

02.1 The Framework of the Information Society

Descripció n de las iniciativas y acciones

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02.1.1 Description of the initiatives and actions

The Information Society and Europe have something in common: both are on the threshold of rapid growth. Access to information and knowledge constitutes the key to evolution and to the maintenance of a democratic society. It must be borne in mind that technology will continue to advance and to constantly improve the group of services offered by the infrastructures. On the other hand, an effort is being made (an effort that still has to be intensified) in order to introduce minimum, but at the same time appropriate regulation. In this respect, the liberalisation of telecommunications, the correct legislation on intellectual property and the policies to ensure that everyone has free access to the network are of fundamental importance.

The success of all the measures proposed by the Strategic Plan "Catalonia on the Network" will depend on the degree of acceptance of the Plan by the users, in short, by the Catalan society.

The policies of action with a transversal effect (i.e., those that have an impact on all the areas) that are proposed hereunder may be grouped around three strategic lines:

- 1. The Research and Development (R & D) policy for the Information Society.
- 2. The presence of Catalonia on the network.
- 3. The regulating framework.

R & D Policy for the Information Society

The quality of the provision for research and development is a key factor and one that is necessary for the development of Information and Communication Technologies (ICT) in Catalonia. Universities and both public and private research centres will receive an important consolidating resource in the form of the services of Internet II, the high-performance network that will be implemented as one of the actions proposed in the area INFRASTRUCTURES AND BASIC SERVICES.

Anticipation in the development of new infrastructures and new uses of information services is the essential condition for the competitiveness of Catalonia in the Information Society. The convergence of audiovisual media with telecommunications requires that R & D should take place in this area, one of crucial importance for Catalonia. Thus, it will be necessary to promote research into alternative systems and

local loop technologies, so that competition has the effect of increasing the diversity of technological solutions in response to an increasingly consolidated demand for mobility for the user.

It is important that there should be both research directed towards the creation of new products for the Information Society and research into the impact of the Information Society on our society. Moreover, the creation of a network of innovative centres, the participation of the finest groups of Catalan researchers around virtual laboratories, and the establishment of R & D that will collaborate and compete with business research constitute the best ways to achieve these ends.

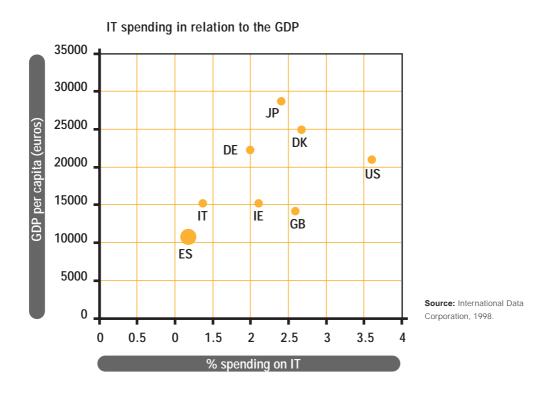


Figure 1. The graph shows one of the most important indicators that reflects the position of a particular society in the new Information Society with regard to its Information Technology consumption. The ultimate aim of the plan "Catalonia on the Network" is that Catalonia should take up a competitive position on the world map. The graph also shows the ratio between the GDP per capita and spending on Information Technologies in various countries. The United States of America and Great Britain spend relatively more on IT than other countries such as Germany, Italy or Spain.

Initiative 1

R & D Plan for the Information Society orientated towards the potential of Catalonia.

Development of R & D that integrates public and private research within the framework of public-private sponsorship, and which serves as "a basis of confidence" for the industry of the Catalan Information Society.

It is necessary to define a R & D Plan for Information and Communication Technologies (ICT) that establishes long-term continuity in research and innovation, in order that the business community may invest with the guarantee of continuous research in Catalonia. Research in ICT will offer the technicians of the Small and Medium-sized Enterprise (SME) integrative participation and will correspond to the needs of the various sectors. This plan will include detection and support systems for private research.

The Commissioner's Office for Universities and Research will propose research on two fronts:

- Research in ICT applied to the various sectors, basically Information Technologies applied to medicine, telecommunications, education and the development of multimedia content.
- 2. Research that focuses on the socio-economic impact of the implantation of ICT.

The Research and Development Plan for the Catalan Information Society will be a national undertaking in which both the Administration and the private sector will participate, and it will be orientated towards the innovation of the production sector in Catalonia.

This undertaking will include:

- The internationalisation of research through collaboration with other centres around the world and maintenance of a high profile in international research programmes.
- An increase in the volume of investment in research during the next three years (with the aim that by the end of this period current investment will have been tripled).
- A 30% increase in the number of personnel that specialise in R & D during the next three years. This measure will be accompanied by an enforced change in the profiles of researchers, who will have to be guided by the demands and needs of the present society.
- The availability of Internet II in 2001.
- The establishment of grants and loans for research and industrial innovation, and for research into the impact of the Information Society on the population.
- The creation of awards and labels for the best "public interest R & D projects".



Agents:

CUR (Commissioner's Office for Universities and Research), **Universities**, CSI (Commissioner's Office for the Information Society), Department of Industry, Trade and Tourism, EU, business sector.

Initiative 2

Network of advanced research centres.

The network of research centres will have a mixed focus with respect to both the participation of public and private research and the type of network; a network of advanced research centres will be created in various fields of learning, in addition to a network of virtual laboratories, in order to promote the collaborative research of different research groups.

Actions:

- Positioning of the university as a laboratory of the Information Society.
- Deployment of a Network of advanced research centres in the priority areas of the Information Society.
- Promotion of the high international profile of research and research groups in Catalonia.
- · Deployment of telematic communities.

Agents:

CUR (Commissioner's Office for Universities and Research) / Universities, CSI, Department of Industry, Trade and Tourism, business sector, departments of the Administration.

The presence of Catalonia on the Network

The presence of Catalonia on the network must be articulated on two fronts: on the one hand, the Catalan language must be present on the network, and on the other hand, there must be a powerful presence of Catalan digital content of all kinds: relating to business, services for the citizen, culture, civic expression, etc.

Initiative 3

Promotion of the presence of the Catalan language in the Information Society

The aim of this initiative is to guarantee that the presence and use of the Catalan language on the Internet exists under the same conditions as the presence and use of other world languages.

The objective behind the presence of Catalonia on the network is to convey and to provide greater communication of the cultural and economic experience and knowledge of Catalonia. All the public interest institutions and organisations should gradually become participants in a cultural electronic network that offers citizens transparent access to the services that they require.

The rapid evolution of technologies and the decentralisation of agents and information networks open new channels for the spread of products and cultural services and for the expansion of cultural diversity. The strategy to be adopted is based on the new opportunities provided by the Information Society of enhancing the international profile of Catalonia.

Actions:

- Creation of a Catalan search engine to provide access to public and private portals, which will support a multitude of initiatives and promote multilingualism and multiculturalism.
- Elaboration of on-line tools and linguistic resources in Catalan (automatic translation services into Catalan, recognition of oral and written Catalan, linguistic resources, etc.).
- Dissemination of tools and content in Catalan (templates, dictionaries, etc.) through the support of a Catalan Agency specialising in Catalan linguistic resources.

The automatic translation of European languages into Catalan and vice-versa, together with speech recognition, will be indispensable tools to ensure that the Catalan language enjoys equal conditions with respect to other languages. On the other hand, specialised templates for business sectors and various professionals will be another of the resources and tools that will have to be made available.

One of the most important tasks is the diffusion of linguistic resources that are currently dispersed and the diffusion both of the use of linguistic tools of all kinds and of good practices. (For example, the inclusion of the Catalan Webs in the Internet search engines, or the diffusion of model norms on how best to offer services via the Internet, etc.).

Agents:

Department of Culture, CIS, LOCALRET (Local Consortium for the development of telecommunications networks and new technologies), universities, IEC (Institute of Catalan Studies), private agents, other Autonomous Communities, multinationals.



Initiative 4

Support and promotion of digital content from Catalonia on the network.

The aim of this initiative is to guarantee that cultural, business or civic content from Catalonia is present on the network under the same conditions as content from other cultures and societies.

Actions:

- Digitisation and dissemination of cultural heritage: The digital library of Catalonia.
- Promotion of the production of new digital content (educational, socio-cultural, periodic publications, leisure, etc.).
- Elaboration of an inventory of digital initiatives and electronic publications in Catalonia.
- Participation of Catalonia in international network standardisation organisations.
- Action concerning domains in Catalan (initiatives with ICAAN and ES_NIC) and promotion of public debate.

Agents:

Department of Culture, **Department of Industry, Trade and Tourism**, private companies, Department of the Presidency, CSI, LOCALRET, universities, local entities.

The regulating framework

Initiative 5

Deployment of a regulating framework and codes of practice to support electronic interchange.

The regulating framework for Catalonia in the Information Society aims to overcome all the possible legal, fiscal, administrative and non-administrative barriers that exist, in order to promote the incorporation of a modern Catalonia into the digital era. This framework will deploy laws and codes of practice to promote electronic interchange and to safeguard citizens' rights.

The regulating framework will cover aspects related with the protection of the rights and privacy of citizens, and, at the same time, it will establish measures to facilitate the deployment of the Information Society, such as those associated with infrastructures and the reinforcement of electronic trading and transactions. In summary, the objective is to define all the possible regulations and recommendations that will endorse the rapid and

profound assimilation of change towards the Information Society, and which will also remove, in so far as is possible, the legal obstacles to the consolidation of this Society.

This framework will promote:

- Regulation adapted to the new technologies and the future Information Society, which is coherent and flexible, internally and externally.
- An effective legal structure that protects the rights of individuals (minors, marginalised groups, etc.) and companies.
- · Reinforcement of the democratic and constitutional nature of the Information Society.
- Optimum social and territorial cohesion and the guarantee that in the future universal access to the Information Society will become a basic right for all.

Actions:

- Creation of a Commission to establish the Legal framework for study of the tax treatment of the Information Society and to constantly review/update this treatment.
 This Commission will seek to perform the following action:
 - To eliminate the legal barriers that obstruct the consolidation of the Information Society.
 - To establish measures that will guarantee the privacy, security and protection of electronic data.
 - To define public information and make this available.
 - To promote measures to support small businesses and retail businesses.
 - To guarantee the democratic right to vote on the network.
- Publication of laws and establishment of legal provisions that protect transactions on the network.
- Creation of a Catalan body (authority) to certify companies and individuals. This body shall be responsible for:
 - Establishment of electronic signature models and sole certification of corporate persons/entities for electronic procedures.
- Proposal for the review of the Administrative Procedure Law and/or the Public Procurement Law.

Agents:

Mixed Commission, **Department of Justice**, Department of the Presidency, Department of Economy and Finance, all departments, Consortium of Public Administrations, Data protection agency.



02.1.2 Chart summarising the initiatives and actions

INITIATIVES	ACTIONS	AGENTS
Initiative 1 R & D Plan for the Information Society orientated towards the potential of Catalonia	 Internationalisation of research. Collaboration with other centres. Participation in international research programs. Tripling the volume of investment in research in three years. 30% increase in numbers of personnel over the course of three years. Introduction of new researcher profiles. Availability of Internet II in 2001. Grants and loans for industrial research and innovation. Awards and labels for the best "public interest R & D projects." 	CUR / Universities CSI Department of Industry, Trade and Tourism EU Business sector
Initiative 2 Network of advanced research centres	 Positioning of the university as a laboratory of the Information Society. Deployment of a network of advanced research centres. Promotion of the high international profile of research and research groups in Catalonia. Deployment of telematic communities. 	CUR / Universities / CSI Department of Industry, Trade and Tourism Business sector Departments of the Administration
Promotion of the presence of the Catalan language in the Information Society	 Creation of a Catalan search engine to provide access to public and private portals, which will support a multitude of initiatives and promote multilingualism. On-line linguistic tools and resources in Catalan (automatic translation services using Catalan, oral and written recognition of Catalan, linguistic resources, etc.) Dissemination of tools and content in Catalan (templates, dictionaries, etc.), through the support of a Catalan Agency specialising in Catalan linguistic resources. 	Department of Culture CSI, LOCALRET Universities IEC (Institute for Catalan Studies) Private agents Other Autonomous Communities Multinationals
Initiative 4 Support and promotion of digital content from Catalonia on the network	 Digitisation and dissemination of cultural heritage: The digital library of Catalonia. Promotion of the production of new digital content (educational, socio-cultural, periodic publications, leisure, etc.). Inventory of digital initiatives and electronic publications in Catalonia. Participation of Catalonia in international network standardisation organisations. Action concerning domains in Catalan (initiatives with ICAAN, public debate). 	Department of Culture Department of Industry, Trade and Tourism Private companies Department of the Presidency CSI LOCALRET Universities Local entities

Initiative 5

Deployment of a regulating framework and codes of practice to support electronic interchange

- Creation of a Commission to establish a Legal framework for study of the tax treatment of the Information Society and to constantly review/update this treatment.
- Elimination of legal barriers.
- Privacy, security and protection of electronic data.
- Public information.
- · Small/retail businesses.
- Democratic rights to vote on the network.
- Publication of laws and legal provisions that protect transactions on the network.
- \bullet Creation of a Catalan body (authority) to certify companies and individuals.
- Electronic signature and sole certification of corporate persons/entities for a variety of procedures.
- Review of the Administrative Procedure Law and/or the Public Procurement Law.

Mixed commission
Department of Justice
Department of the
Presidency
Department of Economy

Department of Economy All departments Consortium of Public Administrations Data protection agency



${\bf 02.1.3} \ \, {\hbox{Co-ordinator, moderators and members}}$

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