

MOVING TOWARDS AN INFORMATION SOCIETY IN PORTUGAL

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Resumen: La convergencia de la tecnología de comunicación y el procesamiento de información digital está cambiando rápidamente el modo en que miramos el mundo en nuestra sociedad. A medida que el procesamiento de la información se ha vuelto progresivamente más barato y las redes electrónicas más amplias, lo que una vez era dominio de lo militar y la investigación ha atraído al sector financiero y ahora es una parte importante de cualquier economía nacional o supranacional, que aspira a competir de forma global.

Desde 1995 Portugal ha desarrollado políticas y estrategias para su implementación dentro del marco de una estrategia más amplia de la Sociedad de la Información de la Unión Europea.

Este artículo describe algunas de las áreas más importantes en la creación y desarrollo de una Sociedad de la Información en Portugal, comentando el papel jugado por los diferentes actores.

Palabras clave: Estrategias de Información; Políticas de Información; Políticas Nacionales de Información; Sociedad de la Información; Portugal; Unión Europea.

Abstract: The convergence of communication technology and digital information processing is rapidly changing the way that we look at the world and our society. As information processing has become progressively cheaper and electronic networks more extensive, what was once the domain of the military and the researcher has attracted the business sector and is now an important part of any national or supranational economy, aiming to compete globally.

Since 1995, Portugal has been developing policies and strategies for their implementation within the framework of the broader European Union Information Society strategy.

This paper outlines some of the more important landmarks in the creation and development of an Information Society in Portugal, commenting on the roles played by the different actors.

Keywords: Information Strategies, Information Policies; National Information Policies; Information Society; Portugal; European Union.

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1. INTRODUCTION

The development of information superhighways has enormous impact on individuals, organisations and Nation-States and is responsible for significant changes in our economies and social behaviour patterns. Information is now recognised as a key resource in the economy and the convergence of telecommunications with digital information processing is capable of providing an infrastructure, which improves economic performance, quality of life, and the preservation of cultural heritage.

Governments all over the world are seeking the most appropriate responses to this situation, responses that will bring maximum advantage for their Nation-States by the introduction of Information Policies and Strategies, which will shape the development of their Information Societies.

The Portuguese response was to draft a “Green Paper on the Information Society”¹ intended for the widest possible discussion. The draft Green Paper took advantage of the new technologies by being announced on the Web, this gave it wide dissemination and facilitated open discussion on an Internet Forum. This account traces the landmark actions and activities, which followed.

2. POLICIES, PLAN AND STRATEGIES

With the declaration of the USA National Information Infrastructure Initiative (1993)² countries all around the world began to outline their own Information Strategies, visions of the Information Societies they intended to build as a result of Information and Communication Technologies (ICT) advances, according to perceived national interests.

The European Commission, through the Delors White Paper (December 1993), outlined its own strategy, and emphasised its significance, in terms of future European growth and competitiveness³. To implement this strategy, a Task Force was created whose work culminated in the Bangemann report (May 1994)⁴. The Council of Ministers which met in Corfu (June 1994), approved the Bangemann Report and invited the Commission to prepare an Action Plan This was later published (July 94) as, “Europe’s way to the Information

¹ Portugal. Ministério da Ciência e Tecnologia. Missão para a Sociedade de Informação. *Livro Verde para a Sociedade da Informação em Portugal*. Lisboa: Missão para a Sociedade da Informação, 1997. (Versão aprovada em Conselho de Ministros de 17 de Abril de 1997). URL: <http://www.missao-si.mct.pt/livroverde/livrofin.htm> [Accessed: 3 December 1998].

² United States. *United States National Information Infrastructure Virtual Library*. URL: <http://nii.nist.gov>. [Accessed: 3 December 1998]. United States. Department of Commerce. The President's Information Infrastructure Task Force. *The National Information Infrastructure: an Agenda for Action*, September 1993. URL: <http://sunsite.unc.edu/nii/NII-Agenda-for-Action.html> [Accessed: 3 December 1998].

³ Commission of the EC. *White Paper on Growth, Competitiveness and Employment: The challenges and ways forward into the 21st century*. COM(93) 700 final, Brussels, 5 December 1993. URL: <http://www.ispo.cec.be/infosoc/backg/whitpaper/top.html> [Accessed: 3 December 1998].

⁴ BANGEMANN, Martin, et al. *A Europa e a Sociedade global de informação: recomendações ao Conselho Europeu*. Bruxelas: Comissão Europeia, 26 Maio 1994. URL: <http://www.ispo.cec.be/infosoc/backg/bangeman.html> [Accessed: 3 December 1998].

Society"⁵ and recommended each Member State to appoint a Minister to co-ordinate all political, financial and regulatory aspects, concerned with the development of an Information Society. In the case of Portugal, the Government, elected in 1995, charged the Minister of Science and Technology with this responsibility.

The Action Plan⁵ was approved by the European Council for the Information Society, on 28th September 1994 and the Commission began to implement it.

Taking account of the progress made and the dynamic nature of Information Society development, the Communication entitled "Information Society: from Corfu to Dublin – the emerging priorities"⁶, published in July 1996, announced an updated and revised Action Plan to launch a second phase of the EU Information Society Strategy. This revised Action Plan was published as "Europe at the forefront of the Global Information Society: Rolling Action Plan"⁷ and has as its main policy objectives:

- Improving the business environment.... Ensuring that the necessary conditions are met for the introduction of Electronic Commerce (e.g. copyright, data protection, digital signature...);
- Investing in the future... starts in the classroom... and emphasis must be placed on Life-Long Learning...;
- People at the Centre...a significant number of new employment opportunities will result from developments in services and content sectors...;
- Setting Global rules... an essential element of the Information Society.

2.1 The Portuguese approach

Until the present Government was elected, in 1995, information management issues were only implicit in Governmental Policies and Programmes. There are now several references to the Information Society in the Government's programme⁸. Within this Programme, there is a clear commitment to the "creation of an Information Society in Portugal" [p. 26-(61)]. So, the Portuguese initiative for the creation of an Information Society is firmly grounded in the Programme of the 13th Constitutional Government⁸, which outlined the Government's intentions for the period 1995-1999.

Each year the Government announces its Planning Options for the following year. The Planning Options for 1996⁹, the first produced by this Government, announced their plans

⁵ European Commission. *Europe's way to the Information Society: An Action Plan*. COM(94) 347 final, Brussels, 19 July 1994. URL: <http://www.ispo.cec.be/infosoc/backg/action.html> [Accessed: 3 December 1998].

⁶ Commission of the EC. *The Information Society: from Corfu to Dublin: the new emerging priorities*. COM(96) 395 final. Brussels, 24 July 1996. Communication from the Commission to the Council, to the European Parliament, to the Economic and Social Committee and to the Committee of the Regions. URL: <http://www.ispo.cec.be/infosoc/legreg/docs/corfudub.html> [Accessed: 3 December 1998].

⁷ Commission of the EC. *Europe and the Forefront of the Global Information Society: Rolling Action Plan*. Communication from the European Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions, 27 November 1996, updated and revised in 31st July 1997. URL: <http://www.ispo.cec.be/infosoc/legreg/RollToc.html> [Accessed: 3 December 1998].

⁸ Portugal. Assembleia da República. Programa do XIII Governo Constitucional: Texto do Programa. *Diário da Assembleia da República*, II Série-A, no. 2, 8 Novembro 1995, 26(2)-26(64).

⁹ Portugal. Assembleia da República. Lei no. 10-A/96: Aprova as Grandes Opções do Plano para 1996. *Diário da República*, I Série-A, no. 71/96, 23 de Março de 1996, p. 584-(2).

for the creation of an Information Society in Portugal. The Planning Options for 1996⁹ launched the *National Initiative Towards the Information Society* (Iniciativa Nacional para a Sociedade de Informação) which was structured around four main themes:

- School (IT in Education);
- Enterprise (The computerised enterprise);
- Local and Regional Public Administration (The Open State);
- Knowledge (libraries, museums, databases, R&D institutions - The Knowledge available).

A Cabinet Resolution, no. 16/96, approved on 21st March 1996¹⁰, created the *Missão para a Sociedade de Informação (MSI)* [Committee for the Information Society], under the Ministry of Science and Technology. As stated in Cabinet Resolution no. 16/96, membership of this Committee includes experts appointed by several Ministries and will operate for a maximum of three years.

The MSI's prime objectives are:

- To promote a general debate and initiate a consultation procedure for the preparation of the Green Paper for the Information Society, which would constitute a National Plan containing the short, medium and long term measures for the creation of an Information Society, in Portugal.
- To prepare, in collaboration with all Ministries, global and sectoral measures required to realise the Governmental programme for development of the Information Society.
- To identify international scenarios, at the Technological and Societal levels, which may have an impact on the development of the Information Society.

2.2. The Green Paper for the Information Society in Portugal

One of the tasks of the MSI concerned the preparation of the Green Paper, a set of recommendations aimed at the development of the Information Society.

This work was carried out through 1996 and 1997. MSI encouraged the widest possible public debate on the draft version of the "Green Paper for the Information Society"; the 0.1 version was made available on the MSI server, for public consultation. Several seminars/workshops were organised to discuss specific issues arising from this draft.

The "Green Paper for the Information Society"¹ was approved at a Cabinet meeting, on the 17th April 1997, following a debate by all Ministers. This Green Paper was submitted to Parliament for approval at the plenary session, held on 30th of April, 1997.

The Green Paper addresses the following eleven topics:

- The Democratic Character of the Information Society;
- Open Government;
- The Knowledge available;

¹⁰ Portugal. Conselho de Ministros. Resolução de Conselho de Ministros no. 16/96, de 7 de Março. *Diário da República*, 21 Março 1996. Cria a Missão da Sociedade de Informação. URL: <http://www.missao-si.mct.pt/despacho.htm> [Accessed: 10 October 1998].

- Connected Schools: Learning in the Information Society;
- The Business Enterprise in the Information Society;
- Employment in the Information Society;
- The Market and the Information Industry;
- Social Implications of the Information Society;
- The Legal Implications of the Information Society;
- The National Information Infrastructure;
- Research & Development in the Information Society.

As stated in the Introduction to the Green Paper, it aims to be “a strategic reflection defining a way to implement the information society in Portugal”¹, (p.8). It examines all sectors of society, community life and state organisation to encourage, stimulate and promote,

“... creativity, innovation, the ability to deliver social stability, democratic access and protection of the needy and physically or mentally handicapped. The Guidelines and measures proposed in the Green Paper correspond to the Government Policy Options, although they may not necessarily carry details or cost - estimates as these do not belong here”¹, (p. 8).

The “Green Paper on the Information Society” has identified a wide spectrum of political measures whose implementation is affecting the sectoral policies of several Government ministries and thus Portuguese Society, at large. Within the eleven topics, 72 measures for action were outlined.

Following the publication of the Green Paper, several Task-Forces were set up to develop Plans that would enable progress to be made on the strategic measures outlined in the Green Paper and to establish programs and create high profile projects to take place in the following years. The intention was that these programs and projects would complement actions and initiatives, which were already in place, in 1997.

3. IMPLEMENTATION AND MAIN ACHIEVEMENTS TO DATE (NOVEMBER 1998)

This section deals with the main events initiated by the Government and that have taken place, since 1996, towards developing an Information Society. The data included here is gathered from several sources (see End Note). They should be considered only as the author’s view of the main events taking place in Portugal, and as indicative of trends and general tendencies in the strategic developments of the Information Society.

I. New regulatory environment for the Telecommunications sector

Several laws and regulations have been approved, in harmony with the guidelines of European Commission for the liberalisation of the Telecommunications sector, in Portugal. These Laws and Regulations provide the legal framework for the modifications required for liberalisation of the sector to take place by 1st January 2000.

It is not the objective of this paper to analyse in detail the evolution of Telecommunication Legislation and Regulation in Portugal. It is mentioned as an indication that Portugal is conforming with the guidelines of the European Commission. Updated information on the Legal and Regulatory environment evolution in Portugal can be obtained from the ESIS Web site¹¹, (*ESIS Regulatory Developments*).

II. Data Protection Legislation

Data Protection legislation (Lei no 6/98, 26 October)¹² has been approved recently. It is the incorporation into the Portuguese regulatory framework of the European Commission's Directive on Data Protection¹³.

III. Science, Technology and Society Network (Rede Ciência, Tecnologia e Sociedade, RCTS)

The existing Scientific Community Network has been expanded and upgraded to provide the "Science, Technology and Society Network". This now offers advanced networked services to the Higher Education Institutions, as well as to Research Centres. It is through this network that schools and libraries are able to connect to the Internet.

The FCCN [Fundação para a Computação Científica Nacional (National Foundation for Scientific Computing)], implemented 15¹⁴ access points (PoP), throughout the country, in Universities, Polytechnics and Research Centres. This enables the connection of all public and private schools (ca.2000) from the 5th to the 12th years to the Internet [as of September 1998] [(see also 3.iv, Programme Internet in School¹⁵). It is planned to extend this service provision to around thirty Teacher Training Centres and an additional 140 schools of the 1st to 4th years. Also, two hundred municipal libraries share this service to allow Internet access for library users. This network provides networked access to the National Scientific Community and is now named the "Science, Technology and Society Network"¹⁴.

¹¹ European Commission, *ESIS: European Survey of Information Society Projects and Actions*. Brussels: ISPO, 1997-1998.

URL: <http://www.ispo.cec.be/esis/> [Accessed: 3 December 1998]. *Regulatory Developments*, In European Commission, *ESIS: European Survey of Information Society Projects and Actions*. Brussels: ISPO, 1997-1998. URL: <http://www.ispo.cec.be/esis/Regulation/> [Accessed: 3 December 1998].

¹² Portugal. Assembleia da República. Lei n° 67/98: Lei da Protecção de Dados Pessoais (transpõe para a ordem Jurídica Portuguesa a Directiva n° 95/46/CE, do Parlamento Europeu e do Conselho, de 24 de Outubro, relativa à Protecção de Dados das Pessoas singulares, no que diz respeito ao tratamento dos dados pessoais e à livre circulação desses dados), *Diário da República*, II Série-A, no. 247/96, 26 de Outubro de 1998, p. 5536 –5546.

¹³ Directiva 95/46/CE do Parlamento Europeu e do Conselho de 24 de Outubro de 1995, relativa à protecção das pessoas singulares no que diz respeito ao tratamento de dados pessoais e à livre circulação desses dados. *JO L* 281 de 23.11.1995, p. 31 - 49. URL: <http://www2.echo.lu/legal/en/dataprot/directiv/directiv.html> [Accessed: 27 April 1998]

¹⁴ Portugal. *Fundação para a Computação Computação Científica Nacional*. URL: <http://www.fccn.pt/> [Accessed: 3 December 1998].

¹⁵ Portugal. *UARTE – Unidade de Apoio à Rede Telemática Educativa*. URL: <http://www.uarte.mct.pt/> [Accessed: 3 December 1998].

This Network has become an important part of the Information Society infrastructure. It enables the flow of information among a wide group of users, not only academics and researchers but also municipal libraries, archives, museums and other non - profit making bodies, such as Learned Societies. It is the realisation of "Measure 3.1" of the Green Paper¹, (p. 28).

IV. Programme Internet in School (Programa Internet na Escola)

Internet in School Programme (Programa Internet na Escola)¹⁵ is one of the initiatives of the Ministry of Science and Technology; it is Measure 4.1 in the "Green Paper"¹, p. 33), under the topic "Connection of Schools: Learning in the Information Society". It aims to achieve the goal of one Multimedia computer (with CD-ROM, access to ISDN and an Ethernet LAN board), per classroom, by the year 2000. It focuses on increasing the number of children having access to Information Society services and products, by encouraging schools to have Internet access.

In the first phase, the programme included all secondary schools and some primary schools, in all a total of 1600 (public and private) schools by the beginning of the 1997/1998 academic year. In the second phase, the programme will be extended to include all primary schools. It focuses attention on the promotion and use of educational software. [see also the Programme NONIO - Twenty First Century, 3.v)¹⁶].

TheUARTE – Unidade de Apoio à Rede Telemática Educativa [Educational Telematic Network] (Educational Telematic Network Support Unit) provides user support, as well as, overall follow-up of the process¹⁵.

V. Programme NONIO - Twenty first Century (Programa NONIO SÉCULO XXI)

The NONIO-Twenty First Century Programme (the Programme for Information and Communication Technologies in Education) was named after the famous Portuguese mathematician, Pedro Nunes, (1502-1578). This Programme was launched by the Minister of Education, in October 1996¹⁶.

It is concerned with the production, application and use of information and communication technologies in Education. It has four sub-programmes:

- Sub-Programme I: Application and Development of Information and Communication Technologies (ICT) in the educational system;
- Sub-Programme II: Training in ICT;
- Sub-Programme III: Creation and Development of Educational Software;
- Sub-Programme IV: Dissemination of Information and International Co-operation.

NONIO finances the creation of Centros de Competência (IT Skills Centres) and promotes projects involved with the development of educational software and electronic publishing of multimedia materials, for primary and secondary level education. It is the

¹⁶ Portugal. Ministério da Educação. *The NONIO - Twenty First Century Programme*. URL: <http://www.dapp.min-edu.pt/nonio/nonio.htm> [Accessed: 3 December 1998]

Portuguese Focal Point for the European Commission Initiative Netd@ys¹⁷. The NONIO XXI programme issues regular Calls for Proposals.

VI. Information Content Industry

The Initiative Mosaico of the Ministry of Culture¹⁸ supports the information content industry in the development of Portuguese cultural products.

Under the umbrella of Initiative Mosaico, a Co-operation Agreement - Culture/Industry has been signed. This agreement between the State, cultural content owners and the producers commits them to:

- Co-operate in the fields of research, development, production, marketing and selling of cultural multimedia products;
- Define models of co-operation between the public and private sectors;
- Stimulate the circulation of information and best practices;
- Participate in actions developed by the European Union;
- Study and give advice on programmes and governmental measures to make available a financial support to the development of a content based multimedia industry;
- Analyse the existing opportunities in the market [... for] multimedia products"¹⁹.

In 1997, an Interministerial Commission was created by created to prepare joint proposals for governmental actions in the area of cinema, audio-visual and multimedia (Resolution of Cabinet no. 86/97, of 2 June). This Commission brought together representatives from the Prime Minister's Office, Ministry of Planning and Land Administration, Ministry of Economy, Ministry of Culture and Ministry of Science and Technology. The aim was to formulate a strategy to take account of the convergence of the various media entities: cinema, audio-visual and multimedia. A report²⁰ was prepared and discussed in the Cabinet meeting of 7th of July 1997.

VII. Terràvista: The Web site for the Portuguese speaking World

Terràvista is an initiative of the Ministry of Culture to create an open "space" on the Internet for communication in the Portuguese language²¹. It focuses on 200 million Portuguese-speaking people. It is concerned with the preservation and promotion of the Portuguese culture around the world and the reinforcement of connections between Portuguese-speaking communities. Recently (August 1998), the facilities have been upgraded; each

¹⁷ Portugal. Ministério da Educação. Netd@ys, 1998. URL: <http://www.dapp.min-edu.pt/nonio/netday/netday1.htm>. [Accessed: 3 December 1998].

¹⁸ Portugal. Ministério da Cultura. URL: <http://www.min-cultura.pt> [Accessed: 3 December 1998].

¹⁹ APMP – Associação para a Promoção do Multimedia em Portugal, 1998. URL: <http://www.apmp.pt/> [Accessed: 3 December 1998].

²⁰ Portugal. *Relatório (da) Comissão Inter-ministerial para o Audiovisual*. Lisboa: Ministério da Cultura, 1997. C.I.M.A. Comissão Inter-ministerial para o Audiovisual. URL: <http://www.min-cultura.pt/CIMA/1.html> [Accessed: 3 December 1998].

²¹ Portugal. Ministério da Cultura. *Terràvista*. URL: <http://www.terravista.pt/> [Accessed: 3 December 1998].

user can have 7Mb of information on the Terravista Server, for personal use, instead of the 2Mb that were previously allocated.

VIII. Programme Computers for All

The Programme, Computers for All, started in 1998; it promotes wider use of PCs in the home, for learning, communication and entertainment.

Citizens can take advantage of a tax concession, when purchasing domestic PC's, amounting to 20% of the retail price up to 30.000 PTE/ year, over the period January 1998 - December 2000. This tax concession was approved as part of the 1998 State Budget.

IX. Programme for Digital Cities

The Government, in its efforts to spread the benefits of the Information Society, has embarked on a Programme for the creation of Digital Cities²². The first and the most comprehensive of these will be Aveiro. However, the Government is also creating others designed to tackle specific problems. In this context, Bragança and Guarda, which are situated inland, will be Digital Cities to counteract the disadvantages of locations away from the coast, known as the "Interior effect". Marinha Grande will be transformed into a Digital City as a demonstrator of the ways in which Information Society services and products can increase productivity in an industrialised area (Moulding Industry, exporting overseas). A Digital City is being created on the outskirts of Lisbon, to counteract the effects of social exclusion in a large and expanding conurbation.

X. National Initiative for Electronic Commerce (Iniciativa Nacional para o Comércio Electrónico)

The promotion of a favourable environment for Electronic Commerce is generally recognised as a strategic step towards the establishment of an Information Society.

As part of the world-wide interest in Electronic Commerce, the Missão para a Sociedade de Informação (MSI) prepared a document which announced a National Initiative for Electronic Commerce; this was made available for public discussion, over the period April to July 1998²³. The Cabinet Office approved this document on 6th August, (Resolution n° 115/98, published in the Official Journal, on 1st September)²⁴. The main aim of this Initiative is to create an appropriate environment, which helps Portuguese SME's to modernise their information systems, to facilitate their participation in the Digital Networks and to create new jobs. Also, it is expected that this Initiative will encourage Portuguese SME's to modernise their processes and update their management procedures, thus improving their competitiveness in World Markets.

²² Portugal. Ministério da Ciência e Tecnologia. *Cidades Digitais*. URL: <http://www.aveiro-digital.pt> [Accessed: 3 December 1998].

²³ Portugal. Ministério da Ciência e Tecnologia. Missão da Sociedade de Informação. *National Initiative for Electronic Commerce*. URL: <http://www.missao-si.mct.pt/INCE/> [Accessed: 3 December 1998].

²⁴ Portugal. Conselho de Ministros. Resolução do Conselho de Ministros no. 115/98. *Diário da República*, no. 201/98, 1 Setembro 1998, p. 4541 – 4542. URL: <http://www.missao-si.mct.pt/INCE/rcm.html> [Accessed: 13 October 1998].

There is already draft legislation concerning the regulation of Electronic Signatures and Electronic Invoicing²³. The approval of this Legislation is critical for the acceptance of new Information Technologies by Portuguese SME's and by businesses at large.

XI. Government Online

Government Online has been another major milestone in the implementation of the Portuguese Initiative towards an Information Society.

This facility includes:

- Official Journal on the Net, made available since 1997;
- Declaration of Income Tax - IRS, through remote access, 1997; A Web site has been created at Direcção Geral de Contribuições e Impostos (Tax Office)²⁵ for this purpose;
- Information for Citizen Programme – INFOCID²⁶ is the Portuguese Interdepartmental Information System for the Citizen, created in 1991,²⁷ p. 253), predating the “Green Paper for an Information Society”.

It continues to be maintained by all State organisations dealing with citizens. It is a public network that offers all Portuguese citizens an easier way of interacting with the Public Administration, irrespective of their social and economic status. It is an integrated database sponsored by the Secretary of State for Public Administration under the Prime Minister's Office. It is co-ordinated by a Steering Committee and is an inter-departmental and co-operative system which has more than 50 different partners from all Ministries²⁸.

4. SOME PLANNING OPTIONS FOR 1999

These are concerned with the medium term strategy for the development of the Portuguese Economy; they were among those submitted recently (October 1998) to the Parliament²⁹.

In the context of developing an Information Society, the GOPs for 1999²⁹, state that the Government will continue with its efforts towards the “exploitation of information and communication technologies in the Portuguese society and economy”, giving high priority to strengthening the National Plan, the “National Initiative for the Information Society”. [²⁹, p.148 – (39)]. Special emphasis is placed on the Initiatives for Electronic Commerce

²⁵ Portugal. *Direcção Geral de Contribuições e Impostos*. [URL: <http://dpci.min-financas.pt> [Accessed:]].

²⁶ Portugal. Presidência do Conselho de Ministros. *INFOCID – Informação para o Cidadão*. URL: <http://www.infocid.pt> [Accessed: 3 December 1998].

²⁷ CORREIA; Ana Maria Ramalho, *et.al.* Portugal, In STEELE, Jane (ed.). *Information and Citizenship in Europe*, London: Policy Studies Institute, 1997, p. 218 - 275.

²⁸ VIDIGAL, Luís. INFOCID – A single window for citizenship in Portugal. In CLIFT, Steven, GOTZE, John, OSTBERG, Olov e LOGHAN, Gretchen W. (eds.). *Democracy and Government on-line services: contributions from Public Administrations around the world*. G8 Government On-Line, 1998. URL: <http://www.open.gov.uk/govoline/front.htm> [Accessed: 3 December 1998].

²⁹ Portugal. Assembleia da República. Proposta de Lei no. 210/VII: Grandes Opções do Plano para 1999 e Anexo. *Diário da Assembleia da República*, II Série-A, no. 8, 16 Outubro 1998, p. 148-(2)-148-(124).

and Digital Cities. [²⁹, p. 148-(2), Preamble], but there are others which are also becoming significant as the Plan develops. These are:

- To gradually expand the “Programme Internet in School” to all primary schools, Teachers Training Centres and other Centres of Learning, in partnership with Local Government [²⁹, p. 148- (40)];
- To launch a Programme for computational processing of the Portuguese Language [²⁹, p.148-(40)];
- To launch the “Information Society Initiative for Citizens with Special Needs”; this initiative includes the development, testing and use of Information and Communication Technologies for the improvement of the Quality of Life of handicapped citizens and other citizens with special needs [²⁹, p.148-(41)];
- To launch a Programme, in collaboration with public and private entities, to educate everyone in the basic Internet skills so that they can efficiently search for and access information [²⁹, p.148-(41)];
- To expand the Programme for Digital Cities, to include new cities and regions in the country and eventually to create a National Programme, “Portugal Digital” [²⁹, p. 148-(41)];
- To expand the creation of “Lojas do Cidadão” (Citizens’ Malls), which provide thirty interactive public services [²⁹, p. 148 -(16)];
- To enhance networking facilities between the various governmental departments and extend this to include citizen access; [²⁹, p. 148 (17) – 148 (18)];
- To promote the classification of Public Information as follows:
- “Information for Citizenship” - which should be made universally available and free at the point of use;
- “Information for Development” – to be paid at a symbolic price or eventually made available at no cost;
- “Added Value Information” – that should be made available at market prices. [²⁹, p. 148 (18)];
- To finalise the Automation Plan of the National Library; to extend the Public Libraries National Network; to install the School Libraries Network [²⁹, p. 148 (42)];
- To promote further development of the audio-visual and multimedia content industry. [²⁹, p. 148 (42)].

5. CONCLUSION

This paper has outlined Portugal’s strategy for the achievement of an Information Society. These are early days but the first steps have already been taken in the form of programmes to lay down the necessary infrastructure, to educate and train the citizens that will form the Information Society and to prime the Portuguese economy as it ventures into the international electronic content marketplace.

The attendant legislative and regulatory actions are well in hand, although they will not be fully realised until international agreements are reached on such important issues as Intellectual Property Rights, Authentication, Electronic Signatures....

Emphasis has properly been placed on infrastructure and education, in the first instance. Then the attention was directed towards the content industry. This also has educational

requirements, not only for generating audio-visual and multimedia products but also to store and preserve them so that they can be accessed later, in an efficient and effective way.

Storage and Preservation of intellectual works, our cultural heritage, is a national responsibility. It can only be achieved through a national network of Digital Libraries, Archives and Museums, equipped to deal with both traditional and electronic materials. This is well recognised in the Green Paper (Measure 3.5) and is represented by the activities of a Task Force, created in October 1998, led by the National Library.

END NOTE:

This paper is a distillation of information gleaned from several sources. The priorities and selections of material content are only according to the Author's research interests. The following references are provided for those who wish to research further:

- APDC – Associação Portuguesa para o Desenvolvimento das Telecomunicações³⁰. [URL: <http://www.apdc.pt/>];
- APMP – Associação para a Promoção do Multimedia em Portugal, 1998¹⁹. [URL: <http://www.apmp.pt/>];
- ESIS - European Survey on Information Society Web Site¹¹. [URL: <http://www.ispo.cec.be/esis/>];
- Material collected through the attendance of events taking place in Portugal, related to Information Society development.
- MSI web site. [URL: <http://www.missao-si.mct.pt/>];
- Official Journal, to track new Laws and regulations as they are published;
- Press cuttings: the services of a press cutting agency to analyse Portuguese newspapers, using the keyword, "Information Society";
- The Web sites of several Portuguese Ministries;
- The Government Planning Options - Grandes Opções do Plano (GOP), for the years 1996⁹, 1997³¹, 1998³² and 1999²⁹; these are discussed and approved by Parliament, on an annual basis, in the last quarter of each year, to coincide with the Annual State Budget discussion.

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³⁰ APDC - Associação Portuguesa para o Desenvolvimento das Comunicações, 1998. URL: <http://www.apdc.pt/> [Accessed: 3 December 1998].

³¹ Portugal. Assembleia da República. Lei no. 52-13/96. Grandes Opções do Plano para 1997. *Diário da República*, I Série-A, no. 299/96, 2º Suplemento, p. 4684 (104) – 4684 (200).

³² Portugal. Assembleia da República. Lei no. 127-A/97: Grandes Opções do Plano para 1998. *Diário da República*, I Série-A, no. 293/97, Suplemento, 20 Dezembro 1997, p. 6732(2) – 6732 (96).

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