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GREEN PAPER ON THE LIBERALISATION OF

TELECOMMUNICATIONS INFRASTRUCTURE

AND CABLE TELEVISION NETWORKS:

PART ONE

PRINCIPLE AND TIMETABLE

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INFRASTRUCTURE: THE BACKBONE OF THE INFORMATION SOCIETY

The information society is on its way. Digital technology is transforming the telecommunications, computer, information and audio-visual industries. In fact, it is converging them all into one. It is also beginning to have a profound effect on society and the economy, changing the way we work, live and play, the way we do business, the way we organise ourselves, the way we interact. These changes are happening all over the world, everyone is busy preparing for and adapting to the challenges of the new information age. That includes Europe. It also includes the USA, Canada, and Japan - Europe's principal economic competitors. The nature of that economic competition itself is also changing. To compete effectively today, one must have the means to access, to process, manipulate, stock and produce information quickly and effectively. One must also have good access to markets and to customers all around the globe. It is therefore vital that Europe places itself at the forefront of this inevitable drive towards a global information society.

Telecommunications infrastructures will form the fundamental platform upon which Europe's society and economy will depend in the decades to come. These infrastructures, which will enable vast quantities of information to flow freely and rapidly around Europe, when combined with the new services and applications which can be tailor-made to users' needs, will be the backbone to Europe's information society.

NO STRENGTH IN WEAKNESS: KEEPING EUROPE COMPETITIVE

In a world economy that is increasingly globalised, European firms must be able to compete effectively with their counterparts in other regional economic groupings. By reinforcing their competitiveness European companies will not only be able to retain their position in existing markets, but help ensure that they are well-placed to take advantage of new opportunities and win new markets.

To remain competitive, European industry must benefit from the widespread diffusion and integration into production processes of new technology. Information and communication technologies can make a significant contribution to helping improve productivity, which is essential to the creation of wealth and to competitiveness. By stimulating economic growth, competitiveness contributes to job creation.

Information and communication technologies can help enterprises adapt to change by introducing new methods of organisation. As we move towards an economy based on immaterial production driven by information, it is necessary that Europe is in a strong position to implement the essential technological, economic and social transformations that will ensure its smooth passage to the information age.

Providing open access to the network is absolutely fundamental to the successful development of the information society. All users, whether they be small or medium enterprises, entire industries, governments, public administrations, citizens or consumers, must have easy access to network-based services. It is essential that this basic principle is upheld, for Europe's continued competitiveness will depend on it.

Just as the provision of infrastructure for service providers should be open, unrestricted and at cost-related prices, all users, irrespective of their location, should have equal access to the network at affordable prices. Within the new environment of the information society therefore, the principle of a universal service must be reinforced and adapted if necessary to incorporate the new range of basic services now becoming available.

INDUSTRIAL AND ECONOMIC EFFECTS OF INFRASTRUCTURE LIBERALISATION

Three positive economic effects can generally been noted in countries which have proceeded with liberalisation of telecoms infrastructure (UK, Sweden, USA, Japan, Australia and New Zealand): a pressure to lower tariffs, greater choice of services and improved quality of offerings.

Information technology and communications products and services have penetrated all major sectors and industries in the member states. Given that the cost of handling a unit of information has divided by ten in the last 10-15 years, the price of transmitting a unit of information can also, if the incentive provided by competition is introduced, be reduced in such proportions.

Technological progress and innovation brings with it the opportunity to offer users an increasing choice of services and applications, of superior performance and better suited to their particular demands. For business the realisation of such an opportunity translates into substantial competitive advantage. For domestic users it means the possibility of direct access on demand of new services and entertainment.

For providers of services and applications, the consolidation of their competitive position depends largely upon the improvement of the quality of their offerings.

Other positive effects of infrastructure liberalisation are also recognised: the growth of the telecoms market, of new opportunities for job creation in new services and support for innovation in telecoms equipment industries.

One of the major preoccupations for public authorities concerning a liberalisation policy of this type, concerns the need to avoid a deterioration of the financial viability of their operators and to guarantee sufficient funding of universal service. The countries which have liberalised telecoms infrastructure are generally known to have higher rates of growth in their telecoms services markets.

Free access to infrastructure has many effects on employment: apart from the direct effects of potential jobs concerned with establishing and running new networks, indirect employment effects are generally observed in the growth of jobs in the service industries which depend upon economic access to and use of infrastructure, in order to improve their competitivity.

The pressure of competition between network operators forces them to be more receptive to the increasing demands of users and results in faster progress in IT in the manufacture of equipment and software.

THE WHITE PAPER ON GROWTH, COMPETITIVENESS, EMPLOYMENT

These are some of the key arguments elaborated in the European Commission's White Paper on Growth, Competitiveness, Employment (COM (93) 700 final), presented by President Delors to the European Council in Brussels in December 1993. The White Paper highlights the importance of moving forward towards the information society as one of the essential elements to help Europe reach those three goals. It also points out that the majority of funds to finance the development of trans-European information networks should come from the private sector.

THE BANGEMANN REPORT

A High Level Group, under the chairmanship of Commissioner Bangemann, was instructed by the Member States to present a report to the European Council in Corfu in June 1994, which recommends a certain number of specific measures to be taken into consideration by the Community and the Member States in the sphere of information infrastructures.

The underlying message behind the Bangemann Report is that the best environment for the development of new markets is an open and competitive one. Public administrations can no longer afford to maintain the high levels of investment necessary to ensure that their national telecommunications industry remains competitive on the world stage, unless it is at the expense of social measures. A liberalised market for services and infrastructures will help unlock revenues vital to support the huge private investments necessary for the development of the information society. It can thus free governments of enormous political and economic constraints, generating new revenues, which can be used to invest in health, education and culture.

TOWARDS A COMPETITIVE ENVIRONMENT

An open market environment for the development of services - a principle already adopted by Member States - cannot be properly implemented without parallel action at the level of infrastructures. New actors would find it difficult to offer their own new services if their access to the network continues to be restricted and with dominant players able to price them out of the market. Service providers must be able to benefit from open access to other services and to other networks at cost-related prices, as well as being able to build and operate their own networks.

A liberalised market is also a flexible one. Telecommunications is a domain that is characterised by constant change and rapid technological progress. It is only in a free and open environment, driven by market forces, that enterprises can achieve the degree of flexibility necessary if they are to react quickly to new developments and adapt to them. This requires them to maintain high levels of investment in research and development and to be able to integrate new technologies into their organisational and production processes as rapidly as possible.

At this stage, it is difficult to discern which technologies and which markets will ultimately prove to be the successful ones. The flexibility achieved in an open market environment is therefore all the more essential in the context of the information society because companies must be allowed the freedom to try out alternative routes towards new applications and markets, and test out a variety of different technologies.

A CLEAR AND STABLE REGULATORY FRAMEWORK

It has been made clear that the private sector is expected to make by far the greatest investment contributions for the implementation of the information society. However, this investment will not be forthcoming unless a clear and stable regulatory framework is promptly established, identifying the general principles and giving a clear timetable. This point was recently emphasised by the "Jumbo" Council on 28 September 1994:

> "The Council (...) stresses the importance and urgency with respect to rapidly evolving market conditions of setting up a clear and stable regulatory and legal framework allowing market operators to engage in business activities, to invest and to take initiatives to bring about the information society."[1]

1 Conclusions of the 1787th Council meeting 9561/94 (Press 197), 28.IX.94

Otherwise, investment will be slow and badly directed, whilst in other regions of the world, industry takes off. It is essential that Europe learns from its mistakes made back in the early days of the computer industry.

Therefore, the Commission's Action Plan (COM (94) 347 final, 19.07.94) stressed the need for a clear and stable regulatory environment. It also set out a policy framework for the development of the information society covering various other areas: networks, basic services, applications, and content; and social, societal and cultural aspects.

THE SOCIAL CHALLENGES

The impact on employment

The information society is rapidly developing; new investment opportunities are being created everywhere and the application of information and communication technologies are affecting all industries and services in our society. These technologies will have a strong impact on the whole economic system, growth, competitiveness and employment.

The application of these technologies can help to strengthen cohesion in the society, to develop a more efficient organisation in a number of fields and also to contribute to the development of Europe's regions. A number of aspects of the society are changing because of these technologies. Work is changing. The education and training systems are changing to provide in particular young people with the necessary qualifications to become citizens in the information society and we are only beginning to exploit the potential these technologies offer for Europe's citizens to benefit from their cultural and linguistic richness.

However, people are concerned about the effects these technologies can have on employment. The concern arises from the belief that a rapid application of these technologies could lead to only few new jobs and to even higher levels of structural unemployment (now more than half of the unemployed in the Union are long-term, structurally unemployed and they account for about 6 % of the active population).

Although there are a number of risks associated with the advantages of the information society, its creation is crucial to ensure sustainable growth and employment and to further develop the European model. Consequently, as set out below, it is imperative to evaluate the effects of applying the new technologies and define the accompanying measures to maximise the economic, social and cultural advantages and at the same time minimise the risks.

Reaching Societal Goals

Moreover, new distance monitoring services linked to a global network will help Europe, as well as the rest of the world, to meet global challenges such as the protection of our environment (for instance a sound management of natural resources, the reduction of pollution, the prevention of industrial disasters, etc.), and enable better quality healthcare provision for all (efficiency of information handling will reduce the cost of healthcare systems), and help reduce pollution and the social cost of traffic congestion through improved transport management systems.

Avoiding a Two-Tier Information Society

The information society also presents the Union with the major social challenge of preventing the creation of a two-tier society of haves and have-nots, in which only part of the population has access to the new technology, is comfortable using it and can fully enjoy its benefits. In the chapter on social, societal and cultural aspects, the above-mentioned Action Plan explores these issues as well as the information society's contribution to the promotion of Europe's cultural and linguistic diversity.

Provided policies are appropriately directed and applied the information society can make a significant contribution to the attainment of a certain number of fundamental social goals: improving the quality of life of Europe's citizens, raising the efficiency of our social and economic organisation, and reinforcing cohesion. Europe's economic prowess not only depends on the success of its industry in the global arena, but also on the effectiveness and quality of its social organisation.

INFRASTRUCTURE LIBERALISATION

Opening up telecommunications infrastructure to competition is the key issue which now requires a political decision. The High Level Group acknowledged this in its first recommendation requesting the Member States to

> "*accelerate the on-going process of liberalisation of the telecoms sector by: opening up to competition <u>infrastructures</u> and services still in the monopoly area; removing non-commercial political burdens and budgetary constraints on telecommunications operators; and setting clear <u>timetables</u> and deadlines for the implementation of practical measures to achieve these goals*" (emphasis added).

In line with these conclusions, the Commission's Action Plan identifies infrastructure liberalisation as one of the main initiatives to be taken in order to open the way for the development of the network and applications on which the information society relies.

The joint industry/telecom Council of 28 September 1994 welcomed the submission of the Commission's Action Plan and agreed on the urgent need to stabilise the basis for market operators' decisions as soon as possible by providing a clear and stable framework, and to provide a more secure basis for planning for all parties involved. The Council confirmed its readiness to examine and, if possible, to decide on the principles of liberalisation of infrastructure and to set a clear timetable.

THE APPROACH CHOSEN

In conclusion, in line with the Council discussions of 28 September 1994, the Commission therefore considers that the debate on the future approach to infrastructure can and should be structured in two parts :

- the basic **Principle and Timetable**. Developing the basis for agreement on the basic principle and on a timetable is the purpose of **Part I** of the Green Paper.

  Agreeing a basic principle and timetable now will enable the sector to plan investments and will provide investors with the necessary investment certainty in order to open the way for private funds to be forthcoming. That will also put the Union in a position to fully participate in the international debate which is opening in the context of the World Trade Organisation and the G7 Ministerial Meeting.

  The Union would also be able to undertake the measures required to lift the most immediate obstacles to the full use of existing network resources and of cable TV networks and provide a boost for the take-off of mobile and multimedia services, as well as the development of corporate communications.

- **Part II** of the Green Paper should prepare an **in-depth discussion of the major issues** involved in future network regulation once the full liberalisation of public voice telephony service allows provision of such services.

  The Commission recognises that, in order to address these issues, a wide debate on future regulation of network infrastructure is needed, and that a global, balanced and integrated approach must be developed. This should include the issue of the future financing of universal service and other public service tasks, as well as taking full account of the industrial, economic and social dimension and the international context.

The broad public consultation will involve the Council of the European Union and the European Parliament; the Economic and Social Committee and the Committee of Regions; consumers and business users; present and potential network operators and service providers; equipment manufacturers and technology providers; together with the trade unions and other organisations representing the social interests in the sector.

SUMMARY

A clear timetable was set at a Community level by Council Resolution 93/C213/01 of 22 July 1993 for the development of telecommunications in the European Union. This timetable confirmed the date of 1 January 1998 for the liberalisation of voice telephony services for the general public, subject to transitional arrangements for certain Member States.

With a clear timetable set for services liberalisation, the primary regulatory task must now be to provide the sector with a clear picture of how and when liberalisation of infrastructure will proceed. The Green Paper proposes that a coherent approach, integrated into the framework provided by Council Resolution 93/C213/01, is now required: infrastructure liberalisation should be linked to the timetable for the full liberalisation of telecommunications services, including both services which are currently open to competition and those to be opened to competition by 1 January 1998, i.e. voice telephony services for the general public.

In order to define such a coherent approach, the Green paper would propose a general principle: provided that the necessary safeguards are in place, the providers of telecommunications services which are open to competition should have a free choice of the underlying infrastructure for the delivery of such services.

This Paper therefore puts forward the position that, on the basis of this principle, action is necessary and desirable to remove immediately restrictions on the use of own or third party infrastructure in the following areas :

1. for the delivery of satellite communications services,

2. for the provision of all terrestrial telecommunications services already liberalised (including the use of cable television infrastructure for this purpose),

   This concerns voice and data services for corporate networks and closed user groups, as well as all other telecommunications services, other than the provision of voice telephony services to the general public,

3. to provide links, including microwave links, within the mobile network for the provision of mobile communications services, and

4. within the timetable for the full liberalisation of voice telephony and subject to the necessary safeguards, for the provision of voice telephony services for the general public.

Immediate action in the first three areas could remove substantial barriers which currently exist to the provision of services already open to competition, thereby making the liberalisation measures undertaken by the Union fully effective. At the same time the studies carried out suggest that action in these areas will not undermine the provision of universal service in the Member States.

This approach ties in with earlier calls by European Parliament to take full advantage, as soon as possible, of the existing infrastructure of cable networks and to obtain optimum utilisation of cross-border utilities networks.

As regards point 4, the full liberalisation of infrastructure for voice telephony services for the general public after they are opened to competition on 1 January 1998 (subject to additional transitional periods for a number of Member States), additional safeguards will be required. These can only be defined on the basis of broad public consultation initiated by the second part of this Green Paper on infrastructure which is to be published in accordance with Council Resolution 93/C213/01.

The continuation of current constraints would fail to meet the requirements in the Report on *Europe and the global information society* for the creation of conditions in which public and private capital can be mobilised to invest in the new technologies, which are vital for growth, competitiveness and employment.

With these considerations in mind, the Commission submits the first part of this Green Paper to the Council and European Parliament and the European public.

I INTRODUCTION

On 22 July 1993 the Council adopted Resolution 93/C213/01[2] which endorsed the general conclusions of the Commission's Communication on the consultation on the review of the situation in the telecommunications services sector[3] (the so-called "1992 Review"). Council Resolution 93/C213/01 set out a timetable for the development of telecommunications and confirmed the date of 1 January 1998 for the liberalisation of voice telephony services[4] for the general public. It also called for the development of future Community policy in the field of mobile and personal communications and in the field of telecommunications infrastructure and cable TV networks.

Whilst, in accordance with Directive 90/388, the focus of the 1992 Review was whether exclusive or special rights over the provision of basic voice telephony services for the general public[5] should continue, the effectiveness of the measures liberalising the telecommunications sector (in particular, the liberalisation of data communications, valued added services and the provision of data and voice services to corporate users and closed user groups), was questioned by many service providers and users of such services.

In particular, high tariffs for and lack of availability of the basic infrastructure over which such liberalised services are operated or provided to third parties have delayed the widespread development of high speed corporate networks in Europe, remote accessing of databases by both business and residential users and the deployment of innovative services (such as telebanking, distance learning, etc.). Additionally, the regulatory restrictions in many Member States prevent the use of alternative infrastructure operated by third parties (such as the cable TV networks and networks owned by energy companies, railways, or motorways to meet their internal communications needs). Many large companies, employers groups and user associations stressed that European business is less competitive, that innovative services are more slowly deployed and that the creation and development of pan-European networks and services is being delayed as a result.

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2 Council Resolution 93/C213/01 of 22 July on the Review of the situation in the telecommunications sector and the need for further development in that market, OJ C213/1, 06.08.93

3 Communication to the Council and the European Parliament on the consultation on the review of the situation in the telecommunications sector, COM(93)159, 28 April 1993.

4 Possible derogations of up to 5 years were provided for Greece, Ireland, Portugal and Spain. Spain has announced in the meantime that it also plans to move to full liberalisation by 1 January 1998. Furthermore the very small Luxembourg network can, where justified, be granted a transition period of up to two years.

5 Commission Directive 90/388/EEC of 28th June 1990 on competition in the markets for telecommunications services defines voice telephony as 'the commercial provision for the public of the direct transport and switching of speech in real-time between public switched network termination points'.

In this context, the importance of effective and affordable infrastructure is increasingly recognised in political debate within the Member States themselves[6]. Parliament also called on the Commission to adopt as soon as possible the necessary measures to take full advantage of the potential of existing infrastructure of cable networks for telecommunications services and to abolish without delay the existing restrictions in the Member States on the use of cable networks for non-reserved services, and to adopt measures to obtain optimum utilisation of the cross-border telecommunications networks of railway operators and electricity producers[7].

The continued bottleneck situation in the provision of infrastructure was also identified as a key obstacle to the development of the European Information Infrastructure in the Report on *Europe and the global information society* prepared by the group of prominent persons, under the chairmanship of Commissioner Bangemann. The report calls for urgent action to adjust tariffs, recognising that "*a reduction in international, long distance and leased line tariffs will trigger expansion in the usage of infrastructures, generating additional revenues, and simultaneously giving a major boost to generic services and innovative applications*".

The report sets an agenda, using the Council Resolution 93/C213/01 as a reference point, for moving towards a multi-media communications environment. In its cover statement, the report urges the European Union to put its faith in market mechanisms as the motive power to carry the Union into the Information Age.

In consequence, the report's first recommendation is to request the Member States to "*accelerate the on-going process of liberalisation of the telecoms sector by opening up to competition infrastructures and services still in the monopoly area; removing non-commercial political burdens and budgetary constraints on telecommunications operators; and setting clear timetables and deadlines for the implementation of practical measures to achieve these goals*". (Emphasis added)

In their conclusions on the report, the Heads of State and Government at the European Council in Corfu considered "*that the current unprecedented*

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6 See in particular :

- *Consultation Publique organisée par Bruno Lasserre à la demande de Gérard Longuet : Quelle réglementation pour les télécommunication françaises?*, Direction Générale des Postes et Télécommunications, April 1994,

- *Study of the International Competitiveness of the UK Telecommunications Infrastructure*, DTI, February 1994

- Report by McKinsey for the Ministerie van Verkeer en Waterstaat, *Telecommunicatie in Nederland : op weg naar wereldklasse*, June 1993

7 Resolution of European Parliament of 20 April 1993 (A3-0113/93)

technological revolution in the area of information opens up vast possibilities for economic progress, employment and the quality of life, whilst simultaneously representing a major challenge". It further called for *the necessary regulatory framework to be established at a Community level as soon as possible*[8].

Taking up the conclusions of the Corfu summit, the Commission in its Action Plan on Europe's Way to the Information Society[9] seeks to obtain agreement on the principle of infrastructure liberalisation in the telecommunications sector, together with clear dates for its implementation. The Commission also considers that some immediate steps must be taken to improve the supply of infrastructure in order to facilitate the introduction of advanced applications, which can be taken without jeopardising the operation of or financial position of current public network providers. This will be of particular importance in the context of the evolving information society.

The political agreement in Council Resolution 93/C213/01 on the date of 1 January 1998 for the full liberalisation of telecommunications services allows the completion of the liberalising measures already introduced at a Union level, in line with the obligations in the EC treaty, to establish an internal market for telecommunications. In particular, these measures have concerned the removal of regulatory barriers or restrictions to the free movement of telecommunications equipment and services, and the creation of a fair competitive environment, as well as the development of a common regulatory framework based on the principle of open access.

With a clear timetable set for services liberalisation, the primary regulatory task must now be to provide the sector with a clear picture of how the Treaty rules apply to the provision of infrastructure, and, in particular, how and when liberalisation of infrastructure will proceed.

At the request of a number of Member States, the Commission has completed studies[10] concerning the use of cable TV networks and alternative infrastructures[11]

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8 Conclusions of the European Council, Corfu, 24-25 June 1994

9 Europe's Way to the Information Society: an Action Plan, Communication of the Commission of 19 July 1994, COM(94) 347 final.

10 The studies carried out were the following:

- "*The Impact of Liberalisation of Alternative Terrestrial Infrastructure for Non-Reserved Services*" by Coopers and Lybrand, 1994;

- "*The Effects of Liberalisation of Satellite Infrastructure on the Corporate and Closed User Group Market*" by Analysys, 1993; and

- "*L'impact de l'authorisation de la fourniture de services de télécommunications liberalisés par les câblo-opérateurs*" by IDATE, 1994.