art.3(3). The 2007 Roaming Regulation did not mandate per second charging. Therefore, some mobile network operators charged for the provision of wholesale roaming calls on the basis of minimum charging periods of up to 60 seconds, as opposed to the per second basis normally applied for other wholesale interconnection charges. This distorted competition between these operators and those applying different billing methods and undermined the consistent application of the wholesale price limits. Moreover, it represented an additional charge which, by increasing wholesale costs, had negative consequences for the pricing of voice roaming services at the retail level. Mobile operators are therefore now required to bill for the wholesale provision of regulated roaming calls on a per second basis: Roaming Amendment Regulation, para.1–019, n.64, recital 14.

[1457] A Eurotariff should not entail any other charges, such as subscription fees or other fixed or recurring charges and it may be combined with a Euro SMS tariff: Roaming Regulation, para.1–019, n.64, Arts.4(1) and 4b(6).

[1458] The "home provider" is "an undertaking that provides a roaming customer with terrestrial public mobile communications services either via its own network or as a mobile virtual network operator or reseller": *ibid.*, Art.2(2)(b).

[1459] The "Eurotariff" is "any tariff not exceeding the maximum charge for the provision of regulated roaming calls": *ibid.*, Art.2(2)(a).

[1460] Roaming Amendment Regulation, para.1–019, n.64, recital 22.

[1461] Roaming Regulation, para.1–019, n.64, Art.4(2). This "per second" requirement was not contained in the 2007 Roaming Regulation. Therefore, some network operators billed their customers based on more than one second basis, which was estimated to have added 24% to a typical Eurotariff bill for calls made and 19% for calls received. Therefore, the amended Roaming Regulation imposes this "per second" requirement: Roaming Amendment Regulation, para.1–019, n.64, recital 18.

[1462] Roaming Regulation, para.1–019, n.64, Art.4(2); and Roaming Amendment Regulation, para.1–019, n.64, recital 21.

to all their roaming subscribers in a clear and transparent form.[1463] Subscribers have the right to request their home provider to switch to or from a Eurotariff at any time, which should then be implemented within one working day of receipt of the request and free of charge. The Eurotariff should not contain conditions or restrictions pertaining to other elements of the service provided. Nevertheless, if a customer has a special roaming package including services other than regulated roaming services and wishes switch to a Eurotariff, the home provider may require the customer to forego the benefits of the other elements of the package. In addition, a home provider may delay a switch until the previous roaming tariff has been effective for a minimum specified period, however not exceeding three months.[1464]

4. Roaming SMS messages

1–354 Wholesale charges for originating a roamed SMS message—Roaming SMS services were not regulated at the EU level before the amendment of the Roaming Regulation in 2009. The 2007 Roaming Regulation only granted the Commission and NRAs powers to monitor the development of roaming SMS services.[1465] In 2009, roaming SMS messages were brought within the scope of the Roaming Regulation.[1466] The Roaming Regulation imposes a maximum average wholesale price for roamed SMS messages, which is charged by the operator of a visited network to the operator of a roaming customer's home network for sending a roaming SMS message from that visited network. From July 1, 2009, this should not exceed EUR 0.04 per SMS message.[1467] The charge is to be calculated by dividing the total wholesale revenue received by the operator of the visited network from each operator of a home network for the origination and transmission of regulated roaming SMS messages within the EU in a twelve month period (or any such shorter period) by the total number of such SMS messages originated and transmitted on behalf of the relevant operator of a home network within that period.[1468] Nevertheless, receiving (and thus the termination of) a roaming SMS message on the visited network should be free of charge.[1469]

1–355 Retail charges for sending a roamed SMS message—Since July 1, 2009, the Roaming Regulation has imposed a maximum tariff, *i.e.* the "Euro-SMS" tariff,[1470] that may be charged by the home provider to a roaming customer for sending a roaming SMS message from a visited network. The "Euro-SMS" tariff may not exceed EUR 0.11 (excluding VAT).[1471] It should not include any associated subscription or other fixed or recurring charges and it may be combined with a Eurotariff.[1472] Home providers should not charge for receiving a roaming SMS message on a

[1463] Roaming Regulation, para.1–019, n.64, Art.4(1).

[1464] *ibid.*, Art.4(4).

[1465] 2007 Roaming Regulation, para.1–019, n. 64, recital 36 and Art.7.

[1466] Roaming Amendment Regulation, para.1–019, n. 64, recitals 23–27.

[1467] Roaming Regulation, para.1–019, n.64, Art.4a(1); and Roaming Amendment Regulation, para.1–019, n.64, recital 29.

[1468] Roaming Regulation, para.1–019, n.64, Art.4a(3); and Roaming Amendment Regulation, para.1–019, n.64, recital 30.

[1469] Roaming Regulation, para.1–019, n.64, Art.4a(4); and Roaming Amendment Regulation, para.1–019, n.64, recital 30.

[1470] A "Euro-SMS tariff" is "any tariff not exceeding the maximum charge for the provision of regulated SMS messages": Roaming Regulation, para.1–019, n.64, Art.2(2)(h); and Roaming Amendment Regulation, para.1–019, n. 64, recital 31.

[1471] Roaming Regulation, para.1–019, n. 64, Arts.4b(2) and 4b(6).

[1472] *ibid.*, Art.4b(1).

visited network,[1473] which is already compensated by the retail charge levied by the sending of a roaming SMS.[1474] The Euro-SMS tariff should apply automatically to all roaming customers, except customers that have made (in the case of existing customers) or make (in case of new customers) a deliberate choice to have another roaming tariff or package.[1475] Customers may request their home providers to switch to or from a Euro-SMS tariff at any time. The switch must be made within one working day of receiving the request, be free of charge, and not be subject to any other conditions. The home provider may delay the switch until the previous roaming tariff has been effective for a minimum specified period, which may not exceed three months.[1476] Home providers must make the Euro-SMS tariff available to all their roaming customers in a clear and transparent form.

1–356 Technical characteristics of regulated roaming SMS messages—Home providers and operators of a visited network shall not alter the technical characteristics of roaming SMS messages in such a way as to make them different from the technical characteristics of non-roaming SMS messages.[1477] NRAs can, where necessary, make use of their powers under Article 5 of the Access Directive to ensure adequate access and interconnection in order to guarantee the end-to-end connectivity and interoperability of roaming services.[1478]

5. Transparency for roaming calls and SMS messages

1–357 Home providers shall inform roaming customers automatically by means of a message immediately after the customer enters a Member State other than that of the home network. This message should contain basic personalised pricing information on the maximum roaming charges (including VAT) for making/receiving calls and sending SMS messages in the visited Member State. The following specific information should be included: (i) the maximum charge for making calls within the visited country and back to the Member State of the home network, as well as for calls received, and sending regulated roaming SMS messages while in the visited Member State; and (ii) the possibility of accessing the emergency services by dialing 112 free of charge.[1479] Moreover, the ERG considers that it would be good practice to: (i) where necessary, distinguish between charges that differ according to the host network used in the visited country; and (ii) specify the maximum rates that a consumer will pay for roaming voice calls made and received, for example for making a roaming voice call to a Member State other than the subscriber's home country or within the visited country.[1480] However, the customer can give notice that the automatic message service is not required but, at the same time, keeps the right, at any time and free of charge, to require the home provider to provide the service again.[1481] In this way, the customer is alerted to the fact that roaming charges will be applicable. These services must be provided free of

[1473] *ibid.*, Art.4b(3).
[1474] Roaming Amendment Regulation, para.1–019, n.64, recital 33.
[1475] Roaming Regulation, para.1–019, n.64, Arts.4b(4)-(5); and Roaming Amendment Regulation, para.1–019, n.64, recital 34.
[1476] Roaming Regulation, para.1–019, n.64, Art.4b(6).
[1477] *ibid.*, Art.4c.
[1478] *ibid.*, Art.7(5); and Roaming Amendment Regulation, para.1–019, n.64, recital 35. See para.1–229, above.
[1479] Roaming Regulation, para.1–019, n.64, Art.6(1).
[1480] ERG Guidelines on Roaming, para.1–351, n.1443, 3.
[1481] Roaming Regulation, para.1–019, n.64, Art.6(1).

charge. In addition, a free of charge number should be designated for customers to obtain more detailed personalised pricing information on the roaming charges that apply to voice calls, SMS messages, MMS messages and other data communication services.[1482] This number should be provided to roaming customers with the mandatory pricing information.[1483] The customer should be informed of applicable roaming charges without undue delay at the time of taking out his or her subscription contract and when there is a change in tariffs. Moreover, home providers must provide this information, upon request, to blind or partially-sighted customers by voice mail.

6. Data roaming services

1–358 Wholesale charges for data roaming—The high level of retail prices for data roaming services, although on a downward trend, indicates that competition in these services may not be effective.[1484] However, data roaming services were not included within the scope of the 2007 Roaming Regulation, which only required the Commission and NRAs to monitor the development of data roaming.[1485] In the process of reviewing the 2007 Roaming Regulation, the Commission found it necessary to regulate charges for data roaming services and they are now regulated under the Roaming Regulation.[1486] Given that competitive constraints, *e.g.* public wireless access to the internet, exist at the retail level, as roaming customers have alternative means of accessing data services when abroad, such as public wireless access to the internet,[1487] the Roaming Regulation only introduces a price cap for wholesale charges on data roaming services, and does not impose, at the present time, retail price regulation. The maximum average wholesale tariff that may be charged by the operator of a visited network to the home provider of the customer for the provision of data roaming services, per megabyte of data downloaded, is required to progressively decrease from EUR 1.00 on July 1, 2009, to EUR 0.80 on July 1, 2010 and EUR 0.50 on July 1, 2011.[1488] It is to be calculated by dividing the total wholesale revenue received by the operator of the visited network from each operator of a home network for the provision of regulated data roaming services in the relevant period (twelve months or shorter) by the total number of megabytes of data actually consumed by the provision of those services within that period, aggregated on a per kilobyte basis.[1489]

1–359 Transparency in retail tariffs—The Roaming Regulation does not set maximum retail tariffs for data roaming services. However, by way of minimum regulation, the Roaming Regulation does impose transparency obligations on mobile operators concerning those retail tariffs.[1490] For this purpose, home providers must ensure that their customers fully understand the financial consequences of the tariffs for data roaming services, and that they can monitor and control their expenditure. They should constantly inform customers of the risk of automatic and uncontrolled data roaming connections and downloads.[1491] Without the prior consent of, or a

[1482] *ibid*, Art.6(2).
[1483] *ibid*, Art.6(1).
[1484] Roaming Amendment Regulation, para.1–019, n.64, recital 37.
[1485] 2007 Roaming Regulation, para.1–019, n.64, recital 36 and Art.7(3).
[1486] Roaming Amendment Regulation, para.1–019, n.64, recitals 2–3.
[1487] *ibid*, recital 38.
[1488] Roaming Regulation, para.1–019, n.64, Art.6a(4)(a)
[1489] *ibid*, Art.6a(4)(b) and (c).
[1490] Roaming Amendment Regulation, para.1–019, n.64, recital 40.
[1491] Roaming Regulation, para.1–019, n.64, Art.6a(1).

request by, the customer, roaming data downloading, including software updating and email retrieval, should not take place, unless the user has indicated that he or she does not wish to enjoy such protection.[1492] Explanations on how to switch off automatic data roaming connections should be given to customers in a clear and easily understandable manner.[1493] Since July 1, 2009, home providers should send an automatic message, containing basic personalised tariff information, to customers when they initiate for the first time a data roaming service. The information should be delivered free of charge to the customers' mobile handsets or other devices, for example by an SMS message, an email or a pop-up window on the computer. Roaming customers can inform their home providers that they do not wish to receive automatic tariff information and can also require their home providers to resume this service at any time and free of charge.[1494]

1–360 Expenditure control facility—By March 1, 2010, home providers are required to give their customers the opportunity to opt deliberately and free of charge for a facility that can provide information on the accumulated consumption of data roaming services, expressed in volume or by value, over a specified period. This facility is intended to guarantee that customers' expenditure does not exceed an agreed financial limit unless explicit consent has been given to exceed it. In order to help consumers to decide such financial limits, home providers can provide one or more standard options, formulated either by value (provided that the customer is informed in advance of the corresponding volume), or in volume (provided that the customer is informed in advance of the corresponding financial amount).[1495] In particular, home providers are recommended to give examples for the price of data roaming applications, such as email, picture and web-browsing, by indicating their approximate size in term of data usage in order to facilitate customers' understanding of the financial consequences of the use of regulated data roaming services and to permit them to better monitor and control their expenditure.[1496] Moreover, a default financial or volume limit must be provided by home providers, which should be equivalent to no more than 50 EUR (excluding VAT) of outstanding charges per monthly billing period. By July 1, 2010 this default financial or volume limit should apply automatically to all customers who have not opted for another limit. Home providers should send roaming customers a first notification when the data roaming service has reached 80 per cent of the agreed financial or volume limit.[1497] When the financial or volume limit is exceeded, a second notification should be sent to the roaming customer, with information on the procedure to continue the provision of the service and the associated cost. In the absence of a prompt response from the customer, it is to be assumed that the customer wishes to cease receiving the service(s) concerned.[1498] Some providers expressed concerns that this would result in the loss of all data in the process of being downloaded or uploaded when the limit was reached. The ERG has suggested that providers should make technically feasible efforts to preserve any data that is in the course of being downloaded or uploaded for a reasonable period after the limit is reached, so as to allow the customer to resume the download or upload.[1499] After

[1492] Roaming Amendment Regulation, para.1–019, n.64, recital 38–39.
[1493] Roaming Regulation, para.1–019, n.64, Art.6a(1).
[1494] *ibid.*, Art.6a(2); and Roaming Amendment Regulation, para.1–019, n.64, recital 41.
[1495] Roaming Regulation, para.1–019, n.64, Art.6a(3).
[1496] Roaming Amendment Regulation, para.1–019, n.64, recital 42.
[1497] The customer can tell his home provider to stop sending notifications in respect of the 80% limit, but can ask the provider to resume this service at any time and free of charge: Roaming Regulation, para.1–019, n.64, Art.6a(3).
[1498] *ibid.*
[1499] ERG Guidelines on Roaming, para.1–351, n.1443, 7.

November 1, 2010, if a customer requests to switch to, opt for, or remove, a financial or volume limit facility, this should be implemented within one working day of receipt of the request, free of charge, and no other conditions or restrictions relating to other elements of the subscription can be imposed.[1500] Nevertheless, these measures should be considered as minimum safeguards for roaming customers, and should not preclude mobile operators from offering their customers other facilities which help them to predict and control their expenditure on data roaming services.[1501]

I. Privacy and security in the electronic communications sector

1–361 Introduction—The field of electronic communications has expanded significantly in recent years, providing the potential for vast and varied applications, bringing with it both promise and risks. The collection and processing of personal data in electronic communications raises concerns regarding individuals' rights and freedoms. The growing development of new technologies, such as RFID and Bluetooth, poses new security and privacy challenges. Whilst users become more familiar with technology, at the same time, and without realising, they reveal their personal information, which can create dangers to their privacy.

1–362 The internet represents a potentially serious threat to privacy, as it is an open network. This means that private communications on the internet can be intercepted and that confidential information stored in computers connected to the internet can be accessed and copied from anywhere in the world. Moreover, many activities on the internet, often unnoticed by internet users, leave tracks that reveal personal data that may be collected, analysed and used in a different context.[1502] For example, visiting a website reveals information on users' habits and tastes, which may be useful for marketing purposes. The expanding scope of the use of the internet therefore raises a number of legal issues in relation to the protection of privacy, including the right of public authorities to monitor communications on the internet to prevent crime, and the right of employers to monitor the electronic correspondence of employees. In addition, the evolution of information and communications technology and the markets which make use of it has substantially enhanced the possibility of cross-border access to, or transfer of, information, including personal data. This also raises substantial legal issues regarding the protection of the confidentiality and integrity of, and the proprietary rights in, such information. The protection of privacy in the processing of personal data, in particular in the electronic communications sector, is of great importance, as electronic communications entail the processing of user and subscriber data for the provision of various services and the billing thereof.

[1500] Roaming Regulation, para.1–019, n.64, Art.6a(3); and Roaming Amendment Regulation, para.1–019, n.64, recital 43.
[1501] *ibid*, recital 44.
[1502] In April 2008, in the context of its Safer Internet Programme, the European Commission set up the European Social Networking Task Force. The principal goal of this Task Force is the development of guidelines for the use of social networking sites by children: see European Social Networking Task Force, *Safer Social Networking Principles for the EU* (February 10, 2009), available at: *http://ec.europa.eu/information_society/activities/social_networking/docs/sn_principles.pdf*. These guidelines have currently been adopted voluntarily by 20 leading social networking sites, including Facebook, Bebo and MySpace. In this way, the European Commission has promoted a solution of self-regulation in a first attempt to protect children who use social networking sites. On February 9, 2010 the European Commission presented the findings of an independent assessment of the implementation of the principles.

1–363 In all Member States, individuals' privacy and the confidentiality of correspondence are protected as an essential right by general laws (very often of a constitutional nature) and/or as a result of similar principles developed by the courts.[1503] Article 8 of the European Convention on Human Rights ("ECHR"), which forms part of the legal order of all Member States, protects privacy and the confidentiality of correspondence. According to the case law of the European Court of Human Rights ("ECtHR"), telephone conversations,[1504] telephone numbers[1505] and voice recording[1506] fall within the scope of this Article. Pursuant to the dynamic character of the ECtHR's case law, it is to be anticipated that email[1507] and all other forms of electronic communications services will be found to fall within the scope of Article 8 of the ECHR. It is possible to bring a case before the ECtHR only in respect of infringements by a state that has ratified the Convention. A complaint against an individual or private party is inadmissible for reason of incompatibility with the Convention *ratione personae*.[1508] Such an alleged infringement can be lodged at the ECtHR only indirectly, *i.e.* when a state can be held responsible for the infringement,[1509] for example by not providing appropriate protection against, or remedies for, an infringement of the rights protected by Article 8.

1–364 With the development of information and communications technologies and their potential for the processing or controlling of data, the mere recognition of a generally applicable fundamental and constitutional principle of privacy appeared to be insufficient to safeguard effectively the growing need to protect the right of privacy with regard to the processing of personal data. This explains the move towards the adoption of comprehensive European legal instruments to be transposed into national data protection laws that are applicable both to the private and public sectors and which have been enacted in a large number of countries. The development of comprehensive national data protection laws has also been stimulated by the need to comply with international policy instruments adopted in parallel with national initiatives, such as the OECD Guidelines[1510] and the Council of Europe Convention for the Protection of Individuals with regard to the Automatic Processing of Personal Data.[1511] From an EU legal perspective, the core of data

[1503] For a description of the applicable national rules in Belgium, France, Germany, the Netherlands and Sweden, see Leenes, Koops and De Hert (eds.), *Constitutional Rights and New Technologies—A Comparative Study* (TMC Asser Press, 2008).

[1504] *Klass v Germany* (App No.5029/71) (1978) 2 E.H.R.R. 214 (September 6, 1978).

[1505] *Malone v United Kingdom* (App No.8691/79) (1984) 7 E.H.R.R. 14 (August 2, 1984).

[1506] *P.G. & J.H. v United Kingdom* (App No.44787/98) (2001) ECHR 550 (September 25 2001).

[1507] De Hert, "Balancing security and liberty within the European human rights framework. A critical reading of the Court's case law in the light of surveillance and criminal law enforcement strategies after 9/11" (2005) 1(1) *Utrecht Law Review* 68.

[1508] Van Dijk, Van Hof, Van Rijn and Zwaak (eds.), *Theory and Practice of the European Convention on Human Rights* (Intersentia, 2006, 4th ed.), 29.

[1509] *ibid.*

[1510] Recommendation concerning the Guidelines on the Protection of Privacy and Transborder Flows of Personal Data (OECD Guidelines), adopted by the Council of the OECD on September 23, 1980. On January 21, 2003 the OECD Working Party on Information Security and Privacy adopted a document entitled "Privacy Online: Policy and Practical Guidance". The Working Party has also prepared a number of reports and recommendations, which are available at *http://www.oecd.org/sti/security-privacy*. See also the OECD Report on Compliance with, and Enforcement of Privacy Protection Online, February 12, 2003, which contains an analysis of the responses to a questionnaire issued to member countries in March 2002.

[1511] Council of Europe, Convention No.108 for the Protection of Individuals with regard to the Automatic Processing of Personal Data, adopted on January 28, 1981.

protection legislation is laid down in the Framework Data Protection Directive[1512] and in the E-Privacy Directive.[1513] The European framework on data protection is complemented by the Data Retention Directive,[1514] which harmonises Member States' laws imposing obligations on providers of publicly available electronic communications services or of public communications networks with respect to the retention of certain data for law enforcement purposes.

1–365 Framework Data Protection Directive—The Framework Data Protection Directive harmonises national laws on the processing of personal data and the free movement of such data.[1515] Personal data may only be processed if the user has given his consent or when the processing is necessary for one or more of a limited number of specific reasons.[1516] The Framework Data Protection Directive contains a number of grounds on which the processing of personal data is allowed and stipulates the basic principles that must be fulfilled during the collection and processing of personal data. It also contains provisions regarding the information that needs to be provided to the data subject, the rights of the data subject, sensitive data and the national data protection authorities. Personal data may only be transferred to third countries outside the EU if

[1512] Para.1–074, n.315. This directive is influenced by the Council of Europe Convention No.108, para.1–364, n.1511. Member States were required to implement the Framework Data Protection Directive by no later than October 24, 1998. Article 33 of the Framework Data Protection Directive requires the Commission to make regular reports on its transposition. The first report was, however, only adopted on May 16, 2003, owing to delays in the transposition of the Directive into national laws. The first report was based on a broad consultation exercise undertaken during 2002, and concluded that the Directive had broadly achieved its aim of ensuring strong protection of privacy, whilst also making it easier for personal data to be transferred within the EU. However, the Commission noted that late transposition by the Member States and differences in how the Directive was being applied at the national level were preventing Europe's economy from getting the full benefit of the Directive. The report proposed a work plan to reduce those differences, based on cooperation among Member States and between Member States and the Commission: see European Commission, First Report on the Implementation of the Data Protection Directive 95/46, COM(2003) 265 final; and Commission Press Release IP/03/697 (May 16, 2003). In 2007, the Commission published a further Communication on the on the follow-up of the Work Programme for better implementation of the Data Protection Directive, which was contained in the 2003 report. The Commission found that the Directive lays down a general legal framework that is substantially appropriate and technologically neutral: see Communication from the Commission of March 7, 2007 on the follow-up of the Work Programme for better implementation of the Data Protection Directive, COM(2007) 87 final. On February 24, 2004, the European Parliament adopted a report based on the report prepared by the European Commission: see Report on the First Report on the implementation of the Data Protection Directive (95/46/EC), Final A5-0104/2004.

[1513] As amended by the Citizens' Rights Directive, para.1–019, n.67.

[1514] See para.1–019, n.68.

[1515] See Kuner, *European Data Protection Law—Corporate Compliance and Regulation* (Oxford University Press, 2nd ed., 2007); Bygrave, *Data Protection Law* (Kluwer Law International, 2002); and Jay, *Data Protection—Law and Practice* (Sweet & Maxwell, 3rd ed., 2007).

[1516] Framework Data Protection Directive, para.1–074, n.315, Art.7. The processing of personal data is legitimate when: (i) the data subject has unambiguously given his/her consent; (ii) it is necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject for entering into a contract; (iii) it is necessary for compliance with an obligation to which the controller is subject; (iv) it is necessary to protect the vital interest of the data subject; (v) it is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller or in a third party to whom the data are disclosed; and (vi) it is necessary for purposes of the legitimate interests pursued by the controller or by a third party or parties to whom the data are disclosed, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject.

the third country ensures an adequate level of protection.[1517] This provision has given rise to substantial controversy between the United States and the EU.[1518]

1–366 E-Privacy Directive—The E-Privacy Directive, adopted in 2002 and amended in 2009,[1519] protects the users of publicly available electronic communications services that are offered via public communications networks, regardless of the technologies used. It therefore implements the principle of technology neutrality into the regulation of data protection in the electronic communications sector.[1520] The E-Privacy Directive contains provisions on confidentiality of communications, the status of traffic and location data, itemised billing and unsolicited communications. For issues related to the processing of personal data, for which the E-Privacy Directive does not contain any special provisions, the general provisions of the Framework Data Protection Directive apply, including the obligations of the controller and the rights of individuals.[1521] The Framework Data Protection Directive also applies to non-public communications networks.[1522]

1–367 Data Retention Directive—The Data Retention Directive[1523] was adopted in March 2006. It harmonises national laws on the obligations of providers of publicly available electronic communications services and public communications networks with respect to the retention of traffic and location data for the purpose of investigation, detection and prosecution of serious crime. It defines the types of data that shall be retained, the duration of the retention and the data security principles that need to be respected, as well as who may have access to these data.

1. Processing of personal data (Framework Data Protection Directive)

1–368 The Framework Data Protection Directive applies to the processing of personal data wholly or partly by automatic means, and to the processing otherwise than by automatic means of personal data which form part of a filing system or are intended to form part of a filing system.[1524] It does not make any reference to specific technologies, which means that it is applicable whenever the processing of personal data takes place. In *Lindqvist*,[1525] its first judgment on the Framework Data Protection Directive, the Court of Justice dealt with the topic of the processing of personal data on the internet. The Court held that "the act of referring, on an internet page, to various persons and identifying them by name or by other means, for instance by giving their telephone

[1517] *ibid.*, Arts.25 and 26; see also para.1–383 *et seq.*, below.
[1518] See para.1–384 *et seq.*, below.
[1519] See para.1–019, n.68, above.
[1520] 2002 E-Privacy Directive, para.1–019, n.68, recital 4.
[1521] *ibid.*, recital 10.
[1522] *ibid.*
[1523] Data Retention Directive, para.1–019, n.68. For the analysis of the Directive, see para.1–422 *et seq.*, below.
[1524] The notion of "filing system" is very important in the definition of the scope of the Framework Data Protection Directive. The term is defined in Art.2(c) as "any structured set of personal data which is accessible according to specific criteria, whether centralised, decentralised or dispersed on a functional or geographical basis". "Personal data" are defined in Art.2(a) as "any information relating to an identified or identifiable natural person ('data subject'); an identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity".
[1525] Case C-101/01, *Bodil Lindqvist* [2003] E.C.R. I-12971. See Garcia, "*Bodil Lindqvist*: A Swedish Churchgoer's Violation of the European Union's Data Protection Directive Should Be a Warning to U.S. Legislators" (2005) 15(4) Fordham Intell. Prop. Media & Ent. L.J. 1205.

number or information regarding their working conditions and hobbies, constitutes the processing of personal data"[1526] within the meaning of the Framework Data Protection Directive.

1–369 Categories of parties involved—With regard to the processing of personal data, the Framework Data Protection Directive defines three distinct categories of parties: (i) the "data subject", *i.e.* the individual which is the subject of the personal data; (ii) the "data controller", *i.e.* the person (natural or legal) which alone or jointly with others determines the purposes and means of the processing of personal data;[1527] and (iii) the "data processor", *i.e.* a third party who simply processes personal data on behalf of the data controller without controlling the contents or use of the data.[1528] The classification of a natural or legal person as a data controller or data processor is of great importance, including in determining which party must comply with the obligations imposed on the data controller by the Framework Data Protection Directive and which party defines the details of the data processing. As a general rule, the data controller is liable for infringements of data protection legislation, while the responsibility of the data processor is more limited.[1529]

1–370 Rules for collecting, processing and transferring data—The Framework Data Protection Directive contains basic principles for the processing of personal data. These principles are intended to be good practice with which data controllers should comply in order to protect the data they hold, reflecting both their interests and those of the data subjects.[1530]

1–371 ***First principle***—The first of these principles requires fair and lawful processing.[1531] In determining whether the processing of personal data is "fair", particular regard must be paid to the method by which the data were obtained. The data subject shall be in a position to be informed about a processing operation. Where the data are collected directly from him, he must be given accurate and full information, taking account of the circumstances of the collection.

1–372 ***Second principle***—Under the second principle, data controllers must obtain data only for specified and legitimate purposes, and must not carry out any further processing which is incompatible with those purposes.[1532] This principle thus has two components: (i) the data controller must specifically inform the data subject of the purpose(s) for which data has been collected; and (ii) once personal data have been properly collected, they must not be used for further purposes that are incompatible with the original purpose(s).

1–373 ***Third principle***—The third principle requires a data controller to hold only personal data that are adequate, relevant and not excessive in relation to the purposes for which they are collected and/or further processed.[1533] Data controllers are therefore obliged to store only a bare minimum of data that will suffice for the running of their services. In the same context, the design and technical devices of the data processing systems must be oriented towards collecting, processing and using either no personal data or as little as possible ("data avoidance").[1534]

[1526] *ibid.*, para.27.
[1527] Framework Data Protection Directive, para.1–074, n.315, Art.2(d).
[1528] *ibid.*, Art.2(e).
[1529] Kuner, para.1–365, n.1515, para.2.19.
[1530] Walden, "Data Protection", in Reed and Angel (eds.), *Computer Law* (Oxford University Press, 5th ed., 2003), 417 at 432.
[1531] Framework Data Protection Directive, para.1–074, n.315, Art.6(a).
[1532] *ibid.*, Art.6(b).
[1533] *ibid.*, Art.6(c).
[1534] Holznagel and Sonntag, "A Case Study: The JANUS Project" in Nicoll, Prins, van Dellen (eds.), *Digital Anonymity and the Law—Tensions and Dimensions* (TMC Asser Press, 2003), 121.

1–374 ***Fourth principle***—The fourth principle stipulates that all personal data shall be accurate and, where necessary, kept up to date.[1535] This creates an obligation for data controllers to take all reasonable steps to ensure that data which are inaccurate or incomplete, having regard to the purposes for which they were collected, are either erased or corrected. In practice, a data subject may complain of a breach of this principle when the information about him is incorrect. It is therefore advisable for the data controllers to set up a mechanism whereby data subjects are able to update their personal data or to notify the data controller of inaccuracies in the relevant information. This mechanism could be set up either within the network platform (by using the network's interface), or outside the platform (*e.g.* by the use of a "hotline").

1–375 ***Fifth principle***—The fifth principle requires that personal data must not be kept for longer than is necessary for the purpose(s) for which it was collected.[1536] This implies that data should be destroyed or rendered anonymous when the specified purpose(s) for which they were collected has been achieved.

1–376 ***Sixth principle***—The sixth principle requires processing to be carried out in accordance with data subjects' rights.[1537]

1–377 ***Seventh principle***—The seventh principle addresses the issue of data security: it requires data controllers to take appropriate technical and organisational measures against unauthorised or unlawful processing, and accidental loss, destruction or damage to the data, particularly when the processing involves transmitting data via a network.[1538] To the extent that this principle covers the security requirements and robustness of the network itself, this principle overlaps with the security and confidentiality requirements laid down in Articles 4 and 5 of the E-Privacy Directive. Taken as a whole, this principle imposes a statutory obligation on data controllers to ensure that personal data are processed in a secure environment. This means that data controllers must consider the state of technological development and the cost of implementing of any security measures. The Framework Data Protection Directive also contains a liability provision: any person who suffers damage as a result of an unlawful processing operation or any act incompatible with its provisions (as implemented into national data protection legislation) is entitled to compensation from the data controller for the damage suffered.[1539] The data controller may be exempted from liability, in whole or in part, if it can be shown that he was not responsible for the event giving rise to the damage.[1540]

1–378 The data subject's rights—The Framework Data Protection Directive grants a data subject the right to obtain certain basic information from the data controller on the processing of his personal data.[1541] Article 12 of the Framework Data Protection Directive explicitly requires only that exercise of the rights contained in sub-paragraph (a)[1542] be without constraint at reasonable intervals and without excessive delay or expense.[1543] However, it is generally accepted that these conditions apply also to the exercise of the rights contained in sub-paragraphs (b)[1544] and (c)[1545] as well, *i.e.* the right to rectify, erase or block the data, as well as the right of notification to third parties of any rectification, erasure or blocking of the data.[1546] The data subject's rights in relation to the marketing of the data are discussed below.[1547] Data subjects must have a right of recourse in the event of an infringement of any of these rights.[1548]

1–379 Sensitive data—The processing of special categories of personal data, *i.e.* personal data which reveal a data subject's racial or ethnic origin, political opinion, religious or philosophical beliefs, trade union membership, or health or sex life, is prohibited.[1549] Exceptionally, for the processing of sensitive data the data subject needs to give his *explicit* consent, although Member States may prohibit the processing of sensitive data, even with the consent of the data subject.[1550] For instance, the French Data Protection Authority has published a recommendation on websites dedicated to health care matters,[1551] stating that healthcare data related to an identified or identifiable person may not be bought or sold, even if the individuals to whom these data refer have given their consent.[1552]

1–380 Notification requirement—Data controllers must notify a national supervisory authority,[1553] specifically appointed to ensure compliance with national data protection regulations,

[1535] Framework Data Protection Directive, para.1–074, n.315, Art.6(d).
[1536] *ibid.*, Art.6(e).
[1537] See para.1–378, below.
[1538] Framework Data Protection Directive, para.1–074, n.315, Art.17(1).
[1539] *ibid.*, Art.23(1).
[1540] *ibid.*, Art.23(2).
[1541] *ibid.*, Art.12.
[1542] Every data subject has the right to obtain from the controller the following: (i) confirmation as to whether or not data relating to him are being processed and information at least as to the purposes of processing, the categories of data concerned, and the recipients to whom the data are disclosed; (ii) communication to him in an intelligible form of the data undergoing processing and of any available information as to their source; and (iii) knowledge of the logic involved in any automatic processing of data concerning him at least in the case of the automated decisions: *ibid.*, Art.12(a).

[1543] In the context of the exercise of the right of access by the data subject, the Court of Justice has held that rules limiting (to a period of one year) the obligation to store information on the recipients or categories of recipient of personal data and on the content of the data disclosed and correspondingly limiting access to that information, despite basic data being stored for a much longer period, do not constitute a fair balance between the data subject's right of access and the data controller's obligations, unless it can be shown that longer term storage of that information would constitute an excessive burden on the controller: Case C-553/07, *College van burgemeester en wethouders van Rotterdam v Rijkeboer*, 3 C.M.L.R. 28.
[1544] The data subject has the right to obtain from the controller the rectification, erasure or blocking of data if its processing does not comply with the provisions of the Framework Data Protection Directive, in particular if the data is incomplete or inaccurate: Framework Data Protection Directive, para.1–074, n.315, Art.12(b).
[1545] The data subject has the right to require the controller to notify to the third parties to whom the data have been disclosed of any rectification, erasure or blocking of the data, unless this proves impossible or involves a disproportionate effort: *ibid.*, Art.12(c).
[1546] Dammann and Simitis, *EG-Datenschutzrichtlinie* (Nomos Verlagsgesellschaft, 1997).
[1547] See para.1–415, below.
[1548] Framework Data Protection Directive, para.1–074, n.315, Art.14.
[1549] E-Privacy Directive, para.1–019, n.68, Art.8.
[1550] Framework Data Protection Directive, para.1–074, n.315, Art.8(2)(a). Arts.8(2)–(7) foresee additional grounds, and specific conditions, under which the processing of sensitive data is allowed, such as for medical reasons or when the data relate to criminal convictions.
[1551] Délibération No.01-011 du 08 mars 2001 portant adoption d'une recommandation sur les sites de santé destinés au publics, available at: *http://www.cnil.fr/index.php?id=1362&delib%5Buid%5D=18&cHash=44cdf7f920*.
[1552] Kuner, para.1–365, n.1515, para.2.98.
[1553] *Commission v Germany*, para. 1–074, n.315, the Court of Justice has been asked to determine whether Germany has complied with its obligations under Art.21(8) of the Framework Data Protection Directive, to ensure the "complete independence" of supervisory authorities responsible for monitoring data processing in the private sector, where such authorities are subject to state supervision. In his Opinion of October 22, 2009, Advocate General Mazák considered that, in order to decide whether a data protection authority acts with complete independence, the negative consequences of the state's of the authorities' functions must be demonstrated (which the Commission had not done) and that the mere existence of state oversight does not, in

before carrying out any automatic processing operation and must supply detailed information on the purposes of the processing as well as the data recipients and the categories of data concerned.[1554]

1–381 Data protection in the employment sector—The Article 29 Data Protection Working Party[1555] has determined that the provisions of the Framework Data Protection Directive, as well as those of the European Convention on Human Rights,[1556] apply to limit the ability of employers to monitor the email and internet usage of employees.[1557] The Article 29 Data Protection Working Party has therefore recommended that employers comply with the "transparency principle" in developing their policies on employee email and internet monitoring. Under this principle, employers must inform employees of: (i) the extent to which communication facilities owned by the company may be used by employees for personal or private communications; (ii) the reasons and purposes for which surveillance, if any, is being carried out; (iii) the details of any surveillance measures; and (iv) the details of any enforcement procedures.[1558] Where employers permit the use of their facilities for private purposes, surveillance should only be carried out for very limited purposes, *e.g.* to ensure network security or to scan for viruses. With respect to monitoring employees' use of internet access, the transparency principle requires employers to specify: (i) material, if any, which cannot be viewed or copied; (ii) where it may be necessary to prevent access to certain sites or to prohibit misuse, whether such monitoring relates to individuals, specific sections of the company or whether the content of the sites visited is viewed or recorded by the employer; and (iii) the use, if any, that will be made of data collected concerning which employees have visited which websites. Furthermore, employers must inform employees and their representatives about the implementation of their monitoring policy and the investigation of alleged breaches.

1–382 Applicability of EU data protection legislation to non-EU undertakings—Data controllers that are not established in the EU are subject to EU data protection legislation if they make use of equipment for data processing, automated or otherwise, that is situated in the EU, unless such equipment is used only for purposes of transit through the territory of the EU. The Article 29 Data Protection Working Party has interpreted the term "equipment" broadly, which has far-reaching consequences for internet-based activities. The Article 29 Data Protection Working Party has stated that a user's PC can be considered to be "equipment".[1559] It repeated its opinion that the use

itself, undermine an authority's independence. The Court did not follow this opinion, see para. 1–074, n.315 above.

[1554] Framework Data Protection Directive, para.1–074, n.315, Arts.18, 19 and 28.

[1555] The Article 29 Data Protection Working Party is an independent European advisory body established under Art.29 of the Framework Data Protection Directive. It is made up of data protection officials from the Member States, together with a representative of the European Commission. It is independent and acts in an advisory capacity, and seeks to harmonise the application of data protection rules throughout the EU, and publishes opinions and recommendations on various data protection topics: Framework Data Protection Directive, para.1–074, n.315,Arts.29 and 30.

[1556] *Halford v United Kingdom* (App No.20605/92) (1997) 24 E.H.R.R. 523 (June 25, 1997), para.29, in which the European Court of Human Rights held that Art.8 of the ECHR, which protects against intrusions into individual's "private life" and "correspondence", applies to communications made from business premises. See also *Copland v United Kingdom*, (App. No.62617/00) (2007) 45 E.H.R.R. 37 (April 3, 2007).

[1557] Article 29 Data Protection Working Party, "Working document on the surveillance of electronic communications in the workplace", WP 55 (May 29, 2002). All opinions and recommendations of the Article 29 Working Party are available at *http://ec.europa.eu/justice_home/fsj/privacy/workinggroup/index_en.htm.*

[1558] *ibid.*, paras.3.1.3, 4.3.

[1559] See Article 29 Data Protection Working Party, Working Document on determining the international

of cookies and similar software devices by an online service provider can also be seen as the use of "equipment" in the Member State's territory, thereby invoking that Member State's data protection laws.[1560] For example, if the operator of a website located in the United States deposits a cookie or JavaScript on to the PC of a user located in the United Kingdom and then reviews the data collected by the cookie when the user revisits the (US-based) website, this would be subject to the data protection legislation of the United Kingdom.[1561]

1–383 Transfer of personal data to non-EU countries—Personal data may only be transferred from a Member State to a third country if that country ensures an "adequate level of protection".[1562] Adequacy is to be assessed in light of all the circumstances surrounding a particular data transfer, including the applicable national laws and sectoral rules (*e.g.* industry codes) in force. The Commission has the power to determine whether a third country ensures an adequate level of protection by reason of its domestic law or of the international commitments it has entered into. The effect of such a determination is that personal data can be transferred from the EU Member States and the EEA member countries (*i.e.* Norway, Liechtenstein and Iceland) to that third country without any further safeguard being necessary. The Commission has so far recognised Switzerland, Canada, Argentina, Guernsey, the Isle of Man, Faeroe Islands and Jersey as providing adequate protection.[1563] Transfers of personal data to non-EU countries which do not ensure an adequate level of protection may, nonetheless, be lawful if one of the following conditions is met: (i) the data subject has given his unambiguous consent to the proposed transfer; (ii) the transfer is necessary for the performance of a contract or the implementation of pre-contractual measures that were requested by the data subject; (iii) the transfer is necessary for the conclusion or performance of a contract concluded in the interest of the data subject between the data controller and a third party; (iv) the transfer is necessary or legally required on important public interest grounds; (v) the transfer is necessary to protect the vital interests of the data subject; (vi) the transfer is made from a public register; or (vii) contractual provisions between the transferor of data in the EU/EEA and the recipient of data in the non-EU/EEA country ensure the provision of an adequate level of protection.

1–384 Specific issues regarding the United States—Particular difficulties have arisen with the transfer of personal data to recipients in the United States, which does not have similar data protection legislation and takes a very different approach to data protection. The United States relies on a mix of sectoral legislation, regulation and self-regulation, rather than general legislation administered by specialised government agencies, with sector-specific codes being created for different industries in order to keep government intervention to a minimum and to establish systems appropriate for different sectors. The Commission had initially determined that the United States' *laissez-faire* approach did not provide an adequate level of protection for the personal data of EU

application of EU data protection law to personal data processing on the Internet by non-EU based websites, WP 56 (May 30, 2002).

[1560] See also Article 29 Data Protection Working Party, Opinion on data protection issues related to search engines, WP148 (April 4, 2008).

[1561] See Article 29 Data Protection Working Party, Working Document on determining the international application of EU data protection law to personal data processing on the Internet by non-EU based websites, WP 56 (May 30, 2002).

[1562] Framework Data Protection Directive, para.1–074, n.315, Arts.25 and 26.

[1563] *ibid.*, Art.25(6). A list of the European Commission decisions on the adequacy of the protection of personal data in third countries is available at *http://ec.europa.eu/justice_home/fsj/privacy/thridcountries/index_en.htm.*

citizens. In order to bridge these different privacy approaches and to ensure that US organisations can receive data from the EU in compliance with the Framework Data Protection Directive, the US Department of Commerce, in consultation with industry and the European Commission, developed a self-certification system based on a set of "safe harbour" principles.[1564] United States businesses that receive data from undertakings and persons in the EU and comply with such principles on a voluntary basis can benefit from the freedom to receive data transferred from the EU. Mechanisms for assuring compliance with these safe harbour principles may take different forms: (i) compliance with industry-specific data protection programs; (ii) compliance with the requirements of legal or regulatory supervisory authorities; and (iii) by committing to cooperate with data protection authorities located in the EU.

1–385 On July 26, 2000, the Commission determined that these "safe harbour" principles offered adequate protection of personal data and adopted its Safe Harbour Decision.[1565] The Safe Harbour Decision allows the transfer of personal data from the EU to US organisations that adopt self-regulatory privacy policies that comply with the following principles:

(i) notice: an organisation must inform individuals about the purposes for which it collects and uses information about them;
(ii) choice: an organisation must offer individuals the opportunity to opt out, or, in the case of sensitive information (*e.g.* medical data, race and political opinions) to opt in, if the data is to be disclosed to a third party or if it will be used for a purpose other than that for which it was originally collected;
(iii) onward transfer: to disclose information to a third party, the organisation must apply the above notice and choice principles;
(iv) security: organisations must take reasonable measures to prevent the loss, misuse, unauthorised access, disclosure, alteration and destruction of personal data;
(v) data integrity: personal information must be relevant for the purposes for which it is to be used;
(vi) access: individuals must have access to the personal information held by an organisation and be able to correct, amend or delete inaccurate information; and
(vii) enforcement: individuals must have effective recourse to remedy breaches of these principles.[1566]

[1564] See *http://www.export.gov/safeHarbor/*.

[1565] Commission Decision 2000/520 of July 26, 2000 pursuant to Directive 95/46 of the European Parliament and of the Council on the adequacy of the protection provided by the safe harbour privacy principles and related frequently asked questions issued by the US Department of Commerce, O.J. 2000 L215/7 ("Safe Harbour Decision"). In February 2002, the Commission Staff Working Paper on the application of Commission Decision 520/2000/EC was published, giving a first assessment of the functioning of the Safe Harbour Decision: see Commission Staff Working Paper on the application of Commission Decision 520/2000 of July 26, 2000 pursuant to Directive 95/46 of the European Parliament and of the Council on the adequate protection of personal data provided by the Safe Harbour Privacy Principles and related Frequently Asked Questions issued by the US Department of Commerce, SEC(2002) 196 (February 13, 2002). This was followed by a second working paper in 2004 on the implementation of the Safe Harbour Decision: see Commission Staff Working Document of October 20, 2004 on the implementation of Commission Decision 520/2000/EC on the adequate protection of personal data provided by the Safe Harbour Privacy Principles and related Frequently Asked Questions issued by the US Department of Commerce, SEC (2004) 1323.

[1566] Safe Harbour Decision, para.1–385, n.1565, Annex 1. Besides the Safe Harbour Decision, the transfer of specific types of data to the United States has been decided with regard to the processing and transfer of

1–386 ***Contractual means for ensuring an "adequate level of protection"***—The Contractual Clauses Decision[1567] contains a set of contractual conditions that, if complied with, allow non-EU recipients of personal data to satisfy the requirement that they provide an adequate level of protection for personal data, thereby allowing personal data to be transferred from the EU, notwithstanding that they are established in non-EU countries that do not provide an adequate level of protection for personal data. The data exporter must agree and warrant that the processing of personal data is in accordance with the data protection rules of the Member State from which the data is exported, including the rights and protections contained in the ECHR. Furthermore, the Contractual Clauses Decision imposes strict liability on both the data exporter and the data importer. The data importer (*i.e.* the data processor established in a third country) and the data exporter (*i.e.* the data controller transferring the data from the EU) must agree to be jointly and severally liable for any damage suffered by a data subject resulting from any infringement of the data protection rules contained in the contract, unless they are able to prove that neither of them was responsible for the losses suffered due to the infringement.[1568] Furthermore, a data subject may sue either the data importer or data exporter to enforce any of the obligations under the contract as a third party beneficiary, where this is permitted by national law.[1569] Besides the Contractual Clauses Decision, which applies to transfers from data controllers in the EU to data processors in third countries, the Commission also adopted a separate decision which applies to transfers from data controllers in the EU to data controllers in third countries.[1570]

1–387 In December 2004, the Commission approved a new set of standard contractual clauses which businesses can use to ensure adequate safeguards when personal data is transferred from the EU to third countries.[1571] The new clauses, submitted by a business coalition, are added to those previously available under the Contractual Clauses Decision. Although some of the new, alternative standard contractual clauses (such as those on litigation, the allocation of responsibilities and auditing requirements) are more business-friendly, data protection authorities have been given more powers to intervene and impose sanctions whenever necessary. The new standard clauses do

Financial Messaging Data from the European Union to the United States for purposes of the Terrorist Finance Tracking Program, see Council Decision 2010/16/CFSP/JHA of November 30, 2009 on the signing, on behalf of the EU, of the Agreement between the EU and the United States of America on the processing and transfer of Financial Messaging Data from the European Union to the United States for purposes of the Terrorist Finance Tracking Program, O.J. 2010 L8/9. However the Decision is subject to the conclusion of the aforementioned agreement, which is still to be concluded.

[1567] Commission Decision 2002/16 of December 27, 2001 on standard contractual clauses for the transfer of personal data to processors established in third countries, under Directive 95/46, O.J. 2002 L6/52 ("Contractual Clauses Decision").

[1568] Contractual Clauses Decision, para.1–386, n.1567, Clause 6 of the Standard Contractual Clauses Annex. This may exceed the scope of Art.23(2) of the Framework Data Protection Directive, which exempts data exporters from liability if they can prove that they are not responsible for the event causing the damage. See Bond and Knyrim, "Data Transfer to Third Countries: Standard Contractual Clauses of the European Commission" (2002) 18(3) C.L.S.R. 187.

[1569] Contractual Clauses Decision, para.1–386, n.1567, Art.3.

[1570] Commission Decision 2001/497 on standard contractual clauses for the transfer of personal data to third countries, under Directive 95/46, O.J. 2001 L181/19.

[1571] Commission Decision 2004/915 amending Decision 2001/497 as regards the introduction of an alternative set of standard contractual clauses for the transfer of personal data to third countries (notified under document number C(2004) 5271), O.J. 2004 L385/74. In January 2006, the Commission published a Staff Working Document on the implementation of the Commission decisions on standard contractual clauses for the transfer of personal data to third countries (2001/497/EC and 2002/16/EC), SEC(2006) 95.

not supersede the standard clauses adopted by the Commission in 2001, permitting operators to choose those that fit best their needs. During the past few years there have been calls to update the Contractual Clauses Decision, especially in view of "global outsourcing". Therefore the European Commission adopted on February 5, 2010 a new Decision on Standard Contractual Clauses for the transfer of personal data to processors established in third countries (standard contractual clauses "controller to processor") in order to make a contract better equipped for current business arrangements.[1572]

1–388 ***Binding Corporate Rules***—The Article 29 Data Protection Working Party has published a number of documents on Binding Corporate Rules ("BCRs"). These permit the use of codes of conduct, instead of model contracts, for the transfer of personal data from the EU within a corporate group. To facilitate the use of BCRs by a corporate group for its international intra-group transfers of personal data from the EU to third countries, the Article 29 Working Group clarified the elements and principles to be found in the BCRs.[1573] The Article 29 Data Protection Working Party has also developed a framework that suggests the content of BCRs when incorporating all of the necessary elements identified in its previous documents.[1574]

2. Directive on privacy and electronic communications (E-Privacy Directive)

1–389 The successful development of new cross-border electronic communications services based on advanced digital technologies, such as video-on-demand and interactive digital television, is partly dependent both on the confidence of users that their privacy will not be at risk and on Member States not imposing their own rules that could hinder such developments. It has, therefore, been necessary to adopt specific measures at the EU level to ensure the protection of personal data in the electronic communications sector, thereby contributing to the development of these new services across the EU. Accordingly, the Telecommunications Data Protection Directive[1575] was adopted in 1997. This Directive was repealed and replaced by the E-Privacy Directive[1576] in 2002, which was itself amended in 2009 by the Citizens' Rights Directive.[1577] The E-Privacy Directive protects the users of publicly available electronic communications services that are offered via

[1572] Commission Decision of February 5, 2010 on standard contractual clauses for the transfer of personal data to processors established in third countries under Directive 95/46 of the European Parliament and of the Council (notified under documents C(2010) 593), O.J. 2010 L39/5. This decision repeals the 2002 Contractual Clauses Decision (Decision 2002/16) as of May 15, 2010. See also Article 29 Data Protection Working Party, Opinion 3/2009 on the Draft Commission Decision on standard contractual clauses for the transfer of personal data to processors established in third countries, under Directive 95/46/EC (data controller to data processor), WP161 (March 5, 2009).

[1573] Article 29 Data Protection Working Party, Working Document of June 24, 2008, setting up a table with the elements and principles to be found in Binding Corporate Rules, WP 153. See also Working Document of June 3, 2003: Transfers of personal data to third countries: Applying Article 26(2) of the EU Data Protection Directive to Binding Corporate Rules for International Data Transfers, WP 74 and Working Document of April 14, 2005, Establishing a Model Checklist Application for Approval of Binding Corporate Rules, WP 108. It has also distinguished between what must be included in BCRs and what must be presented to Data Protection Authorities in the BCRs application: see Recommendation 1/2007 on the Standard Application for Approval of Binding Corporate Rules for the Transfer of personal Data, WP 133 (January 10, 2007).

[1574] Article 29 Data Protection Working Party, Working Document of June 24, 2008, Setting up a framework for the structure of Binding Corporate Rules, WP 154.

[1575] Telecommunications Data Protection Directive, para.1–012, n.41.

[1576] E-Privacy Directive, para.1–019, n.68.

[1577] Citizens' Rights Directive, para.1–019, n.067.

public communications networks, regardless of the technologies used. It implements the principle of technology neutrality into the regulation of data protection in the electronic communications sector.[1578] The E-Privacy Directive complements the Framework Data Protection Directive, a generally applicable framework directive on data protection adopted in 1995.[1579]

1–390 Scope of application of the E-Privacy Directive—The objective of the E-Privacy Directive is to provide for the harmonisation of the Member States' national rules in order to ensure an equivalent level of protection, in particular as regards the rights to privacy and confidentiality, with respect to the processing of personal data in the electronic communications sector and to ensure the free movement of such data and of electronic communications equipment and services in the EU.[1580] Whilst the E-Privacy Directive complements the Framework Data Protection Directive,[1581] it also covers, unlike the Data Protection Directive, the protection of the legitimate interests of legal persons.[1582] It does not apply to activities outside of the scope of the Treaty on the Functioning of the European Union, such as those covered by the Treaty on the European Union concerning a common foreign and security policy and police and judicial cooperation in criminal matters,[1583] nor, in any event, to activities concerning public security, defence, state security and activities in areas of criminal law.[1584] Accordingly, the E-Privacy Directive applies to the processing of data relating to natural persons or legal entities wholly or partly by automatic means and, if by non-automatic means, where the data will be maintained as part of a filing system, in connection with the provision of publicly available communications services on public communications networks in the EU, including public communications networks supporting data collection and identification devices.[1585] The E-Privacy Directive applies only to public electronic communications networks or services, including public communications networks that support data collection and identification devices. It does not apply to closed user groups and corporate networks.[1586] Devices for data collection and identification can be contactless devices using radio frequencies,[1587] such as Radio Frequency Identification ("RFID") devices, which use radio frequencies to capture data from uniquely identified tags, which can then be transferred over existing communications networks. When such devices are connected to publicly available electronic communications networks or make use of electronic communications services as a basic infrastructure, the relevant provisions of the E-Privacy Directive apply, including those on data security, traffic and location data and on confidentiality.[1588]

[1578] 2002 E-Privacy Directive, para.1–019, n.68, recital 4.

[1579] Framework Data Protection Directive, para.1–074, n.315.

[1580] E-Privacy Directive, para.1–019, n.68, Art.1(1).

[1581] *ibid.*, Art.1(2).

[1582] *ibid.*, Art.1(2) and 2002 E-Privacy Directive, para.1–019, n.68, recital 12.

[1583] Treaty on European Union (Maastricht Treaty), JN30.E8.T631 1992 GREF, Titles V and VI.

[1584] E-Privacy Directive, para.1–019, n.68, Art.1(3).

[1585] *ibid.*, Art.3.

[1586] Citizens' Rights Directive, para.1–019, n.67, recital 55.

[1587] *ibid.*, recital 56.

[1588] *ibid.* For privacy issues arising from the use of RFIDs, see Kosta and Dumortier, "Searching the man behind the tag: privacy implications of RFID technology" (2008) 2(3) *International Journal of Intellectual Property Management* 276–288.

1–391 Recommendation on RFID—RFID[1589] enables the processing of data over short distances without physical contact or visible interaction between the RFID reader or writer[1590] and the RFID tag.[1591] Therefore, the individual to whom such data relates may not be aware of the processing of that data.[1592] RFID applications hold the potential to process data that relate to a natural person who, directly or indirectly, can be identified or is identifiable.[1593] The European Commission published a Recommendation on the implementation of privacy and data protection principles in applications supported by RFID. RFID is an emerging technology and facilitates many innovative applications. It is used in various domains, including logistics, healthcare, public transport and retailing, in particular in the areas of product safety, product recalls, entertainment, work, road toll management, luggage management and travel documents.[1594] RFID can also prove very efficient in tackling counterfeiting, managing e-waste, handling hazardous materials and recycling products at their end of life.[1595] The RFID Recommendation provides guidance to the Member States on the design and operation of RFID applications in a lawful, ethical and socially and politically acceptable way, that respects the right to privacy and ensures the protection of personal data,[1596] bearing in mind that privacy and security should be built into the RFID information systems before their widespread deployment (*i.e.* "security and privacy-by-design").[1597]

1–392 Privacy and data protection impact assessments for RFID—The industry, in cooperation with relevant civil society stakeholders, is required to develop a framework for undertaking privacy and data protection impact assessments, which must be submitted to the Article 29 Data Protection Working Party for its endorsement by May 16, 2010.[1598] Operators shall prepare an impact assessment on the implications for the protection of personal data and privacy of the implementation of RFID for the relevant applications, including any information relating to whether the application can be used to monitor individuals.[1599] Operators are also required to take all appropriate technical and organisational measures to ensure the protection of personal data and privacy and shall designate a responsible person for reviewing their assessments and the measures

[1589] Commission Recommendation of May 12, 2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification, O.J. 2009 L122/47 ("Recommendation on RFID"), para.3(a). For the purposes of the Recommendation, RFID is the use of electromagnetic radiating waves or reactive field coupling in the radio frequency portion of the spectrum to communicate to or from a tag through a variety of modulation and encoding schemes to uniquely read the identity of a radio frequency tag or other data stored on it.

[1590] *ibid.*, para.3(c). An RFID reader or writer is a fixed or mobile data capture and identification device using a radio frequency electromagnetic wave or reactive field coupling to stimulate and effect a modulated data response from a tag or group of tags.

[1591] *ibid.*, para.3(b). An RFID tag is either an RFID device that has the ability to produce a radio signal or an RFID device which re-couples, back-scatters or reflects (depending on the type of device) and modulates a carrier signal received from an RFID reader or writer.

[1592] *ibid.*, recital 4.

[1593] *ibid.*, recital 5.

[1594] *ibid.*, recital 2.

[1595] *ibid.*, recital 3.

[1596] *ibid.*, para.1.

[1597] Communication from the Commission of March 15, 2007 on Radio Frequency Identification (RFID) in Europe: steps towards a policy framework, COM(2007) 96 final, 9; and Recommendation on RFID, para.1–391, n.1589, recital 6.

[1598] Recommendation on RFID, para.1–391, n.1589, para.4.

[1599] *ibid.*, para.5(a).

taken by them to protect individuals' privacy.[1600] The privacy and data protection impact assessment shall be made available to the competent authority at least six weeks before the deployment of the application and the provider shall implement the provisions of the framework for privacy and data protection impact assessments, once it is available.[1601] The operators of RFID applications shall also develop and publish a concise, accurate and easy to understand information policy for each of their applications, containing at least the following: (i) the identity and address of the operator; (ii) the purpose of the application(s); (iii) the types of data to be processed, especially if personal data are processed and whether the location of tags will be monitored; (iv) a summary of the privacy and data protection impact assessment; and (v) the eventual risks to privacy and the measures the individuals can take to protect against them.[1602] The Recommendation on RFID also contains provisions with regard to RFID applications used in the retail trade, requiring the provision of information to individuals on the presence of tags that are placed or embedded in products[1603] and calls for the deactivation or removal of the tags at the point of sale.[1604]

1–393 Security and integrity—The Better Regulation Directive introduced a new chapter on security and integrity into the Framework Directive. Operators of public communications networks and providers of publicly available electronic communications services must comply with risk management obligations regarding the security of their networks and services.[1605] They must take measures to prevent and minimise the impact of security incidents on users and interconnected networks and providers of public communications networks must guarantee the integrity of their networks.[1606] The integrity requirement covers fixed telephone networks, as well as mobile and IP networks. Before the adoption of technical and organisational measures to appropriately manage risks to the security of networks and services and to ensure the integrity of networks, Member States must provide an appropriate period for public consultation.[1607]

1–394 Data security—Elaborating on the provisions of the Framework Data Protection Directive on data security[1608] and on the provisions on security and integrity of the Framework Directive,[1609] the E-Privacy Directive contains detailed provisions on the security of processing. Providers of publicly available electronic communications services are required to take appropriate technical and organisational measures to safeguard the security of their services. The measures to be taken shall ensure a level of security appropriate to the risk involved and need to take into account the state of the art and the cost of their implementation. Personal data shall be accessed only by authorised personnel and for legally authorised purposes.[1610] Moreover, a security policy regarding the processing of personal data should be established in order to identify any vulnerabilities in the system, and regular monitoring, as well as preventive, corrective and mitigating actions, should be carried out.[1611] The providers of public electronic communications services shall

[1600] *ibid.*, para.5(b) and (c).

[1601] *ibid.*, para.5(d) and (e).

[1602] *ibid.*, para.7.

[1603] *ibid.*, para.9.

[1604] *ibid.*, paras.10–14.

[1605] Framework Directive, para.1–019, n.64, Art.13a(1).

[1606] *ibid.*, Art.13a(2).

[1607] Better Regulation Directive, para.1–019, n.64, recital 45.

[1608] Framework Data Protection Directive, para.1–074, n.315, Art.17.

[1609] Framework Directive, para.1–019, n.64, Art.13a and 13b.

[1610] E-Privacy Directive, para.1–019, n.68, Art.4(1)(a); Citizens' Rights Directive, para.1–019, n.67, recital 57.

[1611] *ibid.*

also take appropriate technical and organisational security measures to ensure the security of their services. If necessary, this shall be undertaken in cooperation with the providers of publicly available electronic communications networks. In the case of a particular risk of a breach of network security, the providers of a publicly available electronic communications service must inform the subscribers of this risk and, where the risk lies outside the scope of the measures to be taken by the service provider, subscribers must be informed of any possible remedies that may be available to them, including an indication of the possible costs. The measures taken by providers of publicly available electronic communications services can be audited by the relevant national authorities, which will also be able to issue recommendations about best practices concerning the level of security which those measures should achieve.[1612] The European Data Protection Supervisor ("EDPS") recommended that a definition of "security breach" be included in 2009 amendments to the E-Privacy Directive,[1613] but this recommendation was not adopted in the final text of the Directive.

1–395 ***Notifications of breaches of security***—A general obligation to notify breaches of security was introduced into the Framework Directive in 2009. Whenever a breach of security or loss of integrity that has a significant impact on the operation of networks or services occurs, the providers of public communications networks or of publicly available electronic communications services concerned by the breach shall notify the competent national regulatory authority.[1614] The authority shall then inform authorities in other Member States and the European Network and Information Security Agency ("ENISA").[1615] When disclosure of the breach is in public interest, the competent national authority is also required to inform the public.[1616]

1–396 ***Implementation of measures to ensure security and integrity***—The Commission may adopt appropriate technical implementing measures, taking into account European and international standards, in order to ensure the harmonisation of the measures required by the Member States to ensure security and integrity, including the measures on the obligation to notify security and integrity breaches.[1617] These implementing measures shall be adopted in accordance with the regulatory procedure with scrutiny.[1618] The competent national regulatory authorities can issue binding instructions regarding security and integrity to operators of public communications networks and providers of publicly available electronic communications services.[1619] They can require such undertakings to provide them with the information needed to assess the security and integrity of their networks and services, as well as the results of any security audits carried out by a qualified

[1612] E-Privacy Directive, para.1–019, n.68, Art.4(1)(a).

[1613] EDPS, Second Opinion on the review of Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (directive on privacy and electronic communications, January 9, 2009), para.21.

[1614] Framework Directive, para.1–019, n.64, Art.13a(3).

[1615] European Network and Information Security Agency (ENISA) is an EU agency. ENISA supports the capability of the Member States, the European institutions and the business community to prevent, address and respond to network and information security problems. The legal framework for the work of ENISA is contained in Regulation 460/2004 of March 10, 2004 establishing the European Network and Information Security Agency, O.J. 2004 L77/1.

[1616] Framework Directive, para.1–019, n.64, Art.13a(3). Each national regulatory authority shall also submit an annual report both to the Commission and to ENISA on the notifications received and the relevant actions that were taken.

[1617] *ibid.*, Art.13a(4).

[1618] *ibid.*, Art.22(3).

[1619] *ibid.*, Art.13b(1).

independent body or a competent national authority.[1620] The national regulatory authorities also have enforcement powers to investigate cases of non-compliance and the effects of non-compliance on network and services security and integrity.[1621]

1–397 ***Notification of a breach of personal data security***—One of the most important amendments to the E-Privacy Directive introduced in 2009 relates to the notification of personal data breaches.[1622] A personal data breach is a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of or access to personal data transmitted, stored or otherwise processed in connection with the provision of publicly available electronic communications services in the EU.[1623]

1–398 ***Notification to the national authorities***—If a personal data breach occurs, the provider of publicly available electronic communications services concerned is obliged to notify, without undue delay, the competent national authority. If the breach of personal data security is likely to affect adversely the personal data or privacy of a subscriber or individual, the provider shall also notify the subscriber or the individual concerned without undue delay.[1624] The subscriber or the individual concerned does not need to be notified if the provider has demonstrated that it has implemented appropriate technological protection measures, which were applied to the data concerned by the security breach, and does so to the satisfaction of the competent authority. Such technological protection measures must render the data unintelligible to any person who is not authorised to access the data. Nevertheless, the competent authority may ask the provider to notify the concerned subscribers and individuals, having considered the likely adverse effects of the breach.[1625] A breach should be considered as adversely affecting a subscriber's or an individual's data and privacy where it involves *e.g.* identity theft or fraud, physical harm, significant humiliation or damage to reputation in connection with the provision of publicly available communications services in the EU.[1626] In the event of a breach of personal data security, the provider of publicly available electronic communications services concerned has to notify the competent national authority without undue delay.

1–399 ***Notification to subscribers and individuals***—If the breach is likely to affect adversely the personal data and privacy of a subscriber or an individual, the provider shall also notify the subscriber or the individual concerned without undue delay.[1627] The notification shall contain, at a minimum, the following information: (i) a description of the nature of the personal data breach; (ii) the contact points from which more information can be obtained; and (iii) the recommended measures to be taken to mitigate any possible adverse effects of the personal data breach. The notification to the competent national authority shall additionally describe the consequences of the

[1620] *ibid.*, Art.13b(2); Better Regulation Directive, para.1–019, n.64, recital 44.

[1621] Framework Directive, para.1–019, Art.13b(3).

[1622] Recital 59 of the Citizens' Rights Directive, para.1–019, n.67, proposes the introduction of mandatory notification requirements applicable to all sectors, besides the electronic communications sector. The framework for data breach notifications, as described in the E-Privacy Directive, is limited to security breaches which occur in the electronic communications sector. Nevertheless, it demonstrates a general interest of citizens to be informed about security failures, such as data losses, which may result in their data being compromised. Citizens are also interested in being informed about available or advisable precautions that they may take in order to minimise the possible economic loss or social harm that could result from such failures.

[1623] E-Privacy Directive, para.1–019, n.68, Art.2(h).

[1624] *ibid.*, Art.4(3).

[1625] *ibid.*, Art.4(3).

[1626] Citizens' Rights Directive, para.1–019, n.67, recital 61.

[1627] E-Privacy Directive, para.1–019, n.68, Art.4(3).

personal data breach and the measures proposed or taken by the provider to address it.[1628] The notification shall also include information about the measures taken by the provider to address the breach, as well as recommendations for the subscriber or individual concerned.[1629] The obligation to notify a breach of personal data security applies only to providers of publicly available electronic communications services. This is contrary to the proposed approaches of both the European Parliament[1630] and the opinion of the EDPS,[1631] which both considered that the notification obligation should also cover information society service providers, such as online banks, online retailers and online health providers.[1632]

1–400 ***Role of national authorities***—The competent national authorities may adopt guidelines, and possibly also instructions, when necessary, concerning the circumstances in which the notification by providers of a breach of personal data security is required. They must also define the format of such notifications, as well as the way in which the notification is to be made.[1633] Furthermore, the competent national authorities should monitor the measures that are taken by providers and disseminate best practices among them.[1634] They should also be able to audit whether providers have complied with their obligations and impose appropriate sanctions if they fail to do so.[1635] The providers, on the other hand, must maintain an inventory of breaches of personal data security, containing the facts surrounding such breaches, their effects and the action taken to remedy the breaches. The information shall be sufficient for the competent national authorities to verify that the providers are complying with their obligations relating to the procedures to be followed in the event of a breach of data security.[1636] It is important for the competent national authorities to have comprehensive and reliable data on actual security incidents that lead to the security of personal data being compromised, so that they can ensure a high level of protection of personal data and privacy.[1637]

1–401 ***Role of the European Commission***—Besides the competent national authorities, the Commission may adopt technical implementing measures on the circumstances, format and procedures applicable to the information and notification requirements in order to ensure consistency in the implementation of measures regarding the notification of breaches of data security. In doing so, the Commission will consult with ENISA, the Article 29 Data Protection Working Party and the EDPS.[1638] When adopting such measures, due consideration should be given to the circumstances of the breach, including whether or not personal data had been protected by appropriate

[1628] *ibid.*

[1629] Citizens' Rights Directive, para.1–019, n.67, recital 61.

[1630] European Parliament, Legislative resolution of September 24, 2008 on the proposal for a directive of the European Parliament and of the Council amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No.2006/2004 on consumer protection cooperation (COM(2007)0698—C6-0420/2007—2007/0248(COD)), P6_TA-PROV(2008)0452.

[1631] EDPS, Second Opinion on the review of Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (directive on privacy and electronic communications) (January 9, 2009), para.30.

[1632] *ibid.*, para.22.

[1633] E-Privacy Directive, para.1–019, n.68, Art.4(4).

[1634] Citizens' Rights Directive, para.1–019, n.67, recital 58.

[1635] *ibid.*

[1636] *ibid.*, Art.4(4).

[1637] Citizens' Rights Directive, para.1–019, n.67, recital 58.

[1638] E-Privacy Directive, para.1–019, n.68, Art.4(5).

technical protection measures, effectively limiting the likelihood of identity fraud or other forms of misuse.[1639]

1–402 **Confidentiality of communications**—Member States must ensure the confidentiality of communications and the related traffic data made by means of public communications networks or services. In particular, unauthorised listening, tapping, storage or other kinds of interception or surveillance of communications and related traffic data other than by users and without the consent of the users concerned, must be prohibited by national legislation.[1640] The rules regarding the confidentiality of communications apply not only to providers of publicly available electronic communications services, but also to providers of information society services in general. As part of the process for the enforcement of Member States' obligations under EU law, the Commission has published a reasoned opinion against the United Kingdom for failing to comply with EU rules protecting the confidentiality of communications such as email and internet surfing.[1641] Ensuring the confidentiality of communications does not, however, prevent technical storage of data if this is necessary for the conveyance of a communication.[1642] Communications may also be recorded, when legally authorised, if this is carried out in the course of a lawful business practice for the purpose of providing evidence of a commercial transaction or any other business communication.[1643] This would, for example, cover the recording of a call made to a business call centre, provided that the subscriber is made aware of the recording and its purpose and has a right to refuse the recording. Exceptions to this prohibition may be included in national legislation for safeguarding national security, defence or public security and for the prevention, investigation, detection and prosecution of criminal offences or of unauthorised use of the telecommunications system. In these circumstances, data may be retained for a limited period.[1644]

1–403 ***Cookies, spyware etc.***—The storing of information, or the gaining of access to information already stored, in a subscriber or user's terminal equipment is allowed only if the subscriber or the user has given his consent, after having been provided with clear and comprehensive information, in accordance with the Framework Data Protection Directive, including information on the purposes of the processing. This does not, however, apply to technical storage of, or access

[1639] Citizens' Rights Directive, para.1–019, n.67, recital 64.

[1640] E-Privacy Directive, para.1–019, n.68, Art.5(1).

[1641] Commission Press Release, *Telecoms: Commission steps up UK legal action over privacy and personal data protection*, IP/09/1626 (October 29, 2009). The Commission's reasoned opinion followed a letter of formal notice sent by the Commission to the United Kingdom: Commission Press Release, *Telecoms: Commission launches case against UK over privacy and personal data protection*, IP/09/570 (April 14, 2009). The Commission considers that there are three gaps in the existing United Kingdom rules governing the confidentiality of electronic communications: (a) there is no independent national authority to supervise the interception of communications, although the establishment of such an authority is required under the ePrivacy and Data Protection Directives, in particular to receive and investigate complaints regarding the interception of communications; (b) current UK law, the Regulation of Investigatory Powers Act 2000 ("RIPA"), authorises the interception of communications not only where the persons concerned have consented to interception but also when the person intercepting the communications has "reasonable grounds for believing" that consent to do so has been given, which does not comply with EU rules defining "consent" as having been freely given as a specific and informed indication of a person's wishes; and (c) the RIPA's provisions prohibiting, and imposing sanctions for, the unlawful interception of communications are limited to "intentional" interception only, whereas EU law requires Members States to prohibit, and to ensure sanctions against, any unlawful interception regardless of whether committed intentionally or not.

[1642] E-Privacy Directive, para.1–019, n.68, Art.5(1).

[1643] *ibid.*, Art.5(2).

[1644] *ibid.*, Art.15. See para.1–420, below.

to, data for the sole purpose of carrying out the transmission of a communication over an electronic communications network, or if storing or access of the data is strictly necessary in order to provide an information society service explicitly requested by the subscriber or the user.[1645] However, 13 Member States have adopted a Statement the "amended Article 5(3) [of the E-Privacy Directive] is not intended to alter the existing requirement that [the] consent [of the subscriber or the user] be exercised as a right to refuse the use of cookies or similar technologies used for legitimate purposes".[1646] The confidentiality of users' communications can be compromised via so-called spyware, web bugs, hidden identifiers and other similar devices, which can enter the users' terminal without their knowledge in order to gain access to information, to store hidden information or to trace users' activities. This may seriously intrude upon users' privacy. The use of such devices should be allowed only for legitimate purposes, with the knowledge of the users concerned.[1647] The methods of giving information and offering users the right to refuse should be as user-friendly as possible.[1648] However, such devices can be a legitimate and useful tool, as in the case of cookies.[1649] Access to specific website content may be made conditional on the user's well-informed acceptance of a cookie or similar device, if the cookie is used for a legitimate purpose.[1650] This provision was, however, criticised by the Article 29 Data Protection Working Party, which found that this statement may be contradictory to the position that the users should have the possibility to refuse the storage of a cookie on their personal computers. It therefore noted that this provision may need to be clarified or revised.[1651] The scope of this provision changed significantly during the process of amendment of the E-Privacy Directive in 2009. The phrase "the use of electronic communications networks to store information or to gain access to information stored"[1652] was replaced by "the storing of information or the gaining of access to information already stored" in order to expand the application of Article 5(3) of the E-Privacy Directive. The amended provision covers not only unwanted spying programs or viruses which are inadvertently downloaded via electronic communications networks, but also hidden programs that are delivered

[1645] E-Privacy Directive, para.1–019, n.68, Art.5(3).

[1646] Statement made by 13 Member States with regard to the Citizens' Rights Directive and the ePrivacy Directive expressed on the occasion of the Council of the European Union (November 19, 2009).

[1647] 2002 E-Privacy Directive, para.1–019, n.68, recital 24.

[1648] Citizens' Rights Directive, para.1–019, n.67, recital 66

[1649] 2002 E-Privacy Directive, para.1–019, n.68, recital 25. An internet "cookie" is a computer record of information that is sent from a web server to a user's computer for the purpose of identifying that computer on the occasion of future visits to the same website. They may collect and store data on search requests, websites visited and information input into websites. When the user revisits the website, the website may retrieve this information from the cookie, unless it has been deleted by the user in the meantime. See Debusseré, *The EU E-Privacy Directive: A Monstrous Attempt to Starve the Cookie Monster?* (2005) 13(1) Int. J. Law Info. Tech. 70. Persistent cookies containing a unique user ID are personal data and therefore subject to applicable data protection legislation: see Article 29 Data Protection Working Party, Opinion 1/2008 on data protection issues related to search engines, WP 148 (April 4, 2008), repeating its opinion previously supported in: Article 29 Data Protection Working Party, Working Document of May 30, 2002, on determining the international application of EU data protection law to personal data processing on the Internet by non-EU based web sites, WP56.

[1650] 2002 E-Privacy Directive, para.1–019, n.68, recital 25.

[1651] Article 29 Data Protection Working Party, Opinion 8/2006 on the review of the regulatory Framework for Electronic Communications and Services, with focus on the ePrivacy Directive, WP 126 (September 26, 2006).

[1652] E-Privacy Directive, para.1–019, n.68, Art.5(3).

and installed in software distributed on other external storage media, such as CDs, CD-ROMs, USB keys, flash drives, etc.[1653]

1–404 Traffic data—Traffic data[1654] relating to subscribers and users[1655] that are processed and stored by a provider of a public communications network or service must, subject to certain exceptions, be erased or made anonymous when it is no longer needed for the purpose of the transmission.[1656] However, certain data collected for the purpose of subscriber billing and interconnection payments may be processed, but only up to the end of the period during which the bill may lawfully be challenged or payment may be pursued.[1657] The processing of stored traffic data must respect the principle of proportionality of the processed data. Therefore, processing of the necessary data must be limited to processing the necessary data and must be adequate, relevant and not excessive in relation to the purposes of billing and making interconnection payments.[1658] Furthermore, although the E-Privacy Directive does not specify any time period in which traffic data may be stored lawfully, the Article 29 Data Protection Working Party has indicated that a reasonable interpretation is that data may be stored for billing purposes for a maximum of three to six months, except if there is a dispute, in which case the data may be processed for a longer period.[1659] Providers of publicly available electronic communications services may also process traffic data for the purpose of marketing electronic communications services, as well as for the

[1653] Citizens' Rights Directive, para.1–019, n.67, recital 65.

[1654] E-Privacy Directive, para.1–019, n.68, Art.2(b): "traffic data means any data processed for the purpose of the conveyance of a communication on an electronic communications network or for the billing thereof".

[1655] A "subscriber" is "any natural person or legal entity who or which is party to a contract with the provider of publicly available electronic communications services for the supply of such services": Framework Directive, para.1–019, n.64, Art.2(k). The term "user" is defined "any natural person using a publicly available electronic communications service, for private or business purposes, without necessarily having subscribed to this service": E-Privacy Directive, para.1–019, n.68, Art.2(a). The definition of "user" in the E-Privacy Directive is somewhat different than that contained in Art.2(h) of the Framework Directive, which defines "user" as "a legal entity or natural person using or requesting a publicly available electronic communications service". The Data Retention Directive also contains a different definition of "user", according to which a user is "any legal entity or natural person using a publicly available electronic communications service, for private of business purposes, without necessarily having subscribed to that service": Data Retention Directive, para.1–019, n.68, Art.2(b).

[1656] E-Privacy Directive, para.1–019, n.68, Art.6(1). The exact moment after which traffic data should be erased (except for billing purposes) may depend on the type of service that is provided. For example, for a voice telephony call the transmission will be considered as completed as soon as either of the users terminates the connection, while for electronic mail, the transmission will be considered as completed as soon as the addressee receives the message, typically from the server of his service provider. However, the obligation to erase the traffic data or to make such data anonymous when it is no longer needed for the transmission of a communication or for traffic management purposes is without prejudice to certain procedures specific to the internet, such as caching in the domain name system IP addresses or the use of log-in information to control the right of access to networks or services, because these procedures fall outside of the scope of the E-Privacy Directive.

[1657] *ibid.*, Art.6(2). There is no indication in the E-Privacy Directive itself of the data that may be so processed. Arguably, such data would include: (i) the number or identification of the subscriber station; (ii) the address of the subscriber and the type of station; (iii) the total number of units to be charged for the accounting period; (iv) the called subscriber number; (v) the type, starting time and duration of the calls made and/or the data volume transmitted; (vi) the date of the call/service; and (vii) other information concerning payment such as advance payment, payments by instalments, disconnection and reminders.

[1658] See Article 29 Data Protection Working Party, Opinion 1/2003 on the storage of traffic data for billing purposes, WP69 (January 29, 2003), 6.

[1659] *ibid.*, 7.

provision of value-added services,[1660] to the extent and for the duration that this is necessary for such services. This is allowed, provided that the subscriber or the user to whom the data relate has given his prior consent, which may be withdrawn at any time.[1661] Whenever processing of traffic data takes place for the purposes of subscriber billing and interconnection payments, as well as for marketing electronic communications services of the provider or for the provision of value added services, the service provider must, prior to obtaining their consent, inform the subscriber or the user of both the types of traffic data that are being processed and the duration of the processing.[1662] The processing of traffic data in accordance with these provisions must be restricted to persons acting under the authority of the network and service providers and be limited to what is necessary for the purposes of billing or traffic management, customer inquiries, fraud detection, marketing electronic communications services or providing value-added services.[1663] Traffic data may also be provided to the competent authorities for settling interconnection, billing and other disputes.[1664]

1–405 ***Processing of traffic data for security purposes***—During the legislative procedures for the adoption of the E-Privacy Directive, an exception to the conditional processing of traffic data was introduced in order to allow the processing of traffic data for security purposes, to guarantee effective online security. The processing of traffic data is allowed to the extent strictly necessary to ensure network and information security, as defined by Article 4(c) of Regulation 460/2004.[1665] The justification for this new provision was that the Article 7(f) of the Framework Data Protection Directive applies to the processing of traffic data to the extent strictly necessary for the purposes of ensuring network and information security[1666] by providers of security technologies and services when acting as data controllers. This could include, for instance, preventing unauthorised access to electronic communications networks, the distribution of malicious code, "denial of service" attacks and damage to computer and electronic communication systems.[1667] This new provision has been criticised,[1668] for being open to abuse, as it is not accompanied by privacy safeguards. It is, in general, also redundant and has been characterised as such both by the Article 29 Data Protection

[1660] E-Privacy Directive, para.1–019, n.68, Art.2(g): a "value added service" is "any service which requires the processing of traffic data or location data other than traffic data beyond what is necessary for the transmission of a communication or the billing thereof".

[1661] *ibid.*, Art.6(3). By contrast, the Framework Data Protection Directive (Arts.6 and 7) permits the processing of data if the processing is necessary: (i) for the performance of a contract to which the person to whom the data relates is a party; or (ii) for the purposes of the legitimate interest of the data processor or the third party to whom the data are disclosed. The E-Privacy Directive therefore arguably imposes stricter rules in data processing in the electronic communications sector.

[1662] *ibid.*, Art.6(4).

[1663] *ibid.*, Art.6(5).

[1664] *ibid.*, Art.6(6).

[1665] Regulation 460/2004 of March 10, 2004, establishing the European Network and Information Security Agency, para.1–395, fn.1615. Art.4(c) defines "network and information security" as the "ability of a network or an information system to resist, at a given level of confidence, accidental events or unlawful or malicious actions that compromise the availability, authenticity, integrity and confidentiality of stored or transmitted data and the related services offered by or accessible via these networks and systems".

[1666] The ability of a network or an information system to resist, at a given level of confidence, accidental events or unlawful or malicious actions that compromise the availability, authenticity, integrity and confidentiality of stored or transmitted data, and the security of the related services offered by or accessible via these networks and systems.

[1667] Citizens' Rights Directive, para.1–019, n.67, recital 53.

[1668] EDPS, Second Opinion on the review of Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications, January 9, 2009), paras.73–87.

Working Party[1669] and the EDPS.[1670] According to the EDPS, the processing of traffic data for security purposes could be justified under Article 7(f) of the Data Protection Directive,[1671] which defines as a legitimate ground for data processing the legitimate interests of the controller or of a third party. Alternatively, the consent of the user or processing required to protect the subscriber would be sufficient to legitimate the processing of the traffic data.[1672]

1–406 Location data other than traffic data—Digital mobile networks can identify the location of a user in order to ensure that the call is completed, based on location data[1673] that indicate the geographic position of the user's terminal equipment. Location data relating to the users or subscribers of public communications networks or services can also have other potential uses, for example they are used in the provision of value added services that are location-specific. Location data other than traffic data[1674] may be used only if they are made anonymous, or where the users or subscribers have given their consent to the provision of such value added services, in which case the data may be used to the extent and for the duration necessary for the provision of the value added service.[1675] The consent may be withdrawn at any time, free of charge, for each connection to the network or for each transmission of a communication.[1676] The E-Privacy Directive is unclear as to whether consent must be obtained from either the user or the subscriber. In most cases, the subscriber to the service is also the user of the mobile device. However, the situation is more complicated when the same natural person is not both the user and the subscriber, for example in the cases of employees, minors or people that need assistance in using the mobile device. Before the service provider obtains the consent of the user or the subscriber, it should provide them with specific information on the type of location data that will be processed, the purposes and the duration of the processing and whether the data will be transmitted to a third party for the purpose of the providing the value added service.[1677] The provisions of the Framework Data Protection

[1669] Article 29 Data Protection Working Party, Opinion 1/2009 on the proposals amending Directive 2002/58/EC on privacy and electronic communications (E-Privacy Directive), WP159 (February 10, 2009).

[1670] EDPS, Second Opinion on the review of Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications) (January 9, 2009), paras.77–78.

[1671] Framework Data Protection Directive, para.1–074, n.315, Art.7(f) stipulates that "processing is necessary for the purposes of the legitimate interests pursued by the controller or by the third party or parties to whom the data are disclosed, except where such interests are overridden by the interests for fundamental rights and freedoms of the data subject which require protection under Article 1(1)".

[1672] *ibid.*, Art.7(a): "the data subject has unambiguously given his consent". See also, EDPS, Second Opinion on the review of Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications) (January 9, 2009), paras.77–78.

[1673] E-Privacy Directive, para.1–019, n.68, Art.2(c): "location data" means any data processed in an electronic communications network or by an electronic communications service, indicating the geographic position of the terminal equipment of a user of a publicly available electronic communications service".

[1674] The term "location data other than traffic data" is complicated. It is commonly accepted that this term covers location data that are not processed for the transmission of a communication or for setting up a connection, which are treated as traffic data. Commonly, location data other than traffic data are processed for the provision of location based services.

[1675] E-Privacy Directive, para.1–019, n.68, Art.9(1).

[1676] *ibid.*, Arts.9(1) and (2).

[1677] *ibid.*, Art.9(1).

Directive[1678] and the E-Privacy Directive[1679] require additional information to be given to the user. The following information[1680] must be provided:

- the identity of the controller and his representative, if any;
- the purposes of the processing;
- the type of location data processed;
- the duration of the processing;
- whether the data will be transmitted to a third party for the purpose of providing the value added service;
- the right of access to and the right to rectify the data;
- the right of users to withdraw their consent at any time or to temporarily refuse the processing of such data, and the conditions under which this right may be exercised; and
- the right to cancel the data.

1–407 The information shall be provided by the party collecting the location data for processing. Thus, it shall usually be provided by the provider of the value added service, or, if this is not possible, by the electronic communications operator. The information could be provided either directly each time the service is used or in the general terms and conditions for the provisions of the value-added service. In the latter case, the service provider should make the information available so that the individuals concerned can consult it again at any time and by a simple method, such as via a website or while using the service (*e.g.* by dialling a toll-free number).[1681] In addition, in cases of ongoing processing of location data the individual must be reminded regularly of the processing of his location data.

1–408 The processing of location data may be undertaken only by persons acting under the authority of the network operator, the service provider or the third party providing the value added service and only for the purposes of providing the value added service.

1–409 An exception to the general rule of the obtaining of the users' prior consent exists for the processing of location data for emergency calls.[1682] National organisations handling emergency calls and recognised as such are entitled to override the temporary denial or absence of consent of a subscriber or a user for the purpose of responding to such calls. This provision reflects the Universal Service Directive,[1683] which requires public telephone network operators to make caller location information available to authorities handling emergencies, to the extent technically feasible, for all calls made to the single European emergency call number "112".

1–410 Itemised billing—The E-Privacy Directive gives subscribers the right to check the accuracy of bills received from their telecommunications operator by receiving itemised bills, but this must be reconciled with the rights to privacy of calling users and called subscribers. Therefore,

[1678] Framework Data Protection Directive, para.1–074, n.315, E-Privacy Directive, para.1–019, n.68, Art.10.
[1679] *ibid.*, Arts.6 and 9.
[1680] The list of the information to be provided can be found in the Article 29 Data Protection Working Party, Opinion on the use of location data with a view to providing value added services, WP 115 (November 25, 2005), 4–5
[1681] *ibid.*, 5
[1682] E-Privacy Directive, para.1–019, n.68, Art.10(b).
[1683] Universal Service Directive, para.1–019, n.67.

subscribers shall also have the right to receive non-itemised bills[1684] and Member States must ensure that sufficient alternative methods of communications or payments are available to ensure the protection of privacy of subscribers and users if itemised bills are used.[1685]

1–411 Calling and connected line identification—Digital networks facilitate the use of calling and connected line identification services. Operators must allow the calling user, using a simple means and free of charge, to prevent the presentation of the calling line identification on a call-by-call basis. The same right must be given to the subscriber on a per line basis.[1686] This right shall also apply to calls to third countries that originate in the EU.[1687] Called subscribers must be able to prevent the presentation of the identification of the calling line of an incoming call.[1688] They must also be able to reject incoming calls where the presentation of the calling line identification has been prevented by the calling party.[1689] Similarly, the called subscriber must be able, using a simple means and free of charge, to prevent the presentation of connected line identification to the calling user.[1690] These rights also apply to incoming calls originating in third countries.[1691] The providers of publicly available electronic communications services must inform users and subscribers about the presentation of calling and/or connected line identification and their rights, as described above.[1692]

1–412 ***Exceptions***—In specific situations, the provider of a public communications network or service may, exceptionally, override the elimination of the calling line identification. It may do so, following transparent procedures, on a temporary basis and in accordance with national law, if a subscriber requests the tracing of malicious or nuisance calls. In such cases, the data that contain the identification of the calling subscriber will be stored and will be made available by the provider.[1693] A second exception is the requirement for operators and service providers to provide caller location information to emergency service centres, such as those responding to "112" calls, including law enforcement agencies, ambulance services and fire brigades. The elimination of the calling line identification and the temporary denial or absence of the consent of a subscriber or a user may be overridden on a per line basis for the purpose of responding to such emergency calls.[1694] The exception is justified because in emergency situations the protection of life and health is more important than the protection of privacy.[1695] As the E-Privacy Directive particularises and complements the Framework Data Protection Directive, the communication by electronic communications operators of personal data to third parties, as part of their commercial activities, is

[1684] E-Privacy Directive, para.1–019, n.68, Art.7.
[1685] For example, in some Member States, itemised bills do not comprise, in principle, the last digits of the number of the called subscriber. Member States may also encourage payment facilities that allow for anonymous or private access to communications services, such as pre-paid calling cards. Certain types of numbers, *e.g.* "helpline" numbers, can also be deleted from itemised bills.
[1686] E-Privacy Directive, para.1–019, n.68, Art.8(1).
[1687] *ibid.*, Art.8(5).
[1688] *ibid.*, Art.8(2).
[1689] *ibid.*, Art.8(3).
[1690] *ibid.*, Art.8(4).
[1691] *ibid.*, Art.8(5).
[1692] *ibid.*, Art.8(6).
[1693] *ibid.*, Art.10(a).
[1694] *ibid.*, Art.10(b).
[1695] The E-Privacy Directive sets out that, as a general rule, location data, including caller location information, may be transferred to others only with the consent of the user concerned: see para.1–390, above. Art.26 of the Universal Service Directive provides for an exception to this general rule, as far as caller location information is concerned: see para.1–337, above.

subject to, the provisions of the Framework Data Protection Directive, in the absence of specific provisions in the E-Privacy Directive: under the Framework Data Protection Directive, personal data may be disclosed to third parties, provided that the data subjects have been informed of their right to object to the disclosure of such information and have not objected to the disclosure.[1696]

1–413 Automatic call forwarding —Subscribers must be given the possibility to stop automatic call forwarding by a third party to his terminal equipment. This option shall be offered using simple means and free of charge.[1697]

1–414 Subscriber directories—The E-Privacy Directive contains provisions on the creation of subscriber directories. Subscribers shall be informed, free of charge and before they are included in the directory, about the purposes of a printed or electronic directory. Subscribers' personal data can be included in the directories and they need to be informed about any further possible use of that data arising from the search functions embedded in electronic versions of the directory.[1698] Subscribers must be free to choose, free of charge, whether and to what extent they want to be included in the public directory and to verify, correct or withdraw the relevant data.[1699] Subscribers must specifically consent to the use of the public directory for purposes other than to facilitate the search of subscribers' contact details.[1700] The legitimate interests of legal entities regarding their entry in public directories must also be sufficiently protected.[1701]

1–415 Unsolicited communications—Unsolicited calls, made without human intervention by way of automated calling and communications systems, and unsolicited communications of any kind realised by the use of facsimile machines (fax), email or other means (such as SMS and MMS messaging), for the purposes of direct marketing may be made only to subscribers or end users who have given their prior consent to receive such communications.[1702] "Spamming" is the use of unsolicited email for direct marketing purposes, without the consent of the recipient. The E-Privacy Directive contains a general "opt-in" rule for unsolicited communications, as the prior consent of the subscriber or the user is needed.[1703] Unsolicited communications shall not be

[1696] Framework Data Protection Directive, para.1–074, n.315, Art.14.

[1697] E-Privacy Directive, para.1–019, n.68, Art.11.

[1698] *ibid.*, Art.12(1). The obligations foreseen in the E-Privacy Directive, para.1–019, n.68, Art.12, did not apply to editions of directories already produced or placed on the market in printed or off-line electronic form before the adoption of the national legislation implementing the E-Privacy Directive: *ibid.*, Art.16(1). The subscriber data that are included in a public subscriber directory of fixed or mobile public voice telephony services may remain included in these directories, unless subscribers indicate otherwise: *ibid.*, Art.16(2).

[1699] *ibid.*, Art.12(2).

[1700] *ibid.*, Art.12(3).

[1701] *ibid.*, Art.12(4).

[1702] *ibid.*, Art.13(1).

[1703] There seems to be confusion and inconsistency on the applicability of Art.13 of the E-Privacy Directive to unsolicited messages sent via new technological means, such as RFID or Bluetooth. The United Kingdom Information Commissioner's Office originally considered that marketing transmitted using WAP messages or Bluetooth technology (*e.g.* messages sent to all Bluetooth enabled handsets within a given radius) was marketing using electronic mail: Information Commissioner's Office, Guidance for subscribers on the Privacy and Electronic Communications (EC Directive) Regulations 2003 (2006, v2.0/12.2006). Consequently, marketing messages sent using Bluetooth technology would have been subject to the provisions of the United Kingdom Privacy and Electronic Communications (EC Directive) Regulations 2003 (implementing the E-Privacy Directive) relating to the sending of unsolicited communications. However, the Information Commissioner's Office has subsequently amended its guidance, stating that Bluetooth is not covered by those Regulations, and that the legislative provisions relating to spam do not apply to unsolicited Bluetooth messages: Guidance for

allowed in respect of subscribers or users who have indicated that they do not wish to receive such communications.[1704] With regard to direct marketing carried out by automated calling and communications systems, fax, email, SMS, MMS, etc., it is not sufficient for the companies or natural persons who wish to send unsolicited communications messages to consult so-called "Robinson lists",[1705] if they exist, but must obtain the prior consent of the subscriber or the end user.[1706] The legitimate interests of legal entities with regard to unsolicited communications must also be sufficiently protected.[1707]

1–416 ***Email addresses***—Email addresses may be used by individuals or legal persons for the direct marketing of their own products or services if the email address has been obtained in the context of a sale of goods or services and the customer has been given an opportunity to reject such use, both at the time of the collection of the contact details and on each subsequent occasion that a message is sent.[1708] In this way, the E-Privacy Directive introduces an exception to the previous "opt-in" rule, establishing an "opt-out" regime for existing customers. It is prohibited to disguise or conceal the identity of the sender of emails used for direct marketing purposes by using emails which do not have a valid address (so that recipient is not able to send a request that such unsolicited communications cease), or to send emails encouraging the use of malicious websites.[1709] The 2009 amendments to the E-Privacy Directive expanded the protection offered to consumers in the 2002 E-Privacy Directive, by ensuring protection not only against unsolicited commercial communications, but also against scam e-mails and links to phishing websites sent via email.

1–417 ***Spam***—The economic impact of unsolicited communications, especially the vast amount of messages sent via email, is immense. Therefore the E-Privacy Directive creates an obligation for electronic communications service providers to make investments to prevent unsolicited commercial communications (spam). It also creates a right for any individual or legal person, affected

subscribers on the Privacy and Electronic Communications (EC Directive) Regulations 2003 (2007, v3.1/08.10.2007). See Kosta, Valcke and Stevens, "'Spam, spam, spam, spam. . .Lovely spam!' Why is Bluespam different?" (2009) 23(1–2) *International Review of Law Computers & Technology* 90–91. Contrary to the Information Commissioner's Office, its French counterpart, the CNIL, considered that sending direct marketing messages via Bluetooth was direct marketing through email and required the prior consent of the user: *http://www.pcinpact.com/actu/news/47311-publicite-telephone-mobile-cnil-bluetooth.htm*.

[1704] E-Privacy Directive, para.1–019, n.68, Art.13(3).

[1705] "A Robinson list" is an opt-out register of people who do not wish to receive direct marketing advertising.

[1706] Recital 67 of the Citizens' Rights Directive, para.1–019, n.67, clarifies that the safeguards provided for subscribers against intrusion of their privacy by unsolicited email direct marketing communications are also applicable to SMS, MMS and other kinds of similar applications.

[1707] E-Privacy Directive, para.1–019, n.68, Art.13(5).

[1708] *ibid.*, Art.13(2).

[1709] *ibid.*, Art.13(4). The recipients of such e-mails shall not be encouraged to visit websites that are prohibited by Art.6 of the E-Commerce Directive (See para.3–114 *et seq.*, below), which states that: "in addition to other information requirements established by [EU] law, Member States shall ensure that commercial communications which are part of, or constitute, an information society service comply at least with the following conditions: (a) the commercial communication shall be clearly identifiable as such; (b) the natural or legal person on whose behalf the commercial communication is made shall be clearly identifiable; (c) promotional offers, such as discounts, premiums and gifts, where permitted in the Member State where the service provider is established, shall be clearly identifiable as such, and the conditions which are to be met to qualify for them shall be easily accessible and be presented clearly and unambiguously; (d) promotional competitions or games, where permitted in the Member State where the service provider is established, shall be clearly identifiable as such, and the conditions for participation shall be easily accessible and be presented clearly and unambiguously".

by spam, as well as email service providers and other service providers, to initiate legal action against spammers.[1710] Member States may also take specific measures against or impose penalties on providers of electronic communications services, who by their negligence contribute to infringements of national legislation regulating unsolicited marketing communications.[1711]

1–418 Technical features and standardisation—Member States may not impose mandatory specific technical features on terminal or other electronic communication equipment, if this could hinder the placing of such equipment on the internal market and its free circulation in and between the Member States.[1712] If such mandatory features are absolutely necessary, the Member State shall inform the Commission by following the official procedure laid down in the Technical Standards Directive.[1713] Furthermore, when necessary, Member States may adopt measures to ensure that terminal equipment is constructed in a way that respects the protection of the privacy of users' data.[1714]

1–419 Communications Committee—In accordance with Article 14a of the E-Privacy Directive, the Commission shall be assisted by the Communications Committee set up by Article 22 of the Framework Directive.

1–420 Permitted retention of data—The E-Privacy Directive allows Member States to restrict the scope of certain rights granted, and obligations imposed, by it[1715] and to adopt measures to permit the retention of traffic and location data when this is necessary, appropriate and proportionate to safeguard national security, defence and public security, and to prevent, investigate, detect and prosecute criminal offences or unauthorised use of electronic communication systems.[1716] This provision does not apply to data that fall under the scope of application of the Data Retention Directive.[1717] Requests by the public authorities for access to a user's personal data shall be dealt with using the providers' established internal procedures. The providers shall also provide the competent national authority, on demand, with information on these procedures, the number of requests received, the legal justification invoked and the response to the requests.[1718] The conditions under which data retention measures should be adopted largely resemble the exceptions to the right to privacy that are contained in Article 8(2) of the ECHR.[1719] In *Copland v United Kingdom*, the ECtHR held that the collection and storage of personal information relating to a person's telephone, email and internet usage, without her knowledge, amounted to an interference

[1710] Citizens' Rights Directive, para.1–019, n.67, recital 68.
[1711] E-Privacy Directive, para.1–019, n.68, Art.13(6).
[1712] *ibid.*, Art.14(1).
[1713] *ibid.*, Art.14(2). This procedure is provided for by Directive 98/34/EC of June 22, 1998 laying down a procedure for the provision of information in the field of technical standards and regulations, O.J. 1998 L204/37.
[1714] E-Privacy Directive, para.1–019, n.68, Art.14(3).
[1715] Art.15 of the E-Privacy Directive allows the restriction of the scope of Art.5 (confidentiality of the communications), Art.6 (traffic data), Arts.8(1) to 8(4) (presentation and restriction of calling and connected line identification) and Art.9 (location data, other than traffic data).
[1716] E-Privacy Directive, para.1–019, n.68, Art.15(1).
[1717] *ibid.*, Art.15(1a). Data Retention Directive, para.1–019, n.68. See the analysis in para.1–422 *et seq.*, below.
[1718] E-Privacy Directive, para.1–019, n.68, Art.15(1b).
[1719] Art.8(2) ECHR provides the following exceptions to the right to respect for a person's private and family life, home and correspondence, which must be in accordance with the law and be necessary in a democratic society: national security, public safety or the economic well-being of the country, the prevention of disorder or crime, the protection of health or morals, and the protection of the rights and freedoms of others.

with the right to respect for her private life and correspondence.[1720] This represents the consistent approach of the ECtHR[1721] that interferences with Article 8 of the ECHR are not easily accepted and must be strictly limited.[1722] The Court of Justice has also dealt with the relationship between data protection and law enforcement.[1723] It has held that Member States are not obliged to impose an obligation to disclose personal data in the context of civil proceedings, for example for the purpose of enforcing copyright.[1724] However, it also held that Member States may require such disclosure[1725] and must strike a fair balance between the various fundamental rights they protect when transposing EU directives on intellectual property, e-commerce and data protection, and must respect general principles of EU law, such as the principle of proportionality.[1726] The Court of Justice's case law illustrates the growing tension between the need to process personal data for civil enforcement purposes and the restrictions on processing such data under data protection law. Reflecting the Court of Justice's *Promusicae* judgment, the E-Privacy Directive requires Member States' authorities and courts to interpret their national laws that transpose the E-Privacy Directive in a manner consistent with it, whilst also ensuring that the interpretation of such laws does not conflict with fundamental human rights or general principles of EU law, such as the principle of proportionality.[1727]

1–421 Remedies for breach of privacy requirements—The Framework Data Protection Directive and the E-Privacy Directive both leave the imposition of remedies for an infringement of a data subject's rights to the Member States. Potential remedies that may be incorporated into national law include a broad range of administrative, civil and criminal penalties, as well as injunctions and claims for damages against the data controller.[1728] The competent national authorities must have the power to order the cessation of the infringement, without prejudice to any judicial remedy which might be available.[1729] Moreover, the competent national authorities must have the investigative powers and resources necessary to investigate effectively cases of non-compliance, including the possibility to obtain any relevant information they might need, to decide on complaints and to impose sanctions in cases of non-compliance.[1730] When cross-border cooperation is needed, for example in order to combat cross-border spam and spyware, and in order to ensure smooth and rapid cooperation, the relevant national authorities shall define procedures for their cooperation. These may relate, for example, to the quantity and format of information

[1720] *Copland v UK*, (App No.62617/00) (2007) 45 E.H.R.R. 37 (April 3, 2007), para.44.
[1721] *Amann v Switzerland* (App No.27798/95) (2000), 30 E.H.R.R. 843 (February 16, 2000) and *Malone v United Kingdom* (App No.8691/79) (1984) 7 E.H.R.R. 14 (August 2, 1984).
[1722] Breyer, "Telecommunications Data Retention and Human Rights: The Compatibility of Blanket Traffic Data Retention with ECHR" (2005) 11(3) *European Law Journal* 365.
[1723] Case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] E.C.R. I-271. See Kuner, "Data Protection and Rights Protection on the Internet: The *Promusicae* Judgment of the Court of Justice" [2008] E.I.P.R. 199.
[1724] *Promusicae*, para.1–420, n.1723, para.55.
[1725] *ibid.*, para.54.
[1726] *ibid.*, para.68.
[1727] Citizens' Rights Directive, para.1–019, n.67, recital 62.
[1728] Framework Data Protection Directive, para.1–074, n.315, Arts.22, 23 and 24; E-Privacy Directive, para.1–019, n.68, Art.15a(1).
[1729] *ibid.*, Art.15a(2).
[1730] E-Privacy Directive, para.1–019, n.68, Art.15a(3); Citizens' Rights Directive, para.1–019, n.67, recital 69.

exchanged between authorities, or deadlines to be complied with, which will be subject to examination by the European Commission.[1731]

3. Data Retention Directive

1–422 Introduction—Shortly after the bomb attacks in Madrid in March 2004, the Council of the European Union adopted a declaration on combating terrorism.[1732] One of the legislative measures that was suggested to combat terrorism was the establishment of rules on the retention of communications traffic data by service providers. This initiated a long debate at the EU level regarding not only the correct legal basis for such a legislative measure, but also on content issues, such as the types of data to be retained, the retention period and the purposes for which the data could be used. In April 2004, France, Ireland, Sweden and the United Kingdom prepared a proposal for the adoption by the Council of a Framework Decision on the retention of data.[1733] On September 21, 2005 the Commission presented a proposal for a directive on the retention of data, and to amend the E-Privacy Directive.[1734] This proposal would have changed the legal basis of the proposed directive, with the Commission proposing it as a "first pillar" legal instrument, instead of a "third pillar" one, as was proposed by the Council. After only one reading of the European Parliament, the Data Retention Directive was adopted in March 2006.[1735]

1–423 Even if the Data Retention Directive can be seen as an exceptional measure regarding the retention of specific categories for law enforcement purposes, it has been severely criticised for not respecting the basic privacy principles that are laid down in the European Convention of Human Rights, the Council of Europe Data Protection Convention and the Framework Data Protection Directive.[1736] The Law implementing the Data Retention Directive in Germany and amending the Telecommunications Act was challenged before the German Constitutional Court in an action coordinated by the civil rights group Arbeitskreis Vorratsdatenspeicherung (German Working Group on Data Retention)[1737] on behalf of over 30,000 citizens. The German

[1731] E-Privacy Directive, para.1–019, n.68, Art.15a(4); Citizens' Rights Directive, para.1–019, n.67, recital 70.

[1732] Note from the General Secretariat Re: Declaration on combating terrorism, Council of the European Union, No.7906/04 (March 29, 2004).

[1733] Council of the European Union, Draft Framework Decision on the retention of data processed and stored in connection with the provision of publicly available electronic communications services or data on public communications networks for the purpose of prevention, investigation, detection and prosecution of crime and criminal offences including terrorism, 8958/04 (April 28, 2004).

[1734] Commission Proposal for a directive on the retention of data processed in connection with the provision of public electronic communication services and amending Directive 2002/58/EC, COM(2005) 438 final (September 21, 2005) ("Commission Proposal for a directive on the retention of data and amending Directive 2002/58/EC").

[1735] See generally Kosta and Valcke, "Retaining the Data Retention Directive" (2006) 22(5) *Computer Law and Security Report* 370–380; Rauhofer, "Just because you're paranoid, doesn't mean they're not after you: Legislative developments in relation to the mandatory retention of communications data in the European Union" (2006) 3(4) *SCRIPTed* 322–343; and Kosta and Dumortier, "The Data Retention Directive and the principles of European data protection legislation" (2007) *Medien und Recht International* 4(3) 130.

[1736] Framework Data Protection Directive, para.1–074, n.315.

[1737] See *http://www.vorratsdatenspeicherung.de/*.

Constitutional Court, in an interim judgment,[1738] found that data retention is not, as such, unconstitutional. However, it ruled that the German implementing legislation in question did not provide sufficient guarantees concerning access to the data and the crimes for which data retention may be used. It also held that data retention may only be used for serious crimes and when a judicial warrant has been issued. It therefore concluded that the proposed amendments of the Telecommunications Act should be revised.

1–424 The legal basis of the Data Retention Directive was challenged by Ireland, supported by the Slovak Republic, before the Court of Justice. Ireland sought the annulment of the Directive on the grounds that it was not adopted on an appropriate legal basis.[1739] Ireland claimed that the purpose of the Directive was to facilitate the investigation, detection and prosecution of serious crime, including terrorism, and that data retention should therefore be regulated under a framework decision adopted under the "third pillar" legislative procedure.[1740] However, the Court of Justice held that the Directive relates predominantly to the functioning of the internal market and was correctly adopted on the basis of Article 95 of the EC Treaty.[1741]

1–425 The European Commission has created an Experts Group on the transposition into national law of the Data Retention Directive. The Experts Group has a broad remit covering experience in implementing the Directive and in the sharing of best practice. The Experts Group contributes information and experience necessary for the Commission's assessment of whether there is a need for new proposals on data retention, including addressing difficulties in the technical and practical implementation of the Data Retention Directive.

1–426 Scope of application of the Data Retention Directive—The Data Retention Directive harmonises national laws on the obligations of providers of publicly available electronic communications services or of public communications networks to retain data generated or processed by them, so that these data are available for the investigation, detection and prosecution of serious crime.[1742] Contrary to the Council's initial plans, the Directive's scope of application does not include the prevention of crimes.

[1738] BVerfG, 1 BvR 256/08 of 11.3.2008, available at: *http://www.bverfg.de/entscheidungen/rs20080311_1bvr025608.html*. The German Constitutional Court published its judgment on the issue on March 2, 2010, ordering the revision of the relevant legislation implementing the Data Retention Directive into German law and requiring the deletion of the data already stored by German providers based on these provisions, see BVerfG, 1 BvR 256/08 of 02.03.2010.

[1739] Case C-301/06, *Ireland v Council and European Parliament*, judgment of February 10, 2009, [2009] E.C.R. I-593.

[1740] *ibid.*

[1741] *ibid.* Joined Cases C-317 and C-318/04, *European Parliament v Council* [2006] E.C.R. I-4721 concerned Council Decision 2004/496/EC of May 17, 2004 on the conclusion of an Agreement between the European Community and the United States of America on the processing and transfer of PNR data by Air Carriers to the United States Department of Homeland Security, Bureau of Customs and Border Protection (O.J. 2004 L183/83, and corrigendum at O.J. 2005 L255/168); the Court of Justice held that the transfer of Passenger Name Records ("PNR") data, collected in airlines' computer reservation systems, to the US Customs and Border Protection constituted processing operations concerning public security and the activities of the state in the area of criminal law. The Court considered that the transfer of the PNR data was not within the airline's commercial activities, but was processing for operations concerning public security and the activities of the state in areas of criminal law. Many privacy advocates had hoped that the Court would find that the retained PNR data had been collected by the airlines for commercial purposes and that they should therefore not be further processed for law enforcement purposes.

[1742] Data Retention Directive, para.1–019, n.68, Art.1(1).

1–427 The Data Retention Directive adds a new Article 15(1a) to the E-Privacy Directive, which allows the retention of data under specific conditions. Article 15(1a) disapplies Article 15(1) to data that the Data Retention Directive specifically requires be retained for the purposes referred to Article 1(1) of the Data Retention Directive.[1743] Therefore, Article 15(1) of the E-Privacy Directive remains the basis for the retention of all data that fall outside the scope of the Data Retention Directive, including data related to unsuccessful call attempts, *i.e.* data related to communications where a telephone call has been successfully connected but unanswered or where there has been a network management intervention.[1744] This includes the retention of data in relation to such attempts where the data is generated or processed and stored (as regards telephony data) or logged (as regards internet data) by providers of publicly available electronic communications services or of a public communications network in the process of supplying the communication services concerned.[1745]

1–428 If companies already store data related to unsuccessful call attempts, they must retain these data, with the exception of data relating to unconnected calls.[1746] This solution was chosen as the most appropriate one, given that the Data Retention Directive did not intend to harmonise the technology for retaining data and that the obligations on providers of electronic communications services should be proportionate.[1747] Therefore, these providers should only retain such data which are generated or processed in the process of supplying their communications services.

1–429 ***Serious crime***—The Data Retention Directive does not include a definition of the term "serious crime": this is left to the Member States to regulate in their national legislation. The Council urged the Member States to have due regard to the criminal offences listed in Article 2(2) of the Framework Decision on the European Arrest Warrant[1748] and crime involving telecommunications.[1749] Nevertheless, as each Member State will define "serious crime" individually, variations in the scope of application of the Directive are to be expected.

1–430 ***Parties subject to the Data Retention Directive***—The Directive aims to harmonise the obligations of providers of publicly available communications services or public communications networks. The terms "electronic communications network"[1750] and "electronic communications

[1743] *ibid.*, Art.11.
[1744] *ibid.*, recital 12.
[1745] *ibid.*, Art.3(2).
[1746] *ibid.*, Art.3(2).
[1747] *ibid.*, recital 23.
[1748] Council Framework Decision 2002/584/JHA on the European Arrest Warrant and the surrender procedures between Member States, O.J. 2002 L190/1.
[1749] Council of the European Union, Proposal for a Directive on the retention of data processed in connection with the provision of public electronic communication services and amending Directive 2002/58, [first reading]—Statements, 5777/06 ADD 1, February 10, 2006.
[1750] An "electronic communications network" is a "transmission system and, where applicable, switching or routing equipment and other resources including network elements which are not active, which permit the conveyance of signals by wire, radio, optical or other electromagnetic means, including satellite networks, fixed (circuit- and packet-switched, including Internet) and mobile terrestrial networks, electricity cable systems, to the extent that they are used for the purpose of transmitting signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed": Framework Directive, para.1–019, n.64, Art.2(a); see also para.1–045, above.

service"[1751] are defined in Articles 2(a) and 2(c) of the Framework Directive respectively, whilst the term "'communication" is defined in Article 2(d) of the E-Privacy Directive.[1752] From the definition of "communication", it becomes obvious that a communication should be seen in connection with an electronic communications service. However, the concept of communication in the E-Privacy Directive is different from the concept of "electronic communications" defined in the Framework Directive.[1753] The definition of "communication" in the E-Privacy Directive excludes information that is part of a broadcasting service and is intended for a potentially unlimited audience, save when the recipient can be identified, as for instance in the case of video-on-demand services.[1754] All these definitions need to be taken into account in identifying the providers of publicly available communications services or public communications networks that are bound by the Data Retention Directive. The concepts of a "publicly available electronic communications service" and "public communications network" are closely interlinked. Defining a "public communications network" as one that is used wholly or mainly for the provision of publicly available communications services does not immediately provide much clarification for when a network is to be considered as "public". However, it becomes clear from the definition of "public communications network" that a publicly available electronic communications service implies the use of a public communications network. The need for further clarification of the complicated definitions of public electronic communications and services has already been recognised by the Article 29 Data Protection Working Party. It has noted the importance of private networks and that services may use both public and private communications networks, and that there remains considerable ambiguity in applying the Data Retention Directive.[1755] Furthermore, the Expert Group on Data Retention has realised the difficulties in defining which providers should be regarded as being subject to the data retention obligations under the Data Retention Directive.

[1751] A "public communications network" is "an electronic communications network used wholly or mainly for the provision of electronic communications services available to the public which support the transfer of information between network termination points": *ibid.*, Art.2(d); see also para.1–050, above.
[1752] A "communication" is "any information exchanged or conveyed between a finite number of parties by means of a publicly available electronic communications service. This does not include any information conveyed as part of a broadcasting service to the public over an electronic communications network except to the extent that the information can be related to the identifiable subscriber or user receiving the information": E-Privacy Directive, para.1–019, n.68, Art.2(d).
[1753] An "electronic communications service" is "a service normally provided for remuneration which consists wholly or mainly in the conveyance of signals on electronic communications networks, including telecommunications services and transmission services in networks used for broadcasting, but exclude services providing, or exercising editorial control over, content transmitted using electronic communications networks and services": Framework Directive, para.1–019, n.64, Art.2(c). It does not include information society services which do not consist wholly or mainly in the conveyance of signals on electronic communications networks: *ibid.* See Asscher and Hoogcarspel, *Regulating Spam—A European Perspective after the Adoption of the E-Privacy Directive* (2006), 34.
[1754] 2002 E-Privacy Directive, para.1–019, n.68, recital 16.
[1755] Article 29 Data Protection Working Party, Opinion 8/2006 on the review of the regulatory Framework for Electronic Communications and Services, with focus on the ePrivacy Directive, WP 126 (September 26, 2006): "the fact that provisions of the ePrivacy Directive only apply to provision of publicly available electronic communications services in public communication networks is regrettable because private networks are gaining an increasing importance in everyday life, with risks increasing accordingly... Another development that calls for reconsideration of the scope of the Directive is the tendency of services to increasingly become a mixture of private and public ones... both definitions "electronic communications services", and "to provide an electronic communications network" are still not very clear and both terms should be explained in more details in order to allow for a clear and unambiguous interpretation by data controllers and

1–431 The categories of data to be retained—The Data Retention Directive requires the retention of traffic and location data, as well as any related data necessary to identify the registered user or subscriber.[1756] The obligation to retain data includes data relating to unsuccessful call attempts, when these data are generated or processed and stored (as regards telephony data) or logged (as regards internet data).[1757] Pursuant to the goals of the Electronic Communications Regulatory Framework to separate the regulation of transmission from the regulation of content,[1758] the Data Retention Directive does not cover data related to the content of electronic communications, excluding thus such content information consulted using an electronic communications network.[1759] It also does not require the retention of data relating to unconnected calls.[1760]

1–432 The Data Retention Directive relates only to data generated or processed as a consequence of a communication or a communication service[1761] and, to the extent that such data are not generated or processed by the providers of such services, there is no obligation to retain them.[1762] Furthermore, data should be retained in such a way as to avoid being retained more than once.[1763] It is not required to retain all traffic data that are generated or processed by the provider, but the Directive sets out a detailed list of the categories of data that are to be retained. Each category of data contains detailed description of the data that fall under it, divided mainly into data that concern fixed network telephony, mobile telephony, internet access, internet email and internet telephony. The main categories of data to be retained are data that are necessary to:[1764]

(a) trace and identify the source of a communication;
(b) identify the destination of a communication;
(c) identify the date, time and duration of a communication;
(d) identify the type of communication;
(e) identify users' communication equipment or what purports to be their equipment; and
(f) identify the location of mobile equipment.

1–433 ***Internet data***—In respect of internet data, only data that concern internet access, internet email and internet telephony are within the scope of the Data Retention Directive. Consequently, there is no obligation to retain the web pages accessed during web browsing. In the context of data protection issues related to search engines, the Article 29 Data Protection Working Party has pointed out that it is not justified to refer to the Data Retention Directive in connection with the storage of server logs generated through the offering of a search engine.[1765]

users alike": *ibid*, 3. See also Article 29 Data Protection Working Party, Opinion on the review of the Directive 2002/58/EC on privacy and electronic communications (ePrivacy Directive), WP 150 (May 15, 2008).

[1756] Data Retention Directive, para.1–019, n.68, Art.1(2).

[1757] *ibid.*, Art.3(2).

[1758] 2002 Framework Directive, para.1–019, n.64, recital 5.

[1759] Data Retention Directive, para.1–019, n.68, Arts.1(2) and 5(2).

[1760] *ibid.*, Art.3(2).

[1761] *ibid.*, recital 13.

[1762] *ibid.*, recital 23.

[1763] *ibid.*, recital 13.

[1764] *ibid.*, Art.5.

[1765] Article 29 Data Protection Working Party, Opinion on data protection issues related to search engines, WP 148 (April 4, 2008), 12.

1–434 Retention period—The Data Retention Directive harmonises the retention periods, which had previously differed significantly among the Member States that already had data retention legislation. The Article 29 Working Party expressed, as early as in 1999, the opinion that national laws should not require the retention of traffic data for longer than is necessary for billing purposes,[1766] which should not exceed a maximum of three to six months, except in the case of disputes where the data may be processed for a longer period.[1767] Furthermore, according to the European Data Protection Commissioners, the systematic retention of traffic data for more than one year would be clearly disproportionate and unacceptable.[1768]

1–435 ***Maximum retention period***—The Data Retention Directive provides that the data required to be retained shall be retained for not less than six months and for a maximum of two years from the date of the communication.[1769] The Council's Framework Decision asked for the retention of data for a period of at least 12 months and not more than 36 months following its generation,[1770] while the Commission's initial proposal provided for the retention of all data for a period of one year from the date of the communication, other than data related to electronic communications using wholly or mainly Internet Protocol (internet data), which should be retained for a period of six months.[1771] The European Parliament had asked for both periods to be reduced to three months, with the possibility of an extension to six months.

1–436 ***Possible extension of the maximum retention period***—The Data Retention Directive allows the Member States to extend the maximum retention period in particular circumstances.[1772] As soon as they take measures to extend the period, they shall notify the Commission and inform the other Member States of the measures taken, indicating the grounds for taking them. Within six months, the Commission must approve or reject the imposed national measures. Article 12(3) of the Data Retention Directive further describes the impact these measures may have in the retention of data at the European level. Following the approval of the national measures, the Commission may examine possible amendments to the Data Retention Directive itself.

1–437 Access to retained data—The retained data must be provided only to the competent national authorities in specific cases and in accordance with national law.[1773] In order to avoid confusion regarding which authorities fall under the term "competent national authorities", the Article 29 Data Protection Working Party proposed the creation of a list of designated law enforcement services, which should be made public.[1774] However, this proposal was not accepted.

[1766] Article 29 Data Protection Working Party, Recommendation 3/99 on the preservation of traffic data by Internet Service Providers for law enforcement purposes', WP25 (September 7, 1999).

[1767] Article 29 Data Protection Working Party, Opinion 1/2003 on the storage of traffic data for billing purposes, WP69 (January 29, 2003), para.1–388, n.1453.

[1768] European Data Protection Commissioners, Statement on mandatory systematic retention of telecommunication traffic data, International Conference in Cardiff (September 9–11, 2002); Note from the Council of the European Union Presidency, 12610/02 (October 1, 2002).

[1769] Data Retention Directive, para.1–019, n.68, Art.6.

[1770] Council of the European Union, Draft Framework Decision on the retention of data processed and stored in connection with the provision of publicly available electronic communications services or data on public communications networks for the purpose of prevention, investigation, detection and prosecution of crime and criminal offences including terrorism, 8958/04 (April 28, 2004).

[1771] Commission Proposal for a directive on the retention of data and amending Directive 2002/58/EC, para.1–422, n.1734.

[1772] Data Retention Directive, para.1–019, n.68, Art.12.

[1773] *ibid.*, Art.4.

[1774] Article 29 Data Protection Working Party, Opinion 3/2006 on the Directive 2006/24/EC of the European Parliament and of the Council on the retention of data generated or processed in connection with the

The procedures to be followed and the conditions to be fulfilled in order to gain access to retained data shall be defined by each Member State in its national law.

1–438 Data protection and data security—The providers subject to the Data Retention Directive must comply with four fundamental obligations related to the security of data retained by them. They must ensure that the retained data are of the same quality and subject to the same security measures and protections as other data on the network.[1775] Furthermore, the retained data must be subject to appropriate technical and organisational measures to protect against accidental or unlawful destruction, accidental loss or alteration, or unauthorised or unlawful storage, processing, access or disclosure.[1776] Appropriate technical and organisational measures shall also be taken in order to ensure that the retained data can be accessed by only specially authorised personnel.[1777] All other retained data, except those that have been accessed and preserved, shall be destroyed at the end of the period of retention.[1778]

1–439 ***Storage requirements***—The retained data must be retained in such a way that they (as well as any other necessary information relating to such data) can be transmitted upon request to the competent authorities without undue delay.[1779]

1–440 ***Standardisation***—ETSI has created standards regarding the handling of retained data. ETSI Standard TS 102 656[1780] sets out the requirements of law enforcement agencies for handling retained data. This standard contains guidance and requirements for the delivery and associated issues of the retained data, as well as a set of requirements that relate to the handover interfaces for the retained traffic data and the subscriber data. ETSI Standard TS 102 657[1781] defines the handover interface for the request and delivery of retained data. This standard covers both the requesting of retained data and the delivery of the results and defines an electronic interface. Finally, ETSI Technical Report TR 102 661[1782] on a security framework in lawful interception and retained data environment contains advice on security measures and on the actual physical security.

1–441 ***Statistics*** —Member States shall provide annually to the Commission statistics on the retention of data pursuant to the Data Retention Directive. These statistics must not contain personal data and shall include: (i) the cases in which information was provided to the competent authorities in accordance with the applicable national law; (ii) the time that elapsed between the date on which the data were retained and the date on which the competent authority requested the transmission of the data; and (iii) the cases in which competent authorities' requests could not be met.[1783]

1–442 Cost reimbursement—The Data Retention Directive does not provide for the reimbursement of the costs incurred by the providers in complying with their obligations under the Data Retention Directive. However, the Commission has expressed the opinion that reimbursement by

provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58/EC, WP119 (March 25, 2006).

[1775] Data Retention Directive, para.1–019, n.68, Art.7(a).

[1776] *ibid.*, Art.7(b).

[1777] *ibid.*, Art.7(c).

[1778] *ibid.*, Art.7(d).

[1779] *ibid.*, Art.8.

[1780] ETSI TS 102 656, v1.2.1 (December 2, 2008).

[1781] ETSI TS 102 657, v1.1.2 (December 17, 2008).

[1782] ETSI TR 102 661, v 1.1.1 (November 25, 2008).

[1783] Data Retention Directive, para.1–019, n.68, Art.10.

Member States of demonstrated additional costs may be necessary.[1784] A similar provision was included in the Commission's initial legislative proposal,[1785] but was not included in the final text of the Directive adopted by the Council and the European Parliament. Although such reimbursement could be made in compliance with the state aid rules under Articles 107 [ex 87] *et seq.*, Member States are not obliged by the Data Retention Directive to do so.

1–443 Evaluation of the Data Retention Directive—By September 15, 2010, the Commission shall submit to the European Parliament and the Council an evaluation of the application of the Data Retention Directive and its impact on economic operators and consumers. In this evaluation, the Commission shall take into account further developments in electronic communications technology and the statistics provided to the Commission by the Member States. The purpose of this evaluation is to determine whether it will be necessary to amend the provisions of the Directive, in particular with regard to the list of data that shall be retained[1786] and the periods of retention.[1787] The Commission shall examine all observations communicated by the Member States, the Article 29 Data Protection Working Party, as well as the findings of the Expert Group on Data Retention.

1–444 Transposition of the Data Retention Directive—The Data Retention Directive was required to be implemented by the Member States by no later than September 15, 2007.[1788] It permitted the Member States to postpone its application to the retention of communications data relating to internet access, internet telephony and internet email until March 15, 2009.[1789] Sixteen Member States made use of this exception to postpone its application to the retention of internet data.[1790] Bulgaria and Romania also made use of this exception when they acceded to the EU in 2007.

J. Access to the EU telecommunications market for non-EU businesses

1–445 Background—Some preliminary steps for the international liberalisation of the telecommunications sector were taken within the World Trade Organisation ("WTO") when 69

[1784] Council of the European Union, Proposal for a Directive of the European Parliament and of the Council on the retention of data processed in connection with the provision of public electronic communication services and amending Directive 2002/58/EC [first reading]—Statements, 5777/06 ADD 1 (February 10, 2006).

[1785] Commission Proposal for a directive on the retention of data and amending Directive 2002/58/EC, para.1–422, n.1734.

[1786] Data Retention Directive, para.1–019, n.68, Art.5.

[1787] *ibid.*, Art.6.

[1788] The European Commission has brought infringement procedures against four European Member States for failure to fulfil their obligations with regard to the implementation of the Data Retention Directive: Case C-185/09, *Commission v Sweden*, judgment of February 4, 2010, not yet reported; Case C-189/09; *Commission v Austria*, O.J. 2009 C180/33, pending; Case C-202/09, *Commission v Ireland*, judgment of November 26, 2009, not yet reported (finding that Ireland had failed to fulfil its obligations) and Case C-211/09, *Commission v Greece*, judgment of November 26, 2009, not yet reported (finding that Greece had failed to fulfil its obligations).

[1789] *ibid.*, Art.15(3).

[1790] A list of the declarations of the Member States can be found as an Annex to the Data Retention Directive.

members (including the European Union and its Member States)[1791] concluded the Agreement on Basic Telecommunications Services on February 15, 1997.[1792] This Agreement is the "Fourth Protocol" to the General Agreement on Trade in Services ("GATS"),[1793] an agreement on the liberalisation of services that was concluded in 1994 within the framework of the Uruguay Round of trade negotiations.[1794] The Fourth Protocol entered into force on February 5, 1998. The GATS and the Agreement on Basic Telecommunications Services contain provisions that are relevant to the cross-border provision of telecommunications services and also contain certain measures for the liberalisation of telecommunications markets.

1–446 GATS obligations—The Fourth Protocol is an integral part of the GATS. The obligations laid down in the GATS therefore apply fully to telecommunications activities. The GATS lays down three main principles: most favoured nation ("MFN"),[1795] national treatment,[1796] and market access.[1797] Under the MFN principle, WTO Members must treat services and service suppliers from other WTO Members no less favourably than like services and service suppliers from any other Member.[1798] Although they do not have to be reasoned, any exceptions that WTO Members make by way of a "reservation" from the MFN principle must respect a list of

[1791] 99 WTO Members have currently committed to extend competition in basic telecommunications: see *http://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_e.htm*. The applicable commitments and reservations made by the WTO Members are available at: *http://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_commit_exempt_list_e.htm*.

[1792] See Decision on WTO and basic telecommunications services, para.1–242, n.1017. See also *http://www.wto.org/english/docs_e/legal_e/legal_e.htm*.

[1793] The text of the GATS is available at: *http://www.wto.org/english/docs_e/legal_e/26-gats.pdf*. The GATS is itself an annex to the Agreement Establishing the World Trade Organisation, entered into in Marrakech on April 15, 1994, the text of which is available at: *http://www.wto.org/english/docs_e/legal_e/04-wto.pdf*. On the WTO generally, see *http://www.wto.org*. In relation to the WTO aspects of electronic commerce, see generally: *http://www.wto.org/english/tratop_e/ecom_e/ecom_e.htm*. Regarding telecommunications services and WTO, see in general *http://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_e.htm*.

[1794] For a comprehensive review of the impact of the GATS in the telecommunications sector, see Bronckers and Larouche, "Telecommunications Services and the World Trade Organisation" (1997) 31 *Journal of World Trade* ("Bronckers and Larouche") 5; Bronckers and Larouche, "A Review of the WTO Regime for Telecommunications Services" in Alexander and Andenas (eds.), *The World Trade Organization and Trade in Services* (Martinus Nijhof/Brill, 2008) ("Bronckers and Larouche 2008"), 319; McGivern, "Dispute Settlement under the GATS: The Gambling and Telecoms cases" in Alexander and Andenas (eds.), 431, 452–459; Geradin and Luff, *The WTO and Global Convergence in Telecommunications and Audio-Visual Services* (Cambridge University Press, 2004); Luff, *Le droit de l'Organisation mondiale du commerce* (Bruylant, 2004); Koenig and Braun, "The International Regulatory Framework of EC Telecommunications Law: The Law of the WTO and the ITU as a Yardstick for EC law", in Koenig, Bartosch, Braun and Romes (eds.), para.1–002, n.5, 1–18; Long and Hobday (eds.), para.1–018, n.59, 2401–2412; Mavroidis and Neven, "The WTO Agreement on Telecommunications: It's Never Too Late", in Geradin (ed.), para.1–002, n.5, 307; Burri Nenova, para.1–018, n.59, 245–296; Scherer, Mann and Schloemann, "The Law of the International Telecommunication Union and the World Trade Organisation", in Scherer, para.1–018, n.59, 125, 144–163; Wunsch-Vincent and MacIntosh (eds.), *WTO, E-commerce, and Information Technologies—From the Uruguay Round through the Doha Development Agenda—A Report for the UN ICT Task Force* (Markle Foundation—United Nations, 2005).

[1795] GATS, Art.II.

[1796] *ibid.*, Art.XVII.

[1797] *ibid.*, Art.XVI.

[1798] As a result, WTO Members that have not signed the Fourth Protocol can still benefit from the market access commitments made by those Members that are signatories, without having to offer access to their own market in return.

criteria.[1799] Under the national treatment principle, foreign suppliers must be given treatment no less favourable than those accorded to local services and service suppliers.[1800] WTO Members may make exceptions to this principle, provided they do so in a written declaration that specifies the extent of their obligations on market access. Each WTO Member that is signatory to the Fourth Protocol to the GATS has set out binding commitments on providing access to its telecommunications markets. These are contained in a so-called "schedule of commitments". WTO Members may impose restrictions on their market access obligations in their schedules of commitments. For example, such restrictions may involve limitations on the number of operators that may be given access to the domestic market. A large number of WTO Members, including the European Union (on behalf of its Member States) and the United States, submitted specific schedules of commitments as part of the adoption of the GATS in 1994 in relation to market access and national treatment in the telecommunications sector. These commitments are, however, generally limited essentially to value-added services (*e.g.* email, voice mail, online information and databases services, electronic data interchange ("EDI"), enhanced facsimile services, code and protocol conversion, online information and data processing), which account only for a minor part of the overall telecommunications market.[1801] The market access commitments in respect of these services took effect with the entry into force of the GATS on January 1, 1995. No agreement was reached regarding basic telecommunications services. However, it was agreed to continue the negotiations, which led eventually to the adoption of the Fourth Protocol, in 1997.

1–447 GATS obligations that are specific to telecommunications—An Annex on Telecommunications is attached to the GATS, providing specific rules regarding public telecommunications networks and services. Although it was concluded as part of the GATS in 1994, the entry into force of the Annex on Telecommunications was subject to the entry into force of the WTO Members' schedules of commitments under the Fourth Protocol on February 5, 1998. The Annex on Telecommunications imposes two main obligations on WTO Members: (i) an obligation to ensure transparency as regards information on access to and use of public telecommunications networks and services (*e.g.* tariffs, specifications of technical interfaces and conditions on the attachment of terminal equipment); and (ii) the obligation to guarantee access to and use of public telecommunications networks and services on reasonable and non-discriminatory terms and conditions.[1802] Accordingly, foreign suppliers of telecommunications services must: (i) be given access to, and be able to use, public telecommunications networks or services, including private leased lines; (ii) have the right to purchase or lease and attach terminal or other equipment to the network; and (iii) be able to interconnect private leased or owned circuits with public networks or services, or with circuits leased or owned by another service supplier.[1803] Their obligations are without prejudice to the right of the network owner to impose access or usage conditions with a

[1799] An agreement on a list of reservations from the MFN principle can be found in the Annex of Exemptions from Art.II of the GATS.

[1800] GATS, Art.XVII.

[1801] Bronckers and Larouche, para.1–445, n.1794, 5, at 19.

[1802] In *Mexico Telecommunications*, the Dispute Settlement Body Panel found that uniform interconnection rates which exceeded cost-based rates by a substantial margin and which excluded price competition in the relevant markets for telecommunications services that had been bound under Mexico's Schedule of Commitments, did not provide access to and use of public telecommunications transport networks and services in Mexico "on reasonable terms", such that Mexico was in breach of its commitments: Panel Report, *Mexico—Measures affecting telecommunications services*, WT/DS204/R (April 2, 2004), available at: *http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds204_e.htm*.

[1803] Mavroidis and Neven, para.1–445, n.1794, 307, 310.

view to safeguarding public service duties (*e.g.* universal service), to protect network or service integrity and to restrict network use. These obligations benefit service suppliers in sectors other than telecommunications[1804] and providers of telecommunications services competing with incumbent network operators.[1805] WTO Members may also take measures to ensure the security and confidentiality of messages, provided that such measures do not amount to arbitrary or unjustifiable discrimination or a disguised restriction on trade in services.

1–448 Commitments under the Fourth Protocol—The Fourth Protocol covers "basic telecommunications services", on which WTO Members had been unable to reach agreement at the time the GATS was concluded in 1994. Basic telecommunications services comprise most notably voice telephony, packet-switched and circuit-switched data transmission, telex, telegraph, facsimile and private leased circuit services.[1806] These services still account for the bulk of the telecommunications market.

1–449 Market-access and national treatment commitments—Ninety-nine WTO Members have attached schedules of specific commitments to the Fourth Protocol.[1807] The extent of these commitments varies from one WTO Member to another, but most industrialised countries have committed to liberalise fully their markets for voice telephony and data transmission services.[1808] In particular, at the initiative of the United States, a larger number of countries are committed to permitting foreign ownership or control of all telecommunications services and facilities. However, the privatisation of publicly owned telecommunications operators falls outside the scope of the GATS, with the result that foreign investment in the local incumbent operator may not be possible until the state decides to privatise it.[1809]

1–450 Specific commitments on regulatory principles—As part of the Fourth Protocol, many WTO Members (including all then EU Member States) agreed to apply six principles to their telecommunications regulatory regimes. These principles are contained in a so-called "Regulatory Principles Reference Paper".[1810] They cover: (i) the introduction of competitive safeguards to prevent anti-competitive practices in the telecommunications sector; (ii) interconnection; (iii) universal service; (iv) the publication of licensing criteria; (v) the establishment of independent regulatory bodies; and (vi) the use of objective, transparent and non-discriminatory procedures for the allocation of scarce resources such as frequencies, numbers and rights of way.[1811] The purpose

[1804] This is, however, limited to those sectors where WTO Members have accepted commitments in relation to market access and national treatment.

[1805] Mavroidis and Neven, para.1–445, n.1794, 307, 310.

[1806] See *http://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_coverage_e.htm#Top*. See also Decision on WTO and basic telecommunications services, para.1–242, n.1017, Annex.

[1807] See para.1–445, n.1791, above. See also para.1–445, n.1792, above.

[1808] Mavroidis and Neven, para.1–445, n.1794, 307, 313: the authors explain that WTO Members considered it necessary to produce specific schedules specifying the extent of their commitments, mainly because the provisions of the Annex on Telecommunications were not precise enough to guarantee new entrants adequate opportunities to compete and left too much room for interpretation. Also, Members may have found it useful to agree minimum principles for the harmonisation of regulatory practices.

[1809] Bronckers and Larouche, para.1–445, n.1794, 5, 22.

[1810] The text of the Regulatory Principles Reference Paper is available at: *http://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm*. See also Decision on WTO and basic telecommunications services, para.1–242, n.1017, 82 WTO Members have committed to the principles contained in the Regulatory Principles Reference Paper: see *http://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_e.htm*.

[1811] For a comprehensive review of these principles, see Bronckers and Larouche, para.1–445, n.1794, 5, 22–31 and Bronckers and Larouche 2008, 319, 330–347. See also Burri Nenova, para.1–018, n.593, 261–273; and Koenig and Braun, para.1–445, n.1794, 1, 13–18.

of these "reference principles" was to ensure that incumbent operators, which generally remained the dominant players in national markets, were prevented from using their market position to the detriment of new entrants.[1812] These principles are expressed in very basic terms[1813] and do not contain the same level of detail as the equivalent principles of the EU Regulatory Framework.

1–451 Specific remedies and dispute settlement mechanism—If a WTO Member does not respect its obligations under the GATS, disputes may be resolved under the WTO dispute settlement mechanism, which contains specific procedures and remedies for resolving.[1814] The WTO dispute mechanism can only be used by states that are WTO Members; private parties (*e.g.* a supplier having difficulties entering a foreign market) have no right to use the mechanism. Some WTO Members, such as the EU and the United States, have domestic legal mechanisms that allow private parties to petition their government to take appropriate action when a foreign government fails to comply with its WTO obligations, including recourse to the WTO dispute settlement mechanism.[1815] In a sector like telecommunications where markets continue to evolve rapidly, recourse to the WTO dispute settlement mechanism may be inappropriate for obtaining a rapid resolution of a dispute, although the WTO dispute resolution mechanism is still effective. It would be preferable for a foreign operator to be able to seek market access by being able to enforce WTO obligations in domestic courts by relying on these regulatory principles as implemented into national law.[1816] However, this may not always be possible. In the EU, it is doubtful that GATS, its Annexes and Protocols would have direct effect so as to be capable of being enforceable by national courts.[1817]

1–452 Schedule of the EU's commitments—In its schedule of commitments to the Fourth Protocol, the EU has undertaken to apply the EU telecommunications regulatory package to service suppliers from WTO Members in the same manner as it is applied to EU service providers,

[1812] Bronckers and Larouche, para.1–445, n.1794, 5, at 23. The text of the WTO Dispute Settlement Understanding can be found at: *http://www.wto.org/english/docs_e/legal_e/28-dsu.pdf*.

[1813] In *Mexico Telecommunications*, para.1–447, n.1802, the first telecommunications services case heard under the WTO dispute settlement procedures, the Panel was able to construe some of these terms. See also Wellenius, Galarza, Tohen and Guermazi, *Telecommunications and the WTO: The Case of Mexico*, World Bank Policy Research Working Paper No.3759 (November 2005), available at *http://ssrn.com/abstract=844849*; McGivern, para.1–445, n.1794, 431, 452–459.

[1814] For a review of these remedies, see Bronckers and Larouche, para.1–445, n.1794, 5, 37–42.

[1815] In the EU, Regulation 3286/94 of December 22, 1994 laying down Community procedures in the field of the common commercial policy in order to ensure the exercise of the Community's rights under international trade rules, in particular those established under the auspices of the World Trade Organization, O.J. 1994 L349/71 ("Trade Barriers Regulation") as amended by Regulation 356/95 February 20, 1995 amending Regulation 3286/94, O.J. 1995, L41/3 and by Regulation 125/2008 of February 12, 2008 amending Regulation 3286/94, O.J. 2008, L40/1. See Bronckers, "Private Participation in the Enforcement of WTO Law: The New EC Trade Barriers Regulation" (1996) 33 C.M.L. Rev. 299.

[1816] See Eeckhout, "The Domestic Legal Status of the WTO Agreement: Interconnecting Legal Systems" (1997) 34 C.M.L. Rev. 11.

[1817] Such effect has, in principle, been denied by the Court of Justice: Case C-149/96 *Portugal v Council* [1999] E.C.R. I-8395, paras.42-52, confirmed in Case C-377/02, *Léon van Parys v Belgisch Interventie- en Restitutiebureau* [2005] E.C.R. I-1465, para.39. See also: Burri Nenova, para.1–018, n.59, 274–278; Koenig and Braun, para.1–445, n.1794, 1, 26–32.

with limited exceptions.[1818] Accordingly, non-EU undertakings must, in principle, have unrestricted access to and use of public telecommunications networks and services across the EU, including access to and the use of private leased circuits. The EU's obligations under the GATS are limited to ensuring market access to existing services and networks, and there is no obligation for a WTO Member to authorise a foreign supplier to establish, acquire, lease, operate or supply new public or private telecommunications networks. The EU has, nevertheless, elected, as part of its specific commitments, to abolish nearly all restrictions in this respect. This means that market entry by non-EU undertakings offering fixed and mobile voice services is allowed on the same terms as those applicable to EU undertakings. While the national law of a number of WTO Members continues to limit the level of foreign ownership of telecommunications companies, the EU has, in principle, abandoned any such limitations, with some limited exceptions.[1819]

1–453 GATS 2000—A new round of negotiations for the liberalisation of trade in services within the territories of the WTO Members started in January 2000; this round is known as GATS 2000. As regards telecommunications, negotiations are based on the WTO Members' current commitments made in 1997 and the WTO Agreement on Basic Telecommunications Services. The new round of negotiations provides an opportunity to extend these commitments and adopt new commitments that will cover all electronic communications services.[1820] Participants in these negotiations submitted their initial proposals for specific commitments by June 30, 2002 and initial formal offers were scheduled to be made by March 31, 2003. The EU's position was based on the Electronic Communications Regulatory Framework, adopted in March 2002. The EU framework recognises the need to respect the WTO commitments even within the implementation of the EU

[1818] A new EU schedule of commitments was drafted in 2006, which took account of enlargement of the EU to 25 Member States. This new schedule has been certified by the WTO, but has not yet entered into force, as it has not yet been ratified by all 25 Member States. See Communication from the Commission of October 9, 2006, "Certification, Draft consolidated GATS Schedule", WTO S/C/W/273. See also S/C/W/273A1, Addendum 1 of October 31, 2006, S/C/W/273C1, Corrigendum 1 of October 31, 2006 and S/C/W/273S1, Supplement 1 of December 18, 2006. See also *Communication from the European Communities, Classification in the Telecom Sector under the WTO-GATS Framework*, WTO Council for Trade in Services Special Session—Committee on Specific Commitments, TN/S/W/27—S/CSC/W/44, 10 February 2005 (05-0548). A consolidated schedule of commitments for all 27 EU Member States (reflecting the accession of Bulgaria and Romania) is under negotiation in the WTO. The current schedules of specific (and binding) commitments and exceptions for the EU and its Member States are available at: *http://www.wto.org/english/tratop_e/serv_e/serv_commitments_e.htm* and under *http://www.wto.org/english/tratop_e/serv_e/telecom_e.htm*.

[1819] For example, in France non-EU individuals and non-EU companies may not own directly more than 20% of the shares or voting rights of companies authorised to establish and operate radio-based infrastructure for the provision of telecommunications services to the general public. This does not apply to companies or firms legally established in an EU Member State. Other Member States that retain, according to their schedules of commitments, restrictions on foreign ownership include Poland and Slovenia. In Poland, foreign ownership of and voting rights in companies providing domestic long-distance and international telecommunications services provided using cable television and radio networks, and operators of public cellular mobile telephone services and networks, is limited to 49%. In Slovenia, foreign ownership of an operator may not exceed 99%. The related EU (for France) and individual Member States' (for Poland and Slovenia) schedules of commitments are available at: *http://www.wto.org/english/tratop_e/serv_e/serv_commitments_e.htm*.

[1820] See Luff, "International Trade Law and Broadband Regulation: Towards Convergence" (2002) 3 J.N.I. 239.

framework by national regulatory authorities.[1821] Currently, negotiations continue in the "Doha Round",[1822] following the Fourth Ministerial Declaration made in Doha in November 2001.[1823]

1–454 The EU's schedule of commitments expressly excludes audio-visual content, which is defined as the exercise of editorial control over broadcasts. As a result, non-EU content providers may still be subject to market access restrictions in the EU.[1824]

1–455 The European Economic Area (EEA)—On January 1, 1994, the Agreement creating the European Economic Area ("EEA") between the then twelve EU Member States and six Member States of the European Free Trade Association ("EFTA"), *i.e.* at the time Austria, Finland, Iceland, Liechtenstein, Norway and Sweden, entered into effect.[1825] The EEA aims at creating a homogeneous European Economic Area.[1826] To this end, it creates an association which provides for the same four freedoms as are found in the Treaty on the Functioning of the European Union,

[1821] See Access Directive, para.1–019, n.66, Art.8(3), first sub-para., third indent and 2002 Access Directive, para.1–019, n.66, recital 13, or 2002 Framework Directive, para.1–019, n.64, recital 29, on standards.

[1822] Information on the negotiations in respect of telecommunications services is available at: *http://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_e.htm*. The negotiation objectives of the trading partners mainly relate to technological neutrality of the commitments, improved offers and technical assistance of developing countries and least-developed countries, reducing specific legal barriers (*e.g.* exclusive rights and economic needs tests), commitment to all provisions of the Regulatory Principles Reference Paper and non-discrimination: see *Report by the Chairman to the Trade Negotiations Committee*, Special session of the Council for Trade in services, WTO, TN/S/23, 28 November 2005, (05-5630), available at *http://docsonline.wto.org/DDFDocuments/t/tn/s/23.doc*; Shin-yi Peng, "Trade in Telecommunications Services: Doha and Beyond" (2007) 41 *Journal of World Trade* 293.

[1823] See generally, *http://www.wto.org/english/tratop_e/dda_e/negotiations_summary_e.htm*. General information on the submissions made by the EU in the Doha Round is available at: *http://ec.europa.eu/trade/creating-opportunities/eu-and-wto/doha/*.

[1824] See Decision on WTO and basic telecommunications services, para.1–242, n.1017, Annex. This could be maintained in the context of the Doha round, as announced in 2005: WTO, Communication from the Commission of June 29, 2005, Conditional Revised Offer, TN/S/O/EEC/Rev.1, 415–418, available at: *http://www.jmcti.org/2000round/build-in-agenda/service/tn_s_o_ecc_rev1.pdf*. Even though in the EU a single regulatory framework has been introduced for telecommunications and broadcasting networks and services, in its conditional revised offer the EU has retained the distinction between telecommunications and broadcasting and has offered no commitments in respect of the latter, and has sought to maintain most of its Article II exemptions relating to audiovisual services: Bronckers and Larouche 2008, para.1–445, n.1794, 319, 371–373. See also the Commission's Audiovisual and Media Policies website at *http://ec.europa.eu/avpolicy/ext/multilateral/gats/index_en.htm*.

[1825] Agreement on the European Economic Area, O.J. 1994 L1/3, as amended by the Adjusting Protocol (O.J. 1994 L1/572) and subsequently by the 2004 EEA Enlargement Agreement (O.J. 2004 L130/3) and subsequently by the 2007 EEA Enlargement Agreement (O.J. 2007 L221/15). See also Decision of the EEA Council 1/95 of March 10, 1995 on the entry into force of the Agreement on the European Economic Area for the Principality of Liechtenstein, O.J. 1995 L86/58. For a consolidated text of the EEA Agreement, see: *http://www.efta.int/legal-texts/eea/main-text-of-the-agreement.aspx*. For more information on the EEA, see generally: http://www.efta.int/eea.aspx. Austria, Finland and Sweden acceded to the EU on January 1, 1995. Switzerland is also a founding and current member of EFTA, but is not a party to the EEA Agreement. It has a number of bilateral agreements with the EU, including in relation to the free movement of services and telecommunications services: see, *e.g.* Decision of April 4, 2002 as regards the Agreement on Scientific and Technological Cooperation on the conclusion of seven Agreements with the Swiss Confederation, O.J. 2002 L114/1 and Agreement between the European Community and the Swiss Confederation on certain aspects of government procurement, O.J. 2002 L114/430.

[1826] EEA Agreement, para.1–455, n.1825, Art.1(1).

as well as for its competition provisions and provisions on state aid.[1827] The EEA partners also took on board almost the entire *acquis communautaire*. For this purpose, Protocols and Annexes to the Agreement contain a long list of references to EU secondary legislation in many areas, including electronic communications, audiovisual services and information society services,[1828] which have been transposed into the national legislation of the EFTA States. New EU legislation is also transposed into national legislation following a decision of the EEA Joint Committee.[1829] The EFTA Surveillance Authority was created in order to ensure that specific EFTA States (*in casu* Liechtenstein, Norway and Iceland) correctly implement these provisions. EU competition and state aid rules in the EEA are enforced by the ESA and the European Commission.[1830] This means in practice that undertakings or users and customers in Iceland, Liechtenstein and Norway are subject to, or benefit from, the same rules in the electronic communications sector as those applying in the EU. Switzerland follows equivalent rules.[1831]

[1827] *ibid.*, Arts.8–27 (free movement of goods), 28–30 (free movement of persons), 31–35 (freedom of establishment), 36–39 (free movement of services), 40–45 (free movement of capital), 53–60 (competition) and 61–64 (state aid). The EEA Agreement also contains provisions on related horizontal policies (Arts.66–77), including social policy, consumer protection and the environment.

[1828] Annex XI to the EEA Agreement on electronic communications, audiovisual services and information society. For an updated version of the annex, see: *http://www.efta.int/legal-texts/eea/annexes-to-the-agreement.aspx*.

[1829] EEA Agreement, para.1–435, n.1825, Arts.92–104.

[1830] A more detailed discussion of the EEA Agreement and the EFTA Surveillance Authority falls outside of the scope of this work. Information on the European Economic Area is available at *http://ec.europa.eu/external_relations/eea/*. See also para.1–455, n.1825. Information on the European Free Trade Association is available at *http://www.efta.int/about-efta.aspx*. For general background to the EEA Agreement, see: Almestad, "The Squaring of the Circle—The Internal Market and the EEA", in Johansson, Wahl and Bernitz (eds.), *Liber Amicorum in Honor of Sven Norberg—A European for all Seasons* (Bruylant, 2006), 1; Norberg, "The Agreement on a European Economic Area" (1992) 29 C.M.L.Rev. 1171; Toledano Laredo, "The EEA: an overall view" (1992) 29 C.M.L.Rev. 1199; and Tichy and Dedichen, "Securing a smooth shift between the two EEA pillars: prolonged competence of EFTA institutions with respect to former EFTA States after their accession to the European Union" (1995) 32 C.M.L.Rev. 131.

[1831] Regarding the EFTA Surveillance Authority, see: *http://www.eftasurv.int/* and *http://www.eftasurv.int/internal-market-affairs/areas-of-competence/services/electronic-communications*. Regarding Switzerland, see Bartle, "Europeans outside the EU: Telecommunications and Electricity Reform in Norway and Switzerland", (2006) 3 *Governance: An International Journal of Policy, Administration, and Institutions*, 407; Mach, Häusermann and Papadopoulos, "Economic regulatory reforms in Switzerland: adjustment without European integration, or how rigidities become flexible" (2003) 2 *Journal of European Public Policy*, 301.