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**EUROPE'S WAY TO THE INFORMATION SOCIETY.
AN ACTION PLAN**

COMMUNICATION

from the
COMMISSION

to the
COUNCIL and the EUROPEAN PARLIAMENT

and to the
ECONOMIC AND SOCIAL COMMITTEE and the COMMITTEE of REGIONS

EUROPE'S WAY TO THE INFORMATION SOCIETY. AN ACTION PLAN

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The information society is on its way. A "*digital revolution*" is triggering structural changes comparable to last century's industrial revolution with the corresponding high economic stakes. The process cannot be stopped and will lead eventually to a knowledge-based economy.

The Commission's White paper on "*Growth, Competitiveness, Employment - The challenges and ways forward into the 21st century*" acknowledges the importance of this process, critical to the future of European society. It develops a positive vision, stressing that information and communication technologies and related services have the potential to promote steady and sustainable growth, to increase competitiveness, to open new job opportunities and to improve the quality of life of all Europeans.

The White paper was examined by the European Council at its December 1993 meeting. The Council gave its full political support and requested that a report be prepared on the information society by a group of prominent persons, providing concrete recommendations for action.

The report "*Europe and the global information society - Recommendations to the European Council*", illustrates the search for a consensus on this issue and builds on the White paper's analysis. It highlights the need for an acceleration of the liberalisation process and the achievement and the preservation of universal service and the Internal Market principles of free movement. Public authorities will have to set new "rules of the game", control their implementation and launch public interest initiatives. The deployment and financing of an information infrastructure will be the primarily responsibility of the private sector. At a Community level, in addition to legislative initiative, it will be necessary to better target available resources to contribute to the new objectives.

Finally, the report emphasizes the urgency of adopting its recommendations. The race is on at global level, notably US and Japan. Those countries which will adapt themselves most readily will *de facto* set technological standards for those who follow. It also underlines the global nature of the issue, and calls for proper coordination mechanisms, and the advancement of international negotiations.

The report was submitted to the European Council for its meeting in CORFU on 24-25 June 1994. The European Council's conclusions recognize the importance of the opportunity and the scale of the challenge facing Europe. It has emphasized that the prime responsibility for acting rests with the private sector, and that the role of the Community and the Member States is to back up this development by giving a political impetus, creating a clear and stable regulatory framework and by setting an example in areas of their direct responsibility.

The Commission fully supports these conclusions. It welcomes the European Council's invitations (a) to the Council and the European Parliament to adopt before the end of this year measures already proposed by the Commission and (b) to itself to establish a work programme for the remaining measures needed at the Community level.

This Communication is a response to that invitation, and the signal that the information society challenge is effectively being taken up. The momentum established since the publication of the White Paper must be maintained. But it is not sufficient merely to act; there is a need for a consistent response by Europe to the challenge, avoiding initiatives which neutralise each other or are mutually incompatible. A global, coherent and balanced approach of mutually supportive measures is called for. The Community will assume its responsibilities for setting the appropriate regulatory environment. In parallel, the private sector is invited to play its entrepreneurial role and launch without delay concrete initiatives for the prompt deployment of the information society.

While a number of proposals have already been made and are under consideration, there is a need for new proposals in a number of areas. This Communication presents an overview of the Commission's work programme on the information society. It constitutes an action framework within which a series of relevant policies will be articulated and more specialised Communications will be released.

The Commission's response covers four areas:

- the regulatory and legal framework, for which new proposals will be made, in particular regarding telecommunications infrastructure and services, on the protection of intellectual property rights and of privacy, on media concentration, as well as the updating of the "rules of the game" for the free movement of TV broadcast in the Community;
- networks, basic services, applications, and content, where there is a need to bring the parties concerned together in order to stimulate the development of applications in the areas proposed by the High Level Group and endorsed by the European Council;
- social, societal and cultural aspects, including the linguistic and cultural dimensions of the information society stressed by the European Council; and
- promotion of the information society in order to increase public awareness and support.

The Commission invites the Council and the European Parliament, as well as the Social and Economic Committee and the Committee of Regions, to debate the issues and give political backing to the development of this action plan.

I. REGULATORY AND LEGAL FRAMEWORK

The CORFU Summit's Presidency's conclusions underline the importance of backing up the efforts of the private sector with the rapid establishment of a clear and stable regulatory framework, notably with regards to market access, compatibility between networks, intellectual property rights, data protection and copyright. As a response, the Commission proposes a broad regulatory framework package (cf. **Annex 1 and 2**), while preserving missions of public interest according to the principles of universality, equality and continuity. More specific Communications will follow, covering different areas outlined below.

Of central importance to the development of the European information society is the need to safeguard the free circulation of services across our internal frontiers. Given the range of measures that might be necessary, the Commission will, as a matter of importance, set such issues in the context of an Internal Market framework, with the view to guaranteeing a level playing field.

1. Towards a competitive environment

• Infrastructure liberalisation

The Bangemann group's report recommends that Member States accelerate the on-going liberalisation of the telecom sector. It is now appropriate to seek agreement on the principle of infrastructure liberalisation in the telecommunications sector, together with clear dates for its implementation. These efforts would complement the agreement on full service liberalisation according to Council Resolution of July 1993¹. A Communication will be presented in September on the approach proposed.

The second step will be for the Commission to publish a Green Paper on infrastructure by the end of the year. This will be open to a broad consultation process on the conditions for general liberalisation of infrastructure for the provision of public telecom services.

• Establishment of an authority at European level

The question of establishing an authority at European level has been raised. Whilst fully respecting the subsidiarity principle, the Commission will launch in-depth studies to examine institutional aspects and to see which activities at present exercised by the Member States and the Commission might be entrusted to such an authority, and will initiate discussions with Member States authorities.

In the light of these consultations, proposals might be made by January 1996.

¹ Council Resolution of 22 July 1993 on the review of the situation in the telecommunications sector and the need for further development in that market (93/C213/01; OJ C213/1, 06.08.93)

2. Standardisation, interconnection and interoperability

• Standardisation

Standardisation is essential to achieve network interconnection and interoperability of services at the international level. The Commission is initiating a debate on standardisation in information technology and communications policy in order to increase its responsiveness to market realities. It will issue a Communication in October on the wider use of standardisation in support of Union policy.

On the specific aspects of information technology and communication, a major Workshop open to all concerned parties will be held in November. It will identify measures for the improvement of planning and prioritisation, for facilitating consensus building, for speeding up the standard making process and for appropriate use of standards in the international context. On the basis of this workshop, the Commission will initiate appropriate actions during the course of 1995.

• Interconnection and interoperability

Interconnection of networks and interoperability of services and applications become increasingly important as competition is introduced, if fragmentation is to be avoided. The emphasis on interconnection must be reflected in the adjustment of the overall regulatory regime, in preparation for the liberalisation of telecommunications services. The Commission will update the Open Network Provision framework, focusing on rules for interconnection between existing and new service providers, the entities which are concerned, standards interfaces for networks and services enabling fair and open network access, with proposals to be submitted by end of 1995.

The Commission's proposals for TEN-ISDN (integrated services digital networks) will improve the interconnection of networks. The IDA (networks for the exchange of information between administrations) addresses inter alia the interoperability of application services between administrations. The Council and Parliament are invited to adopt these before the end of the year.

3. Tariffs

• Tariff adjustment

Almost every Member State has started or announced plans to rebalance current tariff structures as a key element in preparing for liberalisation, in accordance with Council Resolutions of July 1993 and February 1994².

Cost-orientation is an objective the Commission is pursuing in view of the transition to competition. At the Community level there are already binding requirements for tariffs for leased lines to be cost-oriented, and for verifiable cost-accounting systems to be established by the TO's in each Member State. The corresponding Directive is still not fully transposed by all the Member States. The Commission is, therefore, putting infringement procedures in place.

² Council Resolution 94/C 48/01 of 7 February 1994 on universal service principles in the telecommunications sector (OJ C48/1, 16.02.94)

- **Financing of universal service**

The Commission will complete investigations on financing universal service in accordance with Council Resolution of February 1994 and will report before end 1995. In this context the Commission will develop common access charge principles.

4. Worldwide dimension

The Commission is involved in the negotiations on so-called "basic" telecom services in the context of the General Agreement on Trade in Services (GATS). Specific telecommunication trade issues will be addressed (e.g. the need to ensure a balanced participation in the new personal communications satellite systems and the need for effective access for new land-based mobile technology in world markets).

Additional trade issues will concern services (other than telecoms), IPRs, or mutual recognition agreements (eg. on standardisation issues). These problems must also be addressed on a global basis, notably under the auspices of the new World Trade Organisation and the World Intellectual Property Organisation. The Community is participating actively in these discussions.

These trade policy aspects must be formulated in a global and consistent approach, necessitating an intensified dialogue with the US in the context of the information society. Bilateral discussions with other major trading partners, such as Japan and Canada, will be broadened. Furthermore, several issues related to the global information society will be addressed in the near future in other fora such as the International Telecommunication Union.

The Commission will also promote the setting up of a cooperation framework and support concrete actions in the field of RDT and industrial cooperation with third countries in order to contribute to the development of infrastructures and applications compatible with those of the Union.

The NAPLES G7 meeting agreed to convene in BRUSSELS a conference of the relevant Ministers to discuss the development of an open, competitive and integrated worldwide information infrastructure. The Commission will organise this conference for the end of this year.

5. Intellectual property rights (IPRs)

IPR measures, whether already adopted or addressed in the 1990 Working Programme in the field of copyrights and neighbouring rights will have to be reviewed, and the possible need for additional measures examined. A Green paper on IPRs in the information society will be prepared in the coming months and give the opportunity for extensive consultations with interested parties.

The proposal for a Council Directive on the legal protection of databases³ is critical to the development of an appropriate regulatory environment for networks. The Council is invited to adopt it as a matter of urgency.

³ Proposal for a Council Directive on the legal protection of databases, COM(93) 464 final, SYN 393

In the field of private copying, the Commission will shortly present a proposal for a Directive.

6. Privacy

Following the conclusions of the CORFU Summit urging for the rapid adoption of the data privacy framework Directive⁴, the Commission will strive to have the text adopted in Autumn. The Commission is, however, aware of the need to specify how the general principles will be applied to specific situations raised by the introduction of new technologies. It has modified its proposal for a Directive on the protection of personal data and privacy in the context of digital telecommunications networks⁵ in the light of the subsidiarity principle and of the first opinion given by the Parliament.

7. Electronic protection, legal protection and security

• Electronic protection

The Council and Parliament have asked for rules concerning conditional access to be included in the proposed Directive on the use of standards for the transmission of TV signals⁶. Economic actors are currently trying to reach an agreement under the auspices of the European project on Digital Video Broadcasting. In the light of the results of this process, which will end in September, the Commission will include appropriate provisions in the Directive.

• Legal protection

The Commission is preparing a Green paper on the legal protection of encrypted broadcasts in the internal market, concentrating on problems associated with the absence of specific legislation in some Member States and with the disparities between existing legislation in others. The Commission will examine the need of harmonising the legal provisions in Member states relating to unauthorised access and the appropriate level of intervention.

• Security

The Commission, advised by the Senior Officials Group on Information Security, intends to put forward by September 1994 a further proposal addressing the requirements for encryption for business and commerce and also the integrity of signatures.

⁴ COM(92)422

⁵ Amended proposal for a European Parliament and Council Directive concerning the protection of personal data and privacy in the context of digital telecommunications networks, in particular the integrated services digital network (ISDN) and digital mobile networks, COM(94) 128 final -COD 288, 13.06.94

⁶ Proposal for a Directive of the European Parliament and the Council on the use of standards for the transmission of the Television signals, COM(93) 556 final -COD 476

With the subsidiarity principle in mind, the Commission will undertake a broad examination of the issues relating to information security and the information society, culminating in the presentation of a communication.

The Community will explore cooperation with third countries, notably the US, on encryption.

8. Media ownership

The Commission will shortly present a Communication to the Council and Parliament on the follow-up to the Green paper "*Pluralism and media concentration in the internal market*", in particular to avoid the risk of further fragmentation of the Internal Market with the emergence of new national regulations. The Commission will analyse the comments which have been received during consultations with interested parties and will take a position on the different options regarding the need and the appropriate level of intervention.

9. Competition

Competition law plays an important role in maintaining open markets, as well as in ensuring that cooperation between TOs does not result in new barriers being set up. The Commission takes an active role in the application of the competition rules to the telecom sector, as shown by two Directives based on article 90, and many individual cases falling under articles 85 and 86. The rules will in particular play an increasing role in the settlement of interconnection disputes. The Commission is considering whether to take measures on the use of alternatives and cable TV networks for non-reserved services.

The competition rules support a positive contribution to the achievement of the information society, and the Commission will apply these rules taking into account the reality of the newly emerging global markets and the rapid speed of change.

10. Audiovisual

The regulatory framework which applies to the content of audiovisual services must contribute to the free movement of such services within the Union, and be responsive to the opportunities for growth in this sector opened up by new technologies. These measures must take into account the specific nature, in particular their cultural and sociological impact, of audiovisual programmes, whatever their mode of transmission. Traditional television remains an important service with regards to extending the information society into the home. The 1989 Directive "*Television without frontiers*"⁷ must be reviewed. A proposal will be submitted in the Autumn.

⁷ Council Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities, ECOJ 17.10.1989, L298/23

II. NETWORKS, BASIC SERVICES, APPLICATIONS AND CONTENT

The private sector will take the leading role in the implementation of the Information Society. It is used to risk-taking, has extensive experience in exploring and developing new markets, and is a valuable source of capital. The Commission will play its catalytic role by putting in a user-friendly and coordinated fashion its various instruments at disposal and by stimulating partnership-building and the launching of new concrete initiatives.

Applications in the area of Trans-European Networks, as well as the audiovisual field, will play a major role in the development and implementation of the information society.

1. Networks

- **Euro-ISDN:** The Commission's proposals on TEN-ISDN⁸ should be adopted by the Council and Parliament before the end of the year.
- **Integrated Broadband Communications (IBC):** Work is performed under the RDT specific programmes on information and communication and the "asynchronous transfer mode" (ATM) trial (at present 18 public network operators involved).

The Bangemann report recommends setting up a *European Broadband Steering Committee* involving all relevant actors in order to develop a common implementation strategy by the end of the year. The Commission will encourage such an activity by the end of 1994.

- **Mobile communications:** The Commission has recently issued a Green Paper proposing further liberalisation of the sector and the development towards Union-wide markets for equipment, networks and services⁹. The Commission will present a report on the results of the consultation phase by the end of 1994 and will table respective legislative measures in 1995.
- **Satellite communications:** The Commission is finalising the first phase of its policy based on the Satellite Green Paper¹⁰. This phase could, if necessary, conclude with the adoption of an article 90 based Directive liberalising satellite services and

⁸ Communication from the Commission related to the development of the ISDN as a trans-European network, proposal for a Council Decision on a series of guidelines for the development of ISDN as a Trans-European network, and proposal for a Council Decision adopting a multi-annual Community action concerning the development of ISDN as a trans-European network, COM(93) 347 final (01.09.93)

⁹ Towards the Personal Communications Environment: Green Paper on a common approach to mobile and personal communications in the European Union, COM(94) 145 final.

¹⁰ Towards Europe-wide systems and services: Green Paper on a common approach in the field of satellite communications in the European Community, COM(90)490, 20.11.90)

Parliament of a Directive on the mutual recognition of licences for satellite services¹¹ by the end of 1994.

With the recent adoption of a Communication on the provision of, and access to, space segment capacity¹², the Commission intends to launch a new phase in its policy and the Council is invited to adopt a Resolution on this issue. Extensive discussions will take place with US authorities and European industry on satellite personal communications services.

The Commission will produce before the end of the year an overall conceptual framework for these various trans-European telecom networks initiatives.

2. Basic services

With the emergence of Euro-ISDN and the introduction of ATM-based broadband communication services, more diversified basic services for electronic mail, video conferencing and multimedia services can be provided.

The Commission will initiate a *European Forum for basic services*, aiming at a closer cooperation on common services and functional specifications and on the timing of their introduction.

The Commission will set up a group to identify the benefits and the conditions for coexistence and convergence of the INTERNET and OSI protocol suites in the context of the Union's commitment to standardisation.

3. Applications

Research projects and experimental applications must be moved from the laboratory into real life in order to create new markets and new job opportunities. The CORFU Summit endorsed the application areas proposed by the Bangemann group: teleworking, distance learning, a network for universities and research centres, telematic services for SMEs, road traffic management, air traffic control, healthcare networks, trans-European public administration network, electronic tendering, and city information highways.

• Methodology for implementation

Initiatives will be designed and set up in a bottom-up fashion by the private sector, possibly in partnership, for those applications which are related to public interest or influenced and regulated by public authorities, with Member States, regions and cities.

¹¹ 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 final - COD 482, 04.01.94

¹² Communication from the Commission to the Council and the European Parliament on Satellite Communications: The provision of - and access to - Space Segment Capacity, COM(94) 210 final, 10.06.94.

Besides its actions in the regulatory and legal domain, the Commission will support the development of applications in various ways. Each case being different, no single universal solution exists, and a combination of different means will be needed. As an immediate practical step, the Commission will set up an "*Information Society Project Office*". This office will act as a single user-friendly interface between the Commission and those who are taking initiatives in the various areas ("one-stop shopping" approach) in order to facilitate an optimal use of these various instruments.

- **Financing**

Whilst the creation of the information society will be entrusted to the private sector, the Commission will see to it that better focused and more effective use is made of existing financial instruments.

Building on the results of the 3rd Framework programme, the **4th RDT Framework programme** will contribute extensively to accelerate the deployment of the applications taken up in the conclusions of the European Council. New technologies will be developed in the framework of the specific programmes for full-scale implementation of the applications following the pilot experiments. While the "*Advanced Communication and Telecommunication Services*" specific programme has been adopted, the Commission will seek rapid decisions on "*Telematics*", and "*Information technology*". *Call for proposals* are likely to be issued on respectively 15 September and 15 December 1994. The 4th Framework programme will also support diffusion and valorisation activities, including financial engineering schemes and technology transfer activities.

In the context of **Transeuropean networks**, The Commission will use the TEN-ISDN and TEN-IBC initiatives to support those applications that contribute to the development of advanced communication networks by means of feasibility studies, loan guarantees and interest rebates.

Within the context of the **Structural funds**, the Commission welcomes the emphasis given to aspects of the information society in the Community Support Framework /single programming documents agreed for the Objective 1 regions for the period 1994-1999. The Commission will seek to ensure through the monitoring Committees that sufficient account is taken of the needs of the information society when selecting projects to be financed. These needs will also be addressed in the negotiations of the Objective 2 and 5b plans. In addition, the Member States will be able to include appropriate measures within the draft programmes to be submitted under the SME initiative by the end of October 1994.

- **Initiative definition, partnership-building and concrete experiments**

The Commission will take a number of initiatives to stimulate private and public-private partnerships and to increase user involvement.

It will, from its own initiative or to respond to expressions of interest (for which it will issue *Call for ideas* and *Call for intentions* in various domains), gather potential actors (users, operators, service providers, equipment manufacturers, etc..) in *Round tables*, *Fora* and *Conferences*, according to the degree of maturity of the initiatives. Discussions will address such issues as the identification of needs, cost estimates,

organisational structures, and financing mechanisms. Current areas where this methodology will first be applied concern teleworking, distance learning, research networks, health care, as well as the examples described below.

Through these common definition and partnership-building exercises, and with the support of the Commission's instruments, the aim is to arrive at the launching of *field trials* and *large-scale pilot experiments* in real-life commercial environments.

Besides this, the Commission will reflect on new ways and approaches to further facilitate the deployment of concrete initiatives.

- **Examples (cf. Annex 3)**

Following is a non-exhaustive list of themes mentioned in the Bangemann report which are already well under way:

- Telematic services for SMEs: In the framework of the implementation of the integrated programme for SMEs, and with the collaboration of appropriate local institutions, the Commission will stimulate the creation of telematic networks to reinforce the partnership relations between SMEs and between SMEs and large enterprises. In parallel, new services such as diffusion of new technologies, partnership research, training, legal support, as well as a new culture of cooperation and partnerships between enterprises will be promoted, notably by the development of advisory agencies.
- Transport telematics field: the Commission will issue in the late Summer 1994 a Communication on "*Telematics applications for transport in Europe*" which will identify the required actions (technical, legal, organisational) for the development of the telematics infrastructure and will propose priority telematic projects for various means of transport.

The Commission will continue to collaborate with associations of cities and regions, such as POLIS and CORRIDOR in order to develop common networks for pilot projects and ERTICO (which brings together more than 30 administrations, undertakings, operators and users), in order to coordinate the implementation of telematics road transport.

- Trans-European public administration networks: the Commission proposed in March 1993 guidelines and the implementation action IDA¹³. This programme covers not only electronic mail between administrations in the Union, but also legal and architectural aspects and several sectoral networks linked with the abolition of internal border controls, fisheries, statistics, social security, medicinal products, etc. After the recent adoption of the Resolution on coordination with regard to information exchange between administrations, the

¹³ Communication from the Commission on the trans-European data communication networks between administrations, proposal for a Council Decision on a series of guidelines related to the trans-European data communication networks between administrations, and proposal for a Council Decision on a Community pluriannual action supporting the implementation of trans-European data communication networks between administrations (IDA), COM (93) 69 final (12.03.93),

Council¹⁴ and the European Parliament are invited to adopt rapidly this programme.

- Electronic tendering: The Commission, with the support of the Member States, will develop the SIMAP programme (*Système informatisé des marchés publics*). This programme, of which a pilot project is currently being finalised, should create interactive data exchange possibilities for entities covered by the Community's public procurement Directives and their suppliers.
- Urban Information Highways: The Commission will stimulate the implementation of pilot sites in European cities by inviting multi-disciplinary groups (technicians and creators) to promote pilot experiments, training in new skills and development of interactive applications.

4. Content

- **Audiovisual**

In the audiovisual field, the Green Paper "Strategy options to strengthen the European programme industry in the context of the audiovisual policy of the EU" issued by the Commission in April 1994, focuses on the development of the film and TV programme industry. It stresses the importance of developing a strategy to contribute to the growth of the information society and to promote the competitiveness of the programme industry in the world market.

The follow-up to this Green Paper will address both regulatory aspects (eg promotion of European programmes), and incentive mechanisms (eg the follow-up to the MEDIA programme, the convergence of national support systems). The emphasis will be placed on action at the EU level but a collective effort will be needed involving all interests in the Member States.

- **Information industry and market**

The availability of high quality information resources (databases, image-bases, etc) will be key elements of the European information infrastructure. Building on the results of the IMPACT programme, the Commission will reflect on ways to stimulate the creation of favourable conditions for information providers to adapt their skills and products to the changing environment and to stimulate increased usage.

¹⁴ see also Council Resolution of the 20th June 1994 on coordination with regard to information exchange between administrations (OJ C-181 of 02.07.94)

III. SOCIAL, SOCIETAL AND CULTURAL ASPECTS

The information society promises to create new jobs, enhanced social solidarity and to promote Europe's linguistic and cultural diversity. However, if not adequately framed, it could create new social and economic discrepancies. The strong support of European citizens is needed for the real "take-off" of the information society. Its advent is likely to generate some fears, which should not be underestimated.

In order to maximise the economic, societal and cultural benefits of new technologies and to address the risks, it will be necessary to evaluate their impact and adopt the appropriate response measures to accompany changes, while guaranteeing essential social notions such as universal service.

The Commission intends to set up a *High Level Group of Experts* advising on the problems to be considered in priority and the appropriateness of the measures which are elaborated.

On completion of their work, the Commission might invite all relevant actors to tackle social and societal issues within the framework of a major *Colloquium*.

The Commission intends to give priority to the following issues:

- **Employment and the working environment**

The Commission considers it vital to ensure that the opportunities to develop new and better jobs are exploited to the full, and that potential negative effects are effectively addressed. In particular, it considers that the full involvement of the social partners is an essential part of the process of coping with such structural changes.

Against this background, the Commission intends to ensure that, in the context of the follow-up to the White Paper on Growth, Competitiveness and Employment and in preparation to the ESSEN Council, the necessary conditions will be defined to ensure the optimal exploitation of new possibilities of employment growth linked to technological change, including guidelines designed to facilitate the process of economic and social adaptation.

In order to be able to formulate policies in relation to the impact of the information society on employment, the Commission will also conduct a number of specific studies on this relationship, and contribute to a series of OECD studies, one of which will address information infrastructures, under the leadership of the Commission within the 1995-1996 programme.

The Commission, in collaboration with other instances, will take steps to ensure that effective evaluation is made of the expected overall impact on jobs, both quantitative and qualitative.

The Commission intends to prepare in the near future, a report which will address the employment and wider social consequences of the development of 'the flexible firm' - including the consequences of the development of core and periphery activities, flexible working time arrangements, continuing in-hour training, teleworking, and networking between enterprises.

- **Societal aspects**

The information society will profoundly change everyday life and leisure time, promote new forms of urban and rural development and improve the quality of the education and health systems. However, the accelerated diffusion of new technologies may also give rise to rejection and isolation.

In line with the actions undertaken with respect to applications and with the support of the High Level Group of Experts, the Commission will launch a series of works on the main social impacts caused by the introduction of these new technologies.

It will also launch a study assessing the impacts and benefits of the information society for regional, economic and social cohesion.

- **Cultural aspects**

The information society provides the opportunity to facilitate the dissemination of European cultural values and the valorisation of a common heritage. Cultural goods, especially cinema and television programmes, cannot be treated like other products: they are the privileged mediums of identity, pluralism and integration and retain their specificity within the framework of new multimedia products and services.

Measures derived from the audio-visual Green paper, to be proposed in the Autumn, will aim at making audio-visual policy a key element in the content strategy which will play a crucial role in delivering the benefits of the information society.

- **Linguistic issues**

Europe's strength resides in its rich historical and cultural heritage. Its diversity and its linguistic and cultural links with other parts of the world constitute an asset for supplying new tailored services targeting regional or specialised audiences. However, it also poses a challenge for services aimed at a European wide audience.

The Commission will issue by January 1995 a Communication identifying ways to address European linguistic issues and to stimulate the emerging language-based industry.

IV. PROMOTION ACTIVITIES

Within the framework of the information programme on the White Paper, a package of information activities is planned in order to promote awareness of the global information society throughout the European Union.

The programme of disseminating information has started by the wide distribution of the report "*Europe and the global information society - Recommendations to the European Council*" produced by the high-level group on the information society. Copies of the report have been circulated throughout the EU institutions, national administrations, the media and on the basis of individual requests. The report is now also available to a global readership using worldwide electronic networks.

The information activities will target European citizens in general, as well as specialist audiences (including companies, the press, user groups, trade associations, social partners and public administrations) and will aim at raising the general awareness regarding the emergence of the information society. They will include the benefits and effects of the information services and applications which are being developed. The audience for the promotional campaign will also include EU institutions, and will extend throughout the Member States to ensure that all regions of the EU are informed. Best use will be made of existing organisations at the national and regional level capable of supporting this promotion exercise.

A number of information and promotional activities will be carried out by the Commission, starting early in Autumn 1994. This will include the organisation of "information days" and multimedia demonstrations, a conference on the global information society to be attended by international opinion-makers in this field, the production of audiovisual materials for non-specialised audiences, and the production of an information brochure aimed at the general public.

All modern methods of electronic publishing and information distribution will be used to promote awareness of the technological potential of the information society.

As far as user awareness of best practice is concerned, mechanisms will be established to exchange best practice in the use of technologies, concentrating on the business and public service domains, and giving special attention to the needs of SMEs. This would involve the Member States, industry and user associations, chambers of commerce, local and regional government, and local organisations.

Annex 1 : Pending measures

Measure	Decision-making process	Calendar
I. REGULATORY AND LEGAL FRAMEWORK		
1. Towards a competitive environment		
ONP / Directive on Voice Telephony (co-decision procedure)	Common position by Council; EP to vote July 1994	1994
3. Tariffs		
Implement Council Directive on application of ONP/leased lines by monitoring transposition in Member States	Commission to take appropriate measures	continued action
4. Worldwide dimension		
"Basic" services negotiations (essentially voice telephony)	Commission to act within GATT, WIPO & EPO frameworks	April 1996
IPR-related issues, MRAs		continued action
5. Intellectual property rights (IPRs)		
Proposed Directive on legal protection of databases	Council to adopt	1994
6. Privacy		
Data privacy framework Directive	EP and Council to adopt	end 1994/1995
Directive on the protection of personal data and privacy in the context of digital telecommunications networks	EP and Council to adopt	end 1994/1995
7. Electronic protection, legal protection and security		
Advanced broadcasting: revised Directive on TV standards	Council to adopt common position	November 1994
9. Competition		
Procedures as regards mobile telephony monopolies	Action under way	continued action
II. NETWORKS, BASIC SERVICES, APPLICATIONS AND CONTENT		
1. Networks		
Euro-ISDN: guidelines and Action Plan	Commission to present revised proposal taking into account EP amendments Council common position	July 1994 November 1994
Mutual recognition of licenses & authorisations to provide services; Directives in telecommunications and satellite services sectors	Currently before the Council and EP for discussion and decision	end 1994/1995
Satellite communications : liberalisation of satellite services and terminals	Commission Directive (art.90) in consultation with Council	1994
3. Applications		
IDA : guidelines and action plan	EP and Council to adopt	end 1994
Specific R&D programme on Information Technology	Council to adopt	September 1994
Specific R&D programme on Telematics applications	Council to adopt	September 1994

Measure	Decision-making process	Calendar
I. REGULATORY AND LEGAL FRAMEWORK		
1. Towards a competitive environment		
Communication on infrastructure liberalisation: principle & timetable	Adoption by Commission	September
Green Paper on infrastructure liberalisation implementation measures	Adoption by Commission	end 1994
2. Standardisation, interconnection and interoperability		
Communication on wider use of standardisation to support EU policy	Adoption by Commission	October 1994
Proposal for adaptation of ICT standardisation policy	Commission's proposals	1995
Updating ONP framework (organisation; standardisation)	Commission's proposals	end 1995
Interconnection Directive (updating ONP Framework)	Adoption by Commission	1995
3. Tariffs		
Report on the principles governing the financing of Universal Service	Consultation with MS; report to EP and Council	end 1995
4. Worldwide Dimension		
Global Information Society promotion	G7 ministerial level meeting	November 1994
5. Intellectual Property Rights (IPRs)		
Green Paper on IPRs in the information society	Adoption by Commission	early 1995
Directive on private copying	Adoption by Commission	1994
7. Electronic protection, legal protection and security		
Communication on security issues and role of Member States,	Adoption by Commission	1994
Follow-up to INFOSEC	Adoption by Commission	September 1994
Harmonisation of Member States legal provisions relating to unauthorised access	Commission's proposals	1995
Green paper on the legal protection of encrypted broadcasts	Adoption by Commission	1994
8. Media ownership		
Communication to Council and EP on follow-up to Green Paper on media pluralism	Currently under consideration by the Commission before adoption	July 1994
9. Competition		
Measures on the use of alternatives and cable TV networks for non-reserved services	Adoption by Commission	
10. Audiovisual		
"Television without Frontiers" Directive, revised Council Directive	Adoption by Commission	1994
II. NETWORKS, BASIC SERVICES, APPLICATIONS AND CONTENT		
1. Networks		
Follow-up to Communication on access to space segment	Proposal for Council Resolution	end 1994
Establish overall framework covering all telecom-related issues	Commission's proposal	1995
Communication on follow-up to Green Paper on mobile & personal communications	Adoption by Commission	end 1994/early 95
	First discussion before Council	November 1994
3. Applications		
Communication on Telematics applications for transports in Europe	Adoption by Commission	1994
4. Content		
Follow-up to IMPACT programme	Commission's proposal	1994
Follow-up to the Green Paper on audiovisual	Commission's proposals	1994
III. SOCIAL, SOCIETAL AND CULTURAL ASPECTS		
Analysis of conditions for optimal exploitation of new sources of employment and guidelines to facilitate eco. and soc. adaptation		
Report outlining the needs and effective options to develop flexible organisational structures in enterprises	Adoption by Commission	1994/1995
Communication addressing European linguistic issues and means to stimulate the emerging language-based industry	Adoption by Commission	end 1994/ early 1995

Annex 3 : Possible partnerships

The following table recaps all those initiatives of a non-procedural nature which aim at providing or stimulating partnership amongst the various actors, be they public or private sector, institutions, and users.

Sector and scope of the initiative	Action foreseen /Calendar
I. REGULATORY AND LEGAL FRAMEWORK	
<p>2. Standardisation, interconnection and interoperability Standardisation policy: bringing all concerned actors together to review the European standardisation policy</p>	Workshop with all concerned parties to be held in November 1994 and wide consultation
<p>4. Worldwide dimension Improve international cooperation on information society related issues through the promotion of join initiatives</p>	launching of joint EU-US projects (eg, World Wide Web, teleworking, telematics for the environment); interoperability workbench; information security
<p>10. Audiovisual Advanced Broadcasting : Implement the 1993-1997 Action Plan on advanced TV services and the development of new TV digital services</p>	Commission's continued action with sector's actors; support activities carried out within the Digital Video Broadcasting forum
II. NETWORKS, BASIC SERVICES, APPLICATIONS AND CONTENT	
<p>2. Basic services Promoting closer concertation on common services and functional specifications and on means of introducing them</p>	Commission's proposal for the establishment of a European Forum for Basic Services
<p>3. Applications Promotion of European-wide implementation and deployment of applications; priority areas identified by the "Bangemann report" and endorsed by the Corfu summit</p>	Combination of different means involving public and private sector's actors, including round tables, steering committees, fora, call for intentions and ideas
Pursue ongoing work in specific domains	Telematic services for SMEs; transport telematics; trans-European public administration networks; electronic tendering
Research & Development effort to ensure a sound technology base for the development of the Information Society	Community RDT Framework Programme and specific programmes, eg, launching call for proposals in advance communications, information technology and telematics sectors before end of 1994
Take full advantage of the opportunities offered by TransEuropean Networks	Carrying out feasibility studies, preparing schemes for interest rebates and loan guarantees
Make best use of the 1994-1999 CSFs and SME initiative	Eg, support information infrastructure building for telework and distance learning centres
III. SOCIAL, SOCIETAL AND CULTURAL ASPECTS	
Advise Commission	High Level Group of Experts
To maximise the economic, societal and cultural benefits of the introductions of new technologies and master the risks	Bringing all concerned parties together in a Colloquium
IV. PROMOTION ACTIVITIES	
Stimulate reflection and initiatives from citizens, users, public and private bodies; promote awareness and sensibilise the largest possible audience	Disseminating information early in Fall 1994, through publications, information days, conferences, multimedia demonstrations