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Growth, competitiveness and employment

White Paper follow-up

Report on Europe and the global information society

Interim report on trans-European networks

Progress report on employment

Extracts of the conclusions of the Presidency of the Corfu European Council

This document reproduces the information society report on pages 5-39 and the Presidency conclusions on pages 126-134. The other two reports are available as separate documents on AEI-EU.

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General contents

Europe and the global information society

Recommendations of the high-level group on the information society to the Corfu European Council (Bangemann group)

In its Brussels meeting of December 1993, the European Council requested that a report be prepared for its meeting on 24 and 25 June 1994 in Corfu by a group of prominent persons on the specific measures to be taken into consideration by the Community and the Member States for the infrastructures in the sphere of information. On the basis of this report, the Council will adopt an operational programme defining precise procedures for action and the necessary means.

The following were members of the group chaired by Mr Martin Bangemann, Member of the Commission:

Peter L. Bonfield (Chairman and Chief Executive, ICL), Enrico Cabral da Fonseca (Presidente Companhia Comunicaçaoes nacionais), Etienne Davignon (Président, SGB), Peter J. Davis (Chairman, Reed Elsevier), Jean-Marie Descarpentries (Président Bull), Carlo De Benedetti (Presidente Amministratore Delegato, Olivetti), Brian Ennis (Managing Director, IMS), Pehr G. Gyllenhammer (former Executive Chairman, AB Volvo), Hans Olaf Henkel (Chairman and Chief Executive Officer, IBM Europe), Anders Knutsen (Administrerende Direktor, Bang & Olufsen), Pierre Lescure (Président Directeur, Général Canal +), Constantin Makropoulos (former Managing Director, ELSYP (Hellenic Information Systems)), Pascual Maragall (Alcalde de Barcelona, Vicepresidente de POLIS), Lothar Hunsel (designierter Vorsitzender der Geschäftsführung DeTeMobilfunk GmbH), Romano Prodi (Presidente Direttore Generale, IRI), Gaston Egmont Thorn (Président du Conseil d'administration du CLT), Jan D. Timmer (Voorzitter, Philips Electronics), Cándido Velázquez Gastelu (Presidente, Telefónica), Heinrich von Pierer (Vorsitzender des Vorstandes, Siemens AG).

Contents

This report urges the European Union to put its faith in market mechanisms as the motive power to carry us into the information age.

This means that actions must be taken at the European level and by Member States to strike down entrenched positions which put Europe at a competitive disadvantage:

☐ it means fostering an entrepreneurial mentality to enable the emergence of new dynamic sectors of the economy

☐ it means developing a common regulatory approach to bring forth a competitive, Europe-wide, market for information services

☐ it does NOT mean more public money, financial assistance, subsidies, *dirigisme*, or protectionism.

In addition ot its specific recommendations, the group proposes an action plan of concrete initiatives based on a partnership between the private and public sectors to carry Europe forward into the information society.

Chapter 1: The information society — new ways of living and working together

A revolutionary challenge to decision makers

Throughout the world, information and communication technologies are generating a new industrial revolution already as significant and far-reaching as those of the past.

It is a revolution based on information, itself the expression of human knowledge. Technological progress now enables us to process, store, retrieve and communicate information in whatever form it may take, whether oral, written or visual, unconstrained by distance, time and volume.

This revolution adds huge new capacities to human intelligence and constitutes a resource which ***changes the way we both work and live together.***

Europe is already participating in this revolution, but with an approach which is still too fragmentary and which could reduce expected benefits. An information society is a means to achieve so many of the Union's objectives. We have to get it right, and get it right now.

Partnership for jobs

Europe's ability to participate, to adapt and to exploit the new technologies and the opportunities they create, will require partnership between individuals, employers, unions and governments dedicated to managing change. If we manage the changes before us with determination and understanding of the social implications, we shall all gain in the long run.

Our work has been sustained by the conviction expressed in the Commission's White Paper, 'Growth, Competitiveness and Employment', that '...the enormous potential for new services relating to production, consumption, culture and leisure activities will create large numbers of new jobs...'. Yet nothing will happen automatically. We have to act to ensure that these jobs are created here, and soon. And that means public and private sectors acting together.

If we seize the opportunity

All revolutions generate uncertainty, discontinuity and opportunity. Today's is no exception. How we respond and how we turn current opportunities into real benefits, will depend on how quickly we can enter the European information society.

In the face of quite remarkable technological developments and economic opportunities, all the leading global industrial players are reassessing their strategies and their options.

A common creation or a still fragmented Europe?

The first countries to enter the information society will reap the greatest rewards. They will set the agenda for all who must follow. By contrast, countries which temporize, or favour half-hearted solutions, could, in less than a decade, face disastrous declines in investment and a squeeze on jobs.

Given its history, we can be sure that Europe will take the opportunity. It will create the information society. ***The only question is whether this will be a strategic creation for the whole Union, or a more fragmented and much less effective amalgam of individual initiatives by Member States,*** with repercussions on every policy area, from the single market to cohesion.

What we can expect for . . .

☐ Europe's citizens and consumers:
A more caring European society with a significantly higher quality of life and a wider choice of services and entertainment.

☐ The content creators:
New ways to exercise their creativity as the information society welcomes new products and services.

☐ Europe's regions:
New opportunities to express their cultural traditions and identities and, for those standing on the geographical periphery of the Union, a minimizing of distance and remoteness.

☐ Governments and administrations:
More efficient, transparent and responsive public services, closer to the citizen and at lower cost.

☐ European business and small and medium-sized enterprises:
More effective management and organization, access to training and other services, data links with customers and suppliers generating greater competitiveness.

☐ Europe's telecommunications operators:
The capacity to supply an ever wider range of new high value-added services.

☐ The equipment and software suppliers; the computer and consumer electronics industries.
New and strongly-growing markets for their products at home and abroad.

The social challenge

The widespread availability of new information tools and services will present fresh opportunities to build a more equal and balanced society and to foster individual accomplishment. ***The information society has the potential to improve the quality of life of Europe's citizens, the efficiency of our social and economic organization and to reinforce cohesion.***

The information revolution prompts profound changes in the way we view our societies and also in their organization and structure. This presents us with a major challenge: either we grasp the opportunities before us and master the risks, or we bow to them, together with all the uncertainties this may entail.

The main risk lies in the creation of a two-tier society of have and have-nots, in which only a part of the population has access to the new technology, is comfortable using it and can fully enjoy its benefits. There is a danger that individuals will reject the new information culture and its instruments.

Such a risk is inherent in the process of structural change. We must confront it by convincing people that the new technologies hold out the prospect of a major step forward towards a European society less subject to such constraints as rigidity, inertia and compartmentalization. By pooling resources that have traditionally been separate, and indeed distant, the information infrastructure unleashes unlimited potential for acquiring knowledge, innovation and creativity.

Mastering risks, maximizing benefits

Thus, we have to find ways to master the risks and maximize the benefits. This places responsibilities on public authorities to establish safeguards and to ensure the cohesion of the new society. Fair access to the infrastructure will have to be guaranteed to all, as will provision of universal service, the definition of which must evolve in line with the technology.

A great deal of effort must be put into securing widespread public acceptance and actual use of the new technology. ***Preparing Europeans for the advent of the information society is a priority task. Education, training and promotion will necessarily play a central role.*** The White Paper's goal of giving European citizens the right to life-long education and training here finds its full justification. In order best to raise awareness, regional and local initiatives, whether public or private should be encouraged.

The arrival of the information society comes in tandem with changes in labour legislation and the rise of new professions and skills. Continuous dialogue between the social partners will be extremely important if we are to anticipate and to manage the imminent transformation of the workplace. This concerted effort should reflect new relationships at the workplace induced by the changing environment.

More detailed consideration of these issues exceeds the scope of this report. The group wishes to stress that Europe is bound to change, and that it is in our interest to seize this opportunity. The information infrastructure can prove an extraordinary instrument for serving the people of Europe and improving our society by fully reflecting the original and often unique values which underpin and give meaning to our lives.

At the end of the day, the added value brought by the new tools, and the overall success of the information society, will depend on the input made by our people, both individually and in working together. We are convinced that Europeans will meet this challenge.

Time to press on

Why the urgency? Because competitive suppliers of networks and services from outside Europe are increasingly active in our markets. They are convinced, as we must be, that if Europe arrives late our suppliers of technologies and services will lack the commercial muscle to win a share of the enormous global opportunities which lie ahead. Our companies will migrate to more attractive locations to do business. Our export markets will evaporate. We have to prove them wrong.

Tide waits for no man, and this is a revolutionary tide, sweeping through economic and social life. We must press on. At least we do not have the usual European worry about catching up. In some areas we are well placed, in others we do need to do more. However this is also true for the rest of the world's trading nations.

The importance of the sector was made evident by its prominence during the Uruguay Round of GATT negotiations. This importance is destined to increase.

We should not be sceptical of our possibilities for success. We have major technological, entrepreneurial and creative capabilities. However, the diffusion of information is still too restricted and too expensive. This can be tackled quickly through regulatory reforms.

Public awareness of the technologies has hitherto been too limited. This must change. ***Political attention is too intermittent. The private sector expects a new signal.***

An action plan

This report outlines our vision of the information society and the benefits it will deliver to our citizens and to economic operators. It points to areas in which action is needed now so we can start out on the market-led passage to the new age, as well as to the agents which can drive us there.

As requested in the Council's mandate, we advocate an action plan based on specific initiatives involving partnerships linking public and private sectors. Their objective is to stimulate markets so that they can rapidly attain critical mass.

In this sector, private investment will be the driving force. Monopolistic, anticompetitive environments are the real roadblocks to such involvement. The situation here is completely different from that of other infrastructural investments where public funds are still crucial, such as transport.

This sector is in rapid evolution. ***The market will drive,*** it will decide on winners and losers. Given the power and pervasiveness of the technology, this market is global.

The prime task of government is to safeguard competitive forces and ensure a strong and lasting political welcome for the information society, so that demand-pull can finance growth, here as elsewhere.

By sharing our vision, and appreciating its urgency, Europe's decision-makers can make the prospects for our renewed economic and social development infinitely brighter.

New markets in Europe's information society

Information has a multiplier effect which will energize every economic sector. With market driven tariffs, there will be a vast array of novel information services and applications:

☐ from high-cost services, whose premium prices are justified by the value of benefits delivered, to budget price products designed for mass consumption;

☐ from services to the business community, which can be tailored to the needs of a specific customer, to standardized packages which will sell in high volumes at low prices;

☐ from services and applications which employ existing infrastructure, peripherals and equipment (telephone and cable TV networks, broadcasting systems, personal computers, CD players and ordinary TV sets) to those which will be carried via new technologies, such as integrated broadband, as these are installed.

Markets for business

Large and small companies and professional users are already leading the way in exploiting the new technologies to raise the efficiency of their management and production systems. And more radical changes to business organization and methods are on the way.

Business awareness of these trends and opportunities is still lower in Europe compared to the US. Companies are not yet fully exploiting the potential for internal reorganization and for adapting relationships with suppliers, contractors and customers. We have a lot of pent up demand to fill.

In the business markets, teleconferencing is one good example of a business application worth promoting, while much effort is also being dedicated worldwide to the perfection of telecommerce and electronic document interchange (EDI).

Both offer such cost and time advantages over traditional methods that, once applied, electronic procedures rapidly become the preferred way of doing business. According to some estimates the handling of an electronic requisition is one tenth of the cost of handling its paper equivalent, while an electronic mail (E-mail) message is faster, more reliable and can save 95% of the cost of a fax.

Electronic payments systems are already ushering in the cashless society in some parts of Europe. We have a sizeable lead over the rest of the world in smart-card technology and applications. This is an area of global market potential.

Markets for small and medium-sized enterprises

Though Europe's 12 million SMEs are rightly regarded as the backbone of the European economy, they do need to manage both information and managerial resources better.

They need to be linked to easy access, cost-effective networks providing information on production and market openings. The competitiveness of the whole industrial fabric would be sharpened if their relationships with large companies were based on the new technologies.

Networked relationships with universities, research institutes and laboratories would boost their prospects even more by helping to remedy chronic R&D deficiencies. Networking will also diminish the isolation of SMEs in Europe's less advantaged regions, helping them to upgrade their products and find wider markets.

Markets for consumers

These are expected to be richly populated with services, from home banking and teleshopping to a near-limitless choice of entertainment on demand.

In Europe, like the United States, mass consumer markets may emerge as one of the principal driving forces for the information society. American experience already shows that the development markets encounter a number of obstacles and uncertainties.

Given the initial high cost of new pay-as-you-view entertainment services, and of the related equipment, as well as the high cost of bringing fibre optics to the home, a large mass consumer market will develop more easily if entertainment services are part of a broader package. This could also include information data, cultural programming, sporting events, as well as telemarketing and teleshopping. Pay-as-you-view for on-line services, as well as advertising, will both be necessary as a source of revenue. To some extent, existing satellite and telephone infrastructure can help to serve the consumer market in the initial phase.

At the moment, this market is still only embryonic in Europe and is likely to take longer to grow than in the United States. There, more than 60% of households are tapped by cable TV systems which could also carry text and data services. In Europe, only 25% are similarly equipped, and this figure masks great differences between countries, e.g. Belgium (92%) and Greece (1 to 2%).

Another statistic: in the United States there are 34 PCs per hundred citizens. The European figure overall is 10 per hundred, though the UK, for instance, at 22 per hundred, is closer to the US level of computer penetration.

Lack of available information services and poor computer awareness could therefore prove handicaps in Europe. Telecommunication networks are, however, comparable in size and cover, but lag behind in terms of utilization. These networks, therefore, can act as the basic port of access for the initial services, but stimulation of user applications is still going to be necessary.

Such structural weaknesses need not halt progress. Europe's technological success with CD-ROM and CD-I could be the basis for a raft of non-networked applications and services during the early formative years of the information society. These services on disk have considerable export potential if Europe's audio-visual industry succeeds in countering current US dominance in titles.

In terms of the market, France's *Minitel* network already offers an encouraging example that European consumers are prepared to buy information and transaction services on screen, if the access price is right. It reaches nearly 30 million private and business subscribers through six million small terminals and carries about 15 000 different services. Minitel has created many new jobs, directly and indirectly, through boosting business efficiency and competitiveness.

In the UK, the success of the Community-sponsored 'Homestead' programme, using CD-I, is indicative, as is the highly successful launch of a dedicated (American) cable teleshopping channel.

Meanwhile in the US, where the consumer market is more advanced, video-on-demand and home shopping could emerge as the most popular services.

Audio-visual markets

Our biggest structural problem is the financial and organizational weakness of the European programme industry. Despite the enormous richness of the European heritage, and the potential of our creators, most of the programmes and most of the stocks of acquired rights are not in European hands. A fast growing European home market can provide European industry with an opportunity to develop a home base and to exploit increased possibilities for exports.

Linguistic fragmentation of the market has long been seen as a disadvantage for Europe's entertainment and audio-visual industry, especially with English having an overwhelming dominance in the global market — a reflection of the US lead in production and, importantly, in distribution. This lead, which begins with cinema and continues with television, is likely to be extended to the new audio-visual areas. However, ***once products can be easily accessible to consumers, there will be more opportunities for expression of the multiplicity of cultures and languages in which Europe abounds.***

Europe's audio-visual industry is also burdened with regulations. Some of these will soon be rendered obsolete by the development of new technologies, hampering the development of a dynamic European market.

As a first step to stimulating debate on the new challenges, the Commission has produced a Green Paper on the audiovisual industry.