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**EXPLOITING THE NEW OPPORTUNITIES OF LIBERALISATION
IN THE TELECOMMUNICATIONS INDUSTRY**

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EU TELECOM. POLICY :

- ⇒ **The run-up to liberalisation ;**

- ⇒ **The Green Paper on Mobile and Personal Communications**

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I THE RUN-UP TO LIBERALISATION

The European Commission's policy of opening up the European telecommunications sector has been an important component of the European single market programme, as well as a key to Europe's continuing economic and social development.

The EU-White Paper on Growth, Competitiveness and Employment recognised that telecommunications networks *"will constitute the nervous system of the economy, and more generally of tomorrow's society"*, placing telecommunications at the heart of the European Union's strategy for growth.

With the growing global orientation of telecommunications, the emerging markets in Central and Eastern Europe and the CIS, and the trend towards privatisation European Commission policy has now taken on an even broader orientation. Current telecommunications policies will form an important component in integrating the continent and pulling Europe out of the current recession.

The key features of the current European telecommunications scene are :

- The date of 1 January 1998, set in the EU telecommunications review for liberalisation of public voice telephony service across the continent, with a deferment of up to 5 years for some Member States. For the first time, a regulatory schedule for the liberalisation of the core area of telecommunications has been set and will apply throughout the EU ;
- The major organisational reforms of the European telecommunications operators and the additional licences issues recently in this country, but also in Scandinavia. These will fundamentally change service structures to meet the needs of European customers, by encouraging provision of services both nationally and across borders.

Organisational reforms are now leading on to a wave of privatisations in at least six EU States, with privatisations planned or mooted in Germany, the Netherlands, Portugal, Denmark, Italy, Belgium and Greece.

- The Union has developed into a technology leader in digital mobile communications. The publication of the Green Paper on Mobile Communications of last month is intended to open the development of the mobile sector towards the personal communications mass market, which will radically reshape the very core business of telecommunications - the public voice market.

Five major cellular licences will be granted in the EU during the year : a GSM licence has been awarded earlier this year in Italy to the Omnitel consortium led by Olivetti ; the Netherlands, Belgium and Spain are expected to proceed with licensing a second private GSM operator or consortium ; France has completed the bidding process for a first licence for DCS 1800 services, with allocation anticipated for end-July.

And, of course, Hutchison's DCS-1800 Orange service has entered the market, while Mercury's One-2-One service is expanding outside the London area.

- At the same time, multimedia services are firmly on the agenda. At the EU level, the so-called Bangemann Group, subsequent to the White Paper last December, will report to the Heads of State at the Corfu Summit in June and, is likely to provide substantial impetus to the development of an infrastructure capable of powering the Information Society.

1. The EU-timetable to 1998

As a result of last year's political agreement on the date of 1 January 1998 for the full liberalisation of public voice telephony services, subject to possible derogations of up to 5 years for Greece, Ireland, Portugal and Spain, a clear timetable and agenda for the further liberalisation of the telecommunications sector has now been established for liberalising the most important telecom core market across the EU. It is worth noting that Spain has publicly announced that it will also adhere to the 1998 date.

The key milestones provided in the Council Resolution of 22 July 1993 are:

- Adoption of pending measures : in the field of Open Network Provision (ONP); satellite communications and the mutual recognition of licenses.

All of these measures are before the EU Council and the European Parliament.

- The Green Paper on Mobile and Personal Communications, published on 27 April. This is the first major policy measure triggered by the liberalisation schedule.
- The Green Paper on Infrastructure next year, but with major steps on cable, alternative and satellite infrastructures due this year ; and
- A full scale reform of the EU-regulatory framework to prepare for liberalisation to be tabled by 1 January 1996.

The process of implementation started with the issuing on 15 November last year of a Communication on **universal service**, subsequently adopted by Council in December.

This was aimed at reassuring Member States on the continent that universal service can be maintained and developed in a competitive environment. The Communication established the scope of universal service obligations recognised within the Community framework and set out basic principles for its future financing in a competitive environment. In such circumstances, where elements of universal service could only be provided at an identifiable loss, funding could be derived from a combination of :

- internal transfers from more profitable parts of an operator's business. i.e. long distance and international, but subject to strict regulatory control
- tariff rebalancing to remain the basic goal ;
- access charges to serve to share the financial burden for financing universal service between market participants, but subject to the principle of proportionality ; i.e. the burden should be shared out according to market power and revenues.

This approach was endorsed in principle by the Council in February. At the same time, a mandate was given to the Commission to work out the framework for the determination of access charges across the EU in detail by 1st January 1996, based on the experience available in Member States - and particularly, of course, in this country.

Most operators are now actively pursuing **tariff rebalancing** in preparation for the liberalised environment. This has led in a number of countries to lower prices for long-distance and international calls. Cost-orientation is also a legal requirement for leased line tariffs, according to the ONP Leased Line Directive.

The now published **Green Paper on Mobile and Personal Communications** is the first major liberalisation step resulting from the liberalisation schedule and I will turn to this in detail.

Finally, a further key feature of the schedule is the fact that the question of the future **infrastructure regime** is now firmly on the regulatory agenda across the EU, responding to user and service provider concerns about the availability and pricing of capacity, particularly for high end applications.

The general issue of the future regulation and provision of telecommunications and cable TV infrastructure to the public will be addressed in the Green Paper early next year. The Paper will address the basic issues involved in full scale infrastructure liberalisation, including issues such as access to way-leaves, issues concerning co-existence of telecoms networks and cable and issues concerning provision of multi-media services via these infrastructures.

Nevertheless, the concerns raised and the emergence of multi-media suggest that more rapid limited action must be examined in specific fields. In this context four Member States - the UK, France, Germany, and the Netherlands - supported Commission studies to consider the potential role of alternative infrastructure and cable TV networks for services already liberalised according to EU-legislation, in particular, information and data services and voice and data for corporate networks / closed user groups.

These studies have now been completed and will be published shortly. The studies indicate, inter alia, that e.g. 2 Mbit leased lines in Europe for business users are on average of 10 times more expensive than comparable circuits in North America. This makes it prohibitive in most European countries to introduce advanced data and information services - users on the continent typically lease 64 kbit circuits, whilst in North America T1 1.5 M/bits circuits are increasingly the basic building block of corporate networks.

A clear consequence of the current situation is that the liberalisation put in place by the EU's Services Directive is being handicapped, because the basic tool to deliver such services - reasonably priced infrastructure - is missing.

2. The future EU regulatory environment

As a first step towards the new environment, current legislation, and the opportunities provided by it, must be fully exploited. This concerns, in particular, the ability already provided under Community law to self-provide or contract out voice and data communications services, within corporate networks and closed user groups.

Secondly, this requires the completion of the package of outstanding EU legislative measures in relation to :

- satellite communications : removing monopoly rights over satellite services and equipment ; providing for EU-wide licencing procedures ; and opening access to space segment.

Proposals for EU-wide mutual recognition of licences for satellite services were put forward by the Commission in January and will be discussed at the Telecoms Council by the end of this month. Also by the end of the month, we expect to put to Council new proposals for a joint European policy on open space segment access and management, and with regard to the International Satellite Organisations. The final adoption of the Directive on EU-wide liberalisation of satellite services based on the EC's Treaty Article 90 through the extension of the scope of the EU's Services Directive to satellites is expected shortly.

- Establishing a general regime for the mutual recognition of telecommunications service licenses. In the amended proposal submitted by the Commission last month which takes account of Member States' objections to the initial draft proposing a Single Licence, a system, in parallel with that proposed for satellite services, now builds on ECTRA, CEPT's European Committee for Telecommunications Regulatory Affairs, through a system of Community work mandates for the development of harmonised licence conditions on a service by service basis.

A Memorandum of Understanding and a Framework Contract on cooperation for this purpose between ECTRA and the Commission is to be signed during this year.

- Adoption of clear rules concerning protection of personal data and privacy, adapted to the specific characteristics of digital telecommunications networks. Without this, further progress will not be possible in a number of Member States for advanced telecommunications services, such as Calling Line Identification (CLI). We will submit an amended proposal in the next few weeks and we expect this issue to be a priority of the German EU-Presidency in Autumn.

Thirdly, Open Network Provision - the ONP programme - must be completed.

While we see ONP as the basis for common network regulatory principles across the EU, future emphasis is likely to be more placed on interconnection and dispute resolution than on the regulation of the operators themselves.

These basic principles are included already to substantial extent in the ONP framework and the specific directives, i.e. the ONP Leased Line Directive (applicable since June 1993) and the proposed ONP Voice Telephony Directive which unfortunately has become an issue of dispute between the EU Council and the European Parliament subsequent to a number of Parliamentary amendments, though we hope that these differences will be resolved soon.

The further development of the regulatory framework must establish a fair balance of regulatory responsibilities between the Community, Member

States, and the new CEPT institutions. These include ECTRA - already mentioned - and ETO - its future licensing and numbering office, and in the radiofrequency field, the ERC and ERO (European Radiocommunications Committee and European Radiocommunications Office). The Commission concluded in April a Memorandum of Understanding with the ERC and a Framework Contract with ETO for coordination in the frequency field, and will enter - as I have explained - into a similar arrangement with ECTRA. Both organisations provide coverage including Central and Eastern Europe and possibly soon to extend to countries of the CIS, such as the Russian Federation.

As a first consequence of this agreement, we have entrusted recently nine mandates for frequency harmonisation to the ERC, concerning, inter alia, Europe-wide harmonisation of frequency bands for DCS 1800, for the new digital trunking system TETRA, and for terrestrial Digital Audio Broadcasting. Current work with ECTRA is focusing on Europe-wide numbering mandates such as for portable and personal numbering.

The question of the need for a new independent regulatory institution at a European level remains open. At this stage regulation at the EU level is based on national regulatory authorities acting together in the EU High Level Regulatory Committee (where both the DTI and OFTEL participate), the Commission and ECTRA/ERC. The Bangemann Group may review the situation. The Commission will remain in any event a 'regulator of last resort' in its role as guardian of the EC Treaty and, in particular, the EU's competition rules.

3. Privatisation

The statement with most far-reaching consequences in the 1987 Green Paper on telecommunications, which launched the EU regulatory policy on the sector, was the call for the separation of regulatory and operational functions and the establishment of an arms' length relationship of the operators with the State. It was this position which had the greatest consequences, going far beyond the change of the regulatory framework.

In most continental PTTs, as they then were, separation of regulation and operations was the starting point for deep organizational reform which has

now developed its own dynamic. Organisational reform, combined with a general change in EU Member States attitudes with regard to the public sector role in the economy and new emphasis on the role of private capital, now leads to a wave of privatisations on the continent.

Privatisation is now firmly on the telecommunications agenda in the majority of EU-Member States and also a number of countries in Central and Eastern Europe. Clear announcements or discussion of the issue has taken place in the Netherlands, Belgium, Portugal, Italy and Greece. In Germany, the so-called Post Reform II package is at a decisive stage, with a three party consensus commanding Parliamentary majority for the required change of the Constitution. Adoption of the legislation is anticipated prior to the Autumn elections and, according to announcements, privatisation could start by 1996.

Privatisation will change profoundly the outlook of the sector in Europe. UK operators will find a substantially more open environment and opportunities for partnerships and alliances, amplifying current ventures under way. We expect the European telecommunications sector to undergo substantial restructuring and globalisation, as the necessary base for sustaining the sector's expansion and maintaining Europe's role in the expanding international telecommunications market.

4. Alternative infrastructure and cable-TV networks

I have mentioned that studies in this area have been initiated and are now coming to conclusion.

The studies attempt to assess the benefits of liberalisation in these areas and to identify potential impact on the existing operators.

At this stage, a basic finding appears to be that the provision of liberalised services is being held back by the limited availability and high prices of capacity. The 10:1 price differential for 2 Mbit lines in favour of North America, already mentioned, is indicative of this situation.

We expect to draw conclusions and announce measures before Autumn.

II. THE GREEN PAPER ON MOBILE AND PERSONAL COMMUNICATIONS

The Green Paper on mobile and personal communications published on 27th April represents the first major liberalisation step leading up to 1998.

The Green Paper has two basic objectives : abolishing remaining monopolies in the sector across the EU ; and breaking down existing or newly erected regulatory barriers which hinder the development of the mobile markets into a full scale personal communications mass market. This comes at a critical time, with GSM expanding rapidly in most European markets and the first DCS 1800 services such as One-2-One and Orange in this country, but also E-Plus in Germany entering the market.

The Green Paper proposes a range of detailed positions which are included in annex. Let me make a few basic points.

1. The vision

Studies prepared in advance of the Mobile Green Paper suggest that Europe currently has more than 8 million subscribers to mobile cellular telephony systems and a further 8 million users of other mobile systems such as paging and Private Mobile Radio (PMR) systems. Forecasts suggest that this will rise to 40 million by 2000 and 80 million by 2010.

With an evolution to a generalised personal communications environment, it is estimated that penetration of personal communications services in Western Europe in the business sector could reach 20 to 30% by the year 2000 and up to 50% by 2010. Further 30 to 40% of total population could use personal communications services in 2010. Ultimately, penetration of personal communications services - based on a combination of wireless and wired links - in residential markets is likely to substantially exceed traditional limits on telephone use of around 50% of the population (one phone per household) with an ultimate penetration level of 70 to 80% (one phone per adult).

The rapid development of mobile communications in Europe is being pushed forward by the introduction of the new digital technologies and notably, the

GSM and DCS 1800 cellular systems. Such technologies are proving world leader, with GSM having been adopted in more than 60 countries world-wide within a period of less than two years since its effective introduction. Within Western Europe, GSM accounted, within a year of the first systems arriving in the market, already for more than 10% of all mobile cellular telephony subscribers. It had by January overtaken the analogue systems in three EU-Member States, i.e. in Germany, Portugal, and Greece.

Such systems, and the development of MoUs supporting their introduction, represent the start of a wave of digital pan-European technologies. These include cordless residential and business communications (DECT) - which we expect to become a major market factor towards the end of this year, besides CT2 -, trunked public access mobile radio (TETRA) and also digital paging (ERMES) - even if the latter systems' introduction has been delayed by frequency and interference problems in some EU Member States, i.e. UK and Germany.

The Mobile Green Paper expects future personal communications to be based on a combination of technologies, e.g. GSM, DCS-1800, and DECT / CT2, as well as the intelligent fixed network and a satellite PCS component.

2. Future operation of service providers and combination of licences as critical issues

The development and penetration of personal communications will substantially depend on service providers and service provision being able to overcome the rigidities inherent in current national and technology focused licensing practices, in particular by being able to combine services provided under different licences.

For these reasons the Green Paper indicates that "*commercial freedom should include the opportunity for Service Providers, whether independent or integrated into or forming part of mobile network operations, to offer a combination of services provided under different mobile licences, as well as the ability to provide services in different Member States, subject only to the provision of the Treaty competition rules*".

In order to support service provision, the Green Paper requires that *"Mobile network operators should ..have an obligation to accept all reasonable requests by Service Providers to deal, within the limits of normal commercial practice and Community competition law (including requests from Service Providers integrated into other mobile network operations). It should be possible to challenge any refusal to deal before the National Regulatory Authority."* The Green Paper also recognises the importance of *"sufficient transparency, in particular concerning their accounting practices,"* of mobile network operators relations with their service provision arm.

3. Interconnection framework

In the EU, payment by mobile operators to fixed network operators for leased lines and conveyance of calls currently corresponds to 30 to 50% of revenues. The interconnection framework is therefore, as generally acknowledged, a cornerstone of future development of the sector.

The basic framework for interconnection identified in the Green Paper draws on the general regulatory framework for telecommunications set out in the EU's Open Network Provision (ONP), as well the general application of the Treaty competition rules.

Within this framework, interconnection should basically be a matter for commercial agreement, with regulatory authorities as ultimate arbiters of disputes.

The two key areas of interconnection are between fixed networks and mobile networks and between mobile network operators and service providers. Safeguards must be maintained to ensure that interconnection terms are fair and non-discriminatory and that charges are cost-oriented. Specific consideration may be necessary where mobile network operators are marketing their services directly.

4. Infrastructure for mobile operators

Given the strong dependence of mobile operators on the fixed network in most cases, the Green Paper calls for mobile network operators to have a right within the framework of their mobile licences, to use and construct their own

fixed or microwave links, or to use third party infrastructure, in order to build their radio networks. It also calls for operators to be able to connect directly with other mobile operators both nationally and internationally.

Where operators request the sharing of infrastructure, this should not be restricted. Sharing may in certain circumstances, for example, protection of the environment be required.

III MOVING BEYOND VOICE COMPETITION

The Mobile Green Paper's fundamental goal is to provide a clear picture of the integration of the policy in the mobile field with the overall time table for the liberalisation of the EU telecommunications sector. It is fundamental to the thinking of the Green Paper that it addresses not only the current market for mobile communications, but also the convergence in both technological and regulatory terms of mobile and fixed networks services, fully using the potential of mobile to develop the evolution of the general telephone service towards personal communications, ultimately ushering in the transition to third generation technologies currently under development in Europe - the UMTS / the Universal Mobile Telecommunications System, or in ITU terms, the FPLMTS.

The consultation phase on the Mobile Green Paper has been opened with its publication on 27th April. Major hearings will take place in Brussels on 15/16th June.

The agreement on full voice liberalisation by 1 January 1998 across the EU has opened the way to the formulation of future policies to deal effectively with the major global challenges which the European telecommunications sector will face during the decade - even if the issue of liberalisation of infrastructure / facilities remains open for the time being. These challenges are :

- A break-through in **personal communications** must be achieved to broaden the telecommunications mass market. This is the aim of the Mobile Green Paper.

- Europe must become a major actor in the **multimedia** field to integrate the new cable and media technologies, and to connect to the world-wide trends and the dynamics of the US developments concerning the so-called information superhighway.
- European operators must acquire a strong position as players in the new **global alliances**, such as those pioneered by the UK sector.

All of these challenges, as well as the political priority of promoting the emergence of trans-European networks and services, require further deregulation and unchaining of market forces as their very basis.

As regards **global alliances**, European operators have struck spectacular deals recently.

European operators have become major investors and partners in global joint ventures with the US and Japan, Latin America and they are active in new emerging areas such as South Africa. They are, of course, the natural partners for development in the countries of Central and Eastern European and the CIS.

The sound basis for these activities must, however, be a booming and barrier-free European telecommunications market. Rapid deregulation of the Union's telecommunications market will be a sine-qua-non of such a development.

The **Personal communications environment** now prepared by the Mobile Green Paper will open the potential of a new growth phase for the public telecommunications mass market. Europe, with its firm position as the adopter of the first digital mobile systems operational on a mass basis, and now globally acknowledged, has a unique opportunity in the world market.

This opportunity will however only be used if Europe rapidly discards regulatory barriers towards development of service oriented personal communications and allows systems to operate across the range of different mobile services and freely combine wireless and wired services.

As regards the new major growth market of **multimedia**, it marks a turning point for any telecommunications policy. Multimedia means the entry of the

media industry and the software giants of personal computing into the telecommunications world.

Europe has strong actors in the field, but will have to make major efforts to build up its position in this market.

A necessary condition to develop such services in Europe will be the rapid deregulation of cable-distribution and local networks to allow distribution of multimedia products via European networks. This gives full relevance to the current step in the Commission's deregulation programme concerning the use of cable-TV networks for telecommunications purposes.

I may also add that multi-media is a major focus of the Bangemann Group which - as I have mentioned - will submit its report on future telecommunications policies to the Heads of State at the Corfu summit next month.

The next two years will be decisive for EU-telecommunications and media policies.

Mobile systems and intelligent networks have the potential to converge into full scale personal communications. Global satellite systems will offer global coverage. Multimedia will make telecommunications a market shared between telecommunications operators, the media industry, and the computer world. At the same time, in Geneva the GATT negotiations, subsequent to the Uruguay Round and the creation of the WTS on further liberalisation of international telecommunications are opening.

EU telecommunications policy can make a substantial contribution to draw full benefits for Europe's economies and societies from the immense potential represented by the merger of telecommunications, media, and personal computing.