



Information Society Indicators

Percentage of households with Internet access: 30.2 % (2007)

Percentage of enterprises with Internet access: 92.6 % (2007)

Percentage of individuals using the Internet at least once a week: 28 % (2007)

Percentage of households with a broadband connection: 14.4 % (2007)

Percentage of enterprises with a broadband connection: 69.3 % (2007)

Percentage of individuals having purchased/ordered online in the last three months: 5 % (2007)

Percentage of enterprises having received orders online within the previous year: 19.33 % (2007)

Percentage of individuals using the Internet for interacting with public authorities: obtaining information 9.5 %, downloading forms 4.4 %, returning filled forms 4.5 % (2007)

Percentage of enterprises using the Internet for interacting with public authorities: obtaining information 88.73 %, downloading forms 90.37 %, returning filled forms 74.9 % (2007)

Total population 11.171.100 (2007, Eurostat)

(Sources: Eurostat, Greek Observatory for the Information Society, 2007)

e-Inclusion History

- 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 Secretariat for the Information Society of the Hellenic Ministry of Economy and Finance, in the context of the 3rd Community Support Programme (<http://en.infosoc.gr>). 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.
- A study conducted by the University of Crete: C. Stephanidis (Ed.) (2004). *Universal Access and Equal Participation of people with disabilities in the Information Society* in the context of the Operational Programme "Information Society" of the 3rd Community Support Programme (Secretariat for the Information Society, Hellenic Ministry of Economy and Finance) laid out a framework for current activities to promote e-inclusion and e-accessibility. The study is available online http://www.infosoc.gr/NR/ronlyres/0B306F9C-A819-4F96-ABB1-A21945D1D2B3/1092/final_report.pdf
- The National Network on Design for All (GR-DeAN, <http://www.e-accessibility.gr>) was established in 2003 as a member of the European Network on Design for All (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.

e-Inclusion Strategy

- Since 2002, there are activities targeted to the elaboration of a systematic approach towards:
 - Compliance with EC directives regarding e-Accessibility
 - Initiatives related to e-Inclusion in the context of the Operational Programme "Information Society" of the 3rd Community Support Programme (Secretariat for the Information Society, Hellenic Ministry of Economy and Finance) in the domains of: Education and Culture, Health, Employment, Public Administration, Telecommunications.
- 2004: Policy Study
 - "Universal Access and Equal Participation of people with disabilities in the Information Society" Recommendations towards the formulation of a national policy on the advancement of an inclusive Information Society:
<http://www.infosoc.gr/NR/ronlyres/0B306F9C-A819-4F96-ABB1->

[21945D1D2B3/1092/final_report.pdf](https://www.21945D1D2B3/1092/final_report.pdf)

- Digital Strategy 2006-2013: Addressing the challenges of the 4th Community Support Programme and i2010
 - Focusing on the Quality of Life of Citizens in the Information Society
 - 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 e-health services
 - Universally accessible health records and other related information
 - Public administration
 - Accessible e-services for the regional government
 - Digital content and information services.
 - An important example is the International Call for Tenders conducted by the Greek Pedagogical Institute in 2006. It aims for the development of a digital library and its best practices in certification and implementation of educational software.

Important policies in place

- The digital strategy 2006 – 2013 replaces the “white paper” for the information society and strengthens the role of the existing Operational Program for the Information Society, by re-examining its goals. At the same time, the new digital strategy meets the challenges of the 4th Operational Period (2007-2013) and is compatible with the new 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.

e-Inclusion Legal Framework

There is no single institutional body legally responsible for issues concerning web accessibility. However, the Secretariat for the Information Society of the Hellenic Ministry of Economy and Finance and the Ministry of Transport and Communications have played a coordinating role in this respect in the recent years.

Law in practice

Currently there is no specific legal framework that refers to e-Inclusion. 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 to be enacted in the near future.

In 2005, Disability Units were established in the Ministry of the Interior and in all the institutions this Ministry supervises (i.e., the entire public sector in Greece) (Presidential Decree 13/2005). The Decree describes the duties and responsibilities of these units. Emphasis is put on physical accessibility to premises, but accessibility to e-government is also mentioned.

Research in Practice

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 [in Greek] - Operational Programme "Information Society" of the 3rd Community Support Programme - Secretariat for the Information Society, Hellenic Ministry of Economy and Finance" .

e-Inclusion Actors

Ministries:

- Ministry of Transport and Communications (<http://www.yme.gov.gr/>)
- Ministry of Development (http://www.ypan.gr/index_uk.htm)
- Ministry of Economy and Finance (<http://www.mnec.gr>) and Managing Authority of the Operational Program "Information Society" (OPIS) (<http://en.infosoc.gr>)

NGOs:

- The National Network on Design for All (GR-DeAN, <http://www.e-accessibility.gr>) was established in 2003 as a member of the European Network on Design for All (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.
- The National Confederation of People with Disability of Greece – ESAEA (<http://www.esaea.gr/>)
- W3C Greece Office (<http://www.w3c.gr>)
- DISABILITY NOW (<http://www.disabled.gr>)

Research institutions:

- Centre for Universal Access and Assistive Technologies of the Institute of Computer Science, Foundation for Research and Technology - Hellas (ICS-FORTH), http://www.ics.forth.gr/hci/ua_at_centre.html).
- Department of Informatics and Telecommunications of the University of Athens (<http://www2.di.uoa.gr/en/>)
- Department of Product & Systems Design Engineering of the University of the Aegean (<http://www.syros.aegean.gr/en/default.htm>)
- Department of Computer Engineering and Informatics of the University of Patras (<http://www.ceid.upatras.gr/en/>)
- Institute of Language and Speech Processing – ILSP (<http://www.ilsp.gr/>)

Private companies/consultancies:

- eWorx (<http://www.eworx.gr/>)

e-Inclusion Who is Who

- **e-Inclusion sub group contact:**
 - Professor Constantine Stephanidis, Director Institute of Computer Science, Foundation for Research and Technology - Hellas (FORTH), Heraklion, Crete, GR - 70013 Greece
 - Mr. Iosif Klironomos, Foundation for Research and Technology - Hellas (FORTH), Institute of Computer Science (ICS), Centre for Universal Access and Assistive Technologies, Heraklion, Crete
 - Mr. Ilias Pantazis, Head of International Affairs Division, Ministry of Transport and Communications, Anastaseos Str. 2 GR-10191 Athens

e.Inclusion Progress by Riga Areas

ICT & Ageing

• Status in ICT & Ageing

Overall, 68.8 % of the total population in Greece have never used the Internet (2007).

The following table presents the percentage of internet and PC users per age group in Greece (2007).

Age group	PC users	Internet Users
16-24	85.6	73.3

25-34	63.1	50.7
35-44	50.3	37.0
45-54	29.6	20.4
56-65	12.6	8
65-74	4.1	2.5

(Sources: National Statistical Service of Greece, Greek Observatory for the Information Society 2007)

Geographic digital divide

• Status of Common access to electronic content and services

Percentage of households with Internet access in

- Urban Areas: 30.2 %
- Rural Areas: 16.7 %

(Sources: National Statistical Service of Greece, Greek Observatory for the Information Society, 2007)

• Actions to support Common access to electronic content and services

In Greece, a telephone based public service has been launched and it operates under the patronage of the national telecommunications provider (OTE). The service is helpful especially to persons with mobility restrictions.

The Greek eGovernment portal has been developed in the context of the Operational Programme "Information Society", Measure 2.2 "Government online".

The website was developed by the "Access for the disabled to e-government services" project, which is co-funded by the European Social Fund (ESF) and the Hellenic Ministry of Interior. It aims to constitute 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 Center, 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 organizations
- Web Portal for people with disabilities, which will constitute the main point for the aforementioned services and their diffusion to the wide public and will also provide communication services enhancing thus 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.

The website as well as additional information about this initiative [in Greek](#) are available at: <http://amea.gov.gr> (URL operational as of June 2008) <http://www.amea.gov.gr>

e-Accessibility

• Status of e-Accessibility

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 is presented in a study conducted by the University of Crete: C. Stephanidis (Ed.) (2004). *Universal Access and Equal Participation of people with disabilities in the Information Society* (final draft, in Greek). Operational Programme "Information Society" of the 3rd Community Support Programme (Secretariat for the Information Society, Hellenic Ministry of Economy and Finance).

No official data is available, regarding the accessibility of public websites and e-services. However, the

mentioned study had evaluated 256 sites in total, with the main outcome being that 79% of the sample of Greek websites was not accessible. More information is available at:
<http://www.observatory.gr/page/default.asp?la=1&id=183>

• **Actions towards e-Accessibility**

2003- today: Active participation in EDeAN

– National Network GR-DeAN

Online communication and collaboration of the GR-DeAN members are supported by the portal [e-accessibility.gr](http://www.e-accessibility.gr). More information is available at:
<http://www.e-accessibility.gr> .

– EDeAN Secretariat for 2005, Editorship of the EDeAN White Paper “Promoting Design for All and e-Accessibility in Europe”

For additional information please visit:

<http://www.springerlink.com/content/e31p27x51v0mt60w/>

The Operational Programme “Information Society” of the 3rd Community Support Framework Programme in Greece provided opportunities for funding individual projects in this field, as well as the taking accessibility issues into consideration in the context of mainstream projects.

The implementation of the first specialised web portal for disabled citizens started in 2007 and was completed in early 2008. The target groups consisted of disabled citizens, their associations, social care services and other enterprises being active in the sector. The services provided aim to foster the social inclusion of disabled people through a set of services that can create social and professional opportunities to people with disabilities.

More information is available at: <http://www.amea.gov.gr>

Digital Literacy and Competences

• **Status on Digital Literacy and Competences**

Percentage of individuals regularly using the Internet in 2007 per occupation and educational status :

All individuals	30.2 %
Individuals with no or low formal education	24 %
Individuals with medium formal education	57.5 %
Individuals with higher formal education	68.0 %
Individuals with postgraduate education	87.1 %
Employed	78.9 %
Unemployed	38.4 %
Retired/other	4.7 %

(Sources: National Statistical Service of Greece, Greek Observatory for the Information Society, 2007)

• **Actions towards stimulating Digital Literacy and Competences**

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

Most of the Greek universities are starting to develop eLearning platforms mainly for the use of their own students, but some also offer access other parties.

Although there are no announced training courses in the public administration, specific projects such as the recently completed *EFTEHNOS* (<http://www.di.uoa.gr/speech/eftehnos/>), funded by the General Secretariat for Research and Technology of the Hellenic Ministry of Development and the European Social Fund, 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 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, is aimed at creating 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.

e-Inclusion and Cultural Diversity

- **Status on e-Inclusion and Cultural Diversity**
- **Actions towards e-Inclusion and Cultural Diversity**

The EQUAL project "*NEA PROSEGGISI*" (*NEW APPROACH*) "*Integrated intervention for the equal participation of people with disabilities in the labour market*" running from April 2005 to June 2008, focuses on specific discrimination and inequality issues that people with disabilities face when they enter the labour market. The project takes into consideration discrimination due to disability, sex, nationality, religion, immigration status, linguistic and cultural differences, etc. This project, coordinated by the National Confederation of People with Disabilities of Greece, aims 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. Additional information is available at:

<http://www.nea-prosegisi.gr/>

The recently launched *e-accessibility Unit* of the National and Kapodistrian University of Athens 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
- Information propagation

Moreover, the web site *e-bility.gr* mainly addressing professionals from the domain of IT, as well as from special education and rehabilitation domains, provides information about the emerging trends and available methodologies and solutions in Information and Telecommunication Technologies concerning: a) Assistive Technology to facilitate daily life and social incorporation of the disabled and the aged, and b) Accessibility for the disabled and the elderly to the Internet and its services. *e-bility.gr* was developed by the EFTEHNOS Research and Technology Training Human Network. Additional information in Greek is available at:

<http://e-bility.gr/eutexnos/>

Starlight, a software platform for developing educational electronic textbooks accessible to blind people and people with deteriorated vision, has been designed and evaluated by the Institute of Computer Science at FORTH, in cooperation with the Panhellenic Association of the Blind in the course of 2006. The platform comprises of two components:

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

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

Other examples include applications recently developed by the Institute for Language and Speech Processing:

- *Lexipedia* (http://www.ilsp.gr/lexipedia_eng.html) , a multilingual, multimedia dictionary containing 8.000 entries for primary-school children, translated into English, French, German, Spanish, Russian and Bulgarian
- The *eMaDys* software (http://www.ilsp.gr/emadys_eng.html) aiming to support the detection of students with possible learning problems
- the "*NOEMA*" Series (http://www.ilsp.gr/noema_eng.html) of Dictionaries of the Greek Sign Language (GSL).

Inclusive eGovernment

- **Status on inclusive eGovernment**

Online availability of public services in Greece has been measured by a European-wide survey by Cap Gemini Ernst & Young for Eurostat in 2006. The survey results show a clear rise in the online sophistication of

public services, from 52% in 2003 to 61% in 2004 and 64% in 2006. Despite the marked progress, Greece still ranks below the EU28 average. As for the percentage of services in Greece that offer complete electronic case handling, no progress is made since 2002 wherefrom Greece holds a somewhat smaller value of 30% in 2006, compared to 32% in 2004 and 2003. This is below the EU28 average (40% in 2006). Currently a few services are offered online:

The KEP ("Kentra Exipiretisis Politon" - Citizen's Service Centres) web portal (<http://www.kep.gov.gr>), 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 24 hour telephone support.

The website of the "Access for the disabled to e-government services" project (<http://amea.gov.gr>), fully operational as of June 2008, offering accessible e-services and content.

Latest data for 2007 indicate that only 9.5% of the total population uses the Internet to access e-Government services. This percentage is significantly higher for businesses (71%). (Source: Greek Observatory for the Information Society, Eurostat, 2007).

• **Actions towards inclusive eGovernment**

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" that plans to develop and update the public sector's telecom infrastructure by providing telephony (telephone communication between organisations), data (PC communication - Internet) and video (teleconference, distance training) communication. The project's main goals are to reduce communication costs (approximately 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. Additional information in Greek is available at:

<http://www2.syzefxis.gov.gr/Default.aspx>

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 e-Government.

Adoption of eServices by the public: The public in Greece seems eager to adopt e-Government initiatives despite the comparatively low Internet penetration rates. This is best depicted in the statistics of the main governmental e-Government portal, TAXISnet (<http://www.taxisnet.gr/>) which currently has some 1,054,610 registered users.

Challenges

In order for Greece to be able to benefit from RTD and to capitalise new developments, it is recognised that there are certain weaknesses preventing investment. 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 e-Government 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 the research to the industrial environment.

