# Networks for People and their Communities

# Making the Most of the Information Society in the European Union

## First Annual Report to the European Commission from the Information Society Forum

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## Contents

# Introducing the Information Society Forum

The European Commission decided to set up the Forum in February 1995 in order to create a new and authoritative source of reflection, debate and advice on the challenges of the Information Society. Firmly believing that the new information and communications technologies must meet the needs of all citizens, as well as business, the Commission wanted opinions on policies and priorities from a broadly based group of representatives.

The 128 members of the Forum were appointed by the Commission, half on the nomination of the Member States and half selected by the Commission. They are drawn from five main fields of activity:

- **users of the new technologies**: industry (banks, retail, maritime etc), public services, consumer groups, small and medium-sized enterprises and the professions
- **social groups**: academics, employers organisations and trade unions, youth groups, regional and city representatives
- **content and service providers**: publishers and authors, film and TV producers, broadcasters, computer software producers and information service providers
- **network operators**: fixed telecommunications, cable TV, mobile and satellite operators
- **Institutions**: members of Parliament, of the Economic and Social Committee of the Committee of the Regions and the data protection Commissioner.

The Forum met in plenary session for the first time in July 1995 and decided to divide its membership into six working groups whose reflection and analysis would focus on:

- the impact on the economy and employment
- basic social and democratic values in the "virtual community"
- the influence on public services
- education, training and learning and in the Information Society
- the cultural dimension and the future of the media
- sustainable development, technology and infrastructure

Subsequent plenaries were held in January and June 1996.

The working groups met for the first time in September 1995 and then on three subsequent occasions in November 1995 and in March and May 1996. Their members provided a large number of very useful written contributions to the reports of the individual groups which are available in a supplementary report to the Forum's first Annual Report. Summaries are annexed to this report.

**Copies of the Forum's first Annual Report and of the supplementary report (working group's reports) can be obtained from the Information Society Forum Secretariat (European Commission,**

**Information Society Activity Centre, 200 rue de la Loi, BU-24 2/70, B-1049 Brussels. Fax: +32 2 295 06 88, E-mail: Fabrizia .de rosa@bxl.dg13.cec.be). The full texts are also available on the ISPO web server at: URL: http:/www.ispo.cec.be/infoforum/pub.html.**

# Introducing this Report

The Forum's primary aim in producing this report is to draw attention to the major issues that will affect peoples' lives as we move more rapidly and completely into the Information Society. This new society is being developed and driven by the market for new information and communications technologies and services. The Forum believes that issues affecting peoples' lives are vital elements in the process of change. If they are taken into account, economic development will be strengthened to the benefit and prosperity of all.

We hope to be able to involve ordinary people from all walks of life in discussing changes which we, like others, believe are revolutionary. We are firmly convinced that Europe will not successfully apply the new information and communications technologies unless public discussion is wide and deep, and unless people are involved in making decisions on such key matters as protection of privacy, rights of access to public information and redesigning our educational systems for the radically different needs of tomorrow.

The costs to Europe of failing to adapt swiftly and efficiently will be very high. We shall not only see a growing competitive weakness in relation to the US and the leading Asian economies but also the threat of widespread social alienation.

Those that have undergone profound changes in their social and working lives will feel betrayed if the expected economic and potential social benefits do not fully materialise. Their discontent will add itself to that of very large sections of our societies who either cannot or will not exploit the new technologies because we have failed to respond to their needs.

That is why much of our future economic and social stability depends on how we manage the most profound and far-reaching technological change since the inventions of the steam engine and electricity.

This preoccupation is at the heart of our report and explains why we believe that we have to create confidence in progress in order to mobilise popular support for the Information Society. This support will only be forthcoming if we put people first. The Information Society has to be for everybody. It cannot be for a few.

*Inevitably, this report cannot represent in every detail the precise views of all members of the Forum. However, its contents have been generally endorsed at a plenary meeting as an accurate reflection of the consensus among members on all major issues that have been under discussion*

# Executive Summary

1. The Information Society involves everybody: the new information and communications technologies have been invented, they will fundamentally change the ways we live and work together and we cannot turn the clock back. Understandably, people are worried about their impact and want answers to questions about what they will mean for employment, social protection and existing styles of life and work.

2. Neither our people nor our institutions nor most of our companies are really prepared for the new technologies. For as long as it lasts, this state of unreadiness will be a serious handicap on Europe's capacity to gain the potential benefits they offer - higher economic growth, more employment and a better quality of life.

3. Ordinary people, and not just business, have a vested interest in the transition to the Information Society and they should be involved more in managing the process and in developing useful applications. More needs to be done to make people aware of the risks as well as the opportunities.

4. The Forum has identified some important keys to a successful transition which include more public awareness of the information revolution, better education in the use of the new technologies, popular involvement in designing new services and applications, universal public access to basic on-line services such as public information, education and health and a greater readiness by governments and public authorities at all levels to assume their responsibilities.

5. The Information Society must become the "Lifelong Learning Society" which means that the sources of education and training must be extended beyond the traditional institutions to include the home, the community, companies and other organisations. The teaching professions need help to adapt to the changing situation so that the new opportunities can be fully exploited.

6. Without the right policies and a readiness to stimulate public awareness and participation, we shall run the risk of creating classes of information "have-nots" and "want-nots". Everyone needs an easy familiarity with the new information appliances (personal computers, interactive televisions, video telephones etc.) together with services and applications which are useful and relevant for personal and business needs and which are available at affordable prices.

7. Access to on-line public services and information should be universal. The new technologies offer great opportunities to enable public administrations to respond to peoples' needs more efficiently and flexibly. But their cultures and organisations are major obstacles to progress.

8. The new technologies could have extraordinarily positive implications for our democracies and individual rights by strengthening pluralism, access to public information and enabling citizens to participate more in public decision-making. But these benefits will have to be secured by making sure that the necessary legal guarantees are in place. Some will have to be invented *ex novo*, others will be adaptations of existing laws.

9. Information is not a good or service like any other, it is frequently an expression of cultural identity. The Information Society could give birth to a "Second Renaissance" in Europe based on a fuller and more enriching exploitation of its cultural and linguistic diversity. More traditional forms of media will remain important, but the new technologies will give each person the possibility of more extensive access to their own and other cultures.

10. In order to maximise the job-creating benefits of the new technologies as quickly as possible, it is essential and urgent for companies and organisations of all sizes to adapt their organisations and structures. Until this process is well underway, the Information Society looks likely to destroy more jobs than it creates.

11. Teleworking offers many job-creating possibilities and attractive improvements in working lifestyles. Although it raises many important issues for labour laws and collective bargaining, public policy must facilitate, not obstruct, the development of telework. Promoting a mix of home and office telework is an effective way of handling fears that telework exclusively in the home may be too isolating.

12. Sustainable development aims at achieving a balance between our consumption of resources, and the ability of our natural systems to sustain it at levels which do not rob future generations of their resource needs. The new information and communications technologies could make a vital contribution to sustainability providing we do not succumb to a "rebound" effect by which they create new demands for material consumption.

13. The growth of consumer markets for interactive services will continue to be slow unless public authorities themselves become a stronger source of demand, and unless they encourage greater private sector investment. Generally, popular demand for on-line services will be subdued until

there is a wider understanding of their actual and potential benefits. At the same time, applications and services must be useful and affordable.

14. The “Learning Company” must emerge as a vital component of the “Learning Society”, People who work in it will be using their electronic access to knowledge and information to update their skills. This requires new forms of partnership between businesses and other organisations and educators to ensure that the new and changing skills required are made available.

15. A regulatory framework which enables and stimulates everyone to reap the full economic and social benefits of the Information Society is an important priority. The essence of the task is to strike a balance which encourages market forces to lead the way, but which also recognises that they cannot do the job alone. Among other things, regulations must strengthen competition, pluralism and democracy, preserve and promote European cultures, including minority cultures, avoid monopolistic positions, guarantee open access to networks for content providers and guarantee consumers’ rights and protections.

# Chapter One:

# Creating Confidence in Progress

Revolutions are frightening, even for their most ardent supporters. They bring disruption, distress and destruction; human lives and an established social order are turned upside down. We are now living through a technological revolution which, while it does not threaten death and destruction, does carry with it fundamental changes in the way we live and work together.

Quite justifiably, many people are deeply worried about the impact of this upheaval on their lives, on those of their children and on society at large. They are suspicious, even alarmed, because they are powerless to resist it. They have questions that they want answered:

***People want to know***

**Will there be more jobs in the Information Society or even more unemployment than we have at the moment?**
**What use is it to me and what will the practical benefits be?**
**What will happen to my job and my life if I cannot handle a computer properly?**
**Can I be sure that my privacy and that of my family will not be invaded?**
**Will I be forced to do my job at home, alone with just a computer for company?**
**Will my children live most of their lives as part-time workers? What sort of social protection can they look forward to?**
**What is the point of having greater access to information if most of it is in a foreign language I cannot understand?**

These and many other concerns are worrying people, as they have preoccupied the Forum during its first year of work. We would like to offer reassuring answers to every concern, but we are not in a position to do so. We are convinced that the Information Society can deliver more economic growth, more employment and more quality of life. However, this will not happen spontaneously and may not happen at all if we mishandle the process.

**Finding the right responses**

***Consumers and citizens must be actively involved***
We have to find the right responses and we have to be much more active in addressing the obstacles. This will only be possible if there is dialogue and if decision-making is greatly extended beyond the normal realms of governments, public administrations and vested interests of various kinds. All of us have a vested interest in how we make the transition to the

Information Society The Forum is convinced that the more that consumers and citizens are actively involved in building the Information Society, the swifter and broader will be the public's acceptance and exploitation of the new technologies.

We need to feel a sense of urgency, because the revolution is upon us. The Information Society is already part of many lives and at the heart of many economic activities:

**If we use fax e-mail** we have a toe in the Information Society
**If we surf the World Wide Web** we have a foot in the Information Society
**If we work, learn and communicate with colleagues through a network** we are in the Information Society.

Internet users today total around 55 million - **authoritative estimates expect 500 million by 2000, employing 100 million computers and 1 million networks. Business transactions over the Internet are forecast to rise from $400 million to $1,000 billion in the same period.**

**The way forward**

Clearly, there is no going back. The only way forward is through a proper understanding of the risks and turning them into opportunities. That is the way to create confidence in progress.

***Europe can be world class***
- The European Union is already lagging behind the US in exploiting the new technologies to achieve higher productivity, a faster rate of invention and scientific discovery and the creation of new products.

***If***
If we accept the challenge, the ground can be made up. Fully committed to the Information Society, Europe's single market can be a source of new products, new wealth and new jobs.

***People could be included, not excluded***
- We could have vast numbers of people living at the margins of the Information Society, unable to find their place and denied access to information for a variety of reasons. These might include the cost, the difficulty of handling the information appliances, an inability to see the usefulness of the applications and services on offer or because they reject the new technologies.

***If***
If we create life-long learning systems and decide that access to the skills and information that people need will be universal and affordable, then

there will be more jobs, more social cohesion and more personal fulfilment.

***Citizens' rights could be strengthened***

- Our democracies could be threatened by unscrupulous governments using the power of the new information and communications technologies to snoop into peoples' lives, to keep a detailed file on every citizen and to manipulate public information for their own purposes.

Similarly, in the private sector there is a strong commercial interest in monitoring the on-line activities and transactions of citizens, building detailed consumer profiles which can then be used for a wide range of purposes (e.g. marketing, credit decisions) for which the data were never intended.

***If***

If we pass the appropriate laws and create the right mechanisms, then the citizen can be more involved in public policy making, have more control over those in power, obtain full access to the widest possible range of public information and still enjoy the legal rights to privacy, anonymity and pursuit of complaints against the authorities.

## Making progress happen

***Progress must be sustainable***

The progress we desire is something we must make happen. It also has to be the right kind of progress. We have damaged our planet's ecostructure and are rapidly depleting many of its precious resources. Progress which does that cannot be real progress.

Thankfully, the new information technologies do not do that. To some extent they "dematerialise," which means they enable many goods and services to be produced with fewer materials. A computerised newspaper, for example, can save on the consumption of trees for newsprint, while electronic engine control can reduce both motor vehicle fuel consumption and atmospheric pollution.

***Knowledge is power***

By providing access to knowledge in all its various forms, be they great works of art or public archives or a new scientific discovery, the new information and communications technologies give fresh substance to the cliché "knowledge is power". They can deliver to people more powers of control over their lives - the power to decide when to work and when to take leisure; to create and distribute content over electronic networks and to exploit knowledge for self-development.

## Understanding infrastructure

The capabilities of the new technologies mostly derive from the simple fact of digital technology: words, sounds and pictures can be converted into digital messages in the binary code of 0s and 1s. This code is the

language of computers that are able to store and transmit digital messages in huge quantities, more quickly and efficiently than ever before.

Once, sound was carried exclusively by telephone or radio transmission, and sound and pictures by television signals. Text usually needed a postal service or courier. Now, thanks to digital representation, people exploiting computer power can simultaneously transmit and receive words, sound, pictures and data via coaxial and fibre optic cables, or via radio and satellite systems. "Multi-media" text, sound and image can be exchanged interactively via any one of these infrastructures or by using a combination of them.

To some extent, this will free us from the limitations of time and space. Provided we have access to an information appliance (which may be a personal computer, an interactive television, a video telephone or some other personal communications device) we will be able to communicate, organise and process information when we want, for whom we want and, increasingly, wherever we want.

***Still only a vision***

This description is still more vision than reality, and it is a vision which arouses both fear and boredom. The vast majority of people does not yet seem ready for it, and neither are our societies:

- infrastructures are not fully developed
- services and products for use in our daily lives are not yet available
- private investors are reluctant to commit funds until they are sure the demand is there
- public administrations are adapting too slowly
- the legal framework to encourage and facilitate use of the new technologies is still not fully in place.

**Keys to success**

The Forum has been grappling with these and other problems and will continue to do so throughout its three-year mandate. There are few simple solutions. But there are some keys to success, and those we have managed to identify are:

- **people must be made aware of the implications of the information revolution**
- **they must be educated in the use of the new technologies**
- **they must be involved in designing and implementing the new easy-to-use electronic services and applications**
- **these services and applications must be easy to use and in line with real-life needs**
- **public access to basic electronic services (such as public information, education and health) must be universal and affordable**

- **free and open information should be the norm, not the exception**
- **the new technologies must contribute to sustainable development**
- **while markets must drive most developments, public interests must be safeguarded**
- **responsibilities must be clearly allocated to the various levels of government (EU, national, regional and local) and these levels must assume their responsibilities**

## Chapter Two:

## Putting People First

The Forum firmly believes that sovereignty in the Information Society must belong to the people - their preferences should determine its uses and how the new technologies will be applied. It follows that we must enable people to be the masters of these technologies, not their servants.

The Forum wishes to link this imperative to the opportunity provided by the new technologies to strengthen the meaning of European citizenship. The Information Society raises new issues about civil rights and democratic values; we wish to see them resolved on a common European basis.

Our reflections can be summarised around six propositions:

**1. The pace of change is becoming so fast that people can only adapt if the Information Society becomes the "Lifelong Learning Society". In order to build and maintain competitive economic advantages, skills and talents must be constantly reshaped to meet the changing needs of the work place, wherever that is. These skills and talents will also have broader opportunities for expression because the Learning Society will offer unprecedented possibilities for personal development and fulfilment**

**2. Noone should be excluded from the Information Society: we must not tolerate people becoming information have-nots or want nots, in Europe and elsewhere**

**3. Governments should commit themselves to a broadly-based improvement of the quality of life for ordinary people assuring the electronic provision of public services**

**4. Our democracies are faced with new opportunities and risks: we can revitalise them by bringing people into decision-making and enabling them to exercise a closer scrutiny over the acts of government. Or we can allow the Information Society to become the "Snooping Society" and suffer a loss individual liberties by failing to safeguard such basic rights as privacy and freedom from intrusion**

**5. Much more effort should be devoted to raising peoples' awareness of the issues and opportunities raised by the Information Society and to involving them in the debate on how to respond to the challenges**

**6. The Information Society could give birth to a Second Renaissance, with a new flowering of creativity, scientific discovery, cultural development and community growth.**

**1. The pace of change is becoming so fast that people can only adapt if the Information Society becomes the "Lifelong Learning Society". In order to build and maintain competitive economic advantages, skills and talents must be constantly reshaped to meet the changing needs of the work place, wherever that is. These skills and talents will also have broader opportunities for expression because the Learning Society will offer unprecedented possibilities for personal development and fulfilment**

These statements cannot be repeated too often. They mean that during the course of a human lifetime, education and training will be acquired not only from traditional educational institutions, but also from the home, from the community and from companies and other organisations. Training and upgrading skills will be an essential ingredient for corporate competitiveness, especially for SMEs.

***Adapting many compulsory school systems will be very difficult because of their size and traditional inertia***

The Forum believes that education and training must be swiftly reoriented so that learning institutions are much more responsive to changes in the skills needed by businesses and industries. This is a key to job creation and will have to be part of a wider restructuring of education systems. However, we are very concerned about the barriers to the fundamental changes that are needed. These include:

- resistance to change within educational systems and to changes of role within the teaching professions
- the inability to develop learning systems based on information technologies because of shortages of hardware and software in schools and colleges
- the huge challenge of equipping teachers with the new tutorial skills needed to make the best use of the information technologies
- lack of adequate software for teaching courses
- the differing approaches of Member States to the deregulation of telecommunications is helping to delay the early use of information technologies and the development of an educational software market.

By contrast, further and higher education institutions appear much less handicapped. In many Member States, they are beginning to lay the foundations for the learning communities of the future.

***Education must now be built around learning, not teaching***

We feel sure that education has to move from teacher-centredness to learner-centredness. Among the urgent tasks challenging us are the needs

to promote good practice in training teachers to use information technologies, to investigate the potential for distance learning and its practical applications, and to stimulate the production of educational software and courseware.

**Recommendations to the European Commission:**

1) Establish what Member States are doing to introduce the new technologies in the public education and training sectors so that the Commission's own activities and those of the Information Society Forum can coordinate with them

2) Examine the education and training implications of the EU's range of Information Society activities and disseminate to educators a comprehensive and integrated view of the issues and initiatives

## 2. Noone should be excluded from the Information Society: we must not tolerate people becoming information have-nots or want-nots, in Europe and elsewhere

This objective twins as a priority with life-long learning because we shall create millions of have-nots and want-nots if we do not help people to adapt to the Information Society or if its technologies do not meet their real needs. It is vital for future social stability, economic development and cultural vitality.

***New qualifications are emerging for a full and economically active life***

New qualifications for a full and economically active life are emerging which are as basic as reading and writing. One is that people must have the confidence to use "information appliances" (personal computers, interactive televisions, video telephones etc) with easy familiarity. Another is that they must have access at affordable prices to these appliances and the services they make available. This is by no means guaranteed since the new services will be mostly financed by subscriptions and could be an expensive item for consumers.

We fear that too many services will be beyond the financial reach of too many people. We believe that they will continue to look to public service broadcasters to supply what they need within the cost of the annual license fees - a funding system which works well and is independent of market forces.

How to combat exclusion and rejection of information technologies? Teaching computer literacy is, of course, part of the answer - but only a part. Know-how will be redundant if the information appliance cannot access multi-media applications and services. And these must be relevant and useful to people over a broad range of their activities.

We are hopeful that teaching, combined with the large steps software producers are making towards much more user-friendly appliances, applications and services, will enable most people to operate the new technologies (the needs of some disabled must be specially studied and catered for). But we doubt whether in a short term every home can be wired up for interactive multi-media which raises the danger of discrimination against certain social groups, localities and regions.

***Local access points are needed to allow everyone to plug into the networks of knowledge and information***

Meanwhile, the Forum sees three ways of minimising the dangers:

(i) a commitment by governments to make basic interactive services (public information, education and health) available to all, irrespective of geographical location and at affordable prices for all. This is the essence of universal service

(ii) creation of local access points at public libraries, schools and other community meeting places for people who cannot access from home. This would approximate to universal access

(iii) extending the public service mission of public service broadcasters to electronic information services and ensuring the delivery of these services by "must carry" obligations

Obviously, universal service imposes a financial burden and the Forum intends to work on some recommendations on this and other aspects during the coming twelve months.

**Recommendations to the European Commission**

3) Mount research, pilot projects and public information campaigns with the following objectives:

- to increase public awareness of the social consequences of change, highlighting dangers as well as opportunities
- to examine how information technologies can better meet individual consumers and to encourage their greater use, and in particular,
- to establish how best to ensure that people with disabilities have equal access to the Information Society

## 3. Governments should commit themselves to a broadly-based improvement of the quality of life for ordinary people by assuring the electronic provision of public services

***There must be universal access to on-line public services and public information***

The Forum has no doubt that there must be universal access not only to on-line public services but also to on-line public information. Public

authorities must make services generally available and ensure that people have the technical means to go "on-line". This is the route to:

- better quality services that respond to peoples' needs and are accessible to everyone
- more efficient public administration
- much greater public access to information
- a democratic bonus that allows people to manage rather than be managed in their relationships with public authorities
- more efficient working of the single market and of common policies through electronic links between national and EU administrations

As elsewhere, the obstacles are serious, and determined strategies will be needed to overcome them. Public administrations are hierarchical and vertically integrated, their employees are bound by inflexible procedures in a culture which does not stimulate horizontal cooperation. Too many public data banks are designed for administrative, not public use, while the individual's rights of access to many kinds of information are at best obscure, at worst highly restricted or completely denied.

Technical difficulties also obstruct the way forward. As a matter of priority, technical systems must be quickly standardised so that networks and services can work together and pass information smoothly between administrations, and between them and the citizen. Public procurement policies should be more active in promoting common standards and in developing services for the citizen. Clearly, trans-European networks linking public administrations are also an important motor for both standardisation and new services - for example, informing people on job opportunities in other Member States.

***The public's need for on-line services is unlikely to be fully satisfied by market forces***

The Forum sees the public sector's move into the Information Society as giving a valuable stimulus to the creation of both content and software. While the public's need for on-line services is unlikely to be fully satisfied by market forces, there will be attractive opportunities for companies to use wide varieties of public information as a raw material for added-value services, perhaps in some cases sharing risks and project financing with the public sector. Such is the pressure on public budgets that without private finance and entrepreneurial drive, the pace of innovation is bound to be slow.

**Recommendations to the Commission**

4) Promote a common legal framework:
- guaranteeing the citizen's full rights of access to public information at acceptable cost
- setting limits on the obligation of public authorities to supply information
- defining the relationship between public and private investors

5) Encourage the standardisation process by concentrating on the functional specifications of communication systems and harmonised message formatting and user commands

6) Promote appropriate solutions for public services requirements through EU research and development and other programmes (e.g. INFO 2000) to speed up the interchange of data between Member States' administrations (IDA programme) and explore the concept of a "zone of free regulation" in which innovative initiatives can be tested which might otherwise be blocked by existing regulations. Rules on privacy and data protection must, however, be respected

7) Launch EU-wide awareness raising initiatives including public kiosks at which individuals can access on-line information, and a European Citizens' Card. This could be multifunctional and carry a range of information which must, however, be compatible with data protection and privacy requirements

8) Promote electronic tendering by fixing a percentage of all procurement which must be handled electronically

## 4. Our democracies are faced with new opportunities and risks: we can revitalise them by bringing people into decision-making and enabling them to exercise a closer scrutiny over the acts of government. Or we can allow the Information Society to become the "Snooping Society" and suffer a loss of individual liberties by failing to safeguard such basic rights as privacy and freedom from intrusion

***Extraordinarily positive implications for our democracies and individual rights***

A majority of the Forum takes the view that most discussion of the Information Society tends to focus on creating the conditions for its economic exploitation without giving proper attention to the conditions for sustaining democratic and individual liberties.

The new technologies could have extraordinarily positive implications for our democracies and individual rights. They could:

- guarantee pluralism of opinion and information
- strengthen citizens' rights of access to public information

- provide that access instantly
- enable citizens to participate more in political decision-making and to scrutinise governments
- empower people to become active producers of information rather than passive consumers
- enhance privacy and the anonymity of personal communications and transactions

***Used properly, information technology can empower ordinary people and their communities***

We see opportunities for a more direct democracy within Europe's existing political structures, albeit with some risks of government which is more reactive and vulnerable to powerful interest groups with easy access to advanced technologies. Used properly, information technology can empower ordinary people and their communities, putting them more in control of their working lives, allowing them a fuller exercise of their rights and an outlet for their creativity.

However, these, like so many other potential benefits, will not arrive spontaneously. They have to be secured, partly by ensuring that the necessary legal guarantees are in place. Some will have to be invented *ex novo,* others will be adaptations of existing laws.

We are also aware that the Information Society can narrow people if they exercise only their rights of *access* and not of *search.* They could immerse themselves totally in their most intense personal interests and completely ignore information on what is happening in their communities, their countries and the world outside.

Because the Information Society is a worldwide phenomenon, values important to Europeans cannot be defended and developed by action at European level alone. Privacy and data protection are good examples of a field in which Europe has a rich tradition and for which the EU has recently adopted a framework directive.

The Commission and the Member States must now play an active role internationally to ensure that the principles held dear in Europe are increasingly recognised in other countries and reflected in the reality of tomorrow's global Information Society. Action will be required in the appropriate international fora such as the United Nations or the World Trade Organisation to achieve the necessary binding legal instruments, together with parallel technical work to ensure that international standards take fully into account data protection and privacy concerns.

***Priorities for legal protection***

The Forum has identified the following as priorities for legal protection:

(i) freedom of expression - existing laws and standards must be applied to electronic communications and new ones developed where necessary
(ii) freedom of information - common EU laws based on the highest prevailing standards of openness

(iii) the origins and ownership of all information made available for public consumption must be revealed
(iv) individual privacy and anonymity (data protection and restricted rights of public authorities to monitor personal communications)
(v) encryption -both business and the individual need security of communications and the use of "keys" to unscramble coded messages.
The Forum wants to see an EU-wide regulation which gives equal legal status to digital and handwritten signatures and which imposes transparent procedures on public authorities seeking access to decryption keys.
Reliability of encryption can be secured if keys can be lodged with non-commercial public trust centres, independent of governments and public administrations
(vii) protection of minors and moral and ethical values

**Recommendations to the Commission**

9) Establish an Information Action Plan to stimulate public awareness and wider participation in the democratic process at the European level. This programme could include:

- a European Voter Information Project
- a European Consumer Information Project
- a European Social Charter Information Project
- a European Business Hotline
- European Electronic Information Centres
- providing affordable on-line access to all official EU documents
- research into the current state of "electronic democracy" in Europe, focusing on how popular participation can be funded from private or public resources

10) Rights of access to public information should be guaranteed through common freedom of information laws in all Member States and harmonisation, where necessary, should be according to the highest prevailing standards of openness

11) A legal framework is required to ensure:

a) that existing laws and standards (and new ones where needed) which protect freedom of expression, defend cultural rights and reflect community values apply to all information services available for public consumption.

b) that the individual's right to privacy and anonymity is protected

c) that information providers to the public are obliged to make known the origins and ownership of all material

12) Create reliable encryption procedures based on lodging the keys to encryption with independent and separately regulated public trust centres outside the mainstream of commercial activity. There will be a need for European guidelines for such procedures and European-wide certification arrangements.

**5. Much more effort should be devoted to raising peoples' awareness of the issues and opportunities raised by the Information Society and to involving them in the debate on how to respond to the challenges**

Each of the Forum's six working groups stressed this point and each of them produced ideas for awareness-raising for the particular areas they were dealing with. Suggestions common to all include:

- active dissemination of knowledge of best practices e.g. education and training, on-line public services, job creation
- greater use of pilot projects to demonstrate feasibility, raise awareness and generate entrepreneurial initiative e.g. special measures for the disabled
- involvement of end-users in the design of new services and in the development of appropriate standards and useful applications
- much more research into current policies and trends and future impacts.

**Recommendations to the Commission and Member States**

See Nos: 3,7,9,15,18,21,22,23,24

**6. The Information Society could give birth to a Second Renaissance, with a new flowering of creativity, scientific discovery, cultural development and community growth.**

***Bear in mind what is already starting to happen***

This is not another example of the "hype" which marks some discussion of the Information Society. It is conditional on overcoming the obstacles and achieving the objectives which are defined here and will be developed in subsequent reports. It is also the product of careful observation and reflection on what is already happening.

Pilot projects reveal that slow learners in schools do better with the help of information technologies, that telematics can restore greater tranquillity and safety to transport, that the Internet is encouraging people to form creative cyber-communities, that teleworking improves quality of life.

However, information is not a good or service like any other, it is frequently an expression of cultural identity. Definitions vary, but the Forum likes the very inclusive view of culture offered by the British anthropologist, Edward Taylor, in 1871: "the complex whole which includes knowledge, belief, art, morals, law, custom and other capabilities and habits acquired by man as a member of society."

***Anxieties about the emergence of a dominant global culture***

Culture is also transmitted by media, some of which are now interactive and electronic. However, the Forum is convinced that in the Information Society traditional media such as the printed press, radio and television will continue to be important and in demand.

While sharing the view that the cultural impact of the new technologies could be enormously beneficial, the Forum is aware of anxieties about the emergence of a dominant global culture (usually a reference to the US) at the expense of national and minority cultures. We shall devote further discussion and study to this issue.

Nevertheless, many Forum members do believe that, given the appropriate legal framework, Europe's cultural and linguistic diversity will be strengthened not threatened, creating new global opportunities for information products that exploit our rich heritage. Among other things, this means we must encourage the creative and entrepreneurial initiatives of our content producers without which European products will be sadly lacking in global information markets.

With the right policies in place, the Information Society will give each person easier and fuller access to their own culture, be it in the form of works of art in museums and galleries, films, novels plays or poetry. New channels will open to disseminate minority cultures, allowing individuals and businesses the chance to create and distribute low-cost content.

Geographical communities will enjoy internal means of communication more efficient than any since the town meetings of Ancient Greece. At the same time, new virtual communities are already being created via the Internet, bonded together by multitudes of shared interests.

This vision will not be realised overnight and nor will the development be an even one across all countries and regions. The Forum warns elsewhere in this report of the "danger of discrimination against certain social groups, localities and regions" and wants active policies to contain the inequalities. It doubts that pure market forces are likely to do so.

**Recommendations to the Commission**

13) An effective legal framework is required:

a) to preserve and promote European cultures, in particular minority cultures, and to lend support to local initiatives in using the new media for expressing and developing culture and building communities

b) to safeguard non-discriminatory, fair and transparent access rights for content providers to distribution systems

c) to make available to all content providers market information gathered through control of the infrastructure they are using

d) to create property rights in information transmitted via the networks

e) to encourage the construction of communities of consumers

## Chapter Three:

## Mapping Out a Future for Job Creation and Sustainable Development

The Information Society does not threaten "the end of work" as extreme pessimists in Europe and the United States are inclined to argue. But it will change the nature of employment and erode many of the values derived from "one job, one employer" traditions.The Forum believes that if we manage the process of change in a timely and sensible way, then we shall see a more competitive, job-creating European Union.

As in Chapter Two, we have organised our thoughts and conclusions around six propositions:

**1. The new information and communication technologies will eventually create more jobs than they destroy, but the speed of delivery depends on how well and quickly we can adjust to what will be very different working and social environments**

**2. Teleworking will be the employment future for millions of people: it should not be feared, but it may need to be carefully regulated**

**3. The new technologies look likely to make a real contribution to sustainable development, but there is no guarantee that they will**

**4. The growth of markets for interactive services based on multimedia and other technologies will continue to be slow unless more is done to stimulate them**

**5. Businesses and industries must form new partnerships with educators to ensure that the new and changing skills they require are being taught**

**6. The regulatory framework is a key factor enabling us to make the most of the Information Society as soon as possible. Its development should be pragmatic with some regulations needed at EU level and others to be taken care of by the Member States**

**1. The new information and communication technologies will eventually create more jobs than they destroy, but the speed of delivery depends on how well and quickly we can adjust to what will be very different working and social environments.**

Every effort should be made to create more public confidence on this point. Employment creation is now beginning to confirm the economic theory that productivity increases due to technical innovation lead to a virtuous circle of higher growth, lower prices, rising real wages and job-creation.

***Job insecurity is now beginning to afflict the middle classes***

Nevertheless, the new technologies are for the moment seen by most people as net destroyers of jobs - especially those that are low-skilled, boring, repetitive, mechanical, unpleasant and dangerous. They are also affecting highly-skilled work as their use in the service sector expands, and at the same time changing the nature of employment in the direction of part-time and home-working.

It is little wonder that in many countries such changes are widening traditional zones of job-insecurity to include the middle classes. This need only be a short-lived transitional process if we implement the necessary structural and institutional changes without delay.

Creating a more urgent and dynamic momentum is crucial, particularly within companies. They need to be much more aware of the opportunities that will open to them if they redesign and re-engineer their organisations. They must also respond to the need to launch new innovative services and products as well as re-examine methods of work and the duration of work. Only then can we look for a balance sheet of net job creation.

However, the Forum's attempts to analyse the jobs outlook has been inhibited by the lack of a conceptual framework for understanding the phenomenon. We strongly urge that one be developed.

Far-reaching changes in the education and training systems are a basic requirement for exploiting the new technologies and raising competitiveness and job creation. In addition, the EU and the Member States must do more to encourage the development of markets for services and applications and to help people understand the historic changes they are living through.

***Companies are flattening their structures***

These are not always comfortable: under intense competitive pressures companies are flattening their structures by wiping out managerial functions and placing their responsibilities closer to markets. As part of the same process, they are removing barriers to internal and external flows of information and concentrating power, information and decision-making at the top.

This re-engineering is mainly confined to large companies, leaving small and medium-sized enterprises well behind in their adjustment to, and use of, the new information technologies. In part, this is because the software and other instruments they need is expensive and scarcely adequate, partly because they lack information on the available technologies and markets and also because of the sector's longstanding difficulties in satisfying its training requirements.

**Recommendations to the Commission**

14) Investigate the particular sources of job creation in Europe resulting from the Information Society, and the measures needed to maximise it : coordinate a set of national analyses and actions to demonstrate the ability of the Information Society to create jobs

15) Give a priority to promoting best practices by:
- identifying the best examples of job creation linked to the new technologies
- assessing current national and EU policies for disseminating knowledge of best practices
- recommending actions best suited for the promotion of best practices

16) Promote the development of a coherent conceptual framework by mandating a small team of economists and experts to analyse the economics of the Information Society, its functioning, potential and drawbacks

## 2. Teleworking will be the employment future for millions of people: it should not be feared, but it may need to be carefully regulated

***Despite the risks of social isolation, people seem to want it***

There is still much to be learned about the impact and implications of teleworking. It is an attractive and flexible means of taking work to people which could open up many new opportunities for employment. People seem to want it, even though its introduction in Europe is extremely slow.

In part, this may be due to the risks of social isolation and the creation of "ghettos" for women made possible by moving the work out of the office and into the home. Paradoxically, some demand for teleworking can already be traced to a desire among people to be able to live in and sustain small communities. In the Forum's view, policy should seek to promote a mix of home and office teleworking.

The manifest advantages of teleworking are:
- individuals gain greater managerial and organisational control over their work tasks

- economic development gaps can be narrowed when work moves to distant regions, isolated communities and developing countries
- energy is saved and traffic congestion and pollution reduced when fewer people travel to urban and city centre work places
- work can be shared between home and office
- the possibility of work can be offered to some who are presently excluded e.g. child-rearing parents bound to the home, carers looking after elderly parents, some disabled
- enables companies to grasp the opportunities presented by the information and communication technologies

***There may be a temptation to over-regulate by trying to extend all that is apparently relevant in current social legislation to teleworking***

These are powerful attractions and public policy must facilitate, not obstruct the development of telework. Fundamental changes are implied in the organisation and management of work and in the relations between employer and employees, whether or not they belong to trade unions. There may well be a temptation to over-regulate by seeking to extend all that is apparently relevant in current social legislation to this new area without leaving room for experimentation and development.

A balance has to be struck between the need to allow markets to develop and the protection of those who are employed. In particular, attention will have to be given to:
(i) developing a statutory definition of telework
(ii) changes to labour law and collective agreements
(iii) health and safety regulations
(iv) rights of access to the home for employers and regulatory inspectors
(v) rights to trade union representation
(vi) the need for global standards to avoid "social dumping" - the International Labour Office's standards for homeworkers should be applied as minimum standards for teleworkers

The important role for the EU will be to coordinate the regulatory approaches of the Member States to avoid cross-border discrimination against employees and countries and legislative obstacles to trans-border teleworking.

**Recommendation to the Commission**

17) In order to adapt the social and legal framework to speed up the development of teleworking:
- promote initiatives to create awareness about the opportunities it offers
- establish a framework for achieving a wide social consensus in Europe and in a broader international context on how to implement transborder teleworking
- encourage Member States to clarify the legal and fiscal status of various forms of teleworking
- encourage the Member States to make a coherent adaptation of the social and legal framework and to promote teleworking experiments

## 3. The new technologies look likely to make a real contribution to sustainable development, but there is no guarantee that they will

Sustainability is as important as human rights and democracy and, sadly, much less entrenched in our economic, social and political systems. It is a global requirement which can only be secured by global agreements and actions.

***Sustainable development:***

***(i) implies a concern for future generations and for the long term health and integrity of the environment***

***(ii) embraces concern for the quality of life (not just incomes growth), for equity between people in the present (including the prevention of poverty), for intergenerational equity (people in the future deserve an environment at least as good as the one we currently enjoy, if not better), and for the social and ethical dimensions of human welfare***

***(iii) implies that further development should only take place as long as natural systems can support it***

Most experts do not think that sustainable development is realistically attainable without information technologies, but nor are they sure it is guaranteed with them. Much depends on the framework in which they are used. There is a risk of a "rebound" effect whereby they could stimulate new demands for material consumption. If this happens, sustainability will be lost and we shall be faced with chaos and confrontation.

The new technologies and their applications can contribute to sustainability by:

- their requirement for relatively small amounts of materials and resources in relation to the productivity improvements they deliver
- "dematerialisation" e.g. electronic banking where transactions are conducted without paper
- making Third World development less resource-intensive
- creating "smart" transport systems, less polluting and more efficient in performance and use of material resources
- reducing mobility (by means of teleworking/homeworking, retailing and entertainment applications) and congestion, pollution and energy consumption
- environmental monitoring by means of remote sensing

Securing these benefits requires progress across a broad policy front at local, regional, national and global levels. It also means recognising that technology alone is unlikely to deliver sustainability unless accompanied by cultural and structural changes.

**Recommendations to the Commission**

18) Analyse the concept of sustainability and evaluate the impact of a shift to service-based economies. In particular:

- gather and disseminate information on the impact on sustainability of the information and communication technologies
- promote the use of the new technologies in a manner consistent with sustainability by encouraging such things as teleworking and teleconferencing

## 4. The growth of markets for interactive services based on multimedia and other technologies will continue to be slow unless more is done to stimulate them

With security of transaction problems steadily being dealt with by software development, there is an increasingly obvious imbalance between the rapid growth of new products for business markets and those applications and services available to the general public.

***A critical mass to unlock private investment is still lacking***

Demand from the public and from public administrations is still too weak to create a critical mass sufficient to unlock private investment to develop these new services. Given that initial returns on investment are likely to be low, many providers are looking to advertising to generate funds. However, the benefits to advertisers of on-line vehicles have scarcely been established and the incentives to use them may be slow to develop.

Generally, the Forum thinks that popular demand for on-line services is unlikely to emerge unless they are affordable and respond to actual needs. Their potential benefits must also be better understood. It will take even longer if we maintain the present slow pace of installation of wide band networks whose technical "muscle" is needed for rapid, good quality transmission of sound, pictures and text.

In addition to greater efforts to raise understanding, public authorities still need to take initiatives that will encourage greater private sector investment and the emergence of product markets. Growth of services needs to accelerate at a much higher rate than overall economic growth.. Some of the necessary initiatives are regulatory and are discussed in point 6 below. Others include:

- reducing network transmission charges
- using public procurement to stimulate software production and new services, notably in the areas of education and training and provision of public information and services based on public data bases
- taking active measures to involve people in the design of services targeted at them

**Recommendations to the Commission**

19) The EU must create a regulatory framework which encourages industries, labour markets and consumers to gain the full economic and social benefits of the new information and communication technologies

20) The Commission and Member States must manage infrastructure and service development by means of giving incentives to investment in new multimedia services and applications, orienting R&D programmes towards Information Society needs and developing a common understanding of universal access and universal service obligations

21) Stimulate targeted trials to enable the start up of new markets, to explore possible social benefits and opportunities and to educate potential users

22) Research and study the effectiveness of aids and tax incentives for the development of the Information Society

23) Analyse the impact of conflicting market-pull and policy-push approaches to infrastructure development and the deployment of services

## 5. Businesses and industries must form new partnerships with educators to ensure that the new and changing skills they require are being taught

***We have to create new partnerships between entrepreneurs and educators***

This is by no means the first time this vital requirement for developing and maintaining competitiveness has been highlighted in an official report. Educational institutions have to equip the young with skills appropriate for the Information Society and attitudes favourable to lifelong learning. An important component of "The "Lifelong Learning Society" will be the "Learning Company" whose computer-literate members and employees will be using their electronic access to knowledge and information to update their skills.

This vision needs emphasising because the framework needed will take a long time to achieve, and we do not see enough evidence that the issues are being strategically addressed by the Member States.

**Recommendation to the Commission**

24) Identify and disseminate good practice in the electronic integration of business organisations and integration between school communities, businesses and other partners

## 6. The regulatory framework is a key factor enabling us to make the most of the Information Society as soon as possible. Its development should be pragmatic with some regulations needed at EU level and others to be taken care of by the Member States

***The essence is to strike a balance which encourages the market while protecting vital public interests***

The priority is to create a regulatory framework which enables and stimulates everyone to reap the full economic and social benefits of the Information Society, from producers and carriers of content to end users. The essence of the task is to strike a balance which encourages market forces to lead the way but which also recognises that they cannot do the job alone. As we have already pointed out in this report, there are important matters of public interest to be promoted and protected so as to preserve pluralism, minority cultures and democratic rights.

Competition is a vital driving force and a guarantee of freedom of expression and pluralism. Media conglomerates must not be allowed to dominate, and the extent to which they are allowed to integrate vertically the production and distribution of content may threaten freedom and pluralism. Companies in control of infrastructure should not be able to use their positions as "gatekeepers" to discriminate in favour of their own services.The Forum is concerned that concentrations that may be very difficult to alter are already threatening pluralism and universal access.

The issue of intellectual property rights (IPRs) proved to be one of the most controversial and intractable dealt with by any of the Forum's working groups. In general terms, the Forum is in favour of a high level of protection for authors and the holders of related rights.

***Different approaches to protecting intellectual property rights***

However, two different approaches emerged on how best to afford this protection: one group supported the continental European model of "droit d'auteurs", including its notion of moral rights; the second group favoured the Anglo-American system of copyright law which vests intellectual property rights in the user-producer. Further work will be needed in the next 12 months before we can reach any final recommendations and conclusions.

The regulatory issues we wish to see addressed in a coherent way throughout the EU include:

(i) media concentration. We are particularly concerned to prevent the establishment of monopolistic positions at national and EU levels based either on a high degree of vertical integration, or power to condition access to infrastructure, or both. We do not believe that public broadcasters should be subject to any media concentration rules

(ii) clear definitions of legal responsibilities of the carrier and service

provider

(iii) the need for a new legal framework to ensure open access to networks for content providers, fair transactions and to prevent anti-competitive behaviour

(iv) the need for clear and fair systems of consumer redress and compensation

**Recommendations to the Commission**

25) Create legal safeguards for competition at all levels of the information value chain to prevent the establishment of monopolistic positions which may restrict pluralism and the free flow of information, services and programmes. Such rules also need to address the phenomenon of vertical integration

26) Introduce regulations to prevent anti-competitive behaviour, especially by network "gatekeepers", and to ensure that navigational systems for using hundreds of different television channels are designed to be fair and non-discriminatory

27) Encourage and ensure the active participation of media organisations, including public service broadcasters, in the new technologies and services so as to protect cultural diversity, pluralism and democracy in the Member States

# Chapter Four:

## Summary of Recommendations

### Towards the Lifelong Learning Society

**Recommendations to the European Commission:**

1) Establish what Member States are doing to introduce the new technologies in the public education and training sectors so that the Commission's own activities and those of the Information Society Forum can coordinate with them

2) Examine the education and training implications of the EU's range of Information Society activities and disseminate to educators a comprehensive and integrated view of the issues and initiatives

### Access to the Information Society for everybody

**Recommendations to the European Commission**

3) Mount research, pilot projects and public information campaigns with the following objectives:

- to increase public awareness of the social consequences of change, highlighting dangers as well as opportunities
- to examine how information technologies are used by individual consumers and to encourage their greater use, and in particular,
- to establish how best to ensure that people with disabilities have equal access to the Information Society

**Recommendations to the Commission**

4) Promote a common legal framework:

- guaranteeing the citizen's full rights of access to public information at acceptable cost
- setting limits on the obligation of public authorities to supply information
- defining the relationship between public and private investors

5) Encourage the standardisation process by concentrating on the functional specifications of communication systems and harmonised message formatting and user commands

6) Promote appropriate solutions for public services requirements through EU research and development and other programmes (e.g. INFO 2000) to speed up the interchange of data between Member States' administrations (IDA programme) and explore the concept of a "zone of free regulation" in which innovative initiatives can be tested which might otherwise be blocked by existing regulations. Rules on privacy and data protection must, however, be respected

7) Launch EU-wide awareness raising initiatives including public kiosks at which individuals can access on-line information, and a European Citizens' Card. This could be multifunctional and carry a range of information which must, however, be compatible with data protection and privacy requirements

8) Promote electronic tendering by fixing a percentage of all procurement which must be handled electronically

## Equipping public administrations to provide on-line services

## Strengthening Democracy and Individual Rights

**Recommendations to the Commission**

9) Establish an Information Action Plan to stimulate public awareness and wider participation in the democratic process at the European level. This programme could include:

- a European Voter Information Project
- a European Consumer Information Project
- a European Social Charter Information Project
- a European Business Hotline
- European Electronic Information Centres
- providing affordable on-line access to all official EU documents

- research into the current state of “electronic democracy” in Europe, focusing on how popular participation can be funded from private or public resources

10) Rights of access to public information should be guaranteed through common freedom of information laws in all Member States and harmonisation, where necessary, should be according to the highest prevailing standards of openness

11) A legal framework is required to ensure:

a) that existing laws and standards (and new ones where needed) which protect freedom of expression, defend cultural rights and reflect community values apply to all information services available for public consumption.

b) that the individual’s right to privacy and anonymity is protected

c) that information providers to the public are obliged to make known the origins and ownership of all material

12) Create reliable encryption procedures based on lodging the keys to encryption with independent and separately regulated public trust centres outside the mainstream of commercial activity. There will be a need for European guidelines for such procedures and European-wide certification arrangements.

## Towards a Second Renaissance

### Recommendations to the Commission

13) An effective legal framework is required:

a) to preserve and promote European cultures, in particular minority cultures, and to lend support to local initiatives in using the new media for expressing and developing culture and building communities

b) to safeguard non-discriminatory, fair and transparent access rights for content providers to distribution systems

c) to make available to all content providers market information gathered through control of the infrastructure they are using

d) to create property rights in information transmitted via the networks

e) to encourage the construction of communities of consumers.

## Job Creation

**Recommendations to the Commission**

14) Investigate the particular sources of job creation in Europe resulting from the Information Society, and the measures needed to maximise it : coordinate a set of national analyses and actions to demonstrate the ability of the Information Society to create jobs

15) Give a priority to promoting best practices by:

- identifying the best examples of job creation linked to the new technologies
- assessing current national and EU policies for disseminating knowledge of best practices
- recommending actions best suited for the promotion of best practices

16) Promote the development of a coherent conceptual framework by mandating a small teams of economists and experts to analyse the economics of the Information Society, its functioning, potential and drawbacks

## Teleworking

**Recommendation to the Commission and the Member States**

17) In order to adapt the social and legal framework to speed up the development of teleworking:

- promote initiatives to create awareness about the opportunities it offers
- establish a framework for achieving a wide social consensus in Europe and in a broader international context on how to implement transborder teleworking
- encourage Member States to clarify the legal and fiscal status of various forms of teleworking
- encourage the Member States to make a coherent adaptation of the social and legal framework and to promote teleworking experiments

## Sustainable Development

**Recommendations to the Commission**

18) Analyse the concept of sustainability and evaluate the impact of a shift to service-based economies. In particular:

- gather and disseminate information on the impact on sustainability of the information and communication technologies
- promote the use of the new technologies in a manner consistent with sustainability by encouraging such things as teleworking and teleconferencing

## Markets for Services

**Recommendations to the Commission**

19) The EU must create a regulatory framework which encourages industries, labour markets and consumers to gain the full economic and social benefits of the new information and communication technologies

20) The Commission and Member States must manage infrastructure and service development by means of incentives to investment in new multimedia services and applications, orienting R&D programmes towards Information Society needs and developing a common understanding of universal access and universal service obligations

21) Stimulate targeted trials to enable the start up of new markets, to explore possible social benefits and opportunities and to educate potential users

22) Research and study the effectiveness of aids and tax incentives for the development of the Information Society

23) Analyse the impact of conflicting market-pull and policy-push approaches to infrastructure development and the deployment of services

## Partnerships between Educators and Entrepreneurs

**Recommendation to the Commission**

24) Identify and disseminate good practice in the electronic integration of business organisations and integration between school communities, businesses and other partners

## Getting the regulatory framework right

**Recommendations to the Commission**

25) Create legal safeguards for competition at all levels of the information value chain to prevent the establishment of monopolistic positions which may restrict pluralism and the free flow of information, services and programmes. Such rules also need to address the phenomenon of vertical integration

26) Introduce regulations to prevent anti-competitive behaviour, especially by network "gatekeepers", and to ensure that navigational systems for using hundreds of different television channels are designed to be fair and non-discriminatory

27) Encourage and ensure the active participation of media organisations, including public service broadcasters, in the new technologies and services so as to protect cultural diversity, pluralism and democracy in the Member States

# Chapter Five:

## Future Work

The Forum's work programme for 1996-1997 will be elaborated in detail during the summer of 1996 after discussions between its members meeting in plenary and subsequent exchanges of opinion with the European Commission.

However, we are already agreed that we shall give a high priority to identifying concrete examples of good or relevant practice across the broad range of social, economic and political issues with which we are dealing. In addition, the Forum's working groups have identified a number of specific issues which they wish to examine. Provisionally, these point to an agenda for the coming 12 months which is likely to include:

**- employment and job creation**

- where will the new jobs come from in the Information Society and what will be their quality?
- how should companies restructure themselves to make best use of the new information and communications technologies?
- how to stimulate a better flow of venture capital for start-ups?
- guidelines for teleworking
- prospects for small and medium-sized enterprises, focusing on organisational and technical issues and how to develop new value chains

**- social and democratic values**

- further study of matters relating to encryption, funding, regulation of content, application of common standards, reliability and quality of information
- what are the potential applications of the new technologies in the area of direct democracy and what are the implications?
- how best to protect intellectual property (the advantages and disadvantages of individual exploitation of rights versus collective exploitation), privacy and data?
- what are the consequences of speeding up the delivery of information and what possibilities will citizens have for greater participation in decision-making processes?
- study of how social systems can be better adapted to globalisation

**- consumer issues**

- security of transactions, payments and information, consumer redress and representation and the need for independent regulation
- standardisation of applications and appliances for the disabled
- a study of the effects of the new technologies on purchasing and consumer behaviour

**- universal access issues**

- how to marry access to networks and services with fairness, openness and affordability
- what progress is being made towards developing "user-friendly" access to networks and applications which respond to peoples' day to day needs

**- sustainable development issues**

- what instruments could be used to promote sustainability and how should their proceeds to used?
- are the new technologies a prime enabler for sustainability or are they likely to produce a "rebound effect" of increasing consumption
- what is the potential of the new technologies to induce "dematerialisation"

**- public administrations and public services**

- how to create an information culture in public administrations and how should they be organised for the Information Society?
- how to review and exchange the most relevant experiences in applying the new technologies to the provision of information and services?
- what would be an appropriate common legal framework for the provision of public information?
- further examination of the concept of a "zone of free regulation"

**- lifelong learning**

- what are the key basic skills for the 21st century?
- the economic and social importance of "Lifelong Learning" and the need to restructure education systems to enable the school, the home and the workplace to contribute more effectively
- how to stimulate the educational materials marketplace (and the communications infrastructure) as enablers for the development of good practice?
- what are the implications of shifting from teacher-centredness to learner-centredness? The need to develop a new role for the teacher, and the implications for the skills of other educational actors (parents and children, managers of companies, educational and cultural establishments such as libraries or museums)
- how to promote an awareness among SME managers of the need for continuous identification of areas in which their companies are short of

skills and qualifications? How to help them to select or design suitable training measures for themselves and their staff?
- investigate the barriers to the Information Society's transition to the learning society, including the obstacles to a European market place for the provision of education and training

**- culture**

- how can cultural diversity within the EU be best protected?
- investigate the formation of "virtual communities".Why are they formed? What are the common values that bind them?
- what are the cultural implications of the new services?
- analyse the role that should be played by creators and cultural industries in the Information Society
- consider how to enforce and respect moral rights in line with the Berne Convention
- analyse the potential for integrating "static culture" (museums, art galleries, architecture and monuments) with the "dynamic culture" of data bases

**- the future of new services and media**

- examine the feasibility of the European Union supporting market studies and projects aimed at establishing the market potential of new services in Europe, and methods to measure their possible audience shares and to evaluate their interest for consumers
- examine the new multimedia and the consequences of interactivity
- look at the implications of the convergence of broadcasting, telecommunications and information services especially in terms of competition policy, regulation and consumer protection
- collect examples and best practices of the most advanced cases of individual adoption of the new technologies and their consequent impact on life style