Broadband Universal Service in Europe:
A Review of Policy Consultations 2005-2010

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Abstract: Recognition of the growing importance of broadband to the public presents challenges for policy-makers in introducing efficient strategies, not only to serve the increasing demand for broadband among people in society but also to increase their economic contribution both in the short run and in the long run. Different measures and strategies have been implemented in many countries and regions in order to encourage broadband deployment. Among them, the inclusion of broadband in the scope of universal service has been discussed.

In the European Union, the discussion on broadening the scope of the Universal Service Directive (USD) to include broadband has been raised since the first periodical review in 2005. At that time, the European Commission concluded that only a small, although rapidly growing, minority of European consumers currently make use of broadband services. Therefore, the conditions for including broadband services within the scope of universal service as set out in the USD were not fulfilled.

Later, the European Commission launched the second periodical review of universal service in 2008 with the preliminary conclusion that broadband has not yet reached the majority of people, implying that the conditions of the USD for expanding the scope of universal service were not yet fulfilled. However, the public consultation on broadening the scope of the USD to include broadband has been opened since March 2010 and was last on May 7, 2010. In the meantime, the public workshop organized in the context of the public consultation on universal service principles in e-communications was held on March 30, 2010. The workshop provided wide-ranging views on the topic, including an assessment of the cost of broadband availability and also the rapid change of broadband penetration rate throughout Europe.

Against this background, this paper provides an analytical survey of the current state and trends of universal service with focus on broadband access in the European Union. First it presents an overview of broadband deployment and regulation in Europe. Then, it analyzes the USD reviews by taking into account the previous and the recent review, in particular by comparing the discourse evolution of the public submissions from stakeholders in the two consultations. A framework to evaluate broadband universal service will be provided. In conclusion, the paper will identify selected issues regarding broadband universal service in Europe, especially the pros and cons of broadband universal service.blablabla.

Key words: universal service obligation, broadband, legislations, public consultations.

Moving toward an information society has been set as a political agenda for the European Union (EU) for more than a decade. To reach this goal, several political initiatives have been launched from eEurope to i2010 and now we are moving to the new initiative, the Europe 2020 Strategy. Under this strategy, a flagship initiative to promote smart growth – an economy based on knowledge and innovation is 'A Digital Agenda for Europe'. The aim is to deliver sustainable economic and social benefit from a Digital Single Market based on fast and ultra-fast Internet and interoperable applications, with broadband access for all by 2013, access for all to much higher Internet speeds (at least 30 Mbp/s) by 2020, and at least 50% of European households subscribing to Internet connections above 100 Mbp/s (CEC, 2010).

With broadband access targeted, there is a need to consider what measures and strategies can be used to attain the political agenda. Under the theme of broadband access for all, rules and regulations must be updated or reviewed. A telecommunications regulation aimed primarily at ensuring that basic telecommunications services are available for all EU citizens is the universal service regime. As addressed by Commissioner Neelie Kroes, the future of universal service obligation is at the heart of how Europe meets the target of broadband for all (KROES, 2010).

Nevertheless, including broadband in the scope of universal service has been raised since 1999 (CEC, 1999), but with so few users at that time it could not go forward. A question, therefore, arises whether it is necessary to update the current universal service regime, 2002 Universal Service Directive (USD), designed ten years ago to include broadband. The discussion on broadening the scope to include broadband has been raised since the first periodical review in 2005. At that time, the European Commission (EC) concluded that only a small, although rapidly growing, minority of European consumers currently make use of broadband services. Therefore, the conditions for including broadband services within the scope of universal service as set out in the USD were not fulfilled.

Later, the EC launched the second periodical review of universal service in 2008 with the preliminary conclusion that broadband has yet to reach the majority of people, implying that the conditions of the USD for expanding the scope of universal service are not yet fulfilled. Together with the periodical review, two public consultations have been conducted; in May 2005 and more recently in March 2010.

The main issues raised for the consultation in 2010 are: (a) the basic concept of universal service in digital environment; (b) broadening the scope to include broadband; (c) balance between a coordinated EU-wide response and the need for national flexibility; and (d) financing (CEC, 2010a). Since each issue has different grounds and criteria to be considered, this chapter focuses on the issue of broadening the USO scope to include broadband.

Against this background, this paper is structured as follows. First, an overview of broadband deployment and regulation in Europe is presented. Next, the paper analyzes the USD reviews by taking into account the previous and the recent review, in particular by comparing the discourse evolution of the public submissions from stakeholders in the consultations. A framework to evaluate broadband universal service is provided. In conclusion, the paper identifies selected issues regarding broadband universal service in Europe, especially, the pros and cons of broadband universal service.

■ An overview of broadband deployment and USO regulation development

Broadband deployment

Nowadays, along with technological developments, broadband connectivity is widely accepted as strategically important because of its ability to accelerate the contribution of information and communications technology (ICT) to economic growth, social and cultural development, and facilitate innovation. Accordingly, the EC considered wide broadband coverage in Europe as crucial to foster growth and employment. Many policies have been initiated at the EU level to stimulate broadband coverage through recognition of the primary role of the market as the common approach for broadband deployment.

Under market-based policy together with government interventions, i.e., the EU structural and rural development funds or the European Economic Recovery Plan (EERP), broadband penetration in the EU increased. In 2009, the number of broadband access lines per 100 inhabitants was 24.6 percent at EU 25, and 23.6 percent at EU 27 (see Figure 1). Figure 1 shows the spread of broadband access.

Figure 1 - EU broadband penetration
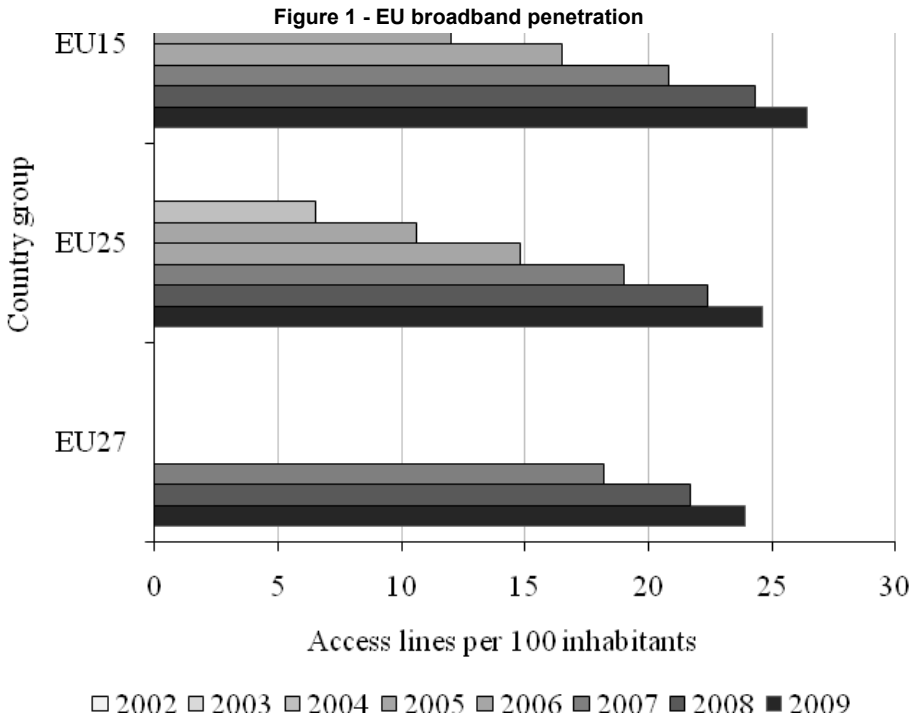
Source: Eurostat

Broadband penetration per 100 inhabitants varies among Member States. The highest penetration is 37.7 percent in the Netherlands, while the lowest is 11.9 percent in Bulgaria (see Figure 2).

This difference, therefore, can be considered as a barrier for the EU to move towards an information society under the theme of digital single market. These data suggest that promoting an information society presents challenges to policy-makers identifying efficient strategies to serve the increasing demand for broadband and increase the economic contribution from that penetration. Also, increasing broadband penetration together with applications development can lead to social exclusion. As Commissioner Reding pointed out, lack of broadband access widens not only the digital but also the economic and social divides (REDING, 2007). Therefore, there has been discussion of whether the inclusion of broadband in the scope of universal service should be implemented to guarantee equal access.

Figure 2 - Broadband penetration rate by EU countries in 2009
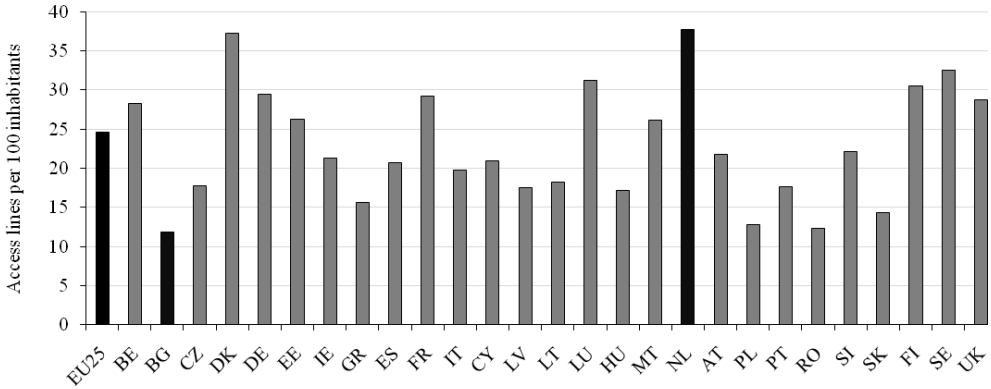
Source: Eurostat

USO regulation development

Apart from the fact of uneven development in member states, it is accepted that universal service is a telecommunications regulatory regime implemented to avoid division among populations with access to the new possibilities and who are comfortable using telecommunications services, and populations excluded from fully benefiting due to geographical, physical or economic limitations.

To yield those benefits to all Europe citizens, a path development of USO concept has gradually emerged. Before the 1990 Open Network Provision (ONP) Directive, which is a precursor to the ensuing conditions on universal service, there was no European universal service harmonisation in the telecommunications sector. Priorities were set nationally, and in the absence of competitive forces in most Member States, this produces mixed results and uneven development which substantially undermine the strengthening of economic and social cohesion set out in the Treaty. In addition, different service obligations in the Member States would hamper the acceleration of European telecommunication services (CEC, 1993).

Since then, the universal service concept has been considered at the EU level. The main elements for a Community-wide definition were developed within the framework of the ONP Directive in 1990 which harmonized principles and conditions for open network provision. With this directive, access to networks and services cannot be restricted, except for reasons of general public interest. The 1992 ONP Leased Lines Directive added a form

of universal service. Article 7 of the Directive obliged Member States to ensure that a harmonized minimum set of leased lines was made available. With respect to leased lines, the Directive indicated components of the universal service: availability, transparency and a regulated price.

A further harmonized set of services was stated in the 1995 ONP Voice Telephony Directive. This Directive concerned the harmonization of voice telephony and fixed public telephone networks. With the adoption of the Directive, the EC identified the common scope of universal service obligations within the EU. In doing so, the EC created obligations which guaranteed a defined level of service in a liberalized environment. The obligations set out in the Directive include the provision of voice telephony *via* a fixed connection, and the provision of operator assistance, emergency calls, directory service and public pay telephones.

Shortly thereafter, the Commission proposed the 1996 Universal Service Green Paper with the point of departure that "universal service is a dynamic and evolving concept. It is one of the essential elements of this information society…". The Green Paper also indicated that by including network access within the scope of universal service, users are given an opportunity to access all services provided over modern telecommunications networks.

The first directive that defined 'universal service' is the 1997 Directive on Amending 1990 ONP Directive. Under this Directive, a set of services must be available to all users regardless of geographic location at affordable prices. Also, the amendment guarantees the provision of universal service in telecommunications taking account of future evolution through the EU.

In 1999, the Commission issued the Electronic Communications Green Paper, and broadband was considered the first time under the USO regime. The Green Paper emphasized the need to ensure that all populations are provided with services considered essential for participation in society, and that the majority principle (that universal service should be considered when services are available to the great majority of citizens) applies. It was accepted in the paper that broadband service is a key factor in ensuring that the EU can make the transition to the information society. However, including such services within the scope of universal service was problematic at that time, because of the financial impact that it would have had on the majority of consumers. The 2002 USD addressed issues of majority and social exclusion. That is, the fundamental requirement of universal service is guaranteed to users on request with connection to the public telephone network at a fixed location, at an affordable price.

However, data communications in the 2002 Universal Service Directive are restricted, with the upper limit of the data rate permitting functional Internet access limited to a single narrow band connection. Even though the Directive explained that it is not appropriate to mandate a specific data or bit rate at Community level, the concept of 'functional Internet' coupled with 'narrowband' and 'currently available voice band modems typically offer a data rate of 56 kbit/s' made the Directive technology-specific (BOHLIN & TEPPAYAYON, 2009).

The 2009 EU Telecom Reforms accelerated broadband access to expand universal service beyond narrowband Internet (CEC, 2009). However, the amendment has several interpretations in terms of implementation, and it also is not clear whether broadband can be included under this amendment. As defined by this Directive, universal service in electronic communications means ensuring that all who request are provided with services essential to participate in society and already available to the majority of citizens, either by the market or by public intervention (CEC, 2008). Moreover, the difference between the most and least developed countries regarding broadband penetration in the EU is increasing annually (SEC, 2008).

The implications of this section are that information society concept, market liberalization and universal service regime have been developed in parallel in the EU. Moving toward information society needs high-performance networks, and broadband networks play an important role. Based on market force, uneven development on broadband growth is observed and the gap between member states is increased. Universal service is another resort to provide the possibility for closing the gap among people. Though broadband is considered to have been included in universal service regulation since 1999, the universal service definition remains unchanged. Universal service is based on a social perspective while liberalization is based on an economic perspective. Those two perspectives can be observed in public consultation in the next section.

■ Policy consultations on universal service under the current Directive

In the EU, the discussion on broadening the scope of the 2002 USD to include broadband is raised in the two EC periodical reviews and the two

public consultations. The first periodical review was in 2005. The EC concluded that only a small, although rapidly growing, minority of European consumers currently use broadband services. Therefore, the conditions for including broadband services within the scope of universal service as set out in the USD are not fulfilled. Later, the EC launched the second periodical review of universal service in 2008 with the preliminary conclusion that broadband has not reached the majority of people, implying that the conditions of the USD for expanding the scope of universal service are not yet fulfilled.

Together with the periodical review by the EC, public consultations on broadening the scope of the 2002 Universal Service Directive to include broadband have been conducted twice. The first public consultation was in May 2005, and the second public consultation was in March 2010.

The 2005 consultation

Submissions to the first public consultation from providers and provider groups strongly objected to including broadband within the scope of universal service. Most providers supported the analysis of the Commission that the criterion of majority, which is stated in the Directive, is not met. However, 6 of 9 consumer groups supported the inclusion of broadband based on the fact that potential merits of broadband should be developed for society as a whole not only in urban areas and that universal service plays a key role (BOHLIN & TEPPAYAYON, 2009).

In April 2006, the Commission published a report regarding the outcome of 2005 review and consultation (CEC, 2006). The Commission's assessment argued that the public consultation provided widespread support for the preliminary position taken by the Communication of May 2005, and that no new rationale emerged to change the conclusion that neither mobile nor broadband communications fulfills the conditions of the Universal Service Directive for inclusion in the scope of universal service. While the Commission noted that the high growth rate of broadband penetration merits constant monitoring of the situation, the Commission concluded that the scope of universal service under the Directive remained unchanged.

Figure 3 - Views from the 2005 consultation by group

	Consumers	Providers	NRA	Other
■ Exclusion	2	22	5	1
▢ Inclusion	6	1	1	2
■ N/A	1	7	1	4
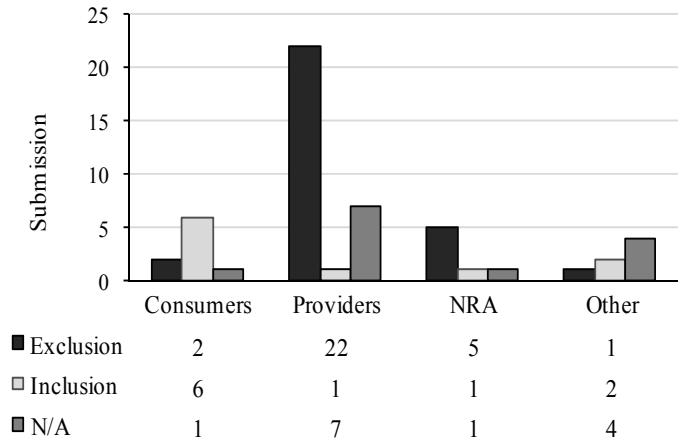
The 2010 consultation

By way of contrast the second consultation in March 2010 focused on the broadband issue. 144 submissions are made, of which, 118 are written in English. Also, submissions are received from 18 national governments, regions or public authorities (15%): 3 from national regulatory authorities (3%), 66 from operators, businesses or industry associations (56%), and are from 31 consumer associations and other NGOs (26%) (see Figure 4).

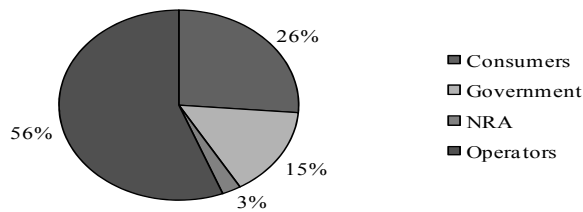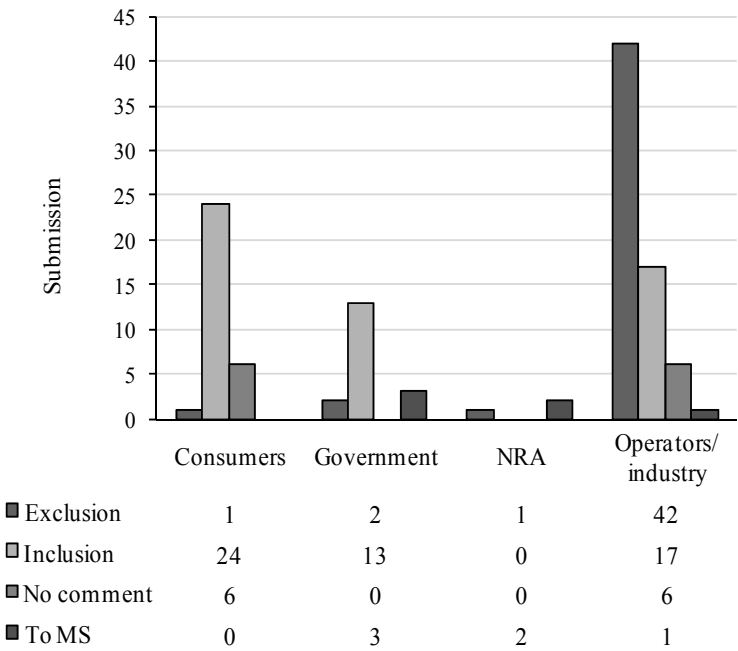**Figure 4 - Submissions by stakeholders in the 2010 consultation**

Figure 4, shows that only a few submissions are made by NRAs, in particular Austria, Italy, Cyprus and BEREC (Body of European Regulators of Electronic Communications). By Member Country, contributions from the UK are the most varied, compared to the 2005 consultation, in both numbers and institutions (see Appendix). Submissions which agreed to include

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broadband in the scope of universal service, whether at an EU or national level (54 submissions), exceeded the number of submissions that disagreed (46 submissions). See Figure 5 (see Appendix 1). However, there is greater participation by consumers in the 2010 consultations. In 2005, there are only 9 submissions from consumers, compared to 30 in 2010. Also many submissions from operators and industry are from applications providers. In the 2005 consultation most were by telecommunications providers.

Figure 5 - Views on broadband universal service in the 2010 consultation

	Consumers	Government	NRA	Operators/industry
■ Exclusion	1	2	1	42
■ Inclusion	24	13	0	17
■ No comment	6	0	0	6
■ To MS	0	3	2	1

The submissions provided wide-ranging views on broadband as a universal service. USO implementations vary across the EU, ranging from broadband inclusion in the scope of the USO regime (e.g., Switzerland) where the USO regime has not yet been implemented (e.g., Germany, Sweden and Luxemburg). From the submissions, divisions also occurred within countries, e.g., the UK, where universal service is fully implemented and competition is the main policy of the government in the telecommunications market. From the BIS and Ofcom submissions, in the UK, analysis conducted as part of the Digital Britain report indicated that 11 per cent of UK households are unable to access broadband at a minimum download speed of 2Mbp/s. Degraded performance because of the

presence of electrical interference from poor telephone wiring in consumers homes is also raised. In addition, it can be observed that two major rationales have been raised in the submissions. The submissions which agree to broadband USO are based much on an economic rationale, while the submissions that oppose broadband USO are based on a social rationale. A brief on those two different rationales is addressed below.

Views opposing broadband universal service

Many arguments raised in the submissions disagree with including broadband within the scope of universal service. In 2005 most contributors argued that inclusion is premature as the criterion of majority is not met. Conversely, based much on economic rationale, few in 2010 raised the criterion. The interesting views include:

- *Competition distortion:* Most submissions opposing broadband universal service, in particular from networks operators, point toward the issue that broadband inclusion would distort competition. For example, the Federal Ministry of Economics and Technology of the Federal Republic of Germany, Telefonica etc., address that there can be adverse implications from broadband universal service, including unfair distribution of cost burden, distortion to competition, lack of local competition and insufficient quality of service.

- *Operator abandonment and innovation harm:* BEREC argued that broadband universal service adversely affects competition and market dynamics. For instance, the obligation might artificially strengthen its position in the electronic communication market. Also, companies, local authorities or other entities that voluntarily participate in infrastructure development may abandon it in the context of any extension to the USO, in turn harming innovation.

- *Policy shift:* An issue raised by Telenor is that extending the scope of universal service to broadband marks a shift from preventing exclusion (geographically and socially) from basic communication services to promoting and ensuring the deployment of new technology and services and that would distort competition in the end.

- *Availability of other tools or initiatives:* Several submissions raise that even though a broadband gap exists , several initiatives of government interventions are available, e.g., public-private partnership, EU Structural Funds or state aid.

Views supporting broadband universal service

Most national governments and consumer associations support the inclusion of broadband into the scope of universal service. The rationale supporting their views is based much on social issue. Some arguments raised in the submissions to support broadband universal service include:

- *Existing of the divide:* The main argument of the submissions which agree to broadband USO for instance the BIS, Ofcom, and consumer group submissions is that there is an internal divide whereby populations are not adequately served under a market system. Therefore, broadband is an instrument to include isolated populations from social, political or cultural processes because of low income, disability or remote location;

- *Stimulate full potential from Internet-enabled society:* Though BEREC does not agree to broadband universal service at the EU level rather at member states, its arguments reinforce 'virtuous circle' arguments that broadband is likely to contribute to the delivery of full economic, social and cultural potential from an Internet-enabled society. Increasing consumer welfare involves improving the general access to public services, entertainment media and political, democratic, educational and cultural resources;

- *Constraint of some technology:* A satellite constraint issue is raised by a consumer that whereby many European citizens in rural areas do not have high-grade wired networks access, the only option they have is satellite reception. However, this model is both expensive and technically limited (bandwidth, upload capacity), connecting through fixed broadband under USO regime would be a better option for consumers; and

- *Necessity to some sevices:* TAG (a consortium promoting access for deaf persons) showed that video relay services for sign language users can only be delivered when Internet connections are fast enough, viz., a minimum of 2 Mbp/s.

■ Analysis of the universal service framework

It is interesting to note that universal service concept had existed in EU legislation after the EU market had been liberalized. Therefore, an action from the EU was needed to ensure that a combination of liberalization and new technologies reduces rather than widens existing regional differences within the European Community.

As the market evolves and services are increasingly adopted, what was once considered to be outside the range of universal service will need to be explicitly reassessed, according to the respective USO legislations. This is particularly true of broadband because of its importance to social and economic development nowadays because broadband is a precondition for access to the full range of NGN services, including high quality VoIP services (XAVIER & YPSILANTI, 2007). However, the failure for rural areas to achieve comparable access to advanced telecommunications service illustrates the problem of establishing imprecise and non-binding regulatory rules (GABEL, 2007). Also the successful governmental strategies should consider both public goods, where USO is situated, and competition-related aspects of broadband (PICOT & WERNICK, 2007). GOLDFARB & PRINCE (2008) pointed out that the benefit of using Internet determined how much value individuals derive from the Internet. Therefore if given the opportunity to go online, low income individuals would be more likely to use the Internet for online activities than high income individuals.

Therefore, to delineate possible future concepts – including that of broadband USO – two basic and fundamental dimensions require attention:

• The extent of *ex ante* regulation for universal service (*via* regulation, mandates, institutional arrangements such as universal service funds). The question is, whether or not USO legislation and some institutional arrangements are needed with respect to broadband.

• The extent of universal service provision (from a narrow and specific set of services to a wide range of services). The question is, to what extent should the scope of universal service be covered. Should it cover a narrow and specific set of services or a wide range of services.

These dimensions define the main universal service concepts as identified in Figure 6:

• *Safety net:* traditional approach to intervention of narrow service range. The safety net for PSTN is dominant in the EU. USOs encompass common pricing geographically, ready access to public services, directory enquiry, and public pay phones. The concept applies to disenfranchised population groups. Typically broadband is not included.

• *E-society:* government supports citizen's rights to knowledge-based society participation. Electronic communications is a citizen's right. The state provides citizens with contemporary service levels of basic needs. Universal service revolves around the obligation Member State to ensure that citizens

can access the full range of e-communications. Accordingly, the principle implicitly includes broadband in the scope of USOs.

• *Limited promotion:* government only encourages the wide deployment of services. The provision of an array of electronic communications is deemed critical for social inclusion, but not necessarily part of citizen rights. Although ICT is necessary for an efficient functioning of economy, there is no extensive government intervention. Rather, government promotes e-society. Promotional efforts attempt to create a demand-led deployment.

• *Minimalist concept:* the market mechanism is assumed to function adequately and there is no need for government intervention.

Figure 6 - Universal service concepts
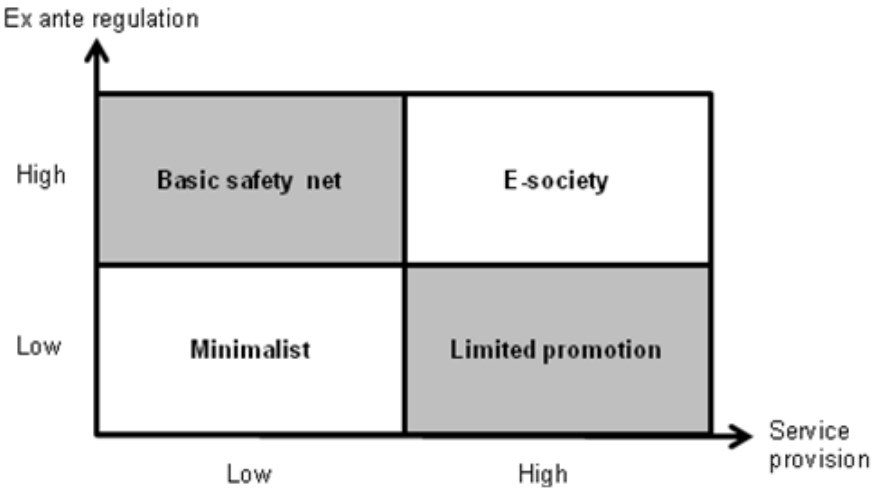
Of the options, E-society appears the best placed to deliver an extensive and inclusive information society. But whether an E-society is an appropriate vehicle to provide broadband universal service depends on supporting rationale. From social rationale, E-society is preferable. Consumers recognise the existence of a divide and that broadband USOs will be benefits to some groups who are ignored by competition mechanism. From economic rationale, Minimalist is preferred as suggested by BLACKMAN & FORGE (2008). Most telecommunications providers share the same view that market can provide broadband (either by fixed or mobile) to all users. Each concept has pros and cons. E-society promises access for all and closing the digital divide but it is unclear how large funds would be managed and finding could distort market. Minimalist may enable a complete range of

services without state funding but it requires strong competition in each market. Clearly, the 'right' concept for policy implementation depends on the ultimate goal to be achieved. [1]

However, if bridging the divide is the main objective, there are many tools that can be used for instance funding from government budgets or public private partnership. But in terms of building the telecommunications networks in unprofitable areas or to some groups of people, the universal service might be a good option because the regulation is more stable than policy. There are some implications for the E-society concept that need to be taken into account. The major weakness of the E-society concept is the large-scale funding required – who will pay and will the financing distort markets? The underlying basis for a future broadband USO should be that development towards increasingly competitive telecommunications markets will continue. A new broadband USO should not drive out or distort competition. It is therefore of central importance that the funding instruments for USO are designed in such a way that competitive forces are not replaced, but rather strengthened if at all possible. However, the funding mechanisms should not be designed in such a way that competition in effect is subsidized. For instance, it has been suggested that the design of the Universal Service Fund in the United States has stimulated excess entry, as several carriers may be entitled to support, even though the revenue and cost structure of the served area in question would not be attractive for one carrier without support.

■ Implications and conclusions

The information society is a political agenda and once it has been set, it will unavoidably touch upon broadband. Broadband is regarded as being of strategic importance to a country because it can contribute to social and economic development, national competitiveness and also sustainable development. Increasing broadband penetration and deployment can be achieved through several strategies. The telecommunications regulatory regime, namely universal service, is one strategy.

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[1] The above figure and conceptual discussion is based on joint work conducted with Simon Forge and Colin Blackman in an JRC-IPTS project on the Future of Universal Service, reported in 2007. A slightly revised conceptual scheme was published by FORGE & BLACKMAN (2008).

The universal service concept has gradually emerged in the EU legislation from the Directive of ONP in 1990 until the 2002 USO Directive. Interestingly, the USO concept was introduced at the EU level after the market had been liberalised for some years. In addition, the issue of broadening the scope of universal service to include broadband has been raised since the 1998 Telecom Review, but it is still unclear whether broadband can be applied under the current Directive, though it was amended in 2009.

The current USO Directive stipulates a periodical review on the scope of universal service. The question whether or not broadband should be included in USO has been addressed twice; in 2005 and 2008. The conclusions from both reviews by the European Commission were the same in both instances: that broadband should not be included because the majority criterion has not yet been met. Together with the periodical review by the European Commission, two public consultations were also conducted – in 2005 and 2010. The majority of submission from stakeholders in the 2005 consultation was against broadband universal service. There were particularly strong opinions from providers or groups of providers which represented 30 from a total of 53 submissions. The result from 2010 was interesting. Submissions which agreed to include broadband within the scope of universal service, whether at the EU level or national level (54 submissions), exceeded the submissions which disagreed (46 submissions). However, it should be noted that the 2010 consultation had more consumers or consumer associations participating than the consultation in 2005.

To determine whether or not the universal service concept should be reviewed to include broadband, an evaluation framework based on two dimensions has been proposed. From the four concepts under the proposed framework, there are two concepts which would be interesting to take into account: E-society and Limited promotion. These two concepts serve different purposes. The E-society approach is good for the purpose of bridging the divide and for including broadband in the universal service regime. The Limited promotion concept is good for the purpose of encouraging competition and innovation and for excluding broadband from the universal service regime.

Moreover, in any universal service discussion, it is important to distinguish between the availability of the service and the actual penetration. Obviously, getting service extended to all households requires one set of policies, but addressing customers who do not or cannot subscribe to the available service requires another set of policies. Clearly distinguishing

between availability and penetration is essential to an analysis of universal service. Extending broadband service to areas that do not have it will boost subscribers, but there may be households with access to broadband which do not subscribe, as is the case with basic voice telephone service. Different remedies will be required for this latter group.

Therefore, the achievement of universal broadband requires a more holistic policy approach across a range of market drivers including both encouraging supply and addressing demand-side barriers. At the same time, if broadband universal service is to be implemented as another tool to ensure that all EU citizens have access to essential communication services, the universal service scheme itself may need to be re-designed so that any competition distortion can be avoided. It is important to point out that the universal service regime and competition in the market are not polar opposites. Instead, they are complementary regimes depending on the design of implementation. Therefore, broadband universal service will not always drive out or distort competition in the market. Some mechanisms need to be re-designed, in particular funding mechanisms.

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Annex

Group	Institution	Country	In	Out	MS	Remark
I	Den danske regering	Denmark			✓	
I	Federal Ministry of Economics and Technology	Germany		✗		
I	Ministry of Infrastructures, Transport and Networks	Greece			✓	
I	Les autorités françaises	France				Last resort
I	Direcció General de Tecnologia i Comunicacions. Govern de les Illes Balears	Spain	✓			Leave to MS
I	Generalitat de Catalunya	Spain	✓			
I	Department of Communications, Energy and Natural Resources	Ireland	✓			Leave to MS
I	Public Utilities Commission	Latvia	✓			Leave to MS
I	Ministerie van Economische Zaken	Netherlands			✓	
I	Ministry of Infrastructure	Poland		✗		
I	Ministry Of Higher Education, Science And Technology	Slovenia	✓			Set minimum requirement
I	Ministry of Transport and Communications	Finland	✓			Set minimum requirement
I	Department for Business, Innovation & Skills and Ofcom	UK	✓			No minimum requirement
I	South East England Development Agency	UK	✓			
I	Ministry of Enterprise, Energy and Communications	Sweden	✓			
I	Anonymous	-	✓			Leave to MS
I	Council of European Municipalities and Regions	-	✓			Set basic requirement
I	Eurocities	-	✓			
II	Body of European Regulators of Electronic Communications	-			✓	
II	Autorità Per Le Garanzie Nelle Comunicazioni	Italy			✓	
II	Office of Commissioner for Electronic Communications &Postal Regulation	Cyprus		✗		
III	Abertis Telecom, S.A	Spain	-	-	-	Not clear
III	Anonymous company	France	✓			Set minimum requirement
III	Anonymous company	Austria	✓			Set minimum requirement
III	American Chamber of Commerce to the EU	Belgium		✗		
III	APRITEL	Portugal		✗		
III	Association of Telecommunication Operators and Service Providers	Spain		✗		
III	BBC	UK	✓			Set minimum requirementt
III	BITKOM	Germany		✗		
III	BT	UK		✗		
III	Bundesverband Glasfaseranschluss	Germany		✗		
III	BusinessEurope	-		✗		
III	Cable Europe	-		✗		
III	Confederation of British Industry	UK			✓	

Group	Institution	Country	In	Out	MS	Remark
III	European Center of Employers and Enterprise providing Public Services	-		✕		
III	Central Chamber of Commerce of Finland	Finland		✕		
III	Chaltel Ltd	UK	✓			
III	Cisco Systems	Belgium		✕		
III	Deutsche Telekom	Germany		✕		
III	Digital Europe	Belgium		✕		
III	DIHK	Germany		✕		
III	European Association of Directory Publishers	-	-	-	-	Not clear
III	European Broadcasting Union	Switzerland	✓			Set minimum requirement
III	European Competitive Telecommunication Association	-		✕		
III	Eircom	Ireland		✕		
III	European Telecommunications Network Operator's Association	-		✕		
III	Europacable EEIG	UK		✕		
III	European Emergency Number Association	-	✓			
III	European Satellite Operators Association	-		✕		
III	Eutelsat S.A.	France	✓			
III	Federation of Austrian Industry	Austria		✕		
III	Federation of Small Businesses	UK	✓			
III	Fonecta Ltd	Finland	-	-	-	Not clear
III	FTTH Council Europe ASBL	Belgium		✕		
III	GSMA Europe	Belgium		✕		
III	Hutchison Whampoa Europe (3 Group division)	Belgium		✕		
III	ICT UNIE o.s.	Czech Republic		✕		
III	Integral SatCom Initiative Technology Platform	France	-	-	-	Not clear
III	Intel Corporation	Belgium	✓			
III	UK Trade Association for the Technology Sector	UK	✓			Flexible for MS
III	INTUG	Netherlands	✓			Flexible for MS
III	Irish Rural Link	Ireland	✓			
III	ISPA- Internet Service Providers Austria	Austria		✕		
III	Polish Chamber of Commerce for Electronics and Telecommunications	Poland		✕		
III	Liberty Global Europe B.V.	Belgium		✕		
III	Microsoft	Belgium	✓			Flexible for MS
III	The Number	UK	-	-	-	Not clear
III	Omnitor	Sweden	✓			
III	Orange France Telecom Group	France		✕		
III	Scottish Screen	UK	✓			Flexible for MS
III	SIA 'Lattelecom'	Latvia		✕		
III	Skype Communications S.A.	Luxembourg		✕		
III	Sonaecom – Serviços de Comunicações, SA (OPTIMUS)	Portugal		✕		

Group	Institution	Country	In	Out	MS	Remark
III	Sorenson Communications Inc.	US	-	-	-	Not clear
III	Tele2 AB	Sweden		✖		
III	Telecom Italia	Italy		✖		
III	Telefónica	Spain		✖		
III	Telekom Austria Group	Austria		✖		
III	Telekommunikationsindustrien i Danmark	Denmark		✖		
III	Telenor	Norway		✖		
III	TeliaSonera AB	Sweden	✓			Set minimum requirement
III	VAT - Austrian Association of Alternative Telecommunications Operators	Austria		✖		
III	VIVACOM	Bulgaria	✓			
III	Vodafone	UK		✖		Change to universal access
III	Voice on the Net Coalition Europe	Belgium		✖		
III	Wienstrom GmbH	Austria		✖		
III	WIND Hellas Telecommunications S.A.	Greece		✖		
IV	ANEC	-	✓			
IV	Associazione Anti Digital Divide	Italy	✓			
IV	BEUC- the European Consumer Organisation	-	✓			
IV	Communications Consumer Panel	UK	✓			
IV	Consumer Focus	UK	✓			
IV	De Minico, Giovanna, Prof.	Italy	✓			
IV	Center for Sign Language and Deaf Communication	Austria	✓			
IV	European Blind Union	-	✓			
IV	European Disability Forum	-	✓			
IV	Fagerberg, Gunnar	Sweden	✓			
IV	Hansen, Yves-Luc	Netherlands	✓			
IV	Julien, Martine	France	✓			
IV	Marsden, Chris	UK	✓			
IV	Spanish National Organisation of the Blind	Spain	✓			
IV	Open Spectrum Alliance	Austria	✓			Under certain circumstances
IV	PhoneAbility	UK	✓			National only
IV	Royal National Institute of Blind People	UK	✓			
IV	Sense	UK	✓			
IV	TAG	UK	✓			
IV	UNI Europa	Belgium	✓			
IV	Verbraucherzentrale Bundesverband e.V.	Germany	✓			
IV	Wirzenius, Arno	Finland		✖		