



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 03.05.1995
COM(95) 158 final

COMMUNICATION FROM THE COMMISSION
TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

THE CONSULTATION ON THE GREEN PAPER
ON
THE LIBERALISATION OF
TELECOMMUNICATIONS INFRASTRUCTURE
AND CABLE TELEVISION NETWORKS

SUMMARY

THE INFORMATION SOCIETY: A POLITICAL CONTEXT FOR TELECOMMUNICATIONS POLICY

The future development of Europe's telecommunications infrastructure is at the forefront of the debate on the Information Society, launched by the Bangemann Group Report on "Europe and the global information society"¹, and in the Commission's Action Plan on Europe's way to the Information Society². More recently this has been the focus of the discussions in February 1995 at the G7 Summit in Brussels. At that meeting the definition of an adaptable regulatory framework was recognised as one of the 8 principles for the realisation of the Global Information Society.

The Conclusions of the G7 Summit noted in that respect that: *"the regulatory framework should put the user first and meet a variety of complementary societal objectives. It must be designed to allow choice, high quality services and affordable prices. It will therefore have to be based on an environment that encourages dynamic competition, ensures the separation of operating and regulatory functions as well as promotes interconnectivity and interoperability"*.

The Consultation which has just concluded on Parts I and II of the Green Paper on the liberalisation of telecommunications infrastructure and cable television networks has made a key contribution to the creation of such a regulatory framework in Europe. In proposing a timetable for liberalisation, the Green Paper has opened the door to further public and private investment in the kind of telecommunications infrastructure which the Information Society requires, and in setting out a clear and coherent regulatory framework it has identified the means to ensure the rapid development of greater choice, innovation and higher quality of service for every user.

Now on the basis of the consensus established through the consultation, it is possible to move forward at a national, Union and global level. The approach which has been confirmed goes beyond the key regulatory challenges of universal service, interconnection, licensing, fair competition and a consistent approach to the international dimension of the new environment. It extends to creating the conditions in which every citizen can access and draw benefits from the new services which the Information Society will offer in fields as diverse as health care, education and training and entertainment.

The approach must also encompass the transformation in employment brought about by the Information Society - both in terms of changes in patterns of employment within the traditional operators in the telecommunications sector and in terms of the wider impact on employment and the organisation of work within the Information Society. In these wider areas, the Report sets out the comments expressed in the consultation and highlights the on-going work in the Union as part of the follow up to the G7 Summit last February. At the same time, the detailed action to meet these challenges, particularly, the challenge of employment falls outside the scope of the regulatory framework and as the Report acknowledges must be the subject of specific on-going initiatives at a Union-level, as well as further discussion in the new Information Society Forum and in the High

¹ Europe and the global information society, Recommendations to the European Council, 26 May 1994

² Communication on Europe's Way to the Information Society. An Action Plan, COM(94) 347 final, 17.7.94

Level Group of Social Experts set up to consider issues linked to employment in the Information Society.

THE ECONOMIC POTENTIAL OF THE TELECOMS SECTOR

An unprecedented growth and transformation of the telecommunications and information sectors is occurring. The telecommunications sector in the European Union is worth over 140 billion ecu (over 3% of GDP) and growing strongly. The nominal growth rate over the last five years has averaged about 7% annually. As an indicator of direct telecommunications usage and growth, international and cross-border public telephone traffic in the Union rose by just over 10% in 1993 compared to volume increases of about 11% in 1991/1992.

At the same time technological changes mean that new telecommunications services are developing, in particular in the areas of mobile and satellite communications but also in digital communications where new services based on various combinations of voice, data and image are becoming possible. The increased use of personal computers and other devices attached to telecommunications networks is reinforcing this trend.

The prospect of the rapid growth and spread of the information society is, therefore, a very real one with telecommunications infrastructure and networks providing the base on which a wide range of communications can flow.

It is against this background that the Commission adopted the two parts of its Green Paper on the liberalisation of telecommunications infrastructure and cable TV networks³, (the Green Paper).

THE MAIN ISSUES ADDRESSED IN THE GREEN PAPER

- How can universal service be developed? How much does it cost and who should pay for it?
- What should be the future framework for interconnection and inter-operability?
- How will telecoms networks be licensed? What restrictions can legitimately be placed on licence numbers and what conditions can be attached to licences?
- How can a fair competitive environment be ensured?
- How can infrastructure competition contribute to the challenge of employment? How should Europe address the shift in employment in telecommunications?
- How can Europe ensure comparable and effective access to global markets?
- What are the broader societal effects of the Information Society and how can the regulatory framework address these ?

³ Green Paper on the liberalisation of telecommunications infrastructure and cable TV networks - Part I : Principle and Timetable, (COM(94)440 final, 25.10.94) and Green Paper on the liberalisation of telecommunications infrastructure and cable TV networks - Part II : A common approach to the provision of infrastructure in the European Union (COM(94)682 final, 25.1.95).

THE CONSULTATION ON THE GREEN PAPER AND SUMMARY OF THE RESULTS

The public consultation period was initiated with the adoption of Part I of the Green Paper in October 1994 and continued until March 1995. The Commission received more than 100 written comments from European and national organisations and associations, companies and individuals active mainly in the telecommunications, but also in broadcasting and related sectors; trade unions; user and consumer organisations; and from the European Data Protection Commissioners.

In addition, a series of consultation meetings which were held in February and March substantially contributed to the work of the Commission. These hearings involved a Round Table for the Chairmen of Europe's network operators (fixed, mobile and licensed alternative infrastructure providers); a general two day hearing involving more than 125 organisations, companies and associations, a meeting with the a delegation representing European Trade Unions in the communications sector. The opinion of the Joint Telecommunications Committee was also given.

The Commission also worked closely with the High Level Committee of National Regulatory Authorities, in line with Council Resolution 94/C379/03⁴.

Responses to the issues raised in the Green Paper were provided during the consultation and form the basis of the Commission's proposals for action set out in this Communication. Those proposals reflect both the areas of consensus and the general trends where different views were expressed which are set out in the table below:

SUMMARY OF THE AREAS OF CONSENSUS

- General support for the full liberalisation of telecommunications infrastructure for the provision of voice telephony services by 1 January 1998, subject to possible transitional arrangements.
- Agreement on the need for an appropriate, transparent and effective regulatory framework to allow effective competition, particularly in the areas of universal service, interconnection and licensing.
- Recognition of the need for a common approach in defining the scope of universal service and in identifying its cost.
- Widespread support for an effective interconnection framework, based on commercial negotiation, but supported by a common regulatory framework at a European level and effective arbitration mechanisms to resolve disputes.
- General support for a common regulatory framework at a European level for licensing or granting authorisations within the European Union, based on the principles of transparency, non-discrimination and proportionality

⁴ Council Resolution 94/C379/03 of 22 December 1994 on the principle and timetable for the liberalisation of telecommunications infrastructures, OJ C379, 31.12.94

- General recognition that the competition rules will play an increasingly important role in the development of the sector.
- Strong agreement on the need for the European Union to seek comparable and effective access to third country markets both for operators and the equipment sector.
- General recognition of the need for further action and assistance in relation to changes in employment in a liberalised telecommunications sector, in education and training needs, and in the evolution of the working environment.
- General recognition that technological change is driving the convergence between the telecommunications, information technology and the broadcasting sectors.

SUMMARY OF KEY AREAS WHERE DIFFERENT VIEWS WERE EXPRESSED, BUT NEVERTHELESS CLEAR TRENDS WERE IDENTIFIABLE

- The pace of liberalisation infrastructure
- The appropriate methodology for costing and financing of universal service
- The future scope of application of the open network provision framework, the balance between general regulation and sector specific rules; and the methodology for calculating interconnection costs.
- The grounds for limiting license numbers and the approach to licensing of trans-European infrastructure and services
- Mandatory sharing of essential resources, i.e. numbers, frequencies, rights of way

THE REGULATORY AGENDA FOR TELECOMMUNICATIONS EMERGING OUT OF THE CONSULTATION

The consultation on this Green Paper has necessarily extended beyond the pure issue of infrastructure liberalisation to encompass the overall regulatory environment to achieve the full liberalisation of telecommunications services and networks by 1 January 1998. On the basis of the comments and the consensus achieved, the Commission can now identify the following priorities in preparing the measures to ensure liberalisation of telecommunications infrastructure and services, and in particular, those measures which the Commission is required to table before 1 January 1996⁵.

This regulatory agenda for telecommunications complements the broader initiatives required to meet the employment, social and societal challenges and the preparation of other aspects of the regulatory environment (in areas such as data protection, intellectual property rights, audio-visual policy for the Information Society). The key points in this agenda are summarised below:

⁵ See Council Resolution of 22nd July 1993 on the review of the situation in the telecommunications sector and the need for further development in that market (93/C 213/01 ; OJ 213/1, 6 August 1993).

- **Implementing the timetable for liberalisation**

The consultation has shown strong support for the linkage of full liberalisation of infrastructure to the full liberalisation of telecommunications services in 1998, subject to possible transitional periods⁶.

At the same time, the Commission attaches considerable weight to the calls from industry, business, service providers, users, and from mobile network operators and some fixed network operators with experience of competitive markets, for faster but limited infrastructure liberalisation now. For that reason, the Commission will put forward separate measures amending Directive 90/388/EEC (the services directive) with regard to the full liberalisation of telecommunications infrastructure and services from 1 January 1998; with regard to cable television networks, and with regard to mobile and personal communications.

As regards the liberalisation of other alternative infrastructures the situation appears to be less clear and has to be investigated further by the Commission. However, the Commission encourages, in particular, the use of such infrastructure for the pilot and other demonstration projects foreseen in the Information Society.

- **Establishing a regulatory framework at an EU level for universal service in the area of telecommunications**

This should address, in particular, the scope, cost and funding of universal service

Measures to liberalise telecommunications by 1 January 1998 will be accompanied by appropriate harmonisation measures designed to safeguard and ensure the development of universal service, in keeping with the policy followed by Council and European Parliament since 1990.

In particular, the measures will ensure that any financial burden associated with the requirement on one or more operators at a national level to provide a public voice telephony service to all those reasonably requesting it can be properly assessed and shared out at a national level on a fair, efficient and equitable basis.

- **Establishing a regulatory framework at an EU level for open access and interconnection to public telecommunications networks and services**

The framework at a Union level will also contain appropriate harmonisation measures designed to guarantee open access to public telecommunications infrastructure and services for both users and new market entrants. Such a framework will complement the application of general competition rules to interconnection arrangements.

⁶ Subject to possible transitional periods if requested of up to 5 years for Greece, Ireland, Portugal and Spain; as well as a possible 2 years for very small networks, where justified, (i.e. Luxembourg).

Harmonisation of the rules for interconnection to public telecommunications networks and services is a priority. New market entrants need access to existing public telecommunications networks and services under conditions that guarantee non-discrimination, equality of access and transparency. For these reasons, the Commission intends to present a proposal for a Directive on Interconnection to public telecommunications networks and services in the context of open network provision.

- **Licensing in the field of telecommunications**

Licences in the field of telecommunications implicitly restrict the freedom to provide services and can distort market structures. At the same time, licences can, within the limits set by the Treaty and, in particular, the competition rules as specified in Directive 90/388/EEC (as amended), provide an appropriate mechanism to ensure the achievement of aims such as the development of universal service or the establishment of conditions promoting the creation of a fair competitive environment.

The Commission will propose before the end of 1995 amendments to Directive 90/388/EEC⁷ in order to establish the grounds which may be used to limit the number of licenses, as well as to define categories of conditions which may be attached to licences, for the provision of public and private telecommunications services.

The Commission will also propose amendments to its current approach to licensing⁸ to extend their scope to establish a common framework for licensing award procedures and the selection criteria used in such procedures, as well as promoting its approach in the field of mutual recognition of licenses.

Initiatives are underway with regard to the co-ordinated national licensing of satellite-based Personal Communications services (PCS) in Europe, in order to allow such services to be provided throughout Europe at the earliest possible opportunity, with the opening of the licensing process by 1 January 1996 at the latest.

⁷ Commission Directive of 28th June 1990 on competition in the market for telecommunications services (90/388/EEC ; OJ L192, 24.7.90)

⁸ Amended proposal for a European Parliament and Council Directive on the mutual recognition of licences and other national authorisations for telecommunications services, COM(94) 41 final, 22.3.94, and Proposal for a European Parliament and Council Directive on a policy for the mutual recognition of licences and other national authorisations for the provision of satellite network services and/or satellite communications services, COM(93) 652, 4.1.94

- **Ensuring a fair competitive environment**

It is clear from the consultation that there is a consensus that the balance proposed in the Green Paper between the application of general competition law and sector-specific regulation has to be maintained. At the same time, considerable weight is attached to those rules and the future development of the regulatory framework is likely to see a continuing reduction in direct regulatory intervention as the full effects of competition are felt.

The Commission will also take into account the calls for more predictability, in particular as regards access and interconnection. In this respect, the appropriate measures to give further effect to the principles set out in Articles 85 and 86 will have to be assessed, in order to establish a more predictable environment if required.

- **The international agenda**

The Commission recognises a clear consensus that priority must be given to multi-lateral solutions within the framework of the on-going WTO Negotiations on Basic Telecommunications in order to achieve the overall aim of comparable and effective access to third country markets, and, in particular, the lifting of ownership restrictions, for EU network operators and service providers. Such an approach was recognised as preferable to bi-lateral initiatives between individual Member States and third countries.

The consultation has confirmed that until the results of the WTO negotiations are clear, it will remain important for the Union to reserve its right to maintain equivalent conditions to those currently prevailing in third country markets with regard to market entry or the licensing of non-EU or EEA nationals or companies controlled by such nationals. The objective of proposing such conditions would be to promote open markets in third countries for European network operators and service providers through negotiations.

Additionally, on-going action to promote the emergence of common European positions in international fora dealing with numbering and frequency allocations will be continued, as well as ensuring a global approach to many of the issues arising out of the Information Society.

ACTION REQUIRED FOR THE FUTURE REGULATORY ENVIRONMENT

Council Resolutions 93/C213/02 and 94/C379/03 call on the Commission to prepare before 1 January 1996 proposals for the future regulatory framework for a liberalised telecommunications environment. In the light of the priorities identified above the following timetable for action, respecting the necessary balance between the complementary areas of liberalisation and harmonisation, can now be established.

Date	Liberalisation	Harmonisation
Before 31 July 1995	<p>Draft amendment of Commission Directive 90/388/EEC with regard to mobile and personal communications</p> <p>Draft amendment of Commission Directive 90/388/EEC with regard to the full liberalisation of telecommunications infrastructure and services from 1 January 1998</p>	Common Position on proposal for a European Parliament and Council Directive for ONP Voice Telephony
Before 1 January 1996	<p>Adoption of amendment of Commission Directive 90/388/EEC with regard to cable television networks</p> <p>Adoption of amendment of Commission Directive 90/388/EEC with regard to mobile and personal communications</p> <p>Adoption of amendment of Commission Directive 90/388/EEC with regard to the full liberalisation of telecommunications infrastructure and services from 1 January 1998</p> <p>If required, proposals for appropriate measures to give further effect to the principles set out in the Treaty (e.g. Article 85 and 86), in particular, with regard to interconnection and access</p>	<p>Adoption of the proposal for a European Parliament and Council Directive for ONP Voice Telephony</p> <p>Proposal for amendment of Council Directive 90/387/EEC (ONP framework directive) and of Council Directive 92/44/EEC (ONP Leased Lines Directive)</p> <p>Proposal for a European Parliament and Council Directive on the application of the principle of open network provision to interconnection to public telecommunications networks and services</p> <p>Adaptation of the current proposals in the field of licensing</p> <p>Proposal for a Council Decision of the co-ordinated licensing of Satellite PCS services within the European Union.</p>

Date	Liberalisation	Harmonisation
Before 1 January 1996 contd.		<p>Communication to the European Parliament and the Council on the preparations for a liberalised telecommunications environment, addressing in particular the issue of universal service</p> <p>Communication to the European Parliament and the Council on directory information and directory services</p>
Before 1 January 1997	Adoption of any measures required to give further effect to the principles set out in the Treaty, in particular in Articles 85 and 86	Adoption by the European Parliament and Council of the measures set out above
Before 1 January 1998	Completion of implementation by the Member States of the liberalisation measures set out above according to the timetables applicable	Completion of implementation by the Member States of the harmonisation measures set out above according to the timetables applicable

CONCLUSION

The Commission believes that the Consultation has established a clear consensus around the main proposals put forward in the Green Paper and that therefore it has provided a major input to the measures which the Commission will table.

On the basis of the consultation the Commission has prepared this report and now transmits it to the European Parliament and Council.

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PAPER ON THE LIBERALISATION OF TELECOMMUNICATIONS
INFRASTRUCTURE AND CABLE TELEVISION NETWORKS

I INTRODUCTION

The future development of Europe's telecommunications infrastructure is at the forefront of the debate on the Information Society, launched by the Bangemann Group Report on "Europe and the global information society"¹, and in the Commission's Action Plan on Europe's way to the Information Society². More recently this has been the focus of the discussions in February 1994 at the G7 Summit in Brussels. At that meeting the definition of an adaptable regulatory framework was recognised as one of the 8 principles for the realisation of the Global Information Society.

The Conclusions of the G7 Summit noted in that respect that: *"the regulatory framework should put the user first and meet a variety of complementary societal objectives. It must be designed to allow choice, high quality services and affordable prices. It will therefore have to be based on an environment that encourages dynamic competition, ensures the separation of operating and regulatory functions as well as promotes interconnectivity and interoperability"*.

An unprecedented growth and transformation of the telecommunications and information sectors is occurring. The telecommunications sector in the European Union is worth over 140 billion ecu and growing strongly. At the same time technological changes mean that new telecommunications services are developing, in particular in the areas of mobile and satellite communications but also in digital communications where new services based on various combinations of voice, data and image are becoming possible. The increased use of personal computers and other devices attached to telecommunications networks is reinforcing this trend.

The prospect of the rapid growth and spread of the information society is, therefore, a very real one with telecommunications infrastructure and networks providing the base on which a wide range of communications can flow.

It is against this background that the Commission adopted the two parts of its Green Paper on the liberalisation of telecommunications infrastructure and cable TV networks³, (the Green Paper).

In Part I of the Green Paper the Commission established the basic principle for the liberalisation of telecommunications infrastructure and the timetable according to which such liberalisation should be achieved. This involved an approach according to which full liberalisation of infrastructure for the provision of voice telephony services to the general public would occur on 1 January 1998, subject to certain possible transitional arrangements.

¹ Europe and the global information society, Recommendations to the European Council, 26 May 1994

² Communication on Europe's Way to the Information Society. An Action Plan, COM(94) 347 final, 17.7.94

³ Green Paper on the liberalisation of telecommunications infrastructure and cable TV networks - Part I : Principle and Timetable, (COM(94)440 final, 25.10.94) and Green Paper on the liberalisation of telecommunications infrastructure and cable TV networks - Part II : A common approach to the provision of infrastructure in the European Union (COM(94)682 final, 25.1.95).

Additionally, the Commission called, in the light of the provisions of the EC Treaty, for limited action before that date to allow operators and service providers a free choice of infrastructure for the provision of telecommunications services which are already open to competition (such as tele-banking; video-conferencing, data transfer and the provision of voice and data services within corporate networks or closed user groups).

Part I also identified the general safeguards which needed to be addressed in parallel with the opening up of full infrastructure competition in 1998.

Part II of the Green Paper outlined for consultation this detailed regulatory framework envisaged to provide these necessary safeguards. In particular, it addressed:

- *Universal service*

and, in particular, the issue of its scope, the need for a common approach to identifying the cost of universal service, and the creation of common financing mechanisms to ensure the continuation and development of universal service in the Union in a competitive environment.

- *Interconnection*

the need for a clear and stable regulatory environment for interconnection drawing on the basic principles established for open access to telecommunications networks and services

- *Licensing*

and, in particular, the need for a common approach in national licensing award procedures and for an overall Union-wide framework for the conditions which may be attached to such licences.

- *Fair competition*

based on the full application of the Treaty competition rules in a manner which provides market players with a clear and predictable environment.

- *The international dimension*

which aims, on the one hand, at ensuring comparable and effective access to third country markets and, on the other, at promoting common Community positions in international fora in areas, such as numbering and frequencies.

The Green Paper also addressed some of the important employment, social and societal issues flowing from a liberalised environment, and launched discussion - from a telecommunications perspective - on the future evolution of the regulatory framework in Europe to meet the challenges of convergence of the IT, broadcasting and telecommunications worlds.

At the same time, the detailed action to meet many of these broader challenges, particularly, the challenges in relation to employment, falls outside the scope of the pure regulatory framework and, as the Report acknowledges, must be the subject both of specific on-going initiatives at a Union-level, and wider study and discussion, including within the new Information Society Forum, and in the High Level Social Expert Group which will be addressing specific questions linked to employment, retraining and the organisation of work in the new environment.

Part I of the Green Paper was considered at the Telecommunications Council of 17 November 1994⁴. The Council recognised the general principle according to which the provision of telecommunications infrastructure should be liberalised by 1st January 1998⁵, including the additional transition periods for certain Member States in line with Council Resolution 93/C213/02⁶. They also agreed on the need for a regulatory framework, addressing as "necessary safeguards", inter alia, the five issues mentioned above. Council request the Commission *"to report to the European Parliament and the Council on the results of this consultation in order to allow for the determination of the necessary safeguards"*. This Communication constitutes that report.

⁴ Council Resolution 94/C379/03 of 22 December 1994 on the principle and timetable for the liberalisation of telecommunications infrastructures, OJ C379,31.12.94

⁵ A number of Member States urged the Commission in an associated statement to come forward as quickly as possible with proposals which provide for the use of alternative network infrastructure for the services already liberalised. The Commission in turn preserved its right to take action in this area within its competence and according to its obligations. On 21 December 1994 the Commission adopted in draft a Directive amending Commission Directive 90/388/EEC regarding the abolition of the restrictions on the use of cable television networks for the provision of telecommunications services. The draft directive was published in the Official Journal of the European Communities on 28.3.

⁶ A maximum of five years for Ireland, Greece, Portugal and Spain and a maximum of two years for Luxembourg. At this stage, it is still not clear to what extent those Member States will exploit these derogations.

II THE CONSULTATION PROCESS

The aim of the consultation was to obtain the views of all interested players on the future regulatory framework for a fully liberalised telecommunications environment.

The public consultation period was initiated with the adoption of Part I of the Green Paper in October 1994 and continued until March 1995. The Commission received more than 100 written comments from European and national organisations, companies and individuals active in the telecommunications and related sectors.

In addition to these written comments, a series of consultation meetings which were held in February and March substantially contributed to the work of the Commission. These hearings involved a Round Table for the Chairmen of Europe's network operators (fixed, mobile and licensed alternative infrastructure providers); and a general two day hearing involving more than 125 organisations, companies and associations.

Many of the broader social and societal issues and, in particular, the issue of employment, were also addressed in addition to the regulatory agenda at a meeting with a delegation representing European trade unions in the communications sector.

More than 200 organisations in total participated either orally or in writing in the consultation.

These included contributions from many of the Telecommunications Organisations (TOs), licensed or potential providers of alternative telecommunications infrastructure (including European cable associations) and mobile operators in Europe, as well as from the European Telecommunications Network Operators association; from service providers and national representative associations; from large and medium-sized users of telecommunications services and from user associations, as well as from the Bureau Européen de l'union des consommateurs (BEUC) and from individual consumer associations, from trade unions, and from the European Conference of Data Protection Commissioners; and from manufacturing associations and individual equipment suppliers, and finally from broadcasters, film makers and the European Broadcasting Union, as well as from organisations active in related sectors, such as advertising industries.

Formal opinions on the Green Paper have also been adopted or are in the process of being adopted by the European Parliament⁷ and the Economic and Social Committee. The opinion of the European Parliament on Part I of the Green Paper was strongly supportive of the principle of infrastructure liberalisation and identified as central to the future regulatory structure many of the issues raised in the consultation, namely, universal service, interconnection, licensing, the need for fair competition and the international dimension of the new regulatory framework. It also stressed the broader social and societal issues linked to infrastructure liberalisation.

⁷ Resolution of 7 April 1995 on Part I of the Green Paper. A further Resolution of the Parliament is in preparation on Part II.

The Joint Committee on Telecommunications⁸ which brings together management and trade unions in the Telecommunications Organisations (TOs) within the Union also gave its opinion.

Consultations at a European level were complemented by those held at a national level within a number of Member States.

The Commission worked closely with the High Level Committee of National Regulatory Authorities, as requested by Council Resolution 94/C379/03⁹.

A list of the hearings and of the written comments received is set out in the Annex.

⁸ Opinion of the Joint Committee, (not yet formally adopted).

⁹ Council Resolution 94/C379/03 of 22 December 1994 on the principle and timetable for the liberalisation of telecommunications infrastructures, OJ C379, 31.12.94

III COMMENTS RECEIVED ON THE MAIN POSITIONS IN THE GREEN PAPER

In the following paragraphs of this section, the main comments received during the consultation process are summarised according to the positions set out in the Green Paper. For those wishing further details of these comments, reference should be made to the full text of comments which are available on request¹⁰.

III.1 The removal of special and exclusive rights over infrastructure

Strong calls were received for a clear and predictable regulatory environment in order to allow key investment and business planning decisions to be taken. The early establishment of clear dates for liberalisation was seen as a major element in providing a firm and predictable regulatory environment.

The basic logic of linking the liberalisation of infrastructure to the full liberalisation of telecommunications services was accepted. Therefore the full liberalisation of infrastructure by 1 January 1998, subject to possible transitional arrangements was welcomed. Nevertheless, different views were expressed on whether liberalisation by that date should be achieved in one or two steps:

- On the one hand, there was strong support from industry, users, telecommunications equipment manufacturers, mobile operators and from certain fixed network operators, urging the Commission to take more rapid action to open up the use of own and third party infrastructure before 1998 for telecommunications services which are open to competition now. This was seen as a vital step to improve the competitiveness of the European economy¹¹ and to stimulating an improvement in the performance of incumbent operators was also highlighted. Additionally, the comments of the Bureau Européen des Unions de Consommateurs suggest that liberalisation should offer benefits to domestic consumers in terms of enhanced choice of services and lower prices for some services.

In particular, it was stressed that competitive provision of alternative infrastructure could have a major effect in preparing both the TOs and the new entrants for full competition in 1998.

- On the other hand, many fixed network operators supported a standstill on the liberalisation of telecommunications infrastructure until 1998. This reflected the concerns of those operators about their ability to maintain and develop universal service, if alternative sources of infrastructure were opened to competition, and, in particular, their ability to continue the substantial investment underway which was currently funded out of their most profitable business areas, which were the areas most likely to be subject to competition.

¹⁰ A volume of collected comments will be sent out on written request to Commission of the European Communities, DGXIII, Secretariat A/1, BU 9/4/140, rue de la loi 200, B-1049 Brussels. (Fax : +32-2-296.83.91)

¹¹ In one case, an association of more than 40 large multi-national users highlighted that they estimated that their collective annual telecoms spend of more than \$2.5 Billion was twice what they would be paying for equivalent networks and capacity in North America.

Several operators and industry stressed that in order to establish real and effective competition and customer choice, competition must extend to and include the provision of the local loop. In this context, the proposed Commission directive on the abolition of restrictions on the use of cable television networks for the provision of telecommunications services was seen as an important step forward¹². At the same time representatives of the cable television industry stressed the importance in addition of the removal of restrictions on direct interconnection between such networks and on the ability of cable networks to offer voice services. This would be essential to ensuring the necessary investment for such infrastructure to play a role in the emerging Information Society.

The establishment of an appropriate regulatory framework was seen as essential for full liberalisation of infrastructure. This required urgent action on the part of the Commission to table the necessary proposals. Such a framework also required rapid adoption of pending legislative proposals, together with full implementation of the existing Union-wide framework.

III.2 Safeguarding and developing universal service

III.2.1 The priority attached to universal service

There was general acceptance of the continuing importance of universal service in a liberalised environment and of the three central issues identified in the Green Paper; namely, (i) scope, (ii) cost and (iii) financing. Many organisations stressed that the issue of universal service should not be used to delay competition. Equally, it was stressed that universal service and competition should not be seen as being in opposition. Universal service had not always been delivered even under current monopolies, whilst a competitive environment was seen, by those with experience of competition, as stimulating improvements in service quality, innovation and leading to an extension in service penetration.

III.2.2 The concept of universal service

There was continued recognition of the need for a common concept of universal service at a European level in order to allow the issues of its cost and financing to be addressed. Most operators, service providers and users felt that the current approach of identifying universal service as the basic voice telephone service was an appropriate starting point, but that the concept should evolve with changes in technology and market demand. Nevertheless any evolution in the concept should not create disproportionate barriers to market entry.

¹² Draft Commission Directive of 21 December 1994 amending Commission Directive 90/500/EEC regarding the abolition of the restrictions on the use of cable television networks for the provision of telecommunications services OJ. C76, 28.3.95.

Many contributions recognised that a distinction could usefully be drawn between universal service and universal service obligations. The former refers to the general set of telecommunications services which a Member State might require to be available throughout its territory, (e.g. a minimum set of leased lines), while the latter represents those elements of universal service that an operator would not voluntarily provide *to particular customers* (e.g. low income users) *or customer groups in particular areas* (e.g. high cost areas) because the revenue raised from such customers would fail to cover the costs involved.

Many comments suggested that market demand (as shown through penetration figures for specific telecommunications services) should determine whether services were in future added to the core of universal service.

Finally, different views were expressed as to whom should be subject to universal service obligations. In some comments it was considered that this was essentially a matter for national regulators to determine and that action at a European level should be confined to identifying the scope of universal service obligations, rather than specifying who should provide such services.

At the same time, many mobile operators pointed to the obligations already placed upon them to ensure extensive geographic coverage and stressed their willingness to play a role in the delivery of universal service. Other comments suggested that universal service obligations should be the counterpart either of the grant of individual licences or of the grant of extensive rights of way, frequency allocations, etc. The role of new technologies in providing universal service more cost-effectively was also highlighted.

III.2.3 A common approach to the costing of universal service

Most respondents stressed the importance of having a common approach to assessing the cost of the universal service obligation in Member States. Many organisations supported the notion of "uneconomic customer" in the Green Paper, whilst some fixed operators felt that approach did not take full account of past historical investments, or that it would be difficult to calculate in practice. Several participants suggested that the real issue was which customers would the operators decide not to serve if the obligation to provide service to all were removed.

Industry, users and some operators (including a number of mobile operators) - particularly those with experience of competitive markets - stressed that universal service represented a commercial opportunity, which should be reflected in any calculation of its cost for that operator. They believed that estimates by incumbent operators would inevitably over-estimate the actual costs involved. Comments therefore supported the approach suggested in the Green Paper for calculating the cost of serving uneconomic customers, and, in particular, supported the use of forward looking long-run incremental costs as the basis for interconnection pricing. Additionally, it was suggested that the National Regulators should set limits to the overall level of interconnection charges. A particular feature of the overall approach should be that it should stimulate more efficient operation.

Other fixed operators believed that universal service would remain a significant "burden" for them, especially in a liberalised environment. Those operators felt that they still needed time to establish what the actual costs involved were. In their view, any common approach to the cost of universal service would only be acceptable if it took account of both current and historical costs and they therefore favoured fully distributed cost methodologies.

III.2.4 The role of tariff-rebalancing and targeted schemes

Generally, there was agreement that :

- the process of tariff rebalancing should continue at a politically acceptable speed. Several comments suggested that firm dates for the completion of the process should be established. At the same time consumer organisations suggested that tariff rebalancing should not undermine the affordability of universal service and that the domestic consumer should not be the last to benefit price changes.
- current political restraints on more flexible tariffs and on the speed of rebalancing were the major cause of the losses linked to the provision of universal service, and should be removed.
- operators should be freed from non-telecoms-related obligations in line with the narrow concept of universal service, and such obligations should not form part of the calculation of the cost of universal service.

III.2.5 Funding mechanisms for universal service

There was agreement that key characteristics of any financing mechanism should be that it does not distort the market structure or delay the introduction of competition, and that it places pressure on operators to improve their performance.

Divergent views were expressed over the future funding mechanisms. A majority of organisations, including fixed network operators with experience of competitive markets, finding the proposal for national universal service funds (to which all market participants made a fair contribution) to be an appropriate way forward. Others still believed that access charges offered considerable advantages and were a good basis for discussion and would avoid the administrative overheads that a Fund might entail. Some operators nevertheless stressed the need for strict controls to ensure that the funds were used purely for telecommunications-related purposes

Questions were raised about who would contribute to such funds, e.g. would providers of data services or private network operators also contribute? There was quite widespread support for an approach requiring all market participants (fixed and mobile network operators and service providers) to make an appropriate contribution to such funds based on their turnover. Payments into a Fund were not seen as being necessarily linked to potential obligations to provide elements of universal service directly. Questions were also raised about who would be entitled to draw on such funds, e.g. would payments be made to customers or to operators who were providing service? A number of comments suggested that, where possible, payments should be made directly to users in order to allow them a choice of service provider.

One view was that current operators should be obliged to list areas or customers who they were unwilling to serve thus giving other operators the possibility to bid to provide service. Other respondents were not in favour of "franchising" or pointed out some of the practical difficulties of putting in place "pay or play" systems.

It was also pointed out that not all Member States had put in place an effective independent regulatory authority which could supervise such mechanisms

In general it was agreed that any funding system should be structured in such a way as to continue to exert pressure on operators to improve efficiency. Some fixed network operators believed that the case for independent universal service funds had not been sufficiently made. Additionally, it was emphasised that the need to create a universal service fund should not be used to delay competition, given the potential role of access charges as a financing mechanism even in the absence of a national fund.

III.2.6 The provision of universal service in the peripheral regions

A number of contributions stressed the role of effective communications in the economic development of these regions and in their integration into the Union¹³.

The Trade Unions stressed the importance of effective access in the peripheral regions to advanced telecommunications networks and services as a vital element in ensuring regional cohesion within the Union. At the same time this raised the issue of whether competitive infrastructure providers could be relied upon to invest the substantial sums required to develop such facilities in more remote areas.

III.3 Future open access principles, interconnection and interoperability

III.3.1 Open access principles for infrastructure, ensuring fair competition and the evolution of Open Network Provision

There was general agreement on the need for the future regulatory environment to be flexible; avoid over-regulation and to be proportional to the type of services and networks being regulated.

There was also recognition of the increasing importance of competition rules and the need for the future regulatory framework to provide an appropriate balance between sector specific regulation and the general application of competition rules. This led some fixed network operators to conclude that there should be increasing reliance on competition rules, but that during the transition to effective competition there was a key role for a regulatory framework to ensure fair interconnection and interoperability.

A number of operators and organisations stressed that an evolving ONP framework should apply not simply to "dominant" undertakings but to undertakings which

¹³ One example cited in comments was of the potential benefits of cheaper communications for the development of tourism and travel in these regions, which is already a key industry in such areas. The travel and tourism industry according to its estimates already accounted for about 1 in 8 jobs within the European Union, generating 988 BECU in gross output and is one of the World's largest users of telecommunications and data communications services.

controlled "essential" or "bottleneck facilities". This would extend regulatory controls beyond current incumbent operators to those new competitors, who would have bottleneck facilities. One view was that access to the local loop was the main bottleneck.

A majority of operators stressed that they should be free from asymmetrical regulation, if fair competition was to be established. The basic principle should be that any organisation should be able to provide any service using any technology.

III.3.2 Cost accounting and accounting separation

Most operators accepted the need for effective accounting separation and adequate cost-accounting between different business activities, whilst some organisations - particularly, some mobile operators - went further and called for separate subsidiaries being established for different types of telecommunications or other services. Those organisations also pointed to the substantial economies of scale and marketing advantages which fully integrated operators might enjoy and which might require particular regulatory attention in order to safeguard competition. Additionally, different views were expressed with regard to which organisations should be subject to cost-accounting rules, with many incumbent operators advocating systems which applied to all market players, whilst other contributions highlighting the need for an approach which would be proportional to size and/or market share of the organisations involved in order to encourage market entry.

III.3.3 Priority to be given commercial agreements within a framework at a European Union level for interconnection and interoperability

The emphasis in the Green Paper on commercial agreement as the basis for interconnection was welcomed, but it was nevertheless stressed by most organisations that such negotiations had to be underpinned by an appropriate regulatory framework, which included dispute resolution procedures, if such interconnection was to be brought about rapidly.

Some comments, particularly from those with experience of competition in mobile and fixed markets, highlighted the difficulties in negotiating interconnection in markets such as the UK and New Zealand.

Number portability and equal access were also seen as critical issues for effective and fair competition and it was considered that these should be addressed in the interconnection framework. Equal access was taken to include both equal access for users in terms of the numbers given to particular operators and telecommunications services, and also issues of physical access, such as collocation of equipment.

III.3.4 The proposed framework for interconnection to public telecommunications networks and telecommunications services

The proposal for an interconnection directive for public telecommunications networks and services was generally welcomed as providing a framework for interconnection negotiations, a common approach to identifying interconnection costs and accounting approaches, and for putting in place dispute resolution mechanisms. Many mobile operators also stressed their need for direct interconnection with both mobile and fixed networks. At the same time many

comments stressed the urgent need for such a framework to be in place in time for 1998, for it to be uniformly implemented throughout the Union and for national regulators to apply the rules effectively in order to allow competition to take off.

Given the heavy burden which scrutiny of interconnection would place on national regulators, some organisations stressed the value of interconnection agreements being publicly available (subject to confidentiality for certain technical and commercial information), to allow for examination by other market players.

At the same time, it was stressed that any interconnection framework must be supported by tariff rebalancing and greater tariff freedom.

III.3.5 Interconnection charges / cost accounting mechanisms

Several contributors called for standard interconnection contracts to be developed or for standard terms to be available in addition to the freedom to negotiate terms.

Many stressed the importance of adequate and appropriate cost accounting mechanisms to deal with interconnection and with fair competition generally. Some contributions argued that accounting separation between wholesale and retail activities was more appropriate than accounting separation between infrastructure and services per se.

Many comments stressed that in the case where infrastructure or network operators enjoyed special or exclusive rights in other sectors (e.g. railway companies, energy utilities, etc.), there should be strict accounting separation between the two areas of business. Some also called for structural separation.

Some operators argued that they should be allowed to recover a full share of common costs in interconnection agreements. However, many commented that it was important to take into account the inefficiencies of the incumbent and that it was illogical to reward automatically such inefficiencies.

III.3.6 Standards and interconnection

There was strong support for the continuation and acceleration of standardisation activities at a European and global level, as well as for an approach which focused on the voluntary application of standards. Nevertheless, certain organisations stressed that the need for interconnection and end to end services in a competitive environment might still require the use of certain mandatory standards.

Several contributions stressed that there were a series of important issues surrounding interconnection such as standards, interfaces, access to network information, which were not purely related to competition or financial issues.

III.4 Licensing

The issue of licensing of both telecommunications infrastructure and services was a central element in the discussions on the Green Paper.

III.4.1 *The overall approach to licensing*

The basic principles for licensing of transparency, non-discrimination and proportionality were broadly accepted. In particular, there was wide support for the idea that any licensing regime¹⁴ should take account of the size and type of services which a licensee would offer and the rights which the licensee would enjoy¹⁵. Most comments therefore supported the view that the provision of telecommunications services to the general public might be subject to more stringent conditions than those applied to the provision of 'private' telecommunications services; and that the provision of services by organisations with rights to use limited resources (frequencies, way leaves, numbers) might justify a stronger degree of regulatory intervention.

A number of comments linked the issue of proportionality to an approach which would balance the obligations attached to a licence with the rights enjoyed by the licence holder. For example, an organisation required to provide universal service to the general public should be given the extensive rights of way and powers of compulsory purchase required to deliver such services, whilst similar rights would be disproportionate in the case of a corporate network providing telecommunications services to a closed group of users. This approach could give rise to the creation of different types of licence reflecting the different rights or obligations sought by an operator.

Potential suppliers of pan-European telecommunications services and networks, and the equipment industry, proposed the granting of licences through a single body at a European level, or at the very least co-ordinated licensing procedures. At the same time, given the view that licensing would be regulated primarily at a national level, the importance of a clear European level framework for national licensing procedures was highlighted in many comments.

The distinction between telecommunications infrastructure and services

A number of comments raised the apparent distinction in the Green Paper between licensing telecommunications infrastructure and services, which led them to suggest that the Green Paper envisaged separate licensing of the two elements. Some comments considered this to be an artificial distinction and to potentially deny economies of scale and vertical integration.

In general, there was acceptance of the position in the Green Paper suggesting that the provision of telecommunications services on a resale basis would not normally be subject to individual licenses. Any conditions which might be applied to such services through general authorisations would reflect the type of services provided.

¹⁴ The term 'Licensing' is used here to cover any type of authorisation to offer telecommunications services granted by a Member States.

¹⁵ Conversely it was suggested that the rights granted in any licence should reflect the obligations placed on the licensee, so that a requirement to provide universal service might justify the grant of rights of way / powers of compulsory purchase, etc. which would not be justified in the case of a licence for the provision of services to a private group of users.

In this context, it was pointed out that the provision of transmission capacity would be characterised as a service.

Some contributors emphasised that the provision of 'raw' capacity was neither a service nor the operation of a network and should not be subject to a licence. Some comments also stressed the approach in Sweden of only licensing telecommunications services rather than infrastructure.

Some emphasis was also placed on the need for licensing to be flexible enough to encourage new technologies and services. This might not always be the case, where licences, had to be pre-announced rather than reactive to possible requests to use new technologies or to deliver highly innovative services.

III.4.2 Licensing award procedures and grounds for limiting licence numbers

Support was expressed for the basic approach of two identifiable categories of conditions (namely, essential requirements and public service requirements in the form of trade regulations) which would support a European level framework for licensing procedures, selection criteria and for the conditions attached to licenses.

In particular, there was general support for the expansion of the essential requirements to include protection of the environment, providing that essential requirement was applied in a proportional manner to ensure that the least limiting approach was taken to meet environmental concerns.

Many comments supported the Green Paper in removing the national regulators discretion in determining licence numbers on the basis of an economic assessment of the market. Several comments sought greater clarification of the grounds for limitation of licences, and, in particular, the role of "financial viability of the operator" in potentially refusing a licence. It was important to ensure that trade regulations could not be used as an indirect mechanism for managing competition and it was equally suggested that once Member States had instituted a scheme guaranteeing the provision of universal service, the restriction of the number of licences on the grounds of trade regulations would no longer be appropriate.

On the other hand some comments suggested that account should be taken of the need not to undermine investment decisions of new entrants or existing operators by having an entirely open market, particularly as rapidly decreasing prices meant that third or fourth entrants might be able to enter the market at considerably less cost than the that incurred by the incumbent operator.

III.4.3 Selection procedures and licence conditions

A number of comments emphasised that the award of licences through auctioning would be inconsistent with the general principles of transparency, proportionality and non-discrimination.

Additionally, comments stressed that licence conditions should highlight the principle of non-discrimination and impose obligations to ensure compliance with competition rules.

A number of national regulators stressed the possibility of imposing obligations in licences linked to national security or public policy objectives. The European Data

Protection Commissioners stressed the need for licences to ensure a high standard of data protection.

III.4.4 Obligations to share infrastructure

In relation to restrictions linked to environmental considerations, there was some support for the possible sharing of infrastructure on the basis of commercial negotiations. There were, however, different views on the extent to which such sharing should be mandated for different types of infrastructure. On the one hand, the technical and legal difficulties inherent in sharing were raised. On the other, it was emphasised the possibility of sharing would stimulate service competition and, in particular, would limit the freedom of national regulators to limit the number of service licences on the basis of lack of rights of way. It was also suggested that greater co-ordination should occur between utilities, whenever new infrastructure was being installed to minimise the environmental impact.

III.5 Ensuring fair competition

In general, many organisations felt that the competition rules would play an increasingly important role in the future development of the telecommunications sector, both in promoting new alliances and co-operation in a manner compatible with competition rules and as an essential element of the future regulatory framework in areas such as licensing, interconnection, universal service and access to essential resources. In particular, the role of competition rules as part of any general regulatory framework was stressed in relation to assessing cross-ownership of different networks and/or joint provision of network and services, and the examination of new global and regional partnerships and alliances.

The key competitive concern was, however, the need even after liberalisation to ensure a fair competitive environment and to protect against the risks of abuse of the incumbent operator's considerable market power. In this context, the need for a clear regulatory framework was broadly recognised, through it was accepted that the balance between sector specific regulation and the application of general competition rules should evolve to reflect the degree of competition in the marketplace.

A specific concern raised by consumer organisations in the context of emerging alliances was the need to ensure that such alliances genuinely led to beneficial competition and did not simply reinforce domestic market positions.

The need for accounting separation between the different activities of network operators and/or utilities who enter the telecoms market was raised by a number of fixed network operators, as well as by the cable television industry in respect of TOs which also own cable networks. The advantages enjoyed by incumbent operators in terms of customer loyalty; economies of scale; ability to be the price leader for many services and the cost for customers to change to other operators were also highlighted. At the same time, most organisations supported the Green Paper in not favouring line of business restrictions, as these would potentially hold back the trend towards greater convergence. Even so, divergent views were expressed about any approach which applied regulation in an asymmetrical manner.

A frequent concern raised in the consultation was the need to ensure that new entrants were not able to cross-subsidise their telecoms activities from profits derived from other monopoly areas, and that regulators should ensure that there was services or capacity of such operators was not priced at an unfair or predatory level.

III.6 Access to rights of way, frequencies and numbering

There was general agreement on the need to make best use of available resources in a number of fields in order to make greater infrastructure competition more effective. Such access should generally result from commercial negotiation, but within a common European framework.

With regard to trans-European networks some industry associations suggested that access issues might be best dealt with at a European level.

III.6.1 Rights of Way

With regard to rights of way, it was suggested that a broad view should be taken. Access to rights of way could involve duct and pole sharing, but should also allow access to corridors used for microwave and satellite links within urban areas and landing sites and non-anchor areas for submarine cables, . Some operators stressed the role of commercial negotiations in such sharing, whilst others raised the issue of charges for such access and whether it would have to be cost-based or whether it could reflect the value to the competitor gaining access.

Different views were expressed in relation to mandatory sharing, with many operators being strongly opposed to this, in particular, because of the problems of security, available resources and questions of legal liability which could arise.

III.6.2 Frequencies

Generally, comments supported the approach towards frequency within the Green Paper and the emphasis on a pan-European approach where possible, though some organisations suggested that the actual allocation of frequencies should nevertheless remain a national responsibility. With regard to the fees charged for frequency a number of comments stressed that a common approach was required throughout the Union, limiting such fees to the recovery of administrative charges only.

There was widespread agreement within the telecommunications sector on the need for a re-distribution of frequencies between telecommunications, broadcasting and defence uses.

Additionally, the equipment industry stressed the need for a global approach in frequency allocation, with sufficient advance notice given to industry, in order to allow the emergence of World markets.

At least one broadcaster suggested that future frequency policy should take account of specific national situations with regard to who can decide and at what level decisions on frequency use would be taken.

III.6.3 Numbering

There was general support for the approach proposed in the Green Paper. Fundamental issues of number portability (i.e. the ability for a customer at a given address to retain the same number when changing operators) and number ownership were raised as central elements to achieving effective competition.

At the same time, both operators and equipment manufacturers stressed the need for full consideration to be given to the cost involved in any replanning of numbers, and, in particular, in moves towards the creation of a European Numbering Space.

III.6.4 Directories

Access to directory information was also seen as an essential for effective competition, and adequate competitive safeguards should be put in place.

Additionally, many organisations stressed the need for a universal telephone directory and directory enquiry service to continue to be offered, even in a competitive environment - and the Commission should provide clarification as to the practical arrangements to guarantee this. This was of particular importance for consumers, as well as the right for them to be left out of any public directory in they so requested.

III.7 Action in neighbouring fields

Generally, there was recognition that the development of telecommunications had to proceed in parallel with a Union initiatives in neighbouring areas if the Information Society was to be realised and potential barriers to its development were to be removed.

III.7.1 Data Protection

The European Data Protection Commissioners stressed the need for clear rules guaranteeing data protection and privacy as a fundamental requirement of a liberalised telecommunications market. They therefore welcomed the progress that had recently been made on the general Data Protection Directive¹⁶ and hoped that speedy adoption of the telecoms-specific proposal would follow. They also stressed the need to avoid an Information Society in which only some users could afford full data protection. Therefore they believed that it was important that facilities such as the ability to block calling line identification were provided free of charge.

Some operators and users believed that a more voluntary approach, involving codes of practice, could be of equal value and that detailed regulation could act as a serious brake on market development. A specific concern raised by both operators and by equipment manufacturers was the need to ensure that the common European framework for data protection did not create unjustified barriers to the development of global communications.

¹⁶ Proposal for a Council Directive concerning the protection of individuals in relation to the processing of personal data, COM(90) 314, OJ C277, 15.11.90.

III.7.2 Audio-visual policy

There was recognition that within a converged environment audio-visual policy and telecommunications policies must evolve in a coherent fashion, whilst respecting the different policy objectives of each sector. This should be reflected in an approach which would allow the separation out of the regulation of transport and the regulation of the content provided over such communications infrastructures. Other organisations stressed the priority to be attached to broadcasting regulation over telecommunications regulation because of its link to fundamental rights, such as the right of free speech.

Content providers stressed that in the context of new communications services driving the Information Society it was essential to ensure that open access was guaranteed both for consumers and content providers and that unnecessary regulatory, trade and other barriers preventing this must be removed.

III.7.3 Plurality and cross-media ownership

A number of comments pointed to the need for national policies relating to plurality of the media to be respected in any evolution of the regulatory framework for telecommunications. At the same time, comments emphasised the role of competition rules in assessing issues linked to the economic aspects of cross-media ownership and the imposition of a priori line of business restrictions were not supported.

III.7.4 Intellectual property rights.

There was general support for the current lines of Commission policy with regard to the evolution of copyright and to database protection, with emphasis placed on the need to adapt existing forms of protection to new media. It was also suggested that a distinction could usefully be drawn between IPRs applying to the generator and the user of a work, and the position of an operator who is simply providing the transmission medium. This analogy might also usefully be applied to both data protection and content regulation.

Content providers and potential service providers stressed the importance of adequate intellectual property protection in order to guarantee investment in an environment where technology and liberalisation multiply the possibilities for access to information. Attention focused on the need for strong and effective copyright protection; support for technical solutions to control unauthorised use of content, and effective global protection of intellectual property through negotiations at an international level, including speedy implementation of the Trade Related Intellectual Property (TRIPs) agreement.

III.8 Employment, and the social and societal impact

There was general support for the approach taken on the issue of employment in the Green Paper and, in particular, the link drawn between technological advances and the decline in employment in the traditional operators. At the same time some operators stressed the role of competition in speeding the rate of this decline, without wanting to call into question the timetable for liberalisation.

Nevertheless for the Joint Telecommunications Committee and for the Trade Unions the impact of liberalisation on employment amongst current incumbent operators was considered to be a major determinant of the pace of liberalisation in the Union. Whilst they accepted that shifts of employment were an inevitable consequence of technological advances, they feared that rapid liberalisation of alternative infrastructure could only accelerate the speed with which changes in employment proceeded. In this context stress was placed on the need for national and Union funds to be made available to promote retraining and re-deployment of the workforce, similar to schemes set up for industries, such as the coal and steel industries.

An additional issue raised by the social partners was the quality of the new jobs which would be created, in terms of working conditions, investment in training and pay, which they perceived as inferior to those currently existing in many incumbent operators.

Many organisations, particularly, those with experience of competitive markets, stressed that liberalisation should stimulate growth and hence create jobs throughout the European economy. In this context, on-going Commission studies should analyse the trends in more detail and an active dialogue should continue with all social partners on how this transition could best be managed.

Emphasis was also placed in comments and in the opinion of the Joint Committee on the need for both training and education for people and for Small and Medium-sized Enterprises (SMEs), promoting the use of new technologies, as well as retraining for those previously employed in the telecommunications sector.

Contributors also highlighted the wider societal challenges, such as ensuring that people could manage the increased volume of information by avoiding exclusion of particular groups from the Information Society.

III.9 The international dimension

III.9.1 Priorities for common Community positions in global fora

A number of operators, particularly, mobile operators also stressed that common Community positions were required in relation to issues such as frequencies and numbering.

III.9.2 Developments in WTO

Strong support was given from all participants for the multi-lateral approach currently being followed by the Union in seeking comparable and effective access to third country markets, in particular by operators and the equipment industry. However, some operators and regulators stressed that in their view the best means to achieve a successful conclusion of on-going negotiations was to ensure that new barriers were not raised in Europe limiting entry to the EU market, whilst others highlighted the need for Community legislation to contain appropriate safeguards to reflect the degree of access enjoyed by European companies in third country markets.

III.10 The future evolution of the regulatory environment

A number of organisations recognised the importance of the issues raised by the Green Paper in relation to the increasing convergence of telecommunications, information technologies and the media. This was seen as a central component of the Information Society and it was hoped that these issues would be further developed in the report on the Green Paper consultation. Nevertheless, it was stressed by broadcasters that it would be important to remain aware of the different objectives which motivate regulation in the respective sectors and of the different patterns of regulation currently found in both sectors.

The emphasis placed on the role of private investment in developing the Information Society was welcomed and the future regulatory environment would to a large extent determine whether such investment would be made.

The Trade Unions suggested that regulators should seek to ensure the emergence of the Information Society by imposing obligations in future infrastructure licences to ensure that infrastructure (including cable TV infrastructure) would be capable of delivering of broadband inter-active services. Their concern was to avoid the implementation of new technologies, in particular, radio-based applications which would have built-in obsolescence

The role of new players, such as the advertising industry, on the superhighways was also raised. Revenue from such advertising might play a significant role in broadening the penetration of the Information Society and in ensuring the users could afford the services on offer. To achieve such a result, however, priority should be given to an open regulatory environment.

With regard to the issue of who should regulate in a converged environment, some organisations suggested a need for a central European regulatory authority.

The principles derived from telecommunications regulation were considered by some to serve as a useful base for the future regulation of the sector, and in particular, the progressive relaxation of regulation as competition is established and the need for a coherent regulatory model which can cover all aspects of the communication sector.

Encouragement was given by the equipment industry to the current initiative's from the Commission forging links between the public and private sector for specific Information Society projects.

IV EVALUATION BY THE COMMISSION

On the basis of the comments and its analysis of the submissions, the Commission considers that the main principles and objectives set forth in the Green Paper have found broad support. On this basis the Commission considered it possible at this stage to :

- identify areas of general consensus amongst all market participants;
- set out general trends which gained majority support in those areas in which consensus is still not possible.

These are set out below.

IV.1 Areas of general consensus

The Commission has found from the consultations the following areas of consensus, indicating that there is :

- *general support for the agreement on the full liberalisation of telecommunications infrastructure and services by 1 January 1998, subject to possible transitional arrangements.*

This implies an urgent need to agree and implement the future regulatory framework for liberalisation from the beginning of 1998.

- *agreement on the need for an appropriate, transparent and effective regulatory framework to allow effective competition, particularly in the areas of universal service, interconnection and licensing.*
- *recognition of the need for a common approach in defining the scope of universal service and in identifying its cost.*

For the moment universal service should comprise the basic voice telephony service, but the concept should be reviewed as necessary. There is also agreement that it is imperative to have a fair, common and transparent approach to costing universal service so as to ensure a level playing field and encourage effective competition.

- *widespread support for effective rules for interconnection, based on commercial negotiation within a common European regulatory framework, and effective arbitration mechanisms to resolve disputes.*

To assist this, there was also general support for legislative measures dealing with interconnection to public telecommunications infrastructure in the context of Open Network Provision.

- *general support for a regulatory framework at a European level for licensing or granting authorisations within the European Union, based on the principles of transparency, non-discrimination and proportionality*

Further clarification was sought concerning the perceived distinction in the Green Paper between the licensing of telecommunications infrastructure and the licensing or authorisation of telecommunications services. At the same time, the underlying **principle of proportionality** was accepted, i.e. that licence conditions must be proportional to the type of services provided and to the means of delivery of those services (e.g. provided over the service providers' own / third party network or provided via the public network)

This means that service providers who do not own the infrastructure over which their telecommunications services are provided should be subject to less regulation (general authorisations) than operators, owning an extensive network with frequencies and rights of way (individual licences). Equally, the provision of public telecommunications services could justify stricter regulatory controls than the provision of services within a corporate network or to a closed group of users.

On this basis, the provision of telecommunications services using third party infrastructure should be governed by lighter regulation such as general authorisations, whilst the facilities-based provision of public telecommunications services would be subject to class or individual licences depending on the degree of access to common resources being sought or whether universal service obligations were involved.

- *General recognition that the competition rules will play an increasingly important role in the development of the sector.*
- *Strong agreement on the need for the European Union to seek comparable and effective access to third country markets both for operators and the equipment sector.*
- *General recognition of the need for further action and assistance in relation to changes in employment in a liberalised telecommunications sector, in education and training needs, and in the evolution of the working environment.*
- *General recognition that technological change is driving the convergence between the telecommunications, information technology and the broadcasting sectors.*

This is driven by rapid advances in computing (digitisation, processing power) and the introduction of new switching and transmission technologies.

At the same time there is a wide belief that the regulation of the transport mechanism (i.e. the infrastructure and related services) can and should be kept separate from the regulation of content, thereby maintaining the status quo between the telecommunications and broadcasting areas.

IV.2 Areas of discussion and identifiable trends

Based on the consultations, the Commission considers the following trends can be identified within those areas where different views were put forward:

- *The pace of infrastructure liberalisation*

A consensus has not yet emerged concerning **the pace of infrastructure liberalisation**, and, in particular, on a rapid but limited liberalisation of certain types of infrastructure in order to allow a free choice of infrastructure for the delivery of telecommunications services which are already open to competition.

Many fixed network operators and some national regulatory authorities do not believe that early limited liberalisation could take place without putting at risk the financial viability of incumbent operators, potentially putting at risk the delivery of universal service.

Nevertheless, industry associations, users, service providers and some operators with experience of competitive markets believe that limited liberalisation is vital to improve the competitiveness of European business. It will be a key component in developing real competition from 1 January 1998. In particular, competing mobile operators stress their urgent need to have alternative sources of infrastructure in order to allow them to gain better control over their costs. In this context, the draft proposal on the liberalisation of cable television networks was therefore welcomed as a first step, and some comments distinguished between, on the one hand, the liberalisation of cable TV networks and of alternative infrastructure for mobile networks, and on the other hand, the general liberalisation of alternative infrastructure. Those comments were in favour of and early liberalisation of the former. The position with regard to an early lifting of restrictions on all alternative infrastructures is more ambiguous.

- *Costing and financing of universal service*

Whilst there is full agreement on the need for a common and transparent approach at a European level to both the scope and costing of universal service obligations, **different views were expressed on how costs should be allocated amongst market players**. A majority of comments suggested what they termed a dynamic "net cost" approach to the costing of universal service which involved taking a forward looking approach to both costs and revenue, whilst some incumbent operators suggested that the cost of universal service should take into account their past investments.

A majority of comments favour an approach involving universal service funds, though others, particularly, some incumbent operators give preference to access charges. Comments also pointed out the various forms that universal service funds could take depending on (i) who administers them, (ii) who is liable to contribute to them and (iii) who benefits from the funds (customers, service providers or operators?).

- *To whom will the Open Network Provision rules apply in future?*

Different views were also expressed over the scope of application of a future interconnection framework in the context of Open Network Provision, with many incumbent operators favouring control of "a bottleneck facility" as the main criteria for interconnection obligations instead of criteria based on market share alone.

- *The balance between general regulation and sector specific rules for interconnection*

Although there is general agreement on the need for a regulatory framework for interconnection at a European level, some incumbent operators believe that general competition rules should be emphasised over sector specific regulation. On the other hand, a number of operators as well as, service providers and users all see an important role for a clear regulatory framework to underpin commercial negotiations at least for a transitional period until competition is effectively established.

- *The cost methodology for interconnection*

Many fixed operators believed that fully distributed cost methodologies should be used in order to ensure that past investment in networks would be fully recovered, whilst others operators with experience of competitive markets and many other organisations stressed the value of long run incremental costs - in particular, as a mechanism for encouraging greater efficiency within incumbent operators.

- *The grounds for limiting license numbers and the licensing of trans-European telecommunications networks and services*

On licensing, there are still divergent views concerning whether national regulatory authorities should be able to limit licence numbers on the basis of their subjective assessment of market conditions. Many comments suggest that there should be no 'a priori' limitation on numbers, other than physical limitations flowing from narrow interpretation of the essential requirements (primarily, limitations linked to physical resources, principally radio-frequency).

Additionally, comments from potential providers of pan-European infrastructure or services, including the equipment industry, recognised the **potential role for either a European Regulatory Authority** to award such licences or at least for co-ordination between Member States to allow such trans-European infrastructure or services to enter into service at the same time throughout the Union.

- *The need to avoid line of business restrictions*

There is full support for transparent and appropriate accounting procedures, though some comments from those attempting to enter mobile or infrastructure markets alongside the incumbent believed that full structural separation might be necessary. Nevertheless a majority of comments supported the Green Paper in rejecting automatic "line of business restrictions".

- *Sharing of essential resources*

There is general agreement on the important role of access to common resources such as rights of way, frequencies and numbering.

However, there is no consensus in favour of **mandatory** duct and infrastructure sharing, although the possibility of voluntary sharing for reasons of environmental policy was accepted. At the same time some comments pointed to the need to ensure sufficient access to rights of way / shared use of infrastructure, in order to prevent environmental considerations justifying a limitation on the number of service licences granted.

There were differing views concerning the price at which such resources should be made available, even if a principle of non-discrimination were applied.

Whilst comments from the telecommunications sector overwhelmingly supported a re-distribution of frequencies between telecommunications, broadcasting and defence uses, this was not supported by broadcasters nor by all national regulatory authorities.

The possibility of allowing experimental shared use of frequencies was suggested.

V PRIORITIES FOR ACTION

The consultation on this Green Paper has necessarily extended beyond the pure issue of infrastructure liberalisation to encompass the overall regulatory environment to achieve the full liberalisation of telecommunications services and networks by 1 January 1998. On the basis of the comments and the consensus achieved, the Commission can now identify the following priorities in preparing the measures to ensure liberalisation of telecommunications infrastructure and services, and in particular, those measures which the Commission is required to table before 1 January 1996¹⁷.

The approach chosen focuses on those issues which have a clear European dimension and for which solutions are essential in order to ensure conformance with the Treaty competition rules and the completion of the internal market for telecommunications infrastructure and services. In particular, the approach favoured seeks to ensure that regulation at both a European and national level is limited to the minimum necessary to achieve the desired objectives and that regulatory responsibilities are carried out at the most effective and appropriate level. This approach is consistent with the Commission's responsibilities under the Treaty, and at the same time takes full account of the principles of subsidiarity and proportionality.

V.1 Liberalisation schedule

The consultation has shown strong support for the linkage of full liberalisation of infrastructure to the full liberalisation of telecommunications services in 1998, subject to possible transitional periods¹⁸.

At the same time, the Commission attaches considerable weight to the calls from industry, business, service providers, users, and from mobile network operators and some fixed network operators with experience of competitive markets, for faster but limited infrastructure liberalisation now. These calls are in line with the proposals in the Green Paper for a more rapid approach to liberalisation in certain areas, which flow from an analysis of current infrastructure monopolies in the light of the Treaty's competition rules and the rules promoting the free movement of services.

This approach was widely recognised in the consultation as being central to Europe's strategy for growth and employment, as well as allowing cheaper communications and stimulating innovation which will keep Europe at the forefront of the emerging Information Society.

¹⁷ See Council Resolution of 22nd July 1993 on the review of the situation in the telecommunications sector and the need for further development in that market (93/C 213/01 ; OJ 213/1, 6 August 1993).

¹⁸ Subject to possible transitional periods if requested of up to 5 years for Greece, Ireland, Portugal and Spain; as well as a possible 2 years for very small networks, where justified, (i.e. Luxembourg).

Commission studies and experience in markets which are already open to competition suggest that the risks of such limited competition destabilising the delivery of universal service would be less than some incumbent operators and national regulators currently believe. In particular, the Commission believes that limited liberalisation is possible without the need for as comprehensive regulatory safeguards to be in place as those required in the context of general infrastructure liberalisation. Any regulatory safeguards required in the context of liberalisation should be proportionate to the liberalisation measures in question.

The Commission will therefore, in line with its obligations under the Treaty and the general policy objective of the Union, propose legislation before the end of the year to extend the existing framework for services liberalisation to provide for the full liberalisation of telecommunications infrastructure and services by 1 January 1998 at the latest.

This will ensure that after 1 January 1998, subject to the possible transitional periods referred to above, all exclusive and special rights over telecommunications infrastructure and telecommunications services in the European Union both within and between Member States (including restrictions on the direct interconnection of networks for the delivery of voice telephony services to the public) will be removed. It will also ensure that from that date mobile network operators should be able to obtain licences for the provision of public voice telephony services over the fixed network and that fixed network operators will be able to use wireless technologies within the provision of their services, subject to the availability of the necessary frequency spectrum and to compatibility with the Treaty competition rules.

As regards more limited liberalisation in advance of 1998 for telecommunications services which are currently open to competition, measures could be taken providing that appropriate regulatory safeguards are in place. It is against this criterion that the Commission will assess any action in this area.

With regard to the use of cable television networks for the provision of liberalised telecommunications services, the Commission in its assessment came to the conclusion that the current regulatory framework provides the necessary safeguards. The Commission therefore put forward on 21 December 1994 a draft amendment to Directive 90/388/EEC¹⁹, to include within its scope the provision of telecommunications services over cable television networks.

With regard to the use of own or third party infrastructure for the internal links within mobile communications networks the existing regulatory framework also seems to provide sufficient safeguards, if the situation in countries with less developed networks is duly taken into account. The Commission will therefore propose an appropriate amendment to Directive 90/388/EEC concerning mobile and personal communications.

¹⁹ In this context, the Commission has currently proposed an amendment to Directive 90/388/EEC to allow the use of cable television networks for the delivery of liberalised telecommunications services, OJ. C76, 28.3.95.

As regards the liberalisation of other alternative infrastructures the situation appears to be less clear and has to be investigated further by the Commission. However, the Commission encourages, in particular, the use of such infrastructure either within a framework to be provided by Community law or within the scope of existing possibilities provided by national regulatory regimes, for the pilot and other demonstration projects foreseen in the Information Society.

V.2 **Establishing a regulatory framework at an EU level for universal service in the area of telecommunications**

This should address, in particular:

V.2.1 *The scope, cost and funding of universal service*

Measures to liberalise telecommunications by 1 January 1998 will be accompanied by appropriate harmonisation measures designed to safeguard and ensure the development of universal service, in keeping with the policy followed by Council and European Parliament since 1990.

In particular, the measures will ensure that any financial burden associated with the requirement on one or more operators at a national level to provide a public voice telephony service to all those reasonably requesting it can be properly assessed and shared out at a national level on a fair, efficient and equitable basis.

The rules with respect to scope and the principles pertaining to costing and sharing any uneconomic burden of the basic universal service requirement will be dealt with in the context of Open Network Provision and Voice Telephony and in the proposed framework for interconnection to public telecommunications networks and telecommunications services.

V.2.2 *The scope of universal service*

It is clear from the consultation that the concept of universal service encompasses two distinct elements.

Firstly, it represents a broad political concept concerning a range of common telecommunications services (such as voice telephony, facsimile services and data transmission services) which Member States want to see widely available throughout their territory. In many of these cases, the issue of the cost of such services and ensuring their availability can be left entirely to market forces. This broad concept of universally available services will clearly vary from Member State to Member State to reflect different political priorities. It is important to stress that economic and social cohesion is a political priority of the Union. In this context, universal service is an evolving concept and, in the light of technical and market development (including customer needs), the scope of universal service will be kept under consistent and continuing review.

Secondly, from a regulatory perspective, some of these services are so important that regulatory intervention at an appropriate level may be required in order to guarantee their universal availability and/or their affordability. This gives rise to "*universal service obligations*" in respect of two different aspects of the universal service concept, namely :

- the provision of certain services at affordable prices for every citizen, including those on low incomes (i.e. the provision of a basic voice telephony service).

Here an element of obligation is required in relation to those elements within the broad group of universal service which an operator would not voluntarily provide *to particular customers or customer groups in particular areas* because of the costs involved. (In particular, the risk of market failure results, for example, from regulatory constraints requiring tariffs to be geographically averaged or limiting the ability of operators to recover the full cost of the service from the end customer).

It is this requirement for affordability which may mean that certain services give rise to a "financial burden" for some operators to which all market players may be required to make a fair contribution; and

- additionally, the provision of services (for example, the minimum set of leased lines²⁰) throughout a Member State's territory, even though the lines themselves are priced according to cost-oriented tariffs.

In the case of leased lines, the availability of a minimum set is crucial to the take off of liberalised telecommunications services throughout the Union (including the inclusion of companies located in remoter parts of the Union within private and closed user group networks).

However, the ability of infrastructure providers to cover the costs of provision means that these obligations do not represent a burden for the operator(s) providing them.

The Consultation has confirmed the need to have common methodology to costing universal service. It has also confirmed that the Commission's proposal for a Directive on the application of open network provision to voice telephony is the appropriate basis for defining those elements of universal service which may give rise to a "burden" and which should in such cases be fairly shared amongst market participants, either through financial contributions to the provision of universal service or through the direct provision of such service elements themselves.

The Commission proposal for a Directive on the application of open network provision to voice telephony seeks to ensure that all users have access to voice telephony services under harmonised conditions of access and use. This will serve as the basis for calculating any "financial burden" associated with the provision of such service.

At the current time and on the basis of the voice telephony proposal, the scope of universal service obligations for the purposes of calculating any "financial burden" associated with universal service would be limited to the following :

- the basic voice telephony service, as identified in that proposal

²⁰ As required by Council Directive 92/44/EEC on the application of open network provision rules to leased lines, OJ L165/27, 19.6.92

- provision of access to the public telephone network at a rate of 2,400 bit/s,
- emergency (112) services
- provision of operator assistance
- directory information services
- the provision of public pay phones, and
- the provision of service under special terms and/or provision of special facilities to customers with disabilities.

Examples of service elements whose cost could not normally be shared amongst all market players includes, but is not limited to :

- the provision of certain advanced voice telephony features²¹,
- the provision of ISDN access for voice telephony customers; and
- the recovery of the costs of non-telecommunications-related obligations imposed on operators or service providers. (These would include public service obligations relating to the financing of research & development or educational activities, or obligations relating to national security or defence).

At the same time this narrow definition of universal service obligations does not mean that Member States or operators may or will not go beyond this in terms of the service that is offered. Indeed it can be expected that this core of universal service will act as an incentive for other operators and service providers to seek to improve upon, in terms of service quality and price.

V.2.3 The costing of universal service

The proposed framework for interconnection to public telecommunications networks and services will set out the principles for calculating any cost associated with the imposition of universal service obligations on an operator or operators at a national level. The basic principle will be to calculate the net cost imposed on the operator or operators with and without the universal service obligations.

National Regulatory Authorities will be required to put in place the appropriate mechanisms to undertake such a calculation. This, implies the need, in particular, to calculate the cost of providing telephone service to any unprofitable areas and to any unprofitable customers in other areas. The process should be transparent and also subject to prior approval under competition rules.

V.2.4 Future funding of universal service

Based on the consultations it has undertaken, the Commission believes that the fundamental requirement to ensure the maintenance and development of universal service in a competitive environment is a common approach on scope and costing.

²¹ The position will vary between Member States, with the costs of such advanced features being separately charged to end users in some cases.

With respect to the funding of universal service at a national level, the Commission believes that it may be possible for approaches to national funding schemes to vary from one Member State to another, without creating significant barriers within the internal market for telecommunications infrastructure or services and without distorting competition.

- First of all, it may be that at a national level, the calculated cost of universal service obligations is zero or negligible in which case there will be no need to set up any specific funding mechanism.
- Secondly, the Commission believes that even within the two general approaches outlined in the Green Paper, (i.e. universal service funds or access charges), there are a number of ways in which national funding schemes could be implemented, whilst respecting the principles of transparency, non-discrimination and proportionality and ensuring a system which can promote more efficient operation. This approach to the practical aspects of national funding schemes is consistent with the principle of subsidiarity.

Nonetheless, National Regulatory Authorities will be obliged to ensure publication of the details of the funding mechanisms being used, to notify them to the Commission in advance of their implementation in order to allow for the assessment of their conformity with Community law, and in particular, with the Treaty competition rules. The NRAs must monitor such financing mechanisms appropriately.

At the same time the Commission notes the consensus within the consultation that any financing mechanisms must be transparent, proportional and non-discriminatory. It also notes the overall preference within most Member States for Universal Service Fund approaches. Any mechanism must also ensure that the contributions to universal service are shared fairly amongst market players, (even if those players are not themselves subject to obligations to provide universal service). Furthermore, decisions to implement such funds must not be used as a reason to delay competition, particularly, as access charge-type regimes could be used as an interim measure pending adoption and implementation of appropriate national funds.

V.3 Establishing a regulatory framework at an EU level for open access and interconnection to public telecommunications networks and services

The framework at a Union level will also contain appropriate harmonisation measures designed to guarantee open access to public telecommunications infrastructure and services for both users and new market entrants. Such a framework will complement the application of general competition rules to interconnection arrangements.

V.3.1. *The ONP framework*

In a liberalised environment, the emphasis will be on voluntary compliance to harmonised conditions for access and use of telecommunications networks and services. In three areas however, - voice telephony, leased lines and interconnection - the need for binding conditions is foreseen, in the form of specific ONP Directives.

Previously the ONP framework applied in general to telecommunications organisations who had special and exclusive rights for the provision of certain public telecommunications networks and/or services. After 1998 many organisations can be expected to be authorised to provide telecommunications networks and services to the public, and individual ONP measures will need to be more specific in identifying those entities within their scope. A flexible approach will be required, so that it is possible that:

- the scope of application of the ONP rules may vary from one directive to another;
- different provisions within a single directive may impose obligations which apply to different categories of organisation offering telecommunications networks and/or services to the public, and
- obligations be placed on a Member State, whilst leaving it to that Member State to determine how and by whom those obligations are met.

The ONP Framework Directive will therefore be revised and updated, in particular with respect to its procedural provisions. Details of other ONP measures and their scope of application are given below.

V.3.2. *Interconnection*

Harmonisation of the rules for interconnection to public telecommunications networks and services is a priority. New market entrants need access to existing public telecommunications networks and services under conditions that guarantee non-discrimination, equality of access and transparency.

The Commission attaches considerable weight to the concerns of industry, users, potential competitors and service providers of the need for uniform application of any interconnection framework; for its effective enforcement by national regulatory authorities and for the need for the regime to be in place by 1 January 1998. For these reasons, the Commission intends to present a proposal for a Directive on Interconnection to public telecommunications networks and services in the context of open network provision, which will address the areas of:

- *rights and obligations of service providers and network operators with regard to interconnection, in accordance with the principle of proportionality*

The environment envisaged is one where any organisation has the right to request interconnection, but where some organisations have stronger obligations than others to accept interconnection requests. These stronger requirements will be linked, in particular, to the need to ensure European-wide offerings for leased lines and voice telephony.

- *principles for interconnection charges and accounting systems, including universal service contributions*

The proposed Directive will provide the legislative basis for the proposals on financing universal service as outlined in Section V.2.1 above

- *transparency of agreements*

Interconnection agreements should be made available to the national regulatory authority and, with the exception of those clauses containing confidential technical or commercial information, should normally be published,

- *role of the National regulatory authority*

At a national level Member States will be required to set up independent procedures for dispute resolution. At the European level, a dispute resolution procedure will be proposed based on the conciliation procedure already in operation under the ONP leased lines Directive 92/44/EEC.

V.3.3. *Open access to voice telephony and leased lines*

From the consultation it is clear that two mandatory elements of the current ONP framework should remain in place after 1998.

These are, firstly, the obligation on Member States to ensure the provision throughout their territory of a basic minimum voice telephony service for the general public at an affordable price. The draft ONP voice telephony Directive constitutes the current core of universal telephone service in the Union.

Secondly, in order to allow competitive service provision to establish itself, leased line capacity will continue to be important. The provision of a minimum set of leased lines should continue to be mandated until competition is effectively established and market forces can be shown to replace the need for mandatory regulations. At the same time these mandated offering will have to evolve in line with technological development and market demand.

The Commission will make proposals for the future re-focusing of the existing ONP Directives for the post-1998 environment, in a way that will require Member States to ensure that all users have access to leased lines and voice telephony services from at least one operator, under harmonised conditions of access and use. This harmonised offering is likely to act as a benchmark in terms of quality, price and service levels which other operators and service providers will seek to better.

The decision as to which organisation(s) will carry this obligation-to-provide will be taken at the Member States' level. Application of the principle of proportionality will ensure that the obligation is placed on those organisations best able to fulfil it. Any cost burden in relation to voice telephony will be shared by other market players in accordance with the principles set out above for financing universal service.

V.3.4. *Harmonisation according to voluntary standards*

The creation of the internal market for telecommunications services and the priority attached to interconnection and interoperability of national networks in the context of TENs, means that harmonisation of conditions for access to and use of public telecommunications networks and services for users also remains a priority. In most cases it will be sufficient to rely on voluntary implementation of recommended standards by the market players. Suitable interface standards will be published from time to time in the *Official Journal of the European Communities* under the ONP Reference List of Standards. Provisions already exist in the ONP Framework

Directive 90/387/EEC to make the implementation of certain standards mandatory in justified cases.

V.3.5. *General*

No other specific measures in the context of open network provision are envisaged. Member States are encouraged to include the ONP principles of non-discrimination, transparency and equality of access in licences as appropriate, and, in particular in licences which grant organisations rights to provide telecommunications infrastructure, but no specific ONP measures on infrastructure are proposed.

Proposals for an Interconnection Directive, and for amendments to the existing ONP Directives to adapt those provisions which may be inappropriate in a competitive environment, will be prepared by the Commission by 1 January 1996.

V.4 **Licensing in the field of telecommunications**

Licences in the field of telecommunications implicitly restrict the freedom to provide services and can distort market structures. At the same time, licences can, within the limits set by the Treaty and, in particular, the competition rules as specified in Directive 90/388/EEC (as amended), provide an appropriate mechanism to ensure the achievement of aims such as the development of universal service or the establishment of conditions promoting the creation of a fair competitive environment. The imposition of licensing procedures, together with the conditions attached to licences must therefore be justified under the Treaty and proportional to the objectives which the licensing procedures seek to achieve. This means that licensing procedures and the conditions attached to licences must, *inter alia*, reflect the extent of the rights and obligations which the licence will convey. This is likely to be reflected in different classes and types of licences within national licensing regimes.

This leads the Commission to confirm a number of positions.

V.4.1. *The justification for limiting the number of licences granted and the range of conditions which may attached to licences*

A consensus has emerged from the consultation that the sole reason for limiting the grant of licences for the provision of telecommunications infrastructure and services should be the existence of physical limitations, imposed by the lack of necessary frequency spectrum. This is one of the essential requirements recognised according to Community law²². Other essential requirements found within the Union's regulatory framework apply to the telecommunications services provided over networks rather than to the infrastructure within a network. Where Member States limit the number of licences because of the availability of frequency spectrum, such decisions should be subject to periodic review, in particular, to take account of advances in technology

²² As set out in Article 4(e) of Council Directive 91/263/EEC on the approximation of the laws of Member States concerning telecommunications terminal equipment, including the mutual recognition of their conformity.

With regard to the extension of the essential requirements to include restrictions based on environmental policy (such as the availability of rights of way), the Commission from the comments received in the consultation accepts that rights of way do not constitute a physical limitation on the possible grant of infrastructure licences and therefore cannot be used to justify a priori restrictions on licence numbers. This is without prejudice to individual decisions taken by relevant national, regional or local authorities limiting the exercise in individual cases of those rights. At the same time, in granting such rights of way and related powers Member States must ensure that they are granted in a non-discriminatory manner and that the rights are exercised under the same conditions by both the incumbent operator and any new entrants.

No regulatory limitations should be placed on the number of service providers. They should not be subject to individual licences. Where the number of licences for infrastructure in a Member State has been limited a priori for physical reasons or where issues of environmental and planning policy arise, for example, with regard to the exercise of individual rights of way, voluntary sharing of infrastructure shall be on the basis of commercially negotiated agreements and subject to regulatory oversight.

Whilst a complete consensus on the issue of whether the number of licences can be restricted on the basis of public service specifications in the form of trade regulations did not emerge, the Commission supports the clear trend in the comments that the issues which "trade regulations" seek to address are issues which can be tackled within the terms of a licence or during the selection procedure, rather than a reason justifying an a priori limitation of the number of licences granted.

Finally, there was general support for the two categories of conditions which form the basis for a common European approach to licensing: namely, the essential requirements (mentioned above) and public service specifications in the form of trade regulations (which might be applied in addition to essential requirements in the case of the provision of public telecommunications services).

Member States would remain free to attach additional conditions outside this framework only if such restrictions could be justified according to the Treaty and are proportional to the objectives sought.

V.4.2 The provision of telecommunications services to the public may justify more comprehensive supervision of operators and service providers

The provision of public telecommunications services to the public is likely to justify to greater supervision and hence a more comprehensive licensing regime²³ (based on both essential requirements and public service specifications in the form of trade regulations) than the provision of private (closed) telecommunications services (where public service specifications in the form of trade regulations do not apply). Such conditions could be applied either through individual or class licences (See below). The approach chosen by the national regulatory authority should impose the least limiting solution.

²³ In this context, it will be recalled that the political agreement on the removal of monopolies over the provision of both voice telephony services to the public and the underlying infrastructure for its provision does not mean that

In this context, it should be noted that the commercial provision of transmission capacity is considered to be a service, but not necessarily a telecommunications service provided to the public and hence only subject to the imposition of conditions linked to essential requirements²⁴. Such resale activities would therefore normally be subject to only limited conditions based on essential requirements, even if the services provided over that transmission capacity were provided to the public and hence more strongly supervised.

With regard to essential requirements the proposal in the Green Paper to extend their scope in relation to infrastructure to include conditions justified on the basis of environmental policy was broadly accepted. At the same time, it should be emphasised that the essential requirements identified in Community law are a list of restrictions which may be imposed by Member States, rather than restrictions or conditions which must be imposed. In every situation the imposition of such conditions must be proportional to the objective which it is sought to achieve.

V.4.3. The justification for requiring individual licences

The shift towards a competitive environment for telecommunications requires a light and flexible regulatory approach. With regard to authorisations, the Commission believes that national regulatory authorities should give preference to general licensing regimes through declaration procedures or class licences. Nevertheless from the consultation, it is clear that individual licences may be justifiable in two situations i.e. where the licence holder is to be subject to obligations, or to be given certain rights, relating to :

- the provision of universal service
- the rights to use specific radio frequencies; to build and operate its own infrastructure and/or to enjoy related rights of way or powers of compulsory purchase; to numbers.

In each case the imposition of individual licences must be consistent with the principle of proportionality. Situations can also be envisaged where an operator may itself choose to be subject to an individual licence (for example, where it seeks to introduce an innovative service or technology, or where it wishes to become a universal service provider and enjoy the additional rights which such operators may be granted in order to enable to meet their universal service obligations e.g. extensive rights of way).

Conversely, general authorisations or class licences should be the appropriate mechanism in a competitive environment for authorising telecommunications services provided on a simple resale basis.

the task of general economic interest (i.e. the provision of universal service) in the sense of Article 90(2) has been removed, rather that after 1998 the service can be guaranteed by a more proportional approach. The use of licensing conditions in the context of the provision of services to the public will be one means in assisting this process.

²⁴ In many cases, such infrastructure will be provided using existing rights of way and so may not require an individual licence. That would certainly be the case where such infrastructure is self-provided for own use by the owner of the infrastructure within its corporate network.

The Commission will propose before the end of 1995 amendments to Directive 90/388/EEC²⁵ in order to establish the grounds which may be used to limit the number of licences, as well as to define categories of conditions which may be attached to licences, for the provision of public and private telecommunications services.

The Commission will also propose amendments to its current approach to licensing²⁶ to extend their scope to establish a common framework for licensing award procedures and the selection criteria used in such procedures, as well as promoting its approach in the field of mutual recognition of licenses.

Initiatives are underway with regard to the co-ordinated national licensing of satellite-based Personal Communications services (PCS) in Europe, in order to allow such services to be provided throughout Europe at the earliest possible opportunity, with the opening of the licensing process by 1 January 1996 at the latest.

V.5 Ensuring a fair competitive environment

It is clear from the consultation that there is a consensus that the balance proposed in the Green Paper between the application of general competition law and sector-specific regulation has to be maintained. At the same time, considerable weight is attached to those rules and the future development of the regulatory framework is likely to see a continuing reduction in direct regulatory intervention as the full effects of competition are felt.

The consultation confirmed that Directive 90/388/EEC was and will continue to be at the core of telecommunications liberalisation in Europe. Based on the comments received, it will be necessary to rapidly and firmly fix the envisaged framework, including in particular the liberalisation dates foreseen. The Directive will have to be extended appropriately with a view to full liberalisation by 1998.

As regards the application of the competition rules, strong support for a strong role for these rules was shown during the consultation. The Commission will take account of this support by ensuring the full application of the competition rules, in particular as regards:

- the examination of interconnection agreements,
- the conditions for access of competing infrastructure providers and for service provision,

²⁵ Commission Directive of 28th June 1990 on competition in the market for telecommunications services (90/388/EEC ; OJ L192, 24.7.90)

²⁶ Amended proposal for a European Parliament and Council Directive on the mutual recognition of licences and other national authorisations for telecommunications services, COM(94) 41 final, 22.3.94, and Proposal for a European Parliament and Council Directive on a policy for the mutual recognition of licences and other national authorisations for the provision of satellite network services and/or satellite communications services, COM(93) 652, 4.1.94

- schemes established for financing universal service,
- access to rights of way,
- cross-ownership of different networks and joint provision of network and services, and
- the emergence of global and regional partnerships and alliances.

The Commission will also take into account the calls for more predictability, in particular as regards access and interconnection. In this respect, the appropriate measures to give further effect to the principles set out in Articles 85 and 86 will have to be assessed, in order to establish a more predictable environment if required.

With regard to barriers to market entry the Commission will consider the lifting of constraints on the basis of the competitive situation, in particular with regard to infrastructure provision.

V.6 Access and availability for service providers and operators to essential resources, namely:

V.6.1. *Rights of Way*

Member States should take necessary measures to remove existing restrictions on the sharing of infrastructure. The voluntary sharing of infrastructure, rights of way, ducts, etc. should be a matter of commercial agreement and may be charged on a commercial basis. At the same time, the Commission recognises the potentially significant cost savings and the reduced environmental impact where sharing of infrastructure is promoted. One objective at a national level may be to minimise unnecessary duplication of infrastructure, though any such approach must be compatible with the Treaty competition rules.

In order to overcome the effects of planning or environmental decisions, consideration should be given by Member States to ensuring in class or individual licences that there are no restrictions preventing the sharing of rights of way or linked facilities (ducts, poles, etc.) on a commercial basis and subject to regulatory oversight and technical feasibility.

V.6.2. *Frequencies*

Access to frequency spectrum is seen as increasingly important to the successful take off of a competitive market, and in particular, in allowing new cost-effective technologies to play a full role in the delivery of universal services within the Union. In order to support current market trends the Commission will continue to support the efforts taken within the CEPT/ERC to co-ordinate frequency allocations to promote pan-European operation. In this context, the formulation of appropriate decisions to support the rapid introduction of Satellite-based personal communications services in Europe is a particular priority. Action to investigate the possible reallocation of frequencies between telecommunications, defence and broadcasting uses will also be encouraged.

V.6.2. *Numbering*

It is clear from the consultation that numbering is seen as a further key resource for the establishment of a competitive environment. A number of the basic principles set out in the Green Paper have been confirmed, namely:

- the need for numbering policy and the allocation of numbers to be the responsibility of an independent authority rather than the operator;
- the need for numbers to be allocated in a non-discriminatory manner with a view to promoting equal access for new market entrants, and
- the need for a rapid implementation of number portability, which would allow customers at a specific location to retain their numbers when switching between different operators or service providers. In the longer term, the aim should be to allow the porting of numbers for customers between different locations within a Member State.

The consultation also expressed concern that a full assessment of the impact in terms of prices and technology must be made in formulating any overall approach to numbering in Europe for a liberalised environment after 1998.

V.6.4. *directories*

Access to directory information and directory services have been highlighted as an essential resource for the creation of effective competition and as a basic right for consumers. The Commission is preparing a Communication on these issues which it expects to publish during the second half of 1995.

V.7 Employment, the social and societal impact

It is clear from the Consultation that a competitive telecommunications environment presents challenges in addressing the trend over the last decade of a reduction in employment within the traditional telecommunications operators. At the same time liberalisation will offer substantial benefits for the whole of the European economy, which should in turn enhance Europe's competitiveness, stimulate growth and create new jobs.

Much of the loss of direct employment within public operators is a direct result of technological advances and the efficiency gains flowing from this. The Commission believes that this is an argument for reinforcing the pace of modernisation and liberalisation, so as to exploit the wide benefits that it can bring and at the same time, for effectively managing the adjustment issues involved. This belief is in line with results from recent OECD studies²⁷.

At the same time, the Commission believes accompanying measures - beyond the purely regulatory scope of this Communication - should be undertaken to support the transition from a monopoly to competitive telecommunications environment - in the same way that resources have been made available in other sectors. Such action will be taken primarily at a national level, although Community structures, such as the European Social Fund and specific projects, such as those identified below in the field of education and training can also play a role. In particular, the Union, in line with on-going initiatives, should assist in the adaptation, re-training and re deployment of those whose traditional activities are likely to disappear within the emerging Information Society. The development of policies in this area should be able to build on two separate sets of initiatives:

- *Monitoring the changes in employment in the telecommunications sector*, on the basis of on-going studies and to prepare appropriate proposals in the light of the trends identified.

²⁷ According to the OECD studies, the rapidity of change in the telecommunications sector is leading to performance gaps between those countries which have already liberalised from those who have not yet done so. The traditional source of direct employment, that of the main public operator, is declining for a number of reasons, but mostly linked to technological improvements.

It may seem paradoxical that the large operators which are laying the foundations for the Information Society are decreasing employment. However, many sectors of the economy are becoming increasingly dependent on telecommunications and the traditional measurement methods are not capturing the extent of new telecommunications related employment.

The new technologies are permitting significant improvements in productivity. Slowing down the pace of modernisation in the traditional telecommunications sector may safeguard some employment temporarily, but only at the cost of blocking the generation of new employment elsewhere in the economy, particularly in the new information or content related sectors, which are more employment intensive.

Moreover, not passing on these productivity improvements increases communications costs for all users and raises the cost of providing universal service. The OECD therefore argues that the pace of liberalisation should be accelerated.

- *Study the current evolution way we work*, the organisation of work and the need for adaptation in the light of new technologies of national employment and social legislation in the Member States.

Work²⁸ in both areas shall be closely co-ordinated with the social partners. This process of consultation and discussion is greatly strengthened within the Union by the creation of the Information Society Forum, first called for in the *Bangemann Group Report* in 1994, and of the High Level Group of Social Experts, set up under the aegis of Commissioner Flynn. Both groups will provide an important input into the discussion of the broader social and societal aspects of the Information Society, with the Social Expert Group having a specific mandate to address the impact and changing nature of employment in the emerging telecommunications environment, as well as consideration of issues linked to education and training, healthcare and cohesion within the Union.

At the same time, it should be noted that significant activity has been underway for a number of years at a European level to support the use of new technologies and services in areas, such as new education and training. The completion of the process of liberalisation is likely to have a major impact on ensuring widespread and affordable access to such activities.

In the field of education and training, the Commission has supported the development of open and distance learning (ODL), a method which is able to exploit the potential offered by advanced telecommunications. In addition to its publication of a Report²⁹ and a Memorandum³⁰ on Open and Distance Learning, the Commission has encouraged work at a European level in favour of this method through a range of Community Programmes³¹. With regard to the promotion of education and training using new technologies the new Community Education and Vocational Training Programmes (SOCRATES and LEONARDO) both offer opportunities for the development and use of ODL at a European level and further possibilities are offered within the Community's Fourth Framework Programme for Research and Development.

The Commission has also provided financial or organisational support to reflections amongst policy makers, providers and users of ODL concerning the development of such methods through its supports for meetings, conferences and seminars on this subject. In addition as part of the follow up to the Commission's Information Society Action Plan, the Commission established at the beginning of 1995, a Task Force for

²⁸ On-going or completed Studies include studies in relation to : the general economic impact of the Information Society; the future organisation of work; the examination of employment trends related to the use of advanced communications and also of the impact on employment of liberalisation in the telecommunications sector; the legal, practical and technical issues surrounding tele-working; the impact of the Information Society on regional development in the Union; the impact of telematics in urban areas; as well as studies examining the impact of the Information Society and/or telecommunications in the areas of education and training and the environment.

²⁹ SEC(91) 897 final, 24 May 1991

³⁰ COM(91) 388 final, 12 December 1991

³¹ Examples can be found within ERASMUS, COMETT, DELTA, EUROTECHNET, FORCE, LINGUA, TEMPUS, EUROFORM, NOW and HORIZON.

Multimedia Educational Software, to examine and report on the situation within Europe and outside on the production and use of new learning materials.

V.8 The international agenda

The Commission recognises a clear consensus that priority must be given to multi-lateral solutions within the framework of the on-going WTO Negotiations on Basic Telecommunications in order to achieve the overall aim of comparable and effective access to third country markets, and, in particular, the lifting of ownership restrictions, for EU network operators and service providers. Such an approach was recognised as preferable to bi-lateral initiatives between individual Member States and third countries.

The consultation has confirmed that until the results of the WTO negotiations are clear, it will remain important for the Union to reserve its right to maintain equivalent conditions to those currently prevailing in third country markets with regard to market entry or the licensing of non-EU or EEA nationals or companies controlled by such nationals. The objective of proposing such conditions would be to promote open markets in third countries for European network operators and service providers through negotiations.

Additionally, on-going action to promote the emergence of common European positions in international fora dealing with numbering and frequency allocations will be continued.

Account must also be taken of the global approach now being taken to a range of regulatory issues in the context of the discussions on the Information Society within the G7, where it is recognised that many nations are facing similar regulatory and societal challenges. After the successful Summit in Brussels in February, a range of projects have been agreed to assist this discussion and co-operation at an international level. In relation to four of the eleven projects agreed in Brussels, leadership is being taken by the Union. These concern projects (i) the drawing up of a global on-line, multimedia inventory of all projects and studies linked to the development of a global information society, (ii) global healthcare applications in the field of telemedicine, (iii) the global market place for SME's, linked in particular, to Electronic Data Interchange (EDI) and (iv) maritime information systems to enhance environmental protection and enhance industrial competitiveness.

Further discussion at a global level and evaluation of projects will continue later this year at a meeting in Halifax, Canada, whilst at a Union level consideration is being given as to how best to involve those Union Member States not members of the G7.

V.9 Towards the Information Society

V.9.1 Other aspects of the regulatory framework for the Information Society

The consultation gave support to the need for continuing Union action in a number of neighbouring fields which will have a direct impact on the speed and success of the liberalisation process in Europe, and more generally will help to shape a

regulatory policy assisting the creation of the Information Society. Such a framework to be developed through coherent action at a national, Union and international level must be consistent with the principle of subsidiarity and must be flexible enough to meet the new and varied requirements which may emerge. Such a framework should ensure that new services, such as distance learning, tele-medicine, tele-shopping, leisure services and video on demand are included within its scope in order to assist in promoting the development of such services. In view of the uncertainties (economic, technological and social) affecting the development of new services, additional studies and broad consultation may be required before firm rules can be determined.

In any event, the overall framework which will emerge with respect to other regulatory aspects of the Information Society must be firmly rooted in the basic principles of the Treaty with a view to the further establishment of the internal market. In addition to the areas specifically commented upon in the consultation (see below), work on creating this regulatory framework is underway through the preparation of :

- a Green Paper on commercial communications
- a Green Paper on the legal protection of encrypted signals
- the consultation underway on media ownership, and
- a Communication on the need for an internal market mechanism ensuring that new national proposals are transparent and comply with the principles of the internal market.

With regard to the areas raised in the consultation:

- *Data protection and privacy*

The consultation indicated clear expectations from operators, service providers, users and residential consumers for rapid progress to be made on formulating common rules for data protection and privacy within the European Union. At the same time, emphasis was placed on the need for any framework to be proportional to the objectives sought and not to place a brake on either innovation or the development of global communications.

In this context, the Commission believes that the urgent adoption of the pending proposals for both a general directive and a telecommunications-specific directive on data protection and privacy is now of prime importance.

- *The protection of Intellectual Property Rights*

Adequate protection of intellectual property was seen in the consultation as an essential prerequisite to attracting investment into Europe's Information Society and in providing a fair reward for innovation. The key concerns of the sector were that providers of both traditional telecommunications and new services and of content should be able to control adequately the distribution of their products in a digital environment.

In this context support was given to the Commission's proposed Database Directive, and at the same time it was felt that the existing framework of copyright law would be important in providing an appropriate protection regime for future digital works. The Commission will further examine these issues in its Green Paper on intellectual property rights in the Information Society.

- *Audio-visual Policy and Media Concentration*

The consultation supported the evolution and adaptation of policies in these areas to take account of the emerging telecommunications and communications environments.

Whilst some comments stressed the desirability of a common approach to address competition concerns raised by vertical integration or the combination of partners from formerly discrete sectors of the economy, others have highlighted the unique issues raised by audio-visual policy. These go to the heart of the freedom of speech (both in a commercial and political sense) and the issue of plurality of sources of information. The Commission is responding to these concerns, inter alia, in the context of its Communication on Information Society Services : Building a regulatory framework of 17 March 1995, SEC(95) 444.

V.9.2 *The future evolution of the regulatory framework*

The aim of consultation in the Green Paper on the future regulatory environment was not to provide answers to the question of its future evolution, but rather to initiate a debate. Moreover, the limited extent to which the audiovisual sector participated in the consultation process makes it difficult to draw conclusions concerning consequences of convergence for future regulatory approaches. Nevertheless, the Commission believes that certain principles can be identified which will assist the future discussions, firstly, with regard to the evolution of the regulatory environment for telecommunications and, secondly, with regard to the future regulatory approach within a converged Information Society.

a) The future evolution of the telecommunications environment beyond 1998

A number of factors emerged from the consultation to guide the future evolution of the regulatory environment for telecommunications :

- Effective implementation of the future regulatory regime must be guaranteed. This will increasingly depend on independent and effective regulation at an appropriate level.
- There will be a continuing role for regulation even after 1998 in order to ensure that competition can effectively be established and to guarantee specific public interest goals, such as the delivery of universal service. At the same time, the regulatory environment must evolve to reflect the degree of competition, so that regulation can be relaxed over time in order to allow market forces to work.
- As effective competition is established tariffs will increasingly be determined by market forces and reflect demand as well as cost conditions. Regulation can therefore focus more appropriately on areas where bottlenecks and market power

exist. To allow current operators to respond effectively to market forces, the process of tariff rebalancing should be accelerated. However, such rebalancing must go hand in hand with measures to promote a smooth transition for particular groups of users (such as those on low incomes or those with special needs) towards greater cost-orientation, particularly, in relation to access and the cost of local calls. To ensure adequate protection for these consumers, telecommunications operators must be able to offer flexible tariffs, for example, tariff schemes targeted at specific groups of users. Well designed price cap schemes can assist the rebalancing process, whilst ensuring adequate protection for consumers. An appropriate monitoring system should be established during the transitional period.

- All regulation at both a national and European level must be proportionate to the objective sought. In principle, as effective competition is established current asymmetries can be safely removed. The ultimate aim must be to create an environment in which any user can receive any service from any operator using any technology.
 - The sector can evolve without a priori structural separation, but subject to the application of Community law, in particular, the competition rules.
- b) *The future evolution of a coherent regulatory framework for a converged environment*

Whilst the central focus of the Green Paper was on the telecommunications environment, comments did address the issue of the future approach to support the full development of a converged environment. In particular, stress was placed on the need for a coherent approach within both Union and national policies, rather than a series of sectoral policies presented to each of the other sectors as a "fait accompli". In this regard the basic approach of the Green Paper should be repeated of indicating that the aim is not to extend telecommunications regulation to the broadcasting or other sectors. At the same time, a number of basic principles can be identified from the comments which may assist in the formulation of a coherent regulatory approach to the future debate on regulating for convergence:

- A clear distinction can usefully be drawn between "transport" (the communications infrastructure over which the traditional telecommunications and new services and/or programming can be delivered) and "content".
- Regulation should be technology neutral.
- Safeguards may be needed in respect of both "transport" and "content", but the regulatory objectives are likely to be quite different. However, the aim must be for a coherent regulatory structure which can support the needs of Information Society.
- A common approach may usefully evolve with regard to the services of public interest (universal service in the telecommunications sector and obligations to carry public broadcasting channels in the broadcasting sector)
- Technological developments are blurring the differences between telecommunications and broadcasting, and artificial regulatory barriers should be

avoided. The Commission is examining these issues and will conduct extensive consultations in the audiovisual and related sectors, inter alia, in the context of a Green Paper on new audiovisual services.

V.10 Implementation

The consultation on the Infrastructure Green Paper has confirmed that a balance between the two complementary areas of harmonisation and liberalisation has to be maintained and that the future evolution of the regulatory environment has to continue to reflect this balance which has been at the heart of Community telecommunications policy to date.

Given the tight timetable leading up to full liberalisation, it will be essential that the Commission, Council and European Parliament work closely and speedily to finalise the future regulatory framework. Responsibility will fall on the Member States and their national regulatory authorities in ensuring the timely transposition and implementation of that framework, as well as on the Commission in ensuring the achievement of the liberalisation process.

As regards the possible creation of a specific European Regulatory Authority for telecommunications in relation to the area of licensing, in particular, for Trans-European telecommunications networks and services, and in other regulatory areas, which was called for in a number of comments received, it is currently too early to draw definite conclusions. During the consultation it was suggested, that such an authority could be in charge of areas such as licensing harmonisation, numbering, frequencies, and interconnection. The Commission is currently carrying out studies on the issue which should provide a basis for further analysis of the issue at a later stage.

Any assessment of this institutional issue should have as its decisive criterion whether the creation of such an authority would substantially increase the efficiency of the regulatory framework.

VI TIMETABLE FOR ACTION

Council Resolutions 93/C213/02 and 94/C379/03 call on the Commission to prepare before 1 January 1996 proposals for the future regulatory framework for a liberalised telecommunications environment. In the light of the priorities identified above the following timetable for action, respecting the necessary balance between the complementary areas of liberalisation and harmonisation, can now be established.

Date	Liberalisation	Harmonisation
Before 31 July 1995	<p>Draft amendment of Commission Directive 90/388/EEC with regard to mobile and personal communications</p> <p>Draft amendment of Commission Directive 90/388/EEC with regard to the full liberalisation of telecommunications infrastructure and services from 1 January 1998</p>	<p>Common Position on proposal for a European Parliament and Council Directive for ONP Voice Telephony</p>
Before 1 January 1996	<p>Adoption of amendment of Commission Directive 90/388/EEC with regard to cable television networks</p> <p>Adoption of amendment of Commission Directive 90/388/EEC with regard to mobile and personal communications</p> <p>Adoption of amendment of Commission Directive 90/388/EEC with regard to the full liberalisation of telecommunications infrastructure and services from 1 January 1998</p> <p>If required, proposals for appropriate measures to give further effect to the principles set out in the Treaty (e.g. Articles 85 and 86), in particular, with regard to interconnection and access</p>	<p>Adoption of the proposal for a European Parliament and Council Directive for ONP Voice Telephony</p> <p>Proposal for amendment of Council Directive 90/387/EEC (ONP framework directive) and of Council Directive 92/44/EEC (ONP Leased Lines Directive)</p> <p>Proposal for a European Parliament and Council Directive on the application of the principle of open network provision to interconnection to public telecommunications networks and services</p> <p>Adaptation of the current proposals in the field of licensing</p> <p>Proposal for a Council Decision of the co-ordinated licensing of Satellite PCS services within the European Union.</p>

Date	Liberalisation	Harmonisation
		<p>Communication to the European Parliament and the Council on the preparations for a liberalised telecommunications environment, addressing in particular the issue of universal service</p> <p>Communication to the European Parliament and the Council on directory information and directory services</p>
Before 1 January 1997	Adoption of any measures required to give further effect to the principles set out in the Treaty, in particular in Articles 85 and 86	Adoption by the European Parliament and Council of the measures set out above
Before 1 January 1998	Completion of implementation by the Member States of the liberalisation measures set out above according to the timetables applicable	Completion of implementation by the Member States of the harmonisation measures set out above according to the timetables applicable

VII CONCLUSIONS

The Consultation on Parts I and II of the Infrastructure Green Paper have allowed all those interested in the telecommunications sector to comment on the specific issue of infrastructure liberalisation, and more generally on the overall regulatory approach for networks and services which the Commission is proposing to assist the transition towards a fully liberalised telecommunications environment. This exercise has continued the process of open consultation initiated by the 1992 Telecommunications Service Review and continued with the 1994 Green Paper on Mobile and Personal Communications.

The Consultation has focused on the key regulatory issues of universal service, interconnection and licensing, giving a strong mandate to the urgent preparation of regulation in these areas. This Commission's proposals for such action have been set out above.

In parallel to these regulatory priorities, the Commission will continue, in line with the views expressed in the consultation, the on-going work on the issues of employment and the social and societal transformation offered by the Information Society. From this perspective, the Green Paper and the consultation raised a range of issues going beyond telecoms regulation in a strict sense to touch on :

- employment,
- the social and societal implications of a competitive market for telecommunications services, and
- the interplay between telecommunications policy and Union policies in neighbouring areas, such as intellectual property, audio-visual policy or data protection.

In each case, the resolution of such issues within other areas of Community policy, and drawing, for example, on the expertise provided by the Social Expert Group and other fora, is essential if public confidence in telecommunications liberalisation and the Information Society is to be maintained.

The Commission believes that the Consultation has established a clear consensus around the main proposals put forward in the Green Paper and that therefore it has provided a major input to the measures which the Commission will table during the second half of this year.

On the basis of the consultation which has emerged the Commission has prepared this report which it now transmits to the European Parliament and Council.

ANNEX

LIST OF CONTRIBUTORS TO THE CONSULTATION ON THE 1995 GREEN PAPER ON THE LIBERALISATION OF TELECOMMUNICATIONS INFRASTRUCTURE AND CABLE TELEVISION NETWORKS

Round Table for the Chairman of Network Operators : 10 February 1995.

54 fixed, mobile and alternative infrastructure companies were represented.

General Consultation Meeting : 20 / 21 February 1995.

Approximately 125 organisations participated.

Meeting with the Trade Unions : 14 March 1995

Meeting with the *Ad Hoc* High Level Committee of National Regulatory Authorities : 16 March 1995

**LIST OF
WRITTEN CONTRIBUTIONS**

National Regulatory Authorities

Austrian National Regulatory Authorities (AU)
Bundesministerium für Post- und Telekommunikation (D)
Department of Trade and Industry (UK)
General Directorate of Posts and Telecommunications (ICE)
Institute belge des services postaux et des télécommunication
Instituto das Comunicações de Portugal (PO)
Ministerie van Verkeer en Waterstraat (NL)
National Post and Telecom Agency (SW)

Joint Committee of Telecommunications

Associations

Association of Private European Cable Operators
Association of Finnish Telephone Companies (ATC)
Association Française des Utilisateurs du Téléphone et des Télécommunications (AFUTT)
Bureau Européen des Unions de Consommateurs
The Cable Communications Association
Conseil National du Patronat Français
Danish Bankers Association
Danish Chamber of Commerce
Danish Insurance Association
Deutsche Industrie und Handlestag
Deutsche Postgewerkschaft
ECTEL (the European Telecommunications and Professional Electronics Industry)
European Public Telecommunications Network Operators Association (ETNO)
EU Committee of the American Chamber of Commerce
European Association of Advertising Agencies
European Broadcasting Union
European Council of Telecommunications Users Association (ECTUA)
European Conference of Data Protection Commissioners
European IT Industry Round Table (EITIRT)
EVUA - European Virtual Private Network Users Association
Federation Belges des Coopératives (FEBECOOP)
Federation of the Electronics Industry (FEI)
French Consumer and User Associations : (joint submission of ASSECO CFDT, AFOC, ANC, AFUTT, LEO, Lagrange, ORGECO, CSF, UNAF, CNAFAL, Familles Rurales, CNAFAPS, CGI, UFCS, J. Lucas)
Foreningen af Teknikumingeniører
Gewerkschaft der Post- und Fernmeldebediensteten
IT Association of Denmark
Mediaraad
Motion Picture Association
Office of the United States Trade Representative
UNICE
Verband der Telekommunikationsnetz und Mehrwertdiensteanbieter (VTM)
Vereniging van exploitanten en machtiginghouders van centrale antenne inrichtingen (VECAI)
World Travel & Tourism Council

Individual Organisations

ARD
Airtouch
AT&T
BBC
Belgacom
BellSouth Europe
Bouygues Telecom
British Telecom

Cable & Wireless plc
Cellnet
Club informatique des grandes entreprises françaises
CNI-Communications Network International GmbH
Colin Long, Coudert Brothers
Communication Media Services S.A.
Compagnie Générale des Eaux
Datsa Belgium
Debitel
Deutsche Sparkassen und Giroverband
Deutsche Telekom
Energis
Enertel
E-Plus Mobilfunk
EURIM
France Telecom
Fundesco
Hermes Europe Hitrail B.V.
Kingston Communications
Mannesmann Mobilfunk
Mercury Communications
Mercury one2one
MFS Communications
National Research and Development Centre for Welfare and Health (NAWH) (FIN)
Netcologne GmbH
Netcom GSM
Nokia
OTE
Orange
Österreichische Post
Post et Télécommunications (LUX)
Post & Telekom (AU)
Portugal Telecom
PTT Telecom
Société Française du Radiotéléphone (SFR)
Sonofon GSM
Stet
TeleDanmark
Telecom Finland
Telefónica
Telekommunikations Gesellschaft für Betrieb
und Dienstleistungen mbH
Telenor Mobil
Thyssen Telecoms AG
Torch Telecom
Telia
Unisource
Dr Rolf H. Weber
Prof.Dr. Paul J.J. Welfens