

[eInclusion in]

Greece

Ελλάδα



ICT & Ageing

Geographic Digital Divide

eAccessibility

eInclusion

Cultural Diversity

Inclusive eGovernment

Digital Literacy & Competences

Country Profile

History

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Disclaimer:

This document is not intended to be exhaustive. Its purpose is to give an overview of the general eInclusion status in Greece. Even though every care has been taken to ensure accuracy, the information herein should be treated as indicative and no responsibility for errors can be assumed. Neither the European Commission, nor any person acting on its behalf can be held responsible for the use that could be made of the information provided.

Country Profile

Basic data and indicators

Basic Data

Population (1 000): 11 295.0 inhabitants (2010)*

GDP at market prices: 237 493.5 million Euro (2009)*

GDP per inhabitant in PPS (Purchasing Power Standards, EU-27 = 100): 95.0 (2009)*

GDP growth rate: -2.0 % (2009)

Inflation rate: 1.3 % (2009)

Unemployment rate: 9.5 % (2009)

Government debt/GDP: 115.1 % (2009)

Public balance (government deficit or surplus/GDP): -13.6 % (2009)

Source: [Eurostat](#)

*Provisional value

Area: 131 957 km²

Capital city: Athens

Official EU language: Greek

Currency: Euro

Source: [Europa website](#)

Information Society Indicators

Percentage of households with Internet access: 38 % (2009)

Percentage of households with broadband connection: 33 % (2009)

Percentage of individuals regularly using the Internet: 38 % (2009)

Percentage of individuals using the Internet for uploading self-created content: 4 % (2008)

Percentage of individuals using the Internet for reading online newspapers/magazines: 21 % (2009)

Percentage of individuals using the Internet for finding information about goods and services: 33 % (2009)

Percentage of individuals using the Internet for seeking health-related information: 15 % (2009)

Percentage of individuals using the Internet for looking for a job or sending a job application: 6 % (2009)

Percentage of individuals using the Internet for doing an online course: 2 % (2009)

Percentage of individuals using the Internet for seeking information with the purpose of learning: 23 % (2009)

Percentage of individuals using the Internet for interaction with public authorities: obtaining information 10.7 %, downloading forms 5.7 %, returning filled forms 4.0 % (2009)

Source: [Eurostat](#)

Editorial notice: Statistical indicators referenced in this section reflect those of Eurostat at the time the Edition is being prepared.

eInclusion History

Main developments and key milestones (in reverse chronological order)

For the latest developments, see: [ePractice news for eInclusion](#)

Recent News

August 2010

On 4 August 2010, the Catholic University of Leuven (*Katholieke Universiteit Leuven - K.U.Leuven*) released a freeware extension for an open source Software suite that enables users to save documents as Braille, or to send them directly to a Braille embosser. The freeware extension in question is available for most operating systems. The current version supports eight Braille embossers, with additional embossers slated for further release.

It is being developed by the [ÆGIS project](#), a research and development project supported by the European Commission. The [ÆGIS project](#) develops software for persons with disabilities, covering the desktop platform, the Web and mobile devices. The application is suitable for both Braille experts and occasional users. The new Braille freeware can be downloaded from <http://odt2braille.sourceforge.net/>. This website also contains installation instructions and a manual.

July 2010

The VERITAS (Virtual and Augmented Environments and Realistic User Interactions To achieve Embedded Accessibility DesignS) project released its first Newsletter on 29 June 2010. This 6-monthly, fully accessible communication tool on the VERITAS project will provide information on the project's progress and announce important events and other up-to-date news addressed to the VERITAS network, policy makers and the scientific community.

Each issue is available both in PDF and accessible HTML format via <http://veritas-project.eu/category/newsletter/>.

The first newsletter is made up of the following sections:

- ▶ Presentation of the 'VERITAS Vision'
- ▶ Presentation of the 'VERITAS Concept and Objectives'
- ▶ The VERITAS Application Areas
- ▶ The VERITAS End User Perspective
- ▶ Views from the Project partners.

The newsletter furthermore announces the [VERITAS European Survey](#), encouraging stakeholders to take part in it. Lastly, it encourages interested parties to [register to the VERITAS Forum](#).

May 2010

Since 30 April 2010 designers and developers, as well as people with disabilities and older people that will be the main users and beneficiaries of the [VERITAS](#) system, have been invited to join the dedicated User Forums where best practices and knowledge can be exchanged. These forums will take place at the same time as the project's conferences, where all interested parties will be able to join the debate. Members of the User Forums will also have the opportunity to apply for participation in the testing of the VERITAS services and in project conferences at a reduced fee. All interested parties can complete the relevant [registration form](#) in order to become a member of the Forums, which also gives them the right to access the [online User Forums](#).

April 2010

The kick-off meeting of [MIG@NET](#), a project dedicated to the study of migrant participation in transnational digital networks, took place on 11 and 12 March 2010 in Athens, Greece. MIG@NET will undertake the task of researching and analysing the ways in which migrants participate in the production and proliferation of transnational digital networks. It will furthermore explore the effect of transnational digital networks on migrant mobility and integration.

The project will study transnational digital networks as instances of socioeconomic, gender, racial and class hierarchies, where the participation of migrant communities entails the possibility of challenging these hierarchies. MIG@NET will be based on a transnational perspective that focuses mostly on the links and networks that cross and transcend national and gender borders connecting migrant individuals and groups across the globe.

The project consortium gathers [partners](#) from eight countries: France, Germany, Greece, Italy, The Netherlands, Slovenia, Turkey and the United Kingdom. MIG@NET is funded under the European Union's Seventh Framework Programme (FP7), Specific Programme on Co-operation, theme 'Socio-economic Sciences and Humanities'.

March 2010

- ▶ The [Open architecture for Accessible Services Integration and Standardization \(OASIS\) project](#) - a Large Scale Integrated Project co-financed by the European Commission under the 7th Framework Programme - has recently released its first animated project video. In the newly released video, the two main characters (John and Sue) use the OASIS services on a daily basis. The video includes the following cases of application of the OASIS project:
 - Independent living applications
 - Nutritional advisor
 - Activity coach
 - Brain and skills trainer
 - Social communities platform
 - Health monitoring
 - Environmental control
 - Autonomous Mobility and Smart Workplaces Applications
 - Transport information services
 - Route guidance
 - Personal mobility
 - Smart workplaces.
- ▶ The OASIS project consortium is composed of 33 partners from 11 countries, namely Belgium, Bulgaria, China, Germany, Greece, Italy, Mexico, Romania, Spain, Switzerland and United Kingdom. Large Industries, SMEs, Universities, Research Centres, Non-Profit Organisations, Public Organisations and Healthcare Centres are represented among the partners.
- ▶ The [Ministry of Economy, Competitiveness and Shipping](#) (Υπουργείο Οικονομίας, Ανταγωνιστικότητας & Ναυτιλίας) proceeded to a **re-design** of the Operational Programme 'Digital Convergence' (Ψηφιακή Σύγκλιση). To this end, relevant stakeholders are invited to participate in a public consultation for the re-design of specific principals, strategies and directions of the operational programme.

- ▶ On 2 March 2010, the County Council of Thessaloniki ratified an agreement for the deployment of the Programme '[From the grandfather to the grandson](#)' (*Από τον παππού στον εγγονό*), the purpose of which is to familiarise the elderly people of the prefecture of Thessaloniki with new technologies.
- ▶ A study entitled '[An overview of web accessibility in Greece: a comparative study 2004–2008](#)' has been published by the Human Computer Interaction Laboratory of the Institute of Computer Science of FORTH, in its capacity as the Greek National Contact Centre of the European Design for All e-Accessibility Network. Approximately 250 public and commercial Web sites in Greece were evaluated for accessibility, concluding that some 85 % of web sites are considered inaccessible, whereas a small group of 14 % have minor accessibility problems and only 1 % are considered accessible. The study has been published as a Communication in the International Journal *Universal Access in the Information Society* (UAIS, Vol. 9 & No.2) by Springer.

News 2009 and before

2009

- ▶ In *December 2009*, through the '[Go Digital 2.0](#)' (*Δες την Ψηφιακά 2.0*) action, the Hellenic Ministry of Education (*Υπουργείο Παιδείας*) offered students a new laptop with a maximum **subsidy** of € 400, free access to 100 GBytes of 'online' storage area via the [PITHOS+](#) service, and access to new open source educational software.
- ▶ In *June 2009*, the ACCESSIBLE project launched a set of [online questionnaires](#) aimed at Developers, Accessibility Assessors, Elderly and Disabled People, Public Bodies and Service Providers respectively. The objective is to identify the user needs regarding accessibility of software usage and development. The survey results evaluation will form the basis for implementing the appropriate tools and methodologies in order to increase awareness and need for accessibility. Those interested in contributing are invited to complete the online questionnaires which have been made available at <http://www.accessible-project.eu/index.php/questionnaire.html>. The questionnaires are completely anonymous, and are available in German, Greek, Portuguese, Italian, English and Bulgarian. The ACCESSIBLE project has intended to have completed the survey by the end of June 2009.
- ▶ In *January 2009*, the Greek digital strategy entered its second phase of implementation, by utilising more than € 2 billion Euros allocated to ICT related initiatives, financed through the Operational programme '[Digital Convergence](#)' (*Ψηφιακή Σύγκλιση*) within the '[National Strategic Reference Framework - NSRF 2007-2013](#)' (*Εθνικό Στρατηγικό Πλαίσιο Αναφοράς - ΕΣΠΑ 2007–2013*). The Digital Strategy to 2013 presented a series of 9 'threads' of initiatives to be supported by ICT, all related to everyday activities of citizens and businesses alike also including a line of actions dedicated to **eInclusion and eParticipation**.

2007

In *September 2007*, a **new financing tool** entitled Operational Programme '[Digital Convergence](#)' (*Ψηφιακή Σύγκλιση*) was approved by the European Commission within the framework of the [National Strategic Reference Framework 2007-2013](#) (*Εθνικό Στρατηγικό Πλαίσιο Αναφοράς 2007-2013*, NSRF 2007-2013). The operational programme 'Digital Convergence' has been intended to become the financing instrument for implementing projects and initiatives foreseen in the Greek Digital Strategy, extending to 2013.

2006

- ▶ In *October 2006*, the Special Secretariat for Information Society (*Ειδική Γραμματεία για την Κοινωνία της Πληροφορίας*) is renamed to [Special Secretariat of Digital Planning](#) (*Ειδική Γραμματεία Ψηφιακού Σχεδιασμού*), also expanding its scope in order to further **promote ICT** through the new Digital Strategy 2006-2013 (*Ψηφιακή Στρατηγική 2006-2013*).

- ▶ In *July 2006*, the Greek Government tenders the € 210 million project entitled 'Broadband Access Development in Underserved Territories', aimed to co-finance **broadband investments** for local-access across Greece (excluding Athens and Thessaloniki).
- ▶ In *January 2006*, the new '[Digital Strategy 2006-2013](#)' (*Ψηφιακή Στρατηγική 2006-2013*) was put into effect with the ambitious target to help Greece perform a '**Digital Leap**'. The strategy included more than 65 actions and was divided into two parts. The first part of the plan was enacted by 2008, and the second one by 2013. By 2008, the government had promoted the development of electronic procurement, broadband connections, digital public services for citizens and businesses, and the use of electronic signatures. In the field of inclusion the strategy focused on development fields such as accessible one-stop shops; subsidies for ICT equipment for specific population groups and accessible eServices for the regional government.

2004

- ▶ In *November 2004*, the [Observatory for the Greek Information Society](#) (*Παρατηρητήριο για την Κοινωνία της Πληροφορίας*) became operational. It is a non-profit organisation supervised by the Ministry of Economy & Finance (*Υπουργείο Οικονομίας και Οικονομικών*) and the Ministry of Interior, Public Administration and Decentralisation (*Υπουργείο Εσωτερικών, Δημόσιας Διοίκησης και Αποκέντρωσης*). Its mission is to measure and evaluate the **national progress** made towards the Information Society, as well as to contribute to the accomplishment of the IS strategic goals at a national level.
- ▶ The '[Study on Universal Access and Equal Participation of people with disabilities in the Information Society](#)' (*Μελέτη με αντικείμενο την Καθολική Πρόσβαση και Ισότιμη Συμμετοχή Ατόμων με Αναπηρίες (ΑμεΑ) στην Κοινωνία της Πληροφορίας*) was published in *March 2004*. The study was conducted by the University of Crete in the context of the Operational Programme 'Information Society' (*Κοινωνία της Πληροφορίας*) of the 3rd Community Support Framework run by the then Secretariat for the Information Society (*Ειδική Γραμματεία για την Κοινωνία της Πληροφορίας*) under the former Hellenic Ministry of Economy and Finance (*Υπουργείο Οικονομίας και Οικονομικών*). This study laid out a framework for activities to promote **eInclusion and eAccessibility**.

2003

The '[National Network on Design for All and e-Accessibility](#)' (*Εθνικό Δίκτυο GR-DeAN*) was established in *2003* as a member of the European Design for All and e-Accessibility Network (EDeAN). GR-DeAN aims to promote the wide application of the 'Universal Access' and 'Design for All' principles in Greece, and to support activities towards equal participation of people with disabilities in the Information Society.

2002

- ▶ A Task Force on issues related to 'Universal Access and Usability in the Information Society by all citizens, including people with disabilities and other disadvantaged groups', was set up in *April 2002* by the then [Secretariat for the Information Society](#) of the Hellenic Ministry of Economy and Finance (*Υπουργείο Οικονομίας και Οικονομικών*), in the context of the 3rd Community Support Framework. The Task Force had an advisory role to the Secretariat for the Information Society on issues related to the planning and implementation phases of the Operational Programme "Information Society". Additionally, the role of the Task Force was to propose specific activities in the context of implementation of the eEurope Action Plan at national level.
- ▶ In *January 2002*, an [updated version](#) of the White Paper 'Greece in the Information Society: Strategy & Actions' was published. Set against the background of what has been achieved since the original plan was published in 1999, this update incorporated initiatives launched over the period 2000-2001. In the field of eLearning, this white paper set out actions to ensure the provision of equal education opportunities to **remote areas** and special categories of users as well as the adaptation of educational systems, software and related digital services for greater **accessibility** for those with

special needs. It has also emphasised the necessity of better preparing young people so as to remain competitive in the work environment of the Information Society through a number of study programmes and programmes of life-long training. In the area of health the programme acknowledged that relevant projects had already been scheduled for implementation such as: projects pertaining to the provision of Health-related information and communication services to citizens and people with special needs; and establishment of a national register for the disabled, introduction of the disability card and development of a relevant database.

- ▶ In the year 2002, the first ten '[Citizen Service Centres](#)' (*Κέντρα Εξυπηρέτησης Πολιτών*, KEP) became operational. These **one-stop administrative shops** were located in, or near municipality and prefecture offices and were meant to gradually integrate all administrative procedures through the use of information and communication technology.

2001

In 2001, the Greek Government created the [Information Society S.A.](#) (*Κοινωνίας της Πληροφορίας Α.Ε.*), a state-owned company tasked with supporting the implementation of the '[Operational Programme for the Information Society](#)' (*Επιχειρησιακό Πρόγραμμα για την Κοινωνία της Πληροφορίας*, OPIS). To this end, the company intended to **support government departments** and agencies at all stages of ICT project design, implementation and follow-up. It was intended to have economic and managerial autonomy.

2000

In 2000, the operational programme '[Operational Programme for the Information Society](#)' (*Επιχειρησιακό Πρόγραμμα για την Κοινωνία της Πληροφορίας*, OPIS) was adopted, aimed at implementing the country's Information Society strategy in a coherent and integrated manner. Initially, the programme covered the period 2000-2006 and was supported by the EU as part of the 3rd Community Support Framework. In 2008, the programme has been extended and is expected to eventually conclude by the end of 2010. Within its framework several **initiatives related to eInclusion** have been put in place in the domains of Education and Culture, Health, Employment and Telecommunications.

1999

In *February 1999*, the White Paper '**Greece in the Information Society: Strategies and Actions**' was published, setting out the Greek policy for the development of the Information Society. It presented a comprehensive strategy and defined priorities and specific goals, as well as resources and mechanisms for achieving them. With respect to employment in the age of Information Society the white paper considered that an important policy objective was to create jobs for persons and groups with **special needs**, thus encouraging their social integration. Moreover, in the field of communications, the white paper considered **universal service** as an integral part of the policy for regional development that should be available to all users irrespective of geographical location, or other restrictive factors (e.g. individuals with special needs) in order to facilitate the participation of all citizens in the Information Society.

eInclusion Strategy

Main strategic objectives and principles

Digital Strategy 2006-2013

For the period beyond 2006, the inter-ministerial [Information Technology Committee](#) (*Επιτροπή Πληροφορικής*), which is the highest institutional body for the planning of the strategy and for the development of IT, proposed the successor strategy in the document '[Digital Strategy 2006-2013](#)' (*Ψηφιακή Στρατηγική 2006-2013*). This strategy meets the challenges of the 4th Operational Period (2007-2013) and is compatible with the European policy for the Information Society 'i2010' and with the 'Jobs and Growth' action plan, both of which were outlined in the first semester of 2005. The strategy addresses the challenges of the 4th Community Support Programme and i2010, focusing on the Quality of Life of Citizens in the Information Society, in particular in:

- ▶ **Infrastructures:** Broadband access; development of accessible one-stop shops; subsidies for ICT equipment for specific population groups.
- ▶ **Education:** Incentives for the development of accessible educational content and distant learning.
- ▶ **Health:** Accessible regional eHealth services; universally accessible health records and other related information.
- ▶ **Public administration:** Accessible eServices for the regional government; digital content and information services.

The design of the Digital Strategy was a collaborative effort between the ICT Commission and of more than 20 managing directors and high ranking officers from the sectors of IT and Communications. In this effort also contributed information users (e.g. Banks, commerce players, etc.), agencies of the public sector, staff from the Ad-hoc Secretariat of the Information Society, experts and associations (e.g. the Federation of Hellenic Information Technology & Communication Enterprises [SEPE] and the Federation of Greek Industries, etc). The design of the digital strategy took into account relevant European and International policies (i2010, WSIS), as well as best practices in new technologies from 20 countries. The implementation of the Digital Strategy is monitored by the inter-ministerial [Information Technology Committee](#).

Operational Programme 'Digital Convergence'

The Operational Programme '[Digital Convergence](#)' (*Ψηφιακή Σύγκλιση*) specifies strategy and actions aimed at the efficient utilisation of Information and Communication Technologies (ICT) in the period 2007-2013. The programme has been developed in compliance with relevant national and international strategies, taking especially into consideration particular strategic decisions, as described in the Greek 'Digital Strategy 2006-2013' (*Ψηφιακή Στρατηγική 2006-2013*). Thereby the programme follows the strategic approach described as 'Digital Convergence of the country with the EU, capitalising on the new information and communication technologies (ICT)'. The strategic objective is analysed in general and specific objectives, and is supported by two Priority Axes, specifying the Programme's interventions at national level.

Productivity enhancement by capitalising on ICT

This objective envisages the strengthening of new technologies' penetration in the productive process sought after in combination with business innovations development, as strategic medium to enhance enterprises' productivity through targeted interventions with particular emphasis on SMEs. Beyond others specific objectives, emphasis is to be placed on enterprises' human capital mobilisation, either by developing a digital content of educational character (accessible to business executives), or by developing business content applications (Business Gateways), or through communication actions and existing services instructions of use with emphasis on ICT value in enterprises' business operation.

Positive actions will be accounted for in favour of women, while the '**non discrimination principle**' will be foreseen (including Disabled individuals).

ICT and quality of life improvement

In this field, the programme envisages **undiscriminated citizens' access** to new technologies and knowledge, digital services availability to citizens, foreseen by e-Europe 2005 and i2010, as well as combating digital divide in all its manifestations (geographical, age, disabled individuals, etc). Emphasis will also be placed on the most frequently used services redesign and digital distribution or/and those services included in Plan i2010; regions' electronic servicing on the basis of local needs will also be targeted.

The programme has a **strong regional character**, as a major part of the described actions and interventions concerns from all of the 13 regions of Greece.

In January 2009, the Greek digital strategy entered its second phase of implementation, by utilising more than € 2 billion Euros allocated to ICT related initiatives, funded through the Operational programme '[Digital Convergence](#)' (*Ψηφιακή Σύγκλιση*). In this context, a series of 9 'threads' of actions, to be supported by ICT, were introduced. These threads are all related to everyday activities of citizens and businesses alike.

In particular, the 7th thread is dedicated to **eInclusion and eParticipation**, comprising actions to support the integration of non-privileged social groups to the Information Society, including:

- ▶ financial aids to enterprises for improving the accessibility of their websites according to the W3C accessibility guidelines;
- ▶ financial aids to enterprises for the acquisition of special equipment to support employment of people with disabilities;
- ▶ digital services to support the employment of migrants by enterprises;
- ▶ support to enterprises in the field of ICT, which use special software for people with disabilities;
- ▶ ICT training activities for the elderly at local level;
- ▶ digital services aimed at improving the integration of social groups;
- ▶ awarding actions for stimulating the development of digital services at local level;
- ▶ tackling the digital divide by providing hardware and equipment to excluded social groups;
- ▶ electronic public services especially designed around the needs of disadvantaged social groups;
- ▶ accessible electronic public services at least of the 3rd Level (Two-way interaction: electronic forms to start the procedure to obtain the service on the website).

Operational Programme 'Information Society' (OPIS)

The Operational Programme '[Information Society](#)' (*Κοινωνία της Πληροφορίας*, OPIS) is aimed at implementing country's Information Society strategy in a coherent and integrated way. It was adopted in 2000 to cover the period 2000-2006 and is supported by the EU as part of the 3rd Community Support Framework. OPIS is an innovative horizontal programme, cutting across government departments. Responsibility for this programme lies within the [Special Secretariat of Digital Planning](#) (*Ειδική Γραμματεία Ψηφιακού Σχεδιασμού*) of the [Ministry of Economy, Competitiveness and Shipping](#) (*Υπουργείο Οικονομίας, Ανταγωνιστικότητας & Ναυτιλίας*). Initiatives related to eInclusion in the context of OPIS have been put in place in the domains of:

Education and Culture

Activities in this field are aimed at supporting education and culture, and at promoting **long life learning** in the new digital age. Related activities include: facilitating the adaptation of the educational system to the requirements of the new digital age; increasing the adoption of new technologies in the field of education; enabling the networking of schools, universities and the academic community

(including administration departments); training of teachers and students; as well as developing digital content for education purposes.

Citizens and Quality of Life - Health

Particular targets with respect to health and social cohesion indicatively include: making it easier for scientific and administrative staff to access medical telematic systems for the purposes of prevention, diagnosis and therapy; connecting distant regional and local health departments/hospitals (including those ones on islands and in rural areas) to centrally managed medicine services; fostering the development of telemedicine; and enhancing the development of systems in **support of the elderly and of people with special needs**. Those activities are complemented by providing training, on ICT use such as the training of qualified staff to support health departments on distant islands and rural areas.

Digital economy and employment

This line of actions is aimed at facilitating the smooth transition of the country to the new post-industrial digital economy, which is based on production, distribution and use of both knowledge and information. On the above basis, the general objectives in this field are: to reinforce economic and employment mechanisms by realising the economic benefits of new technologies, promoting links between the country's scientific and technological personnel and the production sector, developing the skills of the labour force. With respect to reinforcing the potential of human capital, the objective is to support the development of key skills on the basis of the requirements created by the Information Society. Actions in this field are part of a policy framework that emphasises the social protection of **disadvantaged groups** in the labour market at risk of **social exclusion** and **discrimination**, in accordance to the new orientations and policies developed at the European level. Particular measures are aimed: to develop basic IT knowledge for the broader population by means of flexible procedures; to foster acceptance and use of IS and Internet applications among women, socially sensitive population groups and the elderly, in combination with accession or re-accession to the labour market; to promote employment and the acquisition of work experience and training in new skills in IS sectors; and to diffuse and to apply tele-work and long distance training, mainly for geographically **remote areas** and island regions.

Communications

For the development of the Information Society, advanced telecommunications are necessary. These services should be able to support applications at all economy and society levels. This line of actions is aimed at contributing to the introduction of new telecommunications technologies in the operation of public administration, the operation of companies, as well as in the every day life of citizens, so that the benefits of the Information Society can be shared by all. Among other things, it includes the development of telecommunication services for the **elderly** and for **people with special needs**.

Even though the OPIS programme was initially foreseen to cover the period up to 2006, a [revised version](#) of the programme was approved in December 2008, regarding the extension of the line of actions related to 'Citizens and Quality of Life' and 'Communications'. The funds corresponding to the action line 'Citizens and Quality of Life' amounted to € 866.11 million out of a total OPIS budget of € 2 676.0 million. The programme, which now also includes a fifth line of actions aimed at supporting the effective implementation of the programme's projects, is expected to have eventually been concluded by the end of 2010.

Other eInclusion policies

- ▶ Since 2002, there have been activities targeted to the elaboration of a systematic approach to achieve compliance with EC directives regarding eAccessibility.
- ▶ In 2004, the ['Study on 'Universal Access and Equal Participation of people with disabilities in the Information Society'](#) (*Μελέτη με αντικείμενο την Καθολική Πρόσβαση και Ισότιμη Συμμετοχή Ατόμων με Αναπηρίες (ΑμεΑ) στην Κοινωνία της Πληροφορίας*) set out recommendations towards the formulation of a national policy on the advancement of an inclusive Information Society.
- ▶ Significant progress has been made in the actual implementation of policy measures, directly affecting nationally funded projects addressing eInclusion. To this direction, the recent adoption by

the Greek Government of the criterion of accessibility and the principle of non-discrimination as prerequisites for pre-selection and funding in all implementation stages for projects funded under the [National Strategic Reference Framework](#) (NSRF) (*Εθνικό Στρατηγικό Πλαίσιο Αναφοράς – ΕΣΠΑ*) 2007 – 2013, can be considered as a major positive step.

eInclusion Legal Framework

Main legal texts impacting on the development of eInclusion

Law in practice

Greek Constitution

Currently there is no specific legal framework that refers to eInclusion. However, the [Greek Constitution](#) in Article 5A, Section II states the following:

1. All persons are entitled to information, as specified by law. Restrictions to this right may be imposed by law only insofar as they are absolutely necessary and justified for reasons of national security, of combating crime, or of protecting rights and interests of third parties.
2. All persons are entitled to participate in the Information Society. Facilitation of access to electronically handled information, as well as of the production, exchange and diffusion thereof constitutes an obligation of the State, always in observance of the guarantees of articles 9, 9A and 19.

As a result, there are on-going discussions for appropriate legislation specifically related to eInclusion to be enacted in the near future.

Legislation with direct or indirect impact on eInclusion in Greece includes:

UN Convention on the Rights of Persons with Disabilities

It has to be stressed that, since 2007, Greece has signed the [UN Convention on the Rights of Persons with Disabilities](#). The Convention is in the process of Ratification from the Greek Parliament in order to incorporate it in the Greek legislation.

Transparency Law

The 'Transparency' Law 3861/2010 (Official Gazette 112 A/13-7-2010) enacted in 2010, relates to the enhancement of transparency and requires that all legislation and legislative actions of the central government, as well as of local authorities, are publicly available on the Internet as soon as they become effective.

'Intellectual Property Rights' Law

The [Law 2121/1993](#) on 'Intellectual Property Rights' makes specific exceptions on the Intellectual Property Rights for Books designated for persons with disabilities, in order to ensure their access to print information.

'Reproduction of Works of Intellectual Property for blind, deaf and other groups of people with disabilities' Law

The Ministerial Decree 2065 of 2007 (ΥΠΠΟ/ΔΙΟΙΚ/98546, official Gazette: B 2065/24.10.2007) on the 'Reproduction of Works of Intellectual Property for blind, deaf and other groups of people with disabilities' («Αναπαραγωγή έργου πνευματικής ιδιοκτησίας προς όφελος τυφλών και κωφαλάλων, και επέκταση της ρύθμισης σε άλλες κατηγορίες ατόμων με αναπηρίες») ensures that the reproduction of copyrighted material in accessible formats for people with disability is allowed.

eInclusion Actors

Main roles and responsibilities

National eInclusion

Policy/Strategy

Information Technology Committee (*Επιτροπή Πληροφορικής*)

The Information Technology Committee (*Επιτροπή Πληροφορικής*) was established in the spring of 2004. Initially, the Committee was responsible for strategic planning and IT development. Meanwhile, the Committee has become the common platform for political planning, coordination, monitoring and development of the Information Technology at national level, and especially, in the Public Sector. The Committee is responsible for developing Greece's [Digital Strategy](#) for the period 2006-2013, containing specific measures for advancing eInclusion in the field of Infrastructures, Education, Health and the Public Administration. The committee is also responsible for closely monitoring the implementation of the Digital Strategy by public institutions.

Coordination

Special Secretariat of Digital Planning (*Ειδική Γραμματεία Ψηφιακού Σχεδιασμού*)

The Special Secretariat of Digital Planning (*Ειδική Γραμματεία Ψηφιακού Σχεδιασμού*) - formerly Special Secretariat for the Information Society (*Ειδική Γραμματεία για την Κοινωνία της Πληροφορίας*) - of the [Ministry of Economy, Competitiveness and Shipping](#) (*Υπουργείο Οικονομίας, Ανταγωνιστικότητας & Ναυτιλίας*), was originally formed in December 2000 having as main task to plan, supervise and manage Operational Programme 'Information Society' (*Κοινωνία της Πληροφορίας*, OPIS) within the context of the 3rd Community Support Framework (CSF). The Special Secretariat's scope has been extended in October 2006, in order to further facilitate the implementation of the new 'Digital Strategy 2006-2013'. In particular, the secretariat has full responsibility on initiatives and policies that fall under the 'Digital Convergence' (*Ψηφιακή Σύγκλιση*) Agenda.

Implementation

Ministry of Interior, Decentralization and e-Government (*Υπουργείο Εσωτερικών, Αποκέντρωσης & Ηλεκτρονικής Διακυβέρνησης, ΥΠΕΣ*)

The Ministry of Interior, Decentralization and e-Government is responsible for implementing (inclusive) eGovernment in Greece. The Ministry has a long experience in managing eGovernment projects within the 1st and 2nd European Community Support Framework (CSF); it also manages national and European funds within the Operational Programme for the Information Society (OPIS). In particular, within the framework of the latter programme, the ministry coordinated and co-founded the project on 'Access for the disabled to e-government services' (*Πρόσβαση Ατόμων με Αναπηρία στις Υπηρεσίες Ηλεκτρονικής Διακυβέρνησης*), which resulted to the establishment of the dedicated [website](#). In 2005, Disability Units were established in the Ministry of the Interior and in all the institutions supervised by this Ministry (i.e., the entire public sector in Greece). The Presidential Decree 13/2005 describes the duties and responsibilities of these units. Emphasis is laid upon physical accessibility to premises; accessibility to eGovernment is also mentioned.

Ministry of Labour and Social Insurance (Υπουργείο Εργασίας και Κοινωνικής Ασφάλισης)

The Ministry of Labour and Social Insurance (Υπουργείο Εργασίας και Κοινωνικής Ασφάλισης), through its General Secretariat for the Administration of Community and Further Financial Resources (Γενική Γραμματεία Διαχείρισης Κοινοτικών και Άλλων Πόρων, Γ.Γ.Δ.Κ.Π.) supervises the [Special Authority for the Implementation of Actions co-financed by the European Social Fund](#) (Ειδική Υπηρεσία Εφαρμογής Συγχρηματοδοτούμενων Ενεργειών από το Ευρωπαϊκό Κοινωνικό Ταμείο). In the period 2007-2013, within the framework of the operational programme on 'Development of Human Resources' (Ανάπτυξη Ανθρώπινου Δυναμικού), this authority is responsible for the implementation of actions in support of human capital and skills, targeting both employed and unemployed personnel, among other things with actions to improve their ICT skills.

Ministry of Education, Lifelong learning and Religious Affairs (Υπουργείο Παιδείας, Δια Βίου Μάθησης και Θρησκευμάτων)

The Ministry of Education, Lifelong learning and Religious Affairs (Υπουργείο Παιδείας, Δια Βίου Μάθησης και Θρησκευμάτων) is responsible for the utilisation and integration of ICT in education, as well as for actions aimed at improving the digital literacy. The Ministry supervises the independent Office for the Information Society (Γραφείο Κοινωνίας της Πληροφορίας) entrusted with the implementation of actions in the field of education under the Operational Programme 'Information Society' structured around four main axes: deployment and support of hardware and networking equipment; development of software and digital content for educational and administrative purposes (educational software; IT-systems, etc); provision of support to all educational disciplines through ICT; and the improvement of digital literacy and skills.

Support**Observatory for the Greek Information Society (Παρατηρητήριο για την Κοινωνία της Πληροφορίας)**

The Observatory for the Greek Information Society (Παρατηρητήριο για την Κοινωνία της Πληροφορίας) is a non-profit organisation, supervised by the Minister for Economy, Competitiveness and Shipping (Υπουργείο Οικονομίας, Ανταγωνιστικότητας & Ναυτιλίας). The Observatory formed the third pylon of the Operational Programme for the 'Information Society' (Κοινωνία της Πληροφορίας, OPIS), and it preserves its role in the fourth programming period and the Operational Programme 'Digital Convergence' (Ψηφιακή Σύγκλιση). Together with the Special Management Service and the Information Society S.A (Κοινωνία της Πληροφορίας Α.Ε.), they all form its main implementation mechanisms and contribute to the fulfilment of its objectives. The Observatory's mission is to:

- ▶ measure and evaluate the country's progress with regard to its course towards the Information Society;
- ▶ contribute to the country's effort to achieve the IS goals.

The Observatory for the Greek Information Society aims at collecting and assessing quantitative and qualitative data on issues regarding the Information Society in Greece, diffusing best practices, as well as conducting relevant studies and contributing to the policy formulation processes to the Greek Government and any other party interested.

Operational Programme 'Digital Convergence' – Managing Authority (Ειδική Υπηρεσία Διαχείρισης Ε.Π. 'Ψηφιακή Σύγκλιση')

The Managing Authority of the Operational Programme for 'Digital Convergence' (Ειδική Υπηρεσία Διαχείρισης Ε.Π. 'Ψηφιακή Σύγκλιση') operates under the [Special Secretariat of Digital Planning](#) (Ειδική Γραμματεία Ψηφιακού Σχεδιασμού) of the [Ministry of Economy, Competitiveness and Shipping](#) (Υπουργείο Οικονομίας, Ανταγωνιστικότητας & Ναυτιλίας). Its main objective is to secure the effectiveness as well as to monitor the legitimacy and regularity of the management and implementation of the Operational Programmes of 'Digital Convergence' (Ψηφιακή Σύγκλιση) and 'Information Society' (Κοινωνία της Πληροφορίας, OPIS).

Information Society S.A. (Κοινωνία της Πληροφορίας Α.Ε.)

The Information Society S.A. supports government departments and agencies at all stages of ICT project design, implementation and follow-up.

Institute of Computer Science of the Foundation for Research and Technology-Hellas (Ινστιτούτο Πληροφορικής του Ιδρύματος Τεχνολογίας και Έρευνας, FORTH-ICS)

Established in 1983, the Institute of Computer Science of the Foundation for Research and Technology (Ινστιτούτο Πληροφορικής του Ιδρύματος Τεχνολογίας και Έρευνας, FORTH-ICS) is conducting basic and applied research, developing applications and products, providing services, and playing a leading role in Greece and internationally, in the fields of Information and Communication Technologies. Among other things, its activities cover important research and development topics in the framework of the emerging Information Society.

National Network on Design for All and e-Accessibility (Εθνικό Δίκτυο GR-DeAN)

The 'National Network on Design for All and e-Accessibility (Εθνικό Δίκτυο GR-DeAN) was established in 2003, as a member of the [European Design for All and e-Accessibility Network](#) (EDeAN). GR-DeAN aims to promote the wide application of the 'Universal Access' and 'Design for All' principles in Greece, and to support activities towards equal participation of people with disabilities to the Information Society.

National Confederation of People with Disability of Greece (Εθνική Συνομοσπονδία Ατόμων με Αναπηρία, ESAEA)

The National Confederation of People with Disability of Greece (Εθνική Συνομοσπονδία Ατόμων με Αναπηρία, ESAEA) is the social and syndicalistic institution of the disability movement in the country. It was founded in 1989 by organisations of persons with disabilities and their families in order to defend matters of common interest with respect to all types of disabilities and to provide an independent and powerful body to represent people with disabilities and their families in the Greek state and society. Today, the National Confederation of People with Disability is officially considered as a social partner on issues directly or indirectly relating to persons with disabilities and strives to promote policies that contribute to their full participation in social, economic, political and cultural life in the country.

Greek Office of the World Wide Web Consortium (Ελληνικό Γραφείο της Διεθνούς Κοινοπραξίας του Παγκόσμιου Ιστού, W3C-Hellas)

W3C-Hellas was established in 1998 and is hosted at the [Institute of Computer Science](#) (Ινστιτούτο Πληροφορικής, FORTH-ICS) of the [Foundation for Research and Technology-Hellas](#) (Ίδρυμα Τεχνολογίας και Έρευνας, FORTH) in Heraklion, Crete. Office's core mission is to inform all interested Greek organisations and agencies on developments related to advanced technologies of the World Wide Web, as well as to promote recommendations for developers of applications and standards as developers. W3C-Hellas provides information services through the office's website as well as through a monthly newsletter, which is sent electronically to all interested parties.

DISABILITY NOW (ΑΝΑΠΗΡΙΑ ΤΩΡΑ)

'DISABILITY NOW' (ΑΝΑΠΗΡΙΑ ΤΩΡΑ) has been a supporting non-profit company since 1997. Core partners of the organisation are unpaid volunteers. Despite its voluntary nature the organisation develops innovative, professional quality initiatives aimed at providing state of the art support. Among other things, these include: the publication of the 'Disability now' magazine on bi-monthly basis; the Autonomia EXPO – the largest exhibition in Greece concerning people with disabilities; and the www.DISABLED.GR website.

eInclusion Who's Who

Main eInclusion decision-makers and executives

Ministers responsible for eInclusion



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eInclusion Areas

Riga Declaration Priorities

ICT & Ageing

Status in ICT & Ageing

According to a study of the [Observatory for the Greek Information Society](#) (*Παρατηρητήριο για την Κοινωνία της Πληροφορίας*) on the '[Identity of the Greek Internet Users](#)' (*Ταυτότητα χρηστών Internet στην Ελλάδα*), usage of **Computers and the Internet** already play an important role in the daily life of Greek citizens. In 2008, about the half of the Greek population (51 %) used a computer while another 44 % of them had access to the Internet (including those ones without own subscription to the service). The break-down of computer/internet usage with respect to the different age groups has been as follows:

Age group	Using a computer	Using the Internet
16-20	93 %	94 %
21-24	88 %	89 %
25-34	75 %	74 %
35-44	58 %	56 %
45-54	40 %	38 %
55-64	19 %	18 %
65-74	4 %	5 %

Source: [Observatory for the Greek Information Society](#)

While using computers and the Internet is particularly popular in the age groups of 16-20 and 21-24, it is steadily decreasing as the age advances. In particular for the age group of 55-64, the figures testify that only 2 out of 10 persons in this group use computers/Internet, a result which is particularly low considering these persons being in a productive period of their life. Eventually, the age group of 65-74 is practically cut off from ICT. This demonstrates the importance of increased efforts in order to reduce the digital gap in these age groups.

Actions to support ICT & Ageing

'From the grandfather to the grandson'

The County Council of Thessaloniki ratified on 2 March 2010 an agreement for the deployment of the Programme '[From the grandfather to the grandson](#)' (*Από τον παππού στον εγγονό*). Main purpose of this initiative is to **assist senior citizens** of the prefecture of Thessaloniki in dealing with various electronic transactions, as well as to promote the communication between the elderly and the youth.

At first stage, a study will be conducted by the Centre for Vocational Training of Thessaloniki (*Κέντρο Επαγγελματικής Κατάρτισης 'Θεσσαλονίκη' της νομαρχίας Θεσσαλονίκης*) in eight Open Care Centres for the Elderly (*Κέντρα Ανοιχτής Προστασίας Ηλικιωμένων, ΚΑΠΙ*) to investigate the needs of elderly people regarding their ability to use computers and everyday technology applications. On a second note, four seminars will be organised to provide information about the programme. Finally, a 100-hour series of training courses for 320 people (40 elderly participants from each ΚΑΠΙ) will be held in order for the senior citizens to: acquire basic computer skills; learn how to use their electronic cards in withdrawing money from a bank, or how to use the credit cards; be able to read books and fairy tales online.

e-bility.gr website

The web site e-bility.gr mainly addresses professionals from the domain of IT, as well as from special education and rehabilitation domains. This website provides information about the emerging trends and available methodologies and solutions in Information and Telecommunication Technologies concerning:

- ▶ **Assistive Technology** to facilitate daily life and social incorporation of the disabled and the aged.
- ▶ **Accessibility** for the disabled and the elderly to the Internet and its services. This site was developed by the EFTEHNOS Research and Technology Training Human Network.

Geographic Digital Divide

Status of Common Access to Electronic Content and Services

According to the study of the [Observatory for the Greek Information Society](#) (*Παρατηρητήριο για την Κοινωνία της Πληροφορίας*) on the '[Identity of the Greek Inter Users](#)' (*Ταυτότητα χρηστών Internet στην Ελλάδα*), in 2008, approximately 4 out of 10 households (39.4 %) were connected to the Internet, compared to a 60 % among EU27 countries. As particularly positive has been considered the fact that the compound annual growth rate (CAGR) in the period 2005-2008 in the country has been estimated to 17.6 % compared to 7.7 % at European level (EU27 countries).

With respect to development at **peripheral level**, the percentage of households with Internet access was almost doubled compared to the year 2005, in 9 out of the 13 Greek peripheries. Particular increase has been observed in the peripheries of Attica (56 %), North Aegean (38.9 %) and South Aegean (44.1 %), which contribute to an overall increase of the country's average to 39 %. The lowest increase compared to 2005 data is observed in the peripheries of West Macedonia (21.6 %), Thessaly (25.3 %) and Epirus (26.2 %). According to the study, these results are directly related to the GDP per inhabitant in the Greek peripheries. As expected, citizens of areas with increased standards of living are most likely to invest on an Internet connection.

With respect to **computer and internet** usage, the two biggest Greek cities of Athens and Thessaloniki lead the statistics with an amount of approximately 60 %, while remaining cities amount to approximately 40 %. Computer and internet usage in rural areas is trailing at the level of 33 %. Positive is however the fact that the rural areas feature the biggest growth rate compared to the past with respect to both indicators.

As far as the **broadband penetration** in Greece is concerned, according to the 10th six-monthly broadband report (*10η Εξαμηνιαία Αναφορά για την Ευρυζωνικότητα*) of the [Observatory for the Greek Information Society](#) (*Παρατηρητήριο για την Κοινωνία της Πληροφορίας*), on January 2010, the broadband penetration in the country amounted to 17.01 % (connections/100 inhabitants), bringing Greece to the 23rd position among EU 27 countries. The total amount of fixed broadband connections amounted to a total of 1 916 630 connections, depicting an increase of 27.2 % compared with the previous year. Thereby, their vast majority (1 908 124 connections) relied on DSL technology while another 8 506 connections on other technologies (optical fibres, etc).

Actions to support Common Access to Electronic Content and Services

Actions such as the **granting of subsidies** for the acquisition of technical equipments and the related training are expected to foster the development of Greek peripheries and further reduce the digital gap with urban areas. Further actions include:

- ▶ A telephone based public service, which has been launched and operates under the patronage of the national telecommunications provider (OTE). This service is helpful especially to persons with mobility restrictions.
- ▶ The 'Broadband Action Plan' to 2008, allocating a total budget of € 450 million for the development of broadband infrastructure across regions of Greece, the co-financing of broadband services development and the stimulation of broadband demand.

- ▶ The 'Broadband Access Development in Underserved Territories' plan; financed by € 210 million, this project aims to co-finance broadband investments for local-access across Greece (excluding Athens and Thessaloniki) for boosting broadband penetration and coverage in regions where citizens and businesses currently experience difficulties in gaining broadband access.

eAccessibility

Status of eAccessibility

Work on web accessibility in Greece is mainly of RTD nature, and is carried out by research and academic institutions. An overview of this work presented in the '[Study on Universal Access and Equal Participation of people with disabilities in the Information Society](#)' (*Μελέτη με αντικείμενο την Καθολική Πρόσβαση και Ισότιμη Συμμετοχή Ατόμων με Αναπηρίες (ΑμεΑ) στην Κοινωνία της Πληροφορίας*), was published in March 2004. The study was conducted by the University of Crete in the context of the Operational Programme 'Information Society' (*Κοινωνία της Πληροφορίας*) of the 3rd Community Support Framework run by the then Secretariat for the Information Society (*Ειδική Γραμματεία για την Κοινωνία της Πληροφορίας*), under the former Hellenic Ministry of Economy and Finance (*Υπουργείο Οικονομίας και Οικονομικών*). This study laid out a framework for activities to promote eInclusion and eAccessibility.

With respect to the **accessibility** of public websites and eServices, the aforementioned study had evaluated 256 sites in total, with the main outcome being that 79 % of the sample of Greek websites was not accessible.

A study conducted in 2008 by the Human Computer Interaction Laboratory of the Institute of Computer Science of FORTH, in its capacity as the Greek National Contact Centre of the European Design for All e-Accessibility Network, as a follow up of the study conducted in 2004, re-examined the same sample of websites of public interest with regards to their accessibility. The study entitled '[An overview of Web Accessibility in Greece: A Comparative Study 2004-2008](#)' concluded that some 85 % of web sites are considered inaccessible, whereas a small group of 14% have minor accessibility problems and only 1 % are considered accessible. It is argued that website accessibility in Greece has actually deteriorated from 2003 to 2008.

Actions towards eAccessibility

A major step towards the implementation of eAccessibility in Greece is the recent adoption by the Greek Government of the criterion of accessibility and the principle of non-discrimination as prerequisites for preselection and funding in all implementation stages for projects funded under the [National Strategic Reference Framework](#) (NSRF) (*Εθνικό Στρατηγικό Πλαίσιο Αναφοράς, ΕΣΠΑ*) 2007 – 2013. As a result, it is required that all online services and websites to be funded in the context of the NSRF, are compliant with WCAG2.0 (at least level AA).

Digital Strategy 2006-2013

Within the framework of the Digital Strategy 2006-2013 (*Ψηφιακή Στρατηγική 2006-2013*), a budget of € 100 million has been allocated for the digital and social inclusion of **citizens with disabilities**, through a bundle of actions that include:

- ▶ financing and distribution of 50 000 special digital terrestrial decoders to people with disabilities in order to gain accessibility to digital television content;
- ▶ support to visually impaired individuals through the development of ICT solutions in the Centre for Education and Rehabilitation of the Blind (C.E.R.B);
- ▶ provision of eLearning services to 7 000 unemployed women and 500 individuals with disabilities (mostly mobility problems);
- ▶ procurement and installation of IT and special equipment to Special Needs Education;
- ▶ development of an information system for the classification of functioning and disability;

- ▶ training and certification of 750 individuals with sight problems to basic ICT skills;
- ▶ development of sophisticated broadband infrastructure and services for disabled people;
- ▶ procurement of 72 accessible educational software packages of general and special education for the primary and secondary education, as well as the training of 1 000 educators for the maximum exploitation of their benefit.

In addition, Greece actively participates in the European Network on Design for All (EDeAN) through the National Network GR-DeAN. Online communication and collaboration of the GR-DeAN members are supported by the [web portal](#) of the National Network.

Internet portal for Persons with Disabilities

The Greek [Internet portal for Persons with Disabilities](#) (*Διαδικτυακή Πύλη για Άτομα με Αναπηρία, ΑμεΑ*) was developed and launched in 2008 in the context of the Operational Programme '[Information Society](#)' (*Κοινωνία της Πληροφορίας*), Measure 2.2 'Government online'. The website was developed within the framework of the project on 'Access for the disabled to eGovernment services' (*Πρόσβαση Ατόμων με Αναπηρία στις Υπηρεσίες Ηλεκτρονικής Διακυβέρνησης*), co-funded by the European Social Fund (ESF) and the Hellenic Ministry of Interior, Decentralization and eGovernment (*Υπουργείο Εσωτερικών, Αποκέντρωσης και Ηλεκτρονικής Διακυβέρνησης*). It constitutes a generic and systematic technological approach for supporting accessibility and usability of the content, as well as the design and development of accessible web services addressing people with disabilities. The website comprises of the following accessible web services:

- ▶ **Electronic Citizen Service Centre**, for information retrieval and application submission to public administration bodies
- ▶ **Job Finding Service**, supporting people with disabilities in employment seeking and eliminating the need for their physical presence in the workspace for conducting any preliminary negotiations with employers
- ▶ **Digital library of assistive technology product and services**, addressing both individual users, and public bodies and organisations
- ▶ **Web Portal for people with disabilities**, which will constitute the main point for the aforementioned services and their diffusion to the wide public and furthermore provide communication services thus enhancing information exchange and cooperation.

Partners of the project Consortium are: Institute of Computer Science – FORTH (Project Coordinator), INFOQUEST S.A., National Confederation for People with Disabilities, Institute for Language and Speech Processing - ATHENA, European Development S.A., Disability Now, Oration S.A., National Technical University of Athens, Department of Informatics - University of Athens, Hellenic Institute of Transport - CERTH.

Universally Accessible eServices for Disabled People (AmeAnet)

[Universally Accessible eServices for Disabled People](#) (*Ολοκληρωμένες Προσβάσιμες Υπηρεσίες για ΑμεΑ, AmeAnet*) is a national funded project in the context of the Operational Programme '[Information Society](#)' (*Κοινωνία της Πληροφορίας*), Measure 4.3 'Advanced Telecommunications Services for the Citizen' that aims to promote the equal participation of people with disabilities in eGovernment services, and supports independent living by enabling the provision of personalised and informative fully accessible eServices available through mobile devices, as well as traditional desktop PCs equipped with assistive technology. This project involves the development of an accessible web portal for the provision of eServices developed for the [Panhellenic Association of the Blind](#) (*Πανελλήνιος Σύνδεσμος Τυφλών, PABGR*), the procurement of the necessary technical infrastructure (PCs&PDAs), as well as special peripheral assistive technology devices and software for people with disabilities, and the provision of Internet connections through broadband networks (wired and wireless). The web portal complies with the WCAG 1.0 (level AAA) and the Mobile Web Best Practices 1.0.

DISABILITY NOW

['DISABILITY NOW'](#) (*ΑΝΑΠΗΡΙΑ ΤΩΡΑ*) has been a supporting non-profit company since 1997. Core partners of the organisation are unpaid volunteers. The aim of Disability NOW is, more precisely, to produce and distribute all available disability related information, in respect of fundamental rights to independence and social participation. It constitutes a major source of peer support and counselling, empowering people with disabilities with the appropriate knowledge and skills to self-advocate and exercise their civil rights, to manage their needs and to establish their own terms and choices in their lives. Peer support, information and advice are provided continuously through the telephone, email, online disability community and forum, newsletters and the print magazine, on a professional and voluntary basis. Despite its voluntary nature, the organisation develops innovative, professional quality initiatives aimed at providing state-of-the-art support. Among other things, these include: the publication of the 'Disability now' magazine on bi-monthly basis; the Autonomia EXPO – the largest exhibition in Greece concerning people with disabilities; and the www.DISABLED.GR website.

eAccessibility Unit

The [e-accessibility Unit](#) of the National and Kapodistrian University of Athens (*Εθνικόν και Καποδιστριακόν Πανεπιστήμιον Αθηνών*) aims to support disabled students and to apply the corresponding Information Technology solutions through the following activities: assessment of students with disabilities; individual assistive technology; technological accommodation of education; research and development; and, information propagation.

'Starlight' software platform

[Starlight](#), a software platform for developing educational electronic textbooks accessible to blind people and people with deteriorated vision, was designed and evaluated by the Institute of Computer Science (*Ινστιτούτο Πληροφορικής*, ICS) at FORTH, in cooperation with the [Panhellenic Association of the Blind](#) (*Πανελλήνιος Σύνδεσμος Τυφλών*, PABGR) in the course of 2006. The platform comprises of two components:

- ▶ Starlight Reader, Used by end-users for reading / interacting with the electronic textbooks
- ▶ Starlight Writer, Used by authors / creators for developing electronic textbooks.

The platform has been used for developing software products for primary and high schools in Greece.

Digital Literacy and Competences

Status on Digital Literacy and Competences

According to the study on ['eInclusion and Digital Literacy'](#) (*Ηλεκτρονική Ενσωμάτωση & Ψηφιακός Αλφαριθμητισμός στην Ελλάδα*) of November 2009 published by the [Observatory for the Greek Information Society](#) (*Παρατηρητήριο για την Κοινωνία της Πληροφορίας*), the level of **Internet literacy** of the general population in Greece is significantly lower (by 13 percentage points) than the EU 27 average in the year 2007. Only 18.2 % of the Greek citizens had adequate (i.e. moderate or high) skills to use the Internet, compared with the corresponding average of 31 % in the EU 27 countries. Another 9 % of the Greek population featured only low skills, while 72 % of the population did not have any skills at all. It should be noted that in 2008, 43.5 % of Greek citizens had Internet access and 34 % of them have been frequently using the Internet (on a weekly basis).

The same study also analysed the level of Internet literacy regarding **special population groups**, such as persons with **low education** and the **elderly**. To this end, the indicator 'I4-02' has been monitored, measuring a person's ability to use online services (such as email services, search engines, etc). Relevant results for the year 2007 show that Internet literacy among special population groups has been as follows: aged 55-64 (4.8 %); aged 65-74 (0.8 %); women (12.4 %); low educated (4.5 %); inactive persons (2.6 %); unemployed (20.1 %); and population in rural areas (7.9 %).

According to a study, in the period 2005-2007, there has been an **overall improvement** of Internet literacy concerning almost all examined population groups. In general, the growth amounted to 1.6 % -

7.1 % within three years, even reaching 12.6 % in case of the unemployed. An exception constituted the group of 65-74 aged people, where Internet literacy remained unchanged at particularly low levels.

Further analysis of statistical data for the period of 2005-2007 shows clear tendencies with respect to the evolution of the **digital gap** between special population groups and the general population. More precisely, the digital gap has been broadened for the elderly and less educated persons; the digital gap has remained almost unchanged with respect to inactive persons, women and middle-aged people; there has however been a reduction of the digital gap observed for inhabitants of rural areas and for the unemployed.

Actions towards stimulating Digital Literacy and Competences

2002 National Action Plan for the Employment

The 2002 National Action Plan for the Employment of the Ministry of Employment and Social Protection of Greece stated the will to fund and support works of development and test function of flexible forms of education with the use of the Internet (eLearning platforms). This is a field of work in progress.

'EFTEHNOS' project

Specific projects, such as the '[EFTEHNOS](#)' (*ΕΥΤΕΧΝΟΣ*) project, funded by the General Secretariat for Research and Technology (*Γενική Γραμματεία Έρευνας και Τεχνολογίας*) of the Ministry of Education, Lifelong learning and Religious Affairs (*Υπουργείο Παιδείας, Δια Βίου Μάθησης και Θρησκευμάτων*), is aimed to establish a human network responsible for the organisation and conduct of seminars and information days. These training activities are targeted towards the academic, research and business communities, and are aimed at introducing methods and practices that enable the use of ICT by people with disabilities. The project, coordinated by the National and Kapodistrian University of Athens - [Department of Informatics and Telecommunications](#) (*Εθνικόν και Καποδιστριακόν Πανεπιστήμιον Αθηνών, Τμήμα Πληροφορικής και Τηλεπικοινωνιών*), is aimed at creating the know-how and promoting the use of accessibility guidelines, specialised design tools and advanced technologies to the design and development of accessible applications and web services.

'Pilot introduction of computers and related equipment in primary schools accompanied by an integrated and re-designed educational programme for ICT supported lessons' programme

The programme on 'Pilot introduction of computers and related equipment in primary schools accompanied by an integrated and re-designed educational programme for ICT supported lessons' (*Πρόγραμμα πιλοτικής εισαγωγής ηλεκτρονικών υπολογιστών και συναφούς εξοπλισμού σε δημοτικά σχολεία με ενιαίο αναμορφωμένο εκπαιδευτικό πρόγραμμα για μία ψηφιακά υποστηριζόμενη διδασκαλία*) is aimed at supporting the teaching/learning processes with the use of innovative tools. Within this framework, participating primary schools will be provided with 10 lap-tops each, as well as the necessary **network infrastructure** to facilitate access to the [Pan-Hellenic School Network](#) (*Πανελλήνιο Σχολικό Δίκτυο, ΠΣΔ*).

Other actions

- ▶ Most of the Greek universities are starting to develop eLearning platforms mainly for the use of their own students, but some also offer access to other parties.
- ▶ Within the framework of the Operational Programme on 'Development of Human Resources' (*Ανάπτυξη Ανθρώπινου Δυναμικού*), several actions are implemented by the [Special Authority for the Implementation of Actions](#) co-financed by the European Social Fund to improve the ICT skills of the employed and unemployed personnel:
 - [Unemployed personnel](#): training for acquiring basic ICT skills; training for acquiring specialised ICT skills; and, provision of e-Learning services to the unemployed.
 - [Employed personnel](#): training of employees in basic ICT skill and of 6 500 employees in specialised skills.

eInclusion and Cultural Diversity

Actions towards eInclusion and Cultural Diversity

'NEW APPROACH' project

The EQUAL project '[NEW APPROACH](#)' (*ΝΕΑ ΠΡΟΣΕΓΓΙΣΗ*) on an 'Integrated intervention for the equal participation of people with disabilities in the labour market' run from April 2005 to June 2008, focused on specific **discrimination** and **inequality issues** that people with disabilities face when they enter the labour market. The project took into consideration discrimination due to disability, sex and nationality; religion, immigration status, linguistic and cultural differences. This project was coordinated by the [National Confederation of People with Disabilities of Greece](#) (*Εθνική Συνομοσπονδία Ατόμων με Αναπηρία*, ESAEA), and aimed to develop and promote innovative methods, services and practices to enable accessibility and integration into the labour market for the members of the above mentioned groups.

Other actions

Other examples include applications developed by the Institute for Language and Speech Processing (*Ινστιτούτο Επεξεργασίας του Λόγου*, [ILSP](#)), such as:

- ▶ [Lexipedia](#): a multilingual, multimedia dictionary containing 8 000 entries for primary-school children, translated into English, French, German, Spanish, Russian and Bulgarian.
- ▶ [eMaDys](#): This software aims to support the detection of students with possible learning problems.
- ▶ [NOEMA](#): Series of Dictionaries for the Greek Sign Language (GSL).

Inclusive eGovernment

Status on Inclusive eGovernment

Online availability of public services in Greece has been measured in the latest 'Smarter, Faster, Better eGovernment - 8th Benchmark Measurement' [report](#), prepared for the European Commission, Directorate General for Information Society and Media in November 2009. According to the report, Greece is taking on the challenge to change its Information Society performance by prioritising its investment in information technologies to become more competitive. The country achieved a 45 % score in the full online availability ranking. This score comprised a full **online availability** of 33 % for citizens and 63 % for businesses. In terms of **online sophistication**, Greece achieved 68 % for all services, 62 % for citizen services and 78 % for business services. Greece's efforts have led to a stable and relatively high eGovernment use among business, however eGovernment use by citizens has stalled and online availability remains below the EU average. The report indicates that only 10 % of the total population used the Internet to access eGovernment services. This percentage is significantly higher for businesses (83 %).

Actions towards Inclusive eGovernment

'Hermes' portal

The **National Portal of Public Administration 'Hermes'** is the Governmental Portal of Public Administration aiming to inform citizens and businesses, and ensure the safe use of eGovernment services through digital certificates established and operated for the first time. The portal will be linked to all Citizen Service Centres (*Κέντρα Εξυπηρέτησης Πολιτών*, KEP) and will have modern technological infrastructures for interoperability between the computer systems of public services and the safe use of public information. The Hermes portal provides 100 online services and 11 complete transactions (of the 4th level). As of the next phase, ten of the most important daily transactions between companies and the [Social Security Institute](#) (*Ίδρυμα Κοινωνικών Ασφαλίσεων*, ΙΚΑ), such as the updating insurance, will also be possible to take place.

'Citizen Service Centres' portal

The [portal](#) of the '[Citizen Service Centres](#)' (*Κέντρα Εξυπηρέτησης Πολιτών*, KEP) is a one-stop shop online service providing information and access to a large number of documents, certificates and applications to citizens online. The KEP service is supported by a 24 hour telephone support.

'SYZEFXIS' project

An eGovernment strategy to promote citizen participation in the information society has been adopted. One of the main initiatives in this context is the project '[SYZEFXIS](#)'. The 'SYZEFXIS' network is a project of the Greek Ministry of Interior, Decentralization and e-Government (*Υπουργείο Εσωτερικών, Αποκέντρωσης & Ηλεκτρονικής Διακυβέρνησης*, YPES). It aims at ensuring communication by telephone (telephone conversation between operators), data (computer - Internet) and Video (video-tele). It covers the entire Greek territory, linking approx. 4 500 bodies (expected to reach a total of 6 000 in 2010), and is the largest and most modern broadband network administration across Europe. Through 'Syzeffixis' the most modern practices and advanced services in telecommunications and the Internet are being made available to public bodies. The network ensures the infrastructure required to link the information systems in order to develop and provide electronic services to citizens and businesses. At the same time, it contributes to a drastic cost reduction of any telecommunications carrier and the Greek public sector in general.

The project's main goals are to reduce communication costs (approx. 50 %) between public administration actors, and improve data transfer rates and security, to make the most of IT&T systems through functional interconnections, and encourage the utilisation of alternative information resources, to eliminate overlaps in databases and network installations, and promote the effective management of data and information. Moreover, the project aims to develop compatibility requirements for the public sector's network installations in order to ensure the fast and easy search of information by citizens, eventually offering a one-stop-shop where the citizen can be served efficiently. Overall, throughout its lifecycle, the project aims to contribute to the development of a more effective public administration with a more modern information and telecommunications infrastructure, and to the uncomplicated coordination of administrative processes through IT&T networking.

Other actions

- ▶ Other plans for the development of the public administration are also in process, such as the Operational Programme 'Information Society', Measure 2.2 'Government online' which favours projects related to eGovernment.
- ▶ The [website](#) of the 'Access for the disabled to e-government services' project is fully operational as of June 2008, offering accessible eServices and content.

The Future of eInclusion

Research in Practice & Future Challenges

Research in Practice

The [Seventh Framework Programme](#) (FP7) comprises, under its umbrella, EU research initiatives that play a vital part in attaining the objectives of growth, competitiveness and employment. The broad objectives of FP7 have been grouped into four categories: [Cooperation](#), [Ideas](#), [People](#) and [Capacities](#). eInclusion aspects hold a prominent place in this programme, which has been operational since 2007 and will expire in 2013.

Approximately € 400 million have been allocated to FP7's **Challenge 7: 'ICT for Independent Living, Inclusion and Governance'**, one of the seven 'Challenges' of the [ICT Work Programme](#) 2009 – 2010 under FP7. The aim of 'Challenge 7' is to create ICT products, through research and development, which will foster independent and active living among Europe's ageing population, improving living standards and mitigating ICT complexity in order to encourage groups with special needs to uptake and use ICT tools and technologies to their benefit.

'Challenge 7' set three objectives:

Objective ICT-2009.7.1: [ICT & Ageing](#)

- ▶ Service robotics for ageing well
- ▶ Open Systems Reference Architectures, Standards and ICT Platforms for Ageing Well
- ▶ RTD roadmaps and stakeholder coordination.

Objective ICT-2009.7.2: [Accessible and Assistive ICT](#)

- ▶ Embedded Accessibility of Future ICT
- ▶ ICT restoring and augmenting human capabilities compensating for people with reduced motor functions or disabilities
- ▶ RTD research agendas & coordination of constituencies.

Objective ICT-2009.7.3: [ICT for Governance and Policy Modelling](#)

- ▶ Governance and Participation Toolbox
- ▶ Policy Modelling, Simulation and Visualisation
- ▶ Roadmapping and Networking for 'participation, governance and policy modelling'.

Greece is involved in the following FP7 projects:

1. [Open architecture for accessible services integration and standardisation](#) (OASIS)

Research area: ICT-2007.7.1 ICT and ageing

Project start date: [2008-01-01]

2. [Accessibility assessment simulation environment for new applications design and development](#) (ACCESSIBLE)

Research area: ICT-2007.7.2 Accessible and inclusive ICT

Project start date: [2008-09-01]

3. [Open accessibility everywhere: groundwork, infrastructure, standards](#) (AEGIS)

Research area: ICT-2007.7.2 Accessible and inclusive ICT

Project start date: [2008-09-01]

4. [Usability of music for social inclusion of children](#) (UMSIC)**Research area:** ICT-2007.7.2 Accessible and inclusive ICT**Project start date:** [2008-09-01]5. [Accessibility and usability validation framework for AAL interaction design process](#) (VAALID)**Research area:** ICT-2007.7.2 Accessible and inclusive ICT**Project start date:** [2008-05-01]6. [HERMES - Cognitive care and guidance for active aging](#) (HERMES)**Research area:** ICT-2007.7.1 ICT and ageing**Project start date:** [2008-01-01]7. [Ubiquitous care system to support independent living](#) (CONFIDENCE)**Research area:** ICT-2007.7.1 ICT and ageing**Project start date:** [2008-02-01]

National Projects

During the past two decades, Greek research and academic institutions have been conducting pioneering research in Assistive Technologies, Universal Access and Design for All. A comprehensive overview of such RTD activities is provided in Stephanidis (Ed.) (2001): 'User Interfaces for All', Lawrence Erlbaum and Associates, Mahwah, New Jersey.

An overview of more recent activities is available in Stephanidis (Ed.) (2004): 'Universal Access and Equal Participation of people with disabilities in the Information Society' - Operational Programme 'Information Society' of the 3rd Community Support Framework - Secretariat for the Information Society, Hellenic Ministry of Economy and Finance.

The following organisations pursue research activities:

- ▶ [Institute of Computer Science, Foundation for Research and Technology – Hellas](#) (FORTH-ICS) (*Ινστιτούτο Πληροφορικής του Ιδρύματος Τεχνολογίας και Έρευνας*)
- ▶ [Centre for Universal Access and Assistive Technologies](#) (CUA&AT) of the Institute of Computer Science, Foundation for Research and Technology – Hellas (*Κέντρο Καθολικής Πρόσβασης και Υποστηρικτικών Τεχνολογιών του Ινστιτούτου Πληροφορικής του Ιδρύματος Τεχνολογίας και Έρευνας*)
- ▶ [Department of Informatics and Telecommunications of the National and Kapodistrian University of Athens](#) (*Τμήμα Πληροφορικής και Τηλεπικοινωνιών του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών*)
- ▶ [Institute of Language and Speech Processing](#) (ILSP) (*Ινστιτούτο Επεξεργασίας του Λόγου*)
- ▶ [Centre for Research & Technology Hellas](#) (CERTH) (*Εθνικό Κέντρο Έρευνας και Τεχνολογικής Ανάπτυξης*)
- ▶ [Department of Product & Systems Design Engineering of the University of the Aegean](#) (*Τμήμα Μηχανικών Σχεδίασης Προϊόντων και Συστημάτων του Πανεπιστημίου Αιγαίου*)
- ▶ [Department of Computer Engineering and Informatics of the University of Patras](#) (*Τμήμα Μηχανικών Η/Υ & Πληροφορικής του Πανεπιστημίου Πατρών*).

Future Challenges

In order for Greece to be able to benefit from RTD and to capitalise new developments, it is recognised that certain weaknesses preventing investment have to be addressed. This issue should be addressed and support the creation of new economic activities. According to a report for the United Nations Centre for Public Service Professionalism (UNTC), the main characteristics of the Greek Public Administration hindering the provision of eGovernment services include low efficiency, difficulties in the introduction of organisational information architecture models, insufficient technical infrastructure, lack of proper training and scarcity of IT specialists in certain domains.

Results of recent and ongoing RTD activities illustrate that the creation of an inclusive information society is possible, and Greece has played a leading role in this sector. However, in order for this target to be realised, it is essential that a lot more is done with respect to the wider adoption and deployment of the principles of Universal Access and Design for All from the ICT industry, and the transfer of experience, knowledge and know-how from research to the industrial environment.

European Commission - eInclusion Practice

eInclusion practice (epractice.eu) is an information and exchange service for European professionals.

The eInclusion factsheets are one of the epractice.eu services. The factsheets present an overview of the eInclusion status and progress in the European countries.

The eInclusion factsheets are produced and updated once a year.

The eInclusion practice is an initiative of the Directorate General for the Information Society and Media, European Commission.

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