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Current State of Greek E-Government Initiatives

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Abstract

This paper presents an overview of e-government efforts in Greece. Its aim is to point out the necessity of designing and implementing efficient e-government applications in order to improve public sector quality. In this framework, firstly we discuss e-government basic issues. Then we present the structure of public sector in Greece and try to categorise used information systems. We continue with a review of best Greek e-government practices and we compare the progress of Greece against EU countries. We examine the potentials and barriers of the area and finally we demonstrate the arising opportunities and the key challenges regarding e-government in Greece.

Keywords

e-Government, public sector, Greek programmes

Introduction

In recent years, we have witnessed the rapid evolution of the Web, a development environment that allows easy access, sharing, interchanging and publishing of information. In this context, the significance of governing and administration have been considerably altered. Not only because intense pressures and expectations that the way of governing should reflect new methods of work, but also the necessity for more "open" governments to citizens and businesses. Governments have realized that their information resources are not only of value in themselves. They are valuable economic assets, the fuel of the knowledge economy. By making sure the information they hold can be readily located and passed between the public and private sectors, taking account of privacy and security obligations, it will help to make the most of this asset, thereby driving and

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stimulating national and international economy. The governments take advantage of Information and Communication Technologies (ICTs) and the continuing expansion of the Web and started strategies to renew the Public Administration and eliminate existing bureaucracy and therefore reduce costs (Riedl, 2003; Tambouris et al., 2001).

Electronic government (e-government or EG) allows an economic approach of democratic processes. However, ICTs can achieve more than this. They redefine public administration processes by altering the relations between services' providers and public, public and private sector, and government and citizens. New forms of governing make their appearance, reflecting the continuously altered organisational and economic structures, with important effects in the way that we "exist" as citizens. It is clear that e-government does not concern only online services and the better support of citizens and businesses, but comprises a new set of technologically advanced processes and tools, that promote the interaction between the public and the government.

In Greece, ICTs started being explored at first and then exploited in order to help e-government grow. The main boost towards e-government was initiated by European Union (EU) funding on respective actions. The Greek approach towards e-government and the Information Society (IS) has undergone, in terms of top-level planning, a radical change between the 2nd (1994-1999) and 3rd (2000-2006) Community Support Framework (CSF) periods. The efforts during the 2nd period concentrated mainly to informational e-government web portals and to supply Public Administration with technological infrastructure in order for the employees to get familiar with technology and quit the traditional paperwork. During the 3rd period some, but not much, transactional e-services are provided by the Public Administration (Hahamis et al., 2005). Moreover, many divergences are observed between public organisations and agencies mainly in the level of modernisation and provided services to the citizens. Even though the public services that "lead" the developments have a lot of way for improvement in order to reach the European mean values. Now, the Greek Digital Strategy for the period of 2006-2013 is in progress, aimed at enabling a "digital leap" to improve productivity and quality of life by 2013 (Greek Digital Strategy, 2005).

This paper deals with e-government efforts, funding activities and strategies took place so far in Greece. There are no systematic data on Greek e-government programmes. The causes are: (a) the field is relatively new, (b) e-government initiatives are considered on a project by project basis, and (c) many of them are implemented by different ministries, institution and organizations of public sector. In this framework, this paper examines national and international literature, relevant e-government funding issues, programmes and projects, in order to depict the current state of e-government in Greece and also to conclude some specific developing country considerations. Specifically, its aim is to point out the necessity of designing and implementing efficient e-government applications. We believe that the vision of an electronically modernized Greek Public Administration will be realized if a series of key strategic aspects will be considered, as well as international best practices and experiences. Within this context, firstly we discuss e-government basic issues. Then we present the structure of public sector in Greece and try to categorise used information systems. We continue with a review of best Greek e-government practices and we compare the progress of Greece against EU countries. Finally, we examine the potentials and barriers of the area and demonstrate the arising opportunities and the key challenges.

E-government Definitions and Models

Although the literature relating to this area proliferates, the definition and the various models of e-government are still unclear among researchers and practitioners of Public Administration. According to E-governance Institute (2004) *"E-governance involves new channels for accessing government, new styles of leadership, new methods of transacting business, and new systems for organizing and delivering information and services. Its potential for enhancing the governing process is immeasurable"*. Another quite broad definition which incorporates its four key dimensions that reflects the functions of government i.e. e-services, e-democracy, e-commerce and e-management is the following *"E-government is the use of information technology to support government operations, engage citizens, and provide government services"* (Dawes, 2002).

Digital government (DG) or *e-government* may be defined also as *"The process of using information and communication technologies to enable the civil and political conduct of government"* (McIver & Elmagarmid, 2002). In addition, in September 2003, the European Commission defined e-government as *"The use of information and communication technology in public administrations combined with organisational change and new skills in order to improve services and democratic processes and strengthen support to public policies*" (Europa, 2003).

E-government can be distinguished into three basic categories: a) government-to-citizen (G2C) that relates to the relationships between governments and citizens, b) government-to-business (G2B) that relates to the relationships between governments and businesses and c) government-to-government (G2G) that relates to the activities that improve and upgrade governments' services (Egov, 2003). Recently, a fourth category has been added, the one of government-to-employees (G2E) (Ndou, 2004).

E-ASEAN Task Force (2007) explains why e-government is important to developing economies: the democratic, business, and governmental aspects of governance are simplified and improved, cutting costs and providing better services to citizens and businesses. Transformation within the three (3) major authorities of government may be expected, namely: political, economic, and administrative.

- *Political:* government would be able to interact with all citizens in all levels, therefore promoting e-democracy. An informed citizenry would promote transparency and accountability within government.
- *Economic:* e-government delivers services to businesses as well. E-procurement, or an online supplier exchange, is among the services included in G2G and G2B services. This will allow transparency in the bidding process and give opportunities to smaller businesses, which otherwise are not able to bid on big government procurement projects.
- *Administrative:* G2G services are enhanced. Government processes and procedures are simplified to cut red tape, facilitate delivery of services, increase productivity of the bureaucracy, and increase savings.

E-government is not a one-step process or implemented as a single project. It is evolutionary in nature, involving multiple stages or phases of development. Hiller & Belanger (2001) suggested that *"E-government can be considered through two lenses: the type of relationship and the stages of integration*" and offered five stages of development for e-government. Layne & Lee (2001) regarded e-government as an evolutionary phenomenon and suggested a four-stage growth model: (1) cataloguing, (2) transaction, (3) vertical integration, and (4) horizontal integration. Reddick (2004) examined both of the above models and concentrated on two of the four stages proposed by Layne & Lee, cataloguing and transactions. Like Hiller & Belanger, he conceded that stages of growth are combined with major types of e-government relationships: *"E-government can involve electronic relationships between government and different levels of constituents."* The first relationship identified is G2C; the second is G2G and the third, G2B (Table 1).

Type of Government Relationship	**Stages of E-government Growth**	
	Stage I: Cataloguing	*Stage II: Transactions*
G2C	Online presence of information about government and its activities for citizens. Example: council meeting minutes online.	Services and forms online and databases to support online transactions for citizens. Example: online payment of taxes.
G2G	Online presence of information for other levels of government and its employees. Example: intranet with benefit information.	Services and forms online and databases to support online transaction for other levels and government and employees. Example: provide online training.
G2B	Online presence of information for businesses about government. Example: online product review of office supplies.	Services and forms online and databases to support businesses transactions with government. Example: make purchases of office supplies online.

Table 1. Stages of e-government and type of government relationship (Reddick, 2004).

According to World Bank (AOEMA, 2007), the e-government is developed in 3 phases:

- *Publish:* governments generate huge volumes of information (rules, regulations, documents, and forms), much of it potentially useful to individuals and businesses.
- *Interact:* publish sites, however rich in content, are just a first step. Interactive e-government involves two-way communications, starting with basic functions like email contact information for government officials or feedback forms that allow users to submit comments on legislative or policy proposals.
- *Transact:* governments can go further, by creating web sites that allow users to conduct transactions online. A transact web site offers a direct link to government services, available at any time. In the past, government services such as land registration or the renewal of ID cards required long waits, confrontation with stifling bureaucracy and the occasional bribe. Innovations such as citizen service kiosks located in shopping centres in Brazil or portable government computers that can be carried into rural pockets of India bring e-government directly to the citizens of developing nations.

Finally, Gartner Group, an international consultancy firm (Baum & Di Maio, 2000), adds one more phase, so e-government mature according to the following four phases:

- *Stage 1, Presence:* the primary goal is to post information such as agency mission, addresses, opening hours and possibly some official documents of relevance to the public.
- *Stage 2, Interaction:* this phase is characterized by web sites that provide basic search capabilities, host forms to download, and linkages with other relevant sites, as well as e-mail addresses of offices or officials. This stage enables the public to access critical information online and receive forms that may have previously required a visit to a government office.
- *Stage 3, Transaction:* this phase is characterized by allowing constituents to conduct and complete entire tasks online. The focus of this stage is to build self-service applications for the public to access online, but also to use the Web as a complement to other delivery channels. Typical services that are migrated to this stage of development include tax filing and payment, driver's license renewal, and payment of fines, permits and licenses. Additionally, many governments put requests for proposals and bidding regulations online as a precursor to e-procurement.
- *Stage 4, Transformation:* this phase is characterized by redefining the delivery of government services by providing a single point of contact to constituents that makes government organization totally transparent to citizens. Examples of transformation include highly tailored web sites, or "virtual agencies," where government information is pushed to citizens, and where they can pay local property taxes, renew state driver's licenses and apply for federal passports all in one place, with seamless interfaces back to the respective agencies involved in the transactions.

From the above, it is clear that there are many definitions and models for e-government suggesting the existence of a wide spectrum of opinions, perspectives and background. However, meta analysis of relative bibliography seems to offer some insights that eventually would be synthesized into the following: *"E-government refers to the use of ICTs to improve the efficiency, effectiveness, transparency and accountability of government"*.

Structure of Greek Public Sector

The Greek public sector comprises of a significant number of services and institutions that have been categorized based on Services and Institutions Registry of Greek Public Administration (2005) (Table 2). For the rest of the paper, we will use the term "service" for any unit of Greek Administration. The operation of each public service is conditioned by a presidential decree-law (which is called Organization of service) describing:

- the structure of the service (framework, managements, departments, etc.).
- the structure, the objectives and the competences of each management or department.
- the discrimination of the personnel positions in sectors, the posting in each sector, as well as the distribution of organic places inside the service.

Similar logic is followed for the organic ICT units of the organisations in the majority of public sector services. Thus, usually the existence of ICT units is provided with their level (management, department, office), their objectives and competences, the total number of organic places, the allocation of these places in personnel categories and the requisite qualifications for these places. However, divergences in the structure and the precise naming are observed among different services (EPE, 2006).

Structure of Public Sector	
Independent (Self Existent) Public Services of Constitutional Leadership of State	A' and B' Degree OTA (Local Administration Organisations)
Public Offices of Juridical Operation of State	Courthouses
Public Offices of Legislative Operation of State	Municipalities and Communities Unions
Independent Administrative Offices	Municipalities and Communities Confederations
Ministries	Municipal and Community Legal Persons
Regions	Protectoral Legal Persons

Table 2. Greek public sector administration structure.

The first ICT units were initially created in order to support certain functional needs e.g. automatic calculation of employees payroll. So, in many cases a small number of individuals were working in computerised offices or departments supervised by the Economic Management of the specific service. This structure is maintained even today in many services. In addition, the actually needs in ICT structures, systems and applications are different from service to service, depending on their scope, size and functionality. Consequently, the requirements for ICT personnel are also different. Only in 23% of services exist the structure *Institution -> ICT Management -> ICT Department*. In most services the structure *Institution -> Other Management -> ICT Department* is followed (32%), in few the structure *Institution -> ICT Department* (17%), while in the rest (28%) a different structure is followed (e.g. the service has 1-2 ICT employees that do not belong in any Department, or in other cases the employees belong in Departments that are not in the ICT area or in ICT self-existent offices or computer centres) (EPE, 2006).

If we attempt to categorize the Information Systems of Greek public sector using an analysis model like the *Strategic Grid Model* of McFarlan et al. (1983), we would lead to the following conclusions (Figure 1). Until now, the majority of Information Systems are classified in the *Factory Category*, including systems that try to cover the running functional needs of organizations giving low emphasis in the future needs. It's about systems and applications that fulfil specialised needs and in their majority are met in small institutions with limited resources, which do not have the ability to develop their information infrastructure and to make ambitious future plans.

On the contrary, on a large scale organizations and institutions, we observe the design (e.g. in the General Secretariat of Public Administration and Electronic Governing (2007)) and in a few already the existence (e.g. in the General Secretariat of Information Systems (2007)) of certain systems that are classified in the category of *Turnaround Information Systems*. These systems make the change (turnaround) from the orientation in the organization/institution's operation to the direction of development. They do not cover in full running needs, but future needs and give emphasis in the developmental character of the organization/institution.

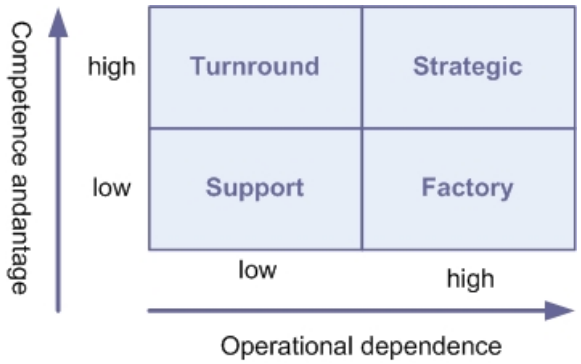


Figure 1. Categorization of Public Administration Information Systems.

McFarlan model (1983) was initially used in the private sector, since high strategic importance characterizes those systems that give competitive advantage in an organization/institution. Respectively, in the public sector, we could say that of strategic importance are the systems that provide a very high level of e-government services. Unfortunately, there are not many systems of this type in the Greek Public Administration, as the need for pioneering services to the citizens and the enterprises is not of vital importance not only for the public but also for the private sector. An example of this type of systems could be considered the information system of Citizen Service Centres (KEP), which is susceptible to lots of improvements (EPE, 2006).

Greek Programmes for E-government

The Greek endeavour for developing the IS began within the 2nd CSF, an effort to integrate scattered actions in homogenous sectoral Operational Programmes (OP) e.g. Telecommunications, Industry, Public Administration, Education and Initial Professional Training. The term CSF is referred to a document, established by the Commission in collaboration with the Member State, which constitutes the Commission's response to the Member State's requirements as set out in the Plan. It describes in general terms the joint action to be undertaken by the Member State and the Union and sets out priorities for action, funding and forms of assistance. Implementation of the 2nd CSF had laid the foundations for the modernization of the country's technical infrastructure, the productive environment and of the labour force skills (Greek E-government Factsheet, 2007). In the next paragraphs, we provide an overview of the general e-government situation in Greece, while Table 3 at the end of the section, gives a summary of major e-government programmes.

KLEISTHENIS Programme

In 1994, KLEISTHENIS, an OP for the Modernisation of Public Administration over the period 1994-1999, was launched. This programme was funded by the 2nd CSF and the Greek State (IDABC e-Government Observatory, 2006). Its main objective was to create the conditions of a continuous modernisation of the public sector via interventions of a technical, organisational and educational order. The introduction of new technologies in public service delivery was among its main priorities.

The programme financed (Greece in the Information Society: Strategy and Actions, 2002):

- organizational and informatics projects in the fields of public finance, social and economic interest.
- introductory and continuing vocational training programmes for public administration personnel.
- studies and applications for the use of new technologies in the public services and for the creation of the necessary common infrastructure.

Among the most important projects included in KLEISTHENIS were the development of electronic tax services (TAXISnet) and the creation of a national public administration network (pilot phase of SYZEYXIS) which are described in sequence.

Actions by the Ministry of Economy and Finance

The Ministry of Economy and Finance implemented a considerable number of Information Technology (IT) projects in the fields of taxation (TAXISnet program), customs offices, treasury-budget, etc., as part of the KLEISTHENIS program, financed by the 2nd CSF. Such projects contributed to the improvement of services provided to all parties carrying out transactions with the Ministry, the effective support of the decision-making procedure, the stamping out of tax and duty evasion, and the curtailment of public expenses (Greece in the Information Society: Strategy and Actions, 2002). Furthermore, the Ministry promoted the development of a pilot system for the electronic exchange of receipts and the electronic filing of Value Added Tax (VAT) statements. Currently, the Ministry is considering the possibility of supplying taxpayers with a smart card identifying its holder in order to allow economic transactions and issuance of standardised tax certificates at special points of service.

Greek Strategy for the Information Society

In 1995, the publication of the white paper *"Greek Strategy for the Information Society: A Tool for Employment, Development and Quality of Life"* took place. The objectives of this strategy over a ten to fifteen year period were the following:

- to increase the use of advanced information technologies in order to reduce the digital gap between Greece and its partners and to reach international standards.
- to prepare Greek firms to adopt ICTs.
- to enable an increasing number of citizens to have access to information technologies.
- to encourage electronic transactions with public.

In addition, in 1997, the Greek Government adopted a *"Strategic Plan for Administrative Reform"*, which set four main fields of action: the structure of the administrative system, its activities, its human resources, and new ICT. The introduction and use of information systems went hand in hand with organisational changes and functional re-organisation (Greece in the Information Society: Strategy and Actions, 2002).

TAXISnet

During the 2nd CSF period, the first serious attempt, which came to success, was the TAXISnet (Taxation Information System, http://www.taxisnet.gr). It is the e-government portal enabling tax-related transactions, issuing of electronic certificates, as well as document handling via the Internet. During the first years of operation, it offered Gartner's 2nd stage services and now it has evolved and provides Gartner's 4th stage services to citizens and businesses. TAXISnet operation has resulted in simplifying and improving servicing citizens and businesses across all taxation procedures. The response of the general public and businesses to the utilization of the online services provided by TAXISnet has been exceptionally positive. As a measure of this response, between its entry into productive operation May 2000 and January 2002, an average of about 500 new users per (working) day signed up. The electronic Proof of Tax Compliance issuing service has processed more than 144,000 applications, and the online information service for settlement of income tax obligations has handled more than 5 million calls (Greece in the Information Society: Strategy and Actions, 2002). Furthermore, operation of the portal has reduced the corresponding manual procedures and manpower, for the benefit of Hellenic Ministry of Economy and Finance. The TAXISnet service, provides G2C, G2B and G2G services, including electronic submission of income tax forms, personalised electronic notification of the results of the tax return clearance process, electronic issuing of certificates by fax,

electronic submission of VAT forms, payment via banking system services and validation of tax certifications e.g. Tax Clearance Certification (Gouscos et al., 2001). Some of these services, as well as some other general information services, are also available via the telephone Call Centre service and via the General Secretariat for Information Systems web site (http://www.gsis.gov.gr).

Operational Programme for the Information Society

With the aim of implementing the IS strategy in a coherent and integrated way, an Operational Programme for the Information Society (OPIS) was adopted in 2000, which covered the period 2000-2006 and was supported by the EU as part of the CSF. OPIS was an innovative horizontal programme, cutting across government departments, which aimed at implementing the essential features of the Greek Government's IS white paper, as well as of the eEurope initiative and the conclusions of the Lisbon Summit of March 2000 (Infosociety, 2004).

The OPIS includes four lines of action: Education and Culture, Citizens and Quality of Life, Digital Economy and Employment, and Communications. The priorities for e-government, which forms part of the action line *"Citizens and Quality of Life"*, are as follows:

- Improved quality of services to citizens and enterprises by public administrations at central, regional and local level.
- Development of online applications, as well as use of ICTs to streamline and re-engineer procedures and communication within and amongst government departments, covering all of public administration and especially the fiscal area and finance, social insurance, justice, public tendering and procurement procedures, regional development and emergency services areas.
- Support the creation of geographical and environmental mapping and management information systems, linking central to regional and local government.
- Use of IT in order to promote and support a broader strategy for providing higher quality health and welfare services to all citizens, and for the reform of the management of the health sector and its budget.
- Introduction of telematics applications in land, sea and air transport.

In 2001, the Greek Government created Information Society S.A., a state-owned company tasked with supporting the implementation of the OPIS. To this end, the company supports government departments and agencies in all stages of ICT project design, implementation and follow-up. It has economic and managerial autonomy.

SYZEFXIS

During the 3rd CSF period more e-government projects were developed. In April 2001, the Government network SYZEFXIS (http://www.syzefxis.gov.gr) was launched as a pilot project, with the participation of 15 state organisations. SYZEFXIS has become a nationwide intranet for the Greek public sector, ultimately connecting more than 1.700 organisations nationwide and has been *"characterized by technical and functional completeness"* (Informatics Development Agency, 2004). It was a project of the Greek Ministry of the Interior, Public Administration and Decentralization that aimed to develop *"an effective public administration with a modern information and telecommunications infrastructure and the easier coordination of state processes through IT and Tele-networking"* (Informatics Development Agency, 2004). Phase A of the project was included in the OP KLEISTHENIS whilst phase B was included in the OPIS (Hahamis et al., 2005). It entered its full production stage in November 2005. The network comprised 1.766 nodes and relied on services by telecom providers under Service Level Agreements (SLAs) and not on purpose-built infrastructures. The network provided advanced telecommunication and information services, including telephony, data and video transmission through 4 Virtual Private Networks (VPNs). Training on the use of the SYZEFXIS network started and implementation of the Training Gate of the network took place then.

The state organizations, which would be finally connected with the Public Administration's network, were the central and regional administration, as well as the prefectural and local administration. A peer-to-peer connection between the National Network of Public Administration SYZEFXIS and the Hellenic Network for Research and Technology, GRNET, was activated in May 2006. Access to the s-TESTA (Secured Trans-European Services for Telematics between Administrations) network through SYZEFXIS became operational (IDABC e-Government Observatory, 2006). It was complemented by the development of Metropolitan Area Networks (MAN), optical rings infrastructures, in approximately 50 municipalities across Greece, aiming to interconnect "points" of public interest (such as public administration buildings, schools, tax offices, administrations) through a broadband network.

IKAnet

As part of its modernization programme IKAnet (http://www.ikanet.gr), the Greek Social Insurance Institution, has developed two new services, which serve as a springboard for the provision of further quality services to employers and employees or pensioners. The new electronic services of IKA fall into two categories: Information Services and Transaction Services. The first transaction service was the electronic submission of the Analytical Periodical Statement, aiming at improving transactions with IKA, and eliminating the need for the physical presence of the employer in transactions with the Institution (Greece in the Information Society, Strategy and Actions, 2002).

Call Centres

The Greek Government launched an innovative Call Centre enabling citizens to apply for a number of certificates and administrative documents by dialling a nationwide four-digit telephone number (1502), in February 1998. Citizen's requests were registered by operators who gave information regarding available services and procedures and filled a standardised computer form. The form was then immediately transmitted online and by fax to the competent administration, which issued the document and sent it to the citizens by registered mail to their postal address. The competent agencies were obliged to take action within a specific time limit (10 days). By the end of 2001, more than 870.000 applications for administrative forms and documents had been submitted, representing almost 608 applications per day (IDABC e-Government Observatory, 2005). This figure shows the success of the service, which increases the responsiveness of public administration, promotes equal and user-friendly access to public services, helps to reduce red tape and administrative costs, and contributes to a better quality of life for citizens. In June 2003, Greece's 1502 Telephone Application System received the first United Nations Public Service Award in the category *"Improvement of Public Service Results"* in the geographic area of Europe and North America.

Greece in the Information Society: Strategies and Actions

The Greek Government's strategic approach to e-government was laid down in the white paper *"Greece in the Information Society: Strategies and Actions"*, which was published in February 1999 and updated in 2002 and set out the new Greek policy for the development of the IS. It presented a comprehensive strategy, defined priorities and specific goals, as well as resources and mechanisms for achieving them and its basic objective was the development of an *"open and effective"* government. The white paper placed great emphasis on raising the quality of public services in order to ensure social cohesion and contribute to economic objectives in terms of living standards. So, they should be characterised by ubiquity, uniqueness of reference, de-materialisation, quality and cost-effectiveness (Greece in the Information Society: Strategy and Actions, 2002).

ARIADNI Programme

The ARIADNI (Development and Operation of the Main Information, Support and Interconnection System of Citizens Service Centre – ARIADNI Offices) programme is adopted for the improvement of public administration services delivered by regional and local administrations, in particular through

the use of Internet for most transactions and communication with central government and for most interactions with citizens and businesses. It signalled the collaboration between the central public administration and local government authorities, and was implemented through both central and decentralized actions. The programme, was financed by Public Investment Programme with a co-funding by national resources and the EU, through the CSF 2000-2006 and in particular the OP IS. It set the target of creating one-stop shops for administrative services in municipalities and prefectures, where citizens are able to complete administrative transactions using a minimum of his resources (money and time to travel). The programme also included an ambitious administrative procedures simplification project, aimed at reducing administrative burdens for citizens and businesses. A specific programme, ASTERIAS, as part of ARIADNI, was aimed at improving public services provided to the people of the Greek islands. The implementation of the Citizens' Service Centres was supported by the ARIADNI programme (Greek E-government Factsheet, 2007).

Today, the programme ARIADNI II (2007), that constitutes the continuation of ARAIDNI, provides services (SLAs) through the development and operation of the necessary ICT infrastructure for facilitation of the Citizens Service Centres (KEP). Specifically, it includes the following subprojects:

- Collection, digitisation, codification, organisation and process of the public information and entry thereof in the main Internet site, as well as the design and implementation of the data base of administrative information and forms.
- Internet portal for administrative information and electronic transactions.
- Provision of information and submission of applications for electronic transactions through telephone centre.
- Provision of services and information through the Citizens Service Centres.
- Development and support of the VPN interconnection of the Citizens Service Centres.
- Control, management and decision making (MIS).
- Provision of training services.
- Support services and Help Desk.

Citizens Service Centres

In 2002, the first ten Citizens Service Centres (KEP in Greek) (http://www.kep.gov.gr) opened, one-stop administrative shops located in or near municipality and prefecture offices. These centres *"were institutions, running under the supervision of Greek local municipalities, realising a flexible citizen-centric mechanism, which aims to increase the flexibility and efficiency of the way citizens interact with the public sector"* (Tambouris et al, 2004). Through these shops, citizens can have access to public service information and to a number of standardised administrative procedures. There are currently more than 1.000 Citizen Service Centres spread around Greece and more than 850 administrative services covering virtually all the public sector that can be accessed through the Centres (Hahamis et al., 2005). The Citizens' Service Centres were meant to gradually integrate all administrative procedures through the use of ICT. The physical one-stop shops were complemented by an Internet portal and by a free of charge telephone helpline (IDABC e-Government Observatory, 2006). These centres are linked together by an IP network and use a platform, called e-KEP, to file citizens' requests, create a relevant e-directory, electronically register KEP mail, manage citizens' requests and monitor their progress all the way through settlement. Accessible through the one-stop service centres across the country or through the Internet, the e-KEP platform supports the use of certified digital signature, enabling real time on-line transactions between citizens and Public Administration. The average service time usually does not exceed 7 days. The Citizen Service Centre Internet portal receives over 9 million visits each month. The Prime Minister announces in parliament in June 2006 that the Citizen Service Centres are to be upgraded and renamed into Integrated Transaction Centres.

POLITEIA Programme

The Ministry of the Interior, Public Administration and Decentralisation implemented in May 2000 an OP called POLITEIA which *"was the main element of a co-ordinated effort to promote reform of the structure and activity of public administration, with the primary aim to improve services offered to the public"* (OECD, 2004). As part of this effort, Citizens' Service Centres (CSCs) designed as one-stop shops for services to the citizen, were introduced under the ARIADNI Project, and operate using up-to-date ICT. Its main objectives were to adopt modern financial management models, to simplify administrative procedures, to recruit well-trained civil servants, to implement new technologies and adopt modern methods of administration and control, and to ensure transparency and eliminate corruption. The overall aim was to transform the Greek public administration into a modern, outward-looking administration focused on better serving citizens' needs.

POLITEIA 2005-2007, a 3-year programme for the *"re-establishment of Public Administration"* was launched in March 2005. The objectives of the programme were to better serve all citizens by focusing on their real needs, increasing transparency in public administration, implementing e-government in all administrative levels (central and regional administration, municipalities), restructuring agencies an processes, protecting citizen's privacy and consolidating the Rule of Law (IDABC eGovernment Observatory, 2005). The POLITEIA programme complemented the OPIS by supporting actions not originally covered by it. Its launce was accompanied by the creation of the *"Council for E-government"*, whose target was to draft a *"Strategic Plan for E-government"*. The plan set the targets and the coordination mechanisms among all relevant national and European Programmes. Following the deployment of the POLITEIA programme, an invitation for proposals was issued by the central government towards the prefectures in September 2005.

Central Procedure Simplification Committee

In 2004, the Central Procedure Simplification Committee was created. Its main objectives were the planning, implementation, monitoring and assessment of administrative simplifications, reform of the appropriate organisational structures for supporting the simplification policy and preplanning of activities to inform government officials on simplification methods and techniques.

Greek Digital Strategy

The draft Greek Digital Strategy for the period of 2006-2013 aimed at enabling a *"digital leap"* to improve productivity and quality of life by 2013. The proposed digital strategy includes more than 65 actions and is divided into two parts. The first part of the plan will be enacted by 2008, and the second one by 2013. By 2008, the government will promote the development of electronic procurement, broadband connections, digital public services for citizens and businesses, and the use of electronic signatures. After 2008, the proposed strategy includes creating one-stop e-points to serve companies, re-organising the public sector and incorporating new technologies into the education system (Greek E-government Factsheet, 2007).

General Secretariat for Public Administration and E-government

The General Secretariat for Public Administration and E-government launched in April 2006, as a consultation process on the future OP entitled *"Improving the Management Capability of Public Administration"*. The programme, which belongs to the National Strategic Reference Framework 2007-2013, aims at transforming the functionality and organisation of public administration and the development of innovative services for citizens and businesses.

Programmes	Description
KLEISTHENIS	A project relating to the administrative modernization of the public administration, the development of integrated information systems in the public administration and the education and training of human resources.
Actions by the Ministry of Economy and Finance	The development of a pilot system for the electronic exchange of receipts and, in particular, the electronic filing of VAT statements.
TAXISnet	It provides services to individual and corporate tax-payers, including electronic submission of VAT forms and payment of VAT via banking system services, electronic submission of income tax forms, personalized electronic notification of the results of the tax return clearance process, and the electronic issuing of certificates by fax.
SYZEFXIS	It aims to develop *"an effective public administration with a modern information and telecommunications infrastructure and the easier coordination of state processes through IT and Tele networking"*.
IKAnet	The IKA web site makes it possible to completely treat the declaration of social contributions for employees online.
Greek Strategy for the Information Society	The objectives of this strategy were defined and the creation of a model that must be followed.
Strategic Plan for Administrative Reform	It sets four main fields of action: the structure of the administrative system, its activities, its human resources, and new ICT.
The call centres	They increase the responsiveness of public administration, promote equal and user-friendly access to public services, help to reduce red tape and administrative costs, and contribute to a better quality of life for citizens.
White Paper "Greece in the Information Society: Strategies and Actions"	It presents a comprehensive strategy, defines priorities and specific goals, as well as resources and mechanisms for achieving them and its basic objective is the development of an 'open and effective' government.
ARAIDNI Programme	It is adopted for the improvement of public administration services delivered by regional and local administrations and sets the target of creating one-stop shops for administrative services in municipalities and prefectures.
Citizens Service Centres	They are institutions, running under the supervision of Greek local municipalities, realising a flexible citizen-centric mechanism, which aims to increase the flexibility and efficiency of the way citizens interact with the public sector.
POLITEIA Programme 2000	The main element of a co-ordinated effort to promote reform of the structure and activity of public administration, with the primary aim to improve services offered to the public.
POLITEIA Programme 2005-2007	The objectives of the programme are to better serve all citizens by focusing on their real needs, increasing transparency in public administration, implementing e-government in all administrative levels, restructuring agencies an processes, protecting citizen's privacy and consolidating the Rule of Law.
Council for E-government	Its present target is to draft a Strategic Plan for E-government. The plan will set the targets and the coordination mechanisms among all relevant national and European programmes.
Operational Programme for the Information Society (OPIS)	OPIS is an innovative horizontal programme, cutting across government departments, which aims at implementing the essential features of the Greek Government's Information Society white paper as well as of the eEurope actions. The priorities for E-government are mentioned.
Information Society S.A.	A state-owned company tasked with supporting the implementation of

	the Operational Programme for the Information Society (OPIS).
Central Procedure Simplification Committee 2003	Its main objectives are the planning, implementation, monitoring and assessment of administrative simplifications, reform of the appropriate organisational structures for supporting the simplification policy and preplanning of activities to inform government officials on simplification methods and techniques.
Greek Digital Strategy	It aims at enabling a "digital leap" to improve productivity and quality of life by 2013.
Improving the Management Capability of Public Administration	The programme aims at transforming the functionality and organisation of public administration and the development of innovative services for citizens and businesses.

Table 3. Greek e-government programmes.

Before the 2000-2006 programming period, most Member States of EU were rather optimistic regarding the permanence of the positive trends that arose with the emergence of the *"new economy"* and the stock market boom. Same was the picture in Greece with CSFs. However, recent data shows that developments are not in step with these optimistic assessments. Already from the second quarter of 2001, the European economy found itself in a phase where development rates were dropping, deficits in the public sector were increasing, unemployment rates were rising, and the return on capital and investments was low (CSF, 2006).

According to i2010 (2006), Greece has only 30 services fully available online, posting the country at 23rd place of the 28 countries of EU measured. Unfortunately, the projects presented above, are the only remarkable e-government projects launched in Greece that have more than informational profile and actually provide electronic G2B, G2C and G2G services. The 3rd CSF and especially OPIS, has brought enough funding to reorganize the whole Greek Public Administration. The institutional and organisational obstacles of the Greek Public Administration, however, remain still insurmountable. The most crucial problem for the preparation of ICT projects are time delays caused by red tape and bureaucratic processing of the calls for interest and biddings, reducing dramatically time available for implementation and the use of the 3rd CSF funds. That is why it is essential that the call for interest and bidding processes are accelerated and the cooperation and the coordination between the related actors are enhanced, in order to realize a substantial and qualitative implementation (Boufeas et al, 2004).

The main characteristics of the Greek Public Administration could be summarized in the following features (Boufeas et al, 2004):

- Low efficiency.
- Difficulties in the introduction of organizational information architecture models.
- Fragmented efforts of computerization – lack of standardization.
- Insufficient technical infrastructure.
- Lack of training and experienced personnel on information technology.

EU Programmes vs Greek Programmes

Most EU countries initiated their first OPs later than Greece did; France and Switzerland in 1998, Germany and Ireland in 1999, Italy and United Kingdom in 2000, while Scandinavian countries (Sweden, Norway, Finland and Denmark) activated in IS during the mid 90's, without taking advantage of a specific OP (Observatory for the Greek Information Society, 2006). EU countries in general are active in e-government projects. Table 4 summarizes the best e-government practices of EU countries (Observatory for the Greek Information Society, 2005).

Country	E-government	URL
Austria	HELP Portal	http://www.help.gv.at
	SBA Online	http://www.schulbuchaktion.at
	Citizen Card	http://www.buergerkarte.at
		http://www.chipkarte.at
	Light Citizen Card	http://www.bdc.at/208.html
		http://www.mobilkomaustria.com
		http://www.a1.net/signatur
		http://www.atrust.at
	Official Email Service for the Public Sector	http://www.zustellung.gv.at
	FINANZonline	https://finanzonline.bmf.gv.at
Belgium	KAFKA Initiative, Simplification of Public Administration	http://www.kafka.be http://www.simplification.be
	e-ID Card	http://eid.belgium.be
		http://www.certipost.be/eid
		http://www.eid-shop.be
	Tax on Web	http://www.tax-on-web.be
	Federal Portal for Citizens and Business	http://www.belgium.be
France	Income Taxes Assessment, Declaration and Payment	http://www.ir.dgi.minefi.gouv.fr
	French eGovernment Portal	http://www.service-public.fr
	eVoting	http://www.interieur.gouv.fr/rubriques/b/b3_elections/b31_actualites
	Online Declaration and Payment of VAT	http://www.tva.dgi.minefi.gouv.fr/index.jsp
Germany	BUND.DE	http://www.bund.de
	Public Purch@sing Online	http://www.evergabe-online.de
	Arbeitsamt Online (Employment Office)	http://www.arbeitsamt.de
	BafögG-Online (Student Loans Online)	http://www.bva.bund.de/aufgaben/bafoeg/index.html
	ELSTER, e-Tax Return	http://www.elster.de
	DIGANT	http://www.bundesdruckerei.de
	Customs Online 2005 & ATLAS	http://www.zoll-d.de
	BRN, Das Bayerisches Realschulnetz	http://www.realschule.bayern.de
	WEB for ALL	http://www.webforall-heidelberg.de
	Bremen On-line Services	http://www.bremen.de
Denmark	Digital North Denmark	http://www.detdigitalenordjylland.dk
	Nordpol.dk, Democracy on the Web	http://www.nordpol.dk
	Public Procurement Portal	http://www.doip.dk
	Digital Signatures	http://www.digitalsignatur.dk
	e-Boks	http://www.e-boks.dk
	NetCitizen, Portal for Digital Citizen Services	http://www.netborger.dk
	Electronic Tendering (SKI): National Procurement	http://www.ski.dk
United Kingdom	Info4local	http://www.info4local.gov.uk
	E-government Unit	http://www.caimed.org
	E-economy Unit	http://www.caimed.org
	E-communications Unit	http://www.caimed.org
	E-voting	http://www.caimed.org
	E-participation	http://www.caimed.org
	National Planning Portal	http://www.planningportal.gov.uk
	Customer Handling of Import and Export Freight (CHIEF)	http://www.hmce.gov.uk
	Directgov.uk	http://www.directgov.uk
	Fife Direct	http://www.fifedirect.gov.uk
Ireland	Irish Public Procurement Portal	http://www.etenders.gov.ie

	OASIS & BASIS Portals	http://www.oasis.gov.ie http://www.basis.gov.ie http://www.eforms.ie
	ROS (Revenue Online Services)	http://www.ros.ie
	REACH, Messaging Infrastructure for Intra-governmental Cooperation	http://www.reach.ie
	FAS & PUBLIC JOBS Portals	http://www.fas.ie http://www.publicjobs.ie
	Motor Tax Online	http://www.motortax.ie
	Irish Tax Administration's SMS Service	http://www.revenue.ie/wnew
Iceland	Government Offices	http://www.government.is
	GoPro, Electronic Records Management System	http://www.gopro.net
	eTax, Electronic Tax Returns	http://www.brussels.rsk.is
	Customs Declaration on the Web	http://www.tollur.is
Spain	INFO XXI	http://enis.eun.org
	CAT 365 Citizen's Portal	http://www.cat365.net
	Utenet, ICT Training for Disabled People and Welfare Workers	http://www.utenet.com.ar
Italy	Citizen Car Registration and Ownership	http://www.aci.it
	Italia.gov.it	http://www.italia.gov.it
	Electronic ID Card and National Services Card	http://www.cartaidentita.it
	eProcurement	http://www.acquistinretepa.it
	PolisWeb, Lawyer Access to Case Information	http://www.tribunale.bologna.giustizia.it
	TELEMACO, Signed Electronic Filling for Business Entities	http://web.telemaco.infocamere.it
Luxembourg	Luxembourg E-government Strategy	http://www.eluxembourg.lu
	Public Web Sites Portal	http://www.etat.lu
	Online Declaration and Payment of VAT	http://saturn.etat.lu/etva/index.do
Netherlands	Public Key Infrastructure	http://www.opengroup.org
	Electronic Government Counters	http://www.eurovision.net http://www.caimed.org
	Electronic Vote	http://www.minbzk.nl http://www.caimed.org
	Biometric Passports and ID Cards	http://www.caimed.org
Portugal	Citizens Portal	http://www.portaldocidadao.pt
	Fiscal Electronic Declarations	http://www.e-financas.gov.pt http://www.dgci.min-financas.pt
	Portugese Government Portal	http://www.portugal.gov.pt
	e-Voting	http://www.votoelectronico.pt
Sweden	Ministry 24-7	http://www.24-timmarsmyndigheten.se
	Seniornet.se	http://www.seniornet.se http://www.sics.se
Finland	Finnish e-ID Card	http://www.fineid.fi
	Oodi & Web-Oody Systems, Enrollment in the University of Helsinki	http://www.oodi.fi
	Public Sector Portal	http://www.suomi.fi http://www.lomake.fi
	TYVI	http://www.tyvi.fi
	Tyoelake, Finnish Center for Pensions	http://www.tyoelake.fi
	VERO Portal	http://www.vero.fi
	Citizen Certificate	http://www.sonera.fi http://www.vaestorekisterikeskus.fi

Table 4. Best e-government practices of EU countries.

Many of the above best EU e-government practices could be applied in Greece. Indicatively, we mention the following:

- *Services for job searching.* These services are provided via Greek Manpower Employment Organization (OAED) web site (http://www.oaed.gr). For the time being, online services include only: unemployed searching and job searching in Greece and in Europe. So, there is a need for application more sophisticated services e.g. intelligent classification of professional categories. Characteristic practices from Ireland are Fas (http://www.fas.ie) and Public (http://www.publicjobs.ie) Jobs Portals.

- *Customs services.* An integrated customs information system (ICIS) is under development, but today its provided services are limited. Moreover, soon the computerization and inter-networking of all custom stations will be completed. Representative EU best practices are: from Germany, Customs Online 2005 & ATLAS (http://www.zoll-d.de), from United Kingdom, Customer Handling of Import/Export Freight (CHIEF) (http://www.hmce.gov.uk), and from Iceland, Customs Declaration on the Web (http://www.tollur.is).

- *Electronic procurements.* An integrated system of electronic procurements is under development. This system could be adopt best services of relative EU countries e.g. from Denmark, Public Procurement Portal (http://www.doip.dk) and Electronic Tendering (SKI): National Procurement (http://www.ski.dk), from Ireland Public Procurement Portal (http://www.etenders.gov.ie) and the Italy, eProcurement (http://www.acquistinretepa.it).

- *Portals.* The lack of basic portals (national, citizens, enterprises) implies Greek insufficiency in e-government field. Currently, this role is covered by Citizens Service Centres portal (http://www.kep.gov.gr), which despite its recent redesign, it is unable to correspond with high arisen requirements (e.g. content organisation that remains focused on Public Administration structure, interaction that does not reach the level of electronic forms completion and submission, etc.). In late 2008, ERMIS e-government portal is expected to be in full operation in order to fulfil this gap. A best EU practice that could be found application in this portal, constitutes Austria HELP Portal (http://www.help.gv.at). Another interesting practices are: Belgium, Federal Portal for Citizens and Business (http://www.belgium.be), France, eGovernment Portal (http://www.service-public.fr), Denmark, NetCitizen, Portal for Digital Citizen Services (http://www.netborger.dk), Luxembourg, Public Web Sites Portal (http://www.etat.lu) etc.

Greek E-government Ranking

Many organisations and surveys attempt to measure e-government progress of several countries either on a EU level or an international level, according to different indicators and measurements. European Commission (2005), measures the e-government policy indicator of the eEurope Action Plan on 28 EU countries yearly. For these countries the European Commission and the Member States defined a list of twenty basic public services. For twelve of these services, the citizens are the target group while for eight of them businesses are the target group. European Commission (2005) resulted for online sophistication indicator in an overall average score of 65% for the 20 public services in the 28 countries (53 % for the 10 new member states and 72% for the other countries). This means that the online sophistication of public service delivery in the EU is situated between one-way interaction and two-way interaction. Even the EU 15+ countries are overall not yet on a level of two-way online service delivery. As far as the new fully available online indicator is concerned, the fifth measurement resulted in an overall average score of 40% for the 20 public services in the 28 countries (29% for the 10 new member states and 46% for the 18 other countries). These results are illustrated in Figure 2, while Figure 3 and Figure 4 depict each participating country's indicators measurement.

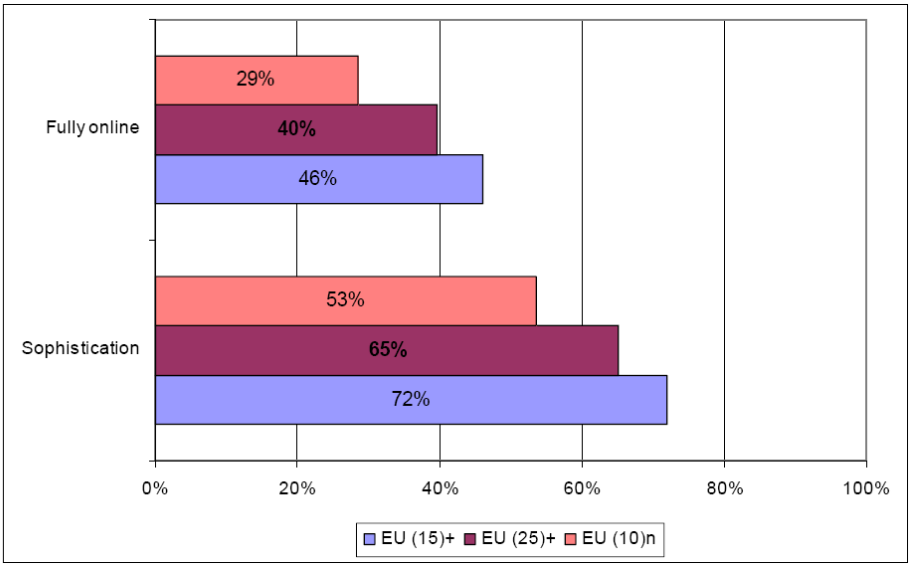


Figure 2 Overall Results (European Commission, 2005).

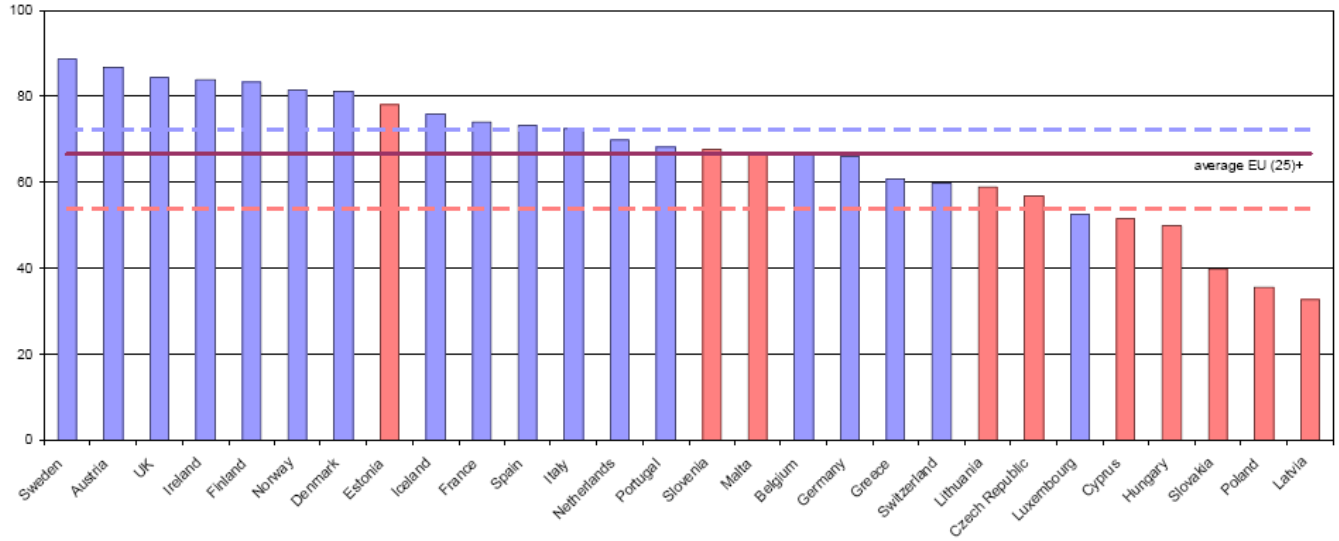


Figure 3. Country results – online sophistication (European Commission, 2005).

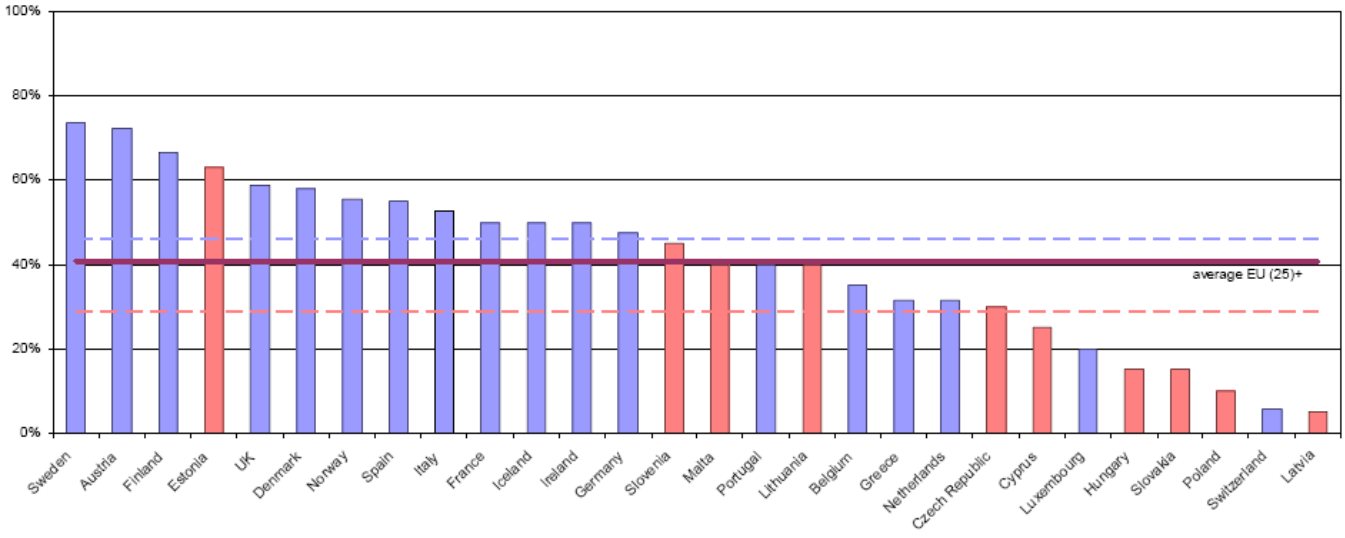


Figure 4. Country results – fully availability online (European Commission, 2005).

According to European Commission (2005), over the last 3 years, the online development of public services has improved by 27 percentage points as depicted in Figure 5 while the *"fully available online"* development of public services has improved by 26 percentage points, as depicted in Figure 6. Greece (EL) stands at 16th place as far as online sophistication progress is concerned and at 15th place as far as fully available online progress is concerned. Table 5 illustrates each participating country's progress on these two indicators during 2001-2004.

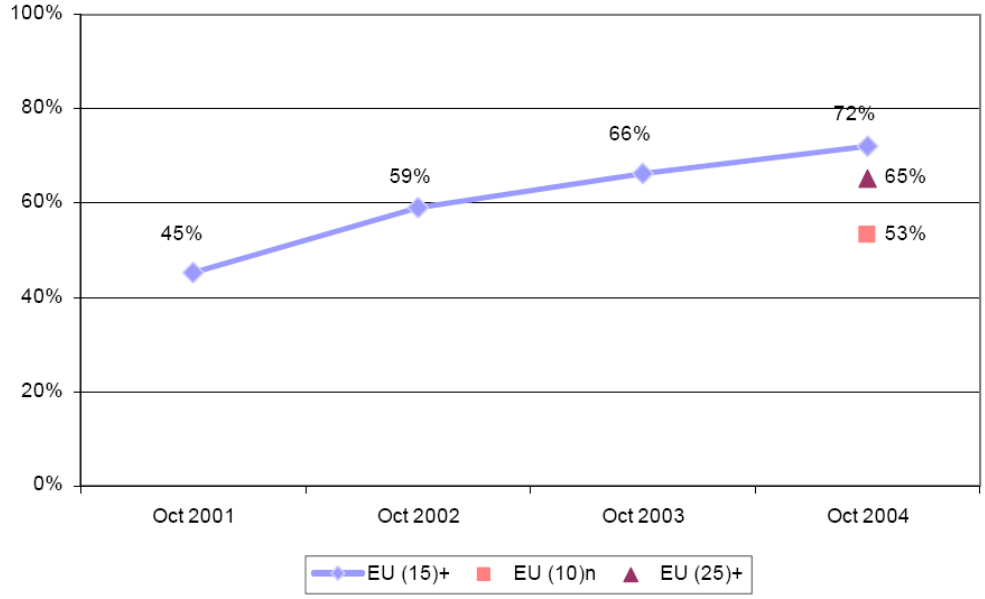


Figure 5. 2001-2004 overall progress – online sophistication (European Commission, 2005).

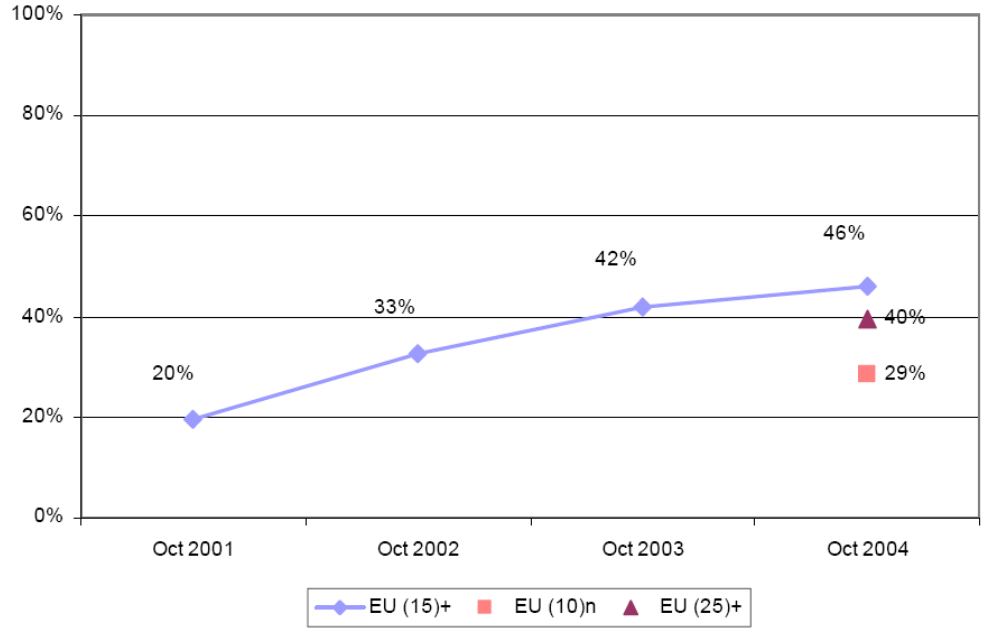


Figure 6. 2001-2004 overall progress – fully available online (European Commission, 2005).

Online Sophistication						Fully available online				
	Oct 2004	*Oct 2003*	*Oct 2002*	*Oct 2001*			*Oct 2004*	*Oct 2003*	*Oct 2002*	*Oct 2001*
S	89%	87%	87%	61%		S	74%	67%	67%	28%
A	87%	83%	56%	40%		A	72%	68%	20%	15%
UK	84%	71%	62%	50%		FIN	67%	61%	50%	33%
IRL	84%	86%	85%	68%		UK	59%	50%	33%	24%
FIN	83%	80%	76%	66%		DK	58%	72%	61%	32%
NOR	82%	75%	66%	63%		NOR	56%	47%	35%	35%
DK	81%	86%	82%	59%		E	55%	50%	40%	30%
ISL	76%	56%	53%	38%		I	53%	45%	35%	15%
F	74%	73%	63%	49%		F	50%	45%	35%	25%
E	73%	68%	64%	50%		ISL	50%	28%	28%	11%
I	72%	59%	57%	39%		IRL	50%	56%	50%	22%
NL	70%	65%	54%	37%		D	47%	40%	35%	20%
P	68%	65%	58%	51%		P	40%	37%	32%	32%
B	67%	58%	47%	23%		B	35%	35%	25%	0%
D	66%	52%	48%	40%		EL	32%	32%	32%	11%
EL	61%	54%	52%	39%		NL	32%	26%	21%	5%
CH	60%	55%	49%	-		L	20%	15%	5%	5%
L	53%	47%	32%	15%		CH	6%	0%	0%	-

Table 5. Country ranking (European Commission, 2005).

At international level, the World Economic Forum's Networked Readiness Index (NRI) measures the propensity for countries to exploit the opportunities offered by ICT and is published annually. Table 6 illustrates the NRI rankings for the past 4 years for most EU countries as well as other countries with high NRI rankings.

Country	2002-2003	2003-2004	2004-2005	2005-2006
Australia	15	9	11	15
Austria	16	21	19	18
Belgium	22	24	26	25
Canada	6	6	10	6
Denmark	8	5	4	3
Finland	1	3	3	5
France	19	19	20	22
Germany	10	11	14	17
Greece	**42**	**34**	**42**	**43**
Hong Kong	18	18	7	11
Iceland	5	10	2	4
Ireland	21	22	22	20
Israel	12	16	18	19
Italy	26	28	45	42
Japan	20	12	8	16
Korea	14	20	24	14
Luxembourg	27	14	17	26
Malaysia	32	26	27	24
Netherlands	11	13	16	12
New Zealand	23	23	21	21
Portugal	31	31	30	27
Singapore	3	2	1	2
Spain	25	29	29	31
Sweden	4	4	6	8
Taiwan	9	17	15	7
United Kingdom	7	15	12	10
United States	2	1	5	1
Countries measured	***82***	***102***	***104***	***115***

Table 6. Greece NRI Ranking (World Economic Forum, 2006).

The above international ranking implies that despite the undertaken e-government initiatives, public sector's management methods and procedures in Greece are still inefficient, full of inherent weaknesses that need to be solved further. In specific areas, the results were relatively successful (e.g. Citizens Service Centres), but at the same time, they have to face certain public administration

problems, failures and controversies to effectively manage and fully utilize the potentials that ICTs offer in order to improve public sector services.

Conclusion and Future Directions

The operation of public sector and the procedures, services or information for covering citizens' and companies' transactions require an open, transparent, effective and responsible environment, as a basic precondition for economic growth and citizen service. This plays a significant role in the quality of life, as well as entrepreneurship and investments. In Greece the public sector's organization structure and operation is characterised by reduced efficiency. Complex regulatory frameworks, division of competencies among a large number of services and administration levels, unnecessary workload, costs and red tape, reduced incitement, inadequate mobility and formalism constitute the major administrative burdens that affect Greek public sector and economy activity growth.

Greek Public Administration modernization is a necessity imposed by the increase of the quality of service delivery and the reduction of the transaction costs (National Strategic Reference Framework 2007-1013, 2006). Greek transition to the IS, even if it is temporally delayed, it is in the stage of maturation, building on the previous experience and correcting the weaknesses within the framework of 2nd CSF. However, the undertaken reform initiatives are not yet complete and new actions need to be addressed in order to contribute to the attainment of high quality public services.

The OPs are based henceforth on the integrated planning of OPIS, eliminating the initial fragmentation of the individual actions. The public agencies are not anymore reserved towards outsourcing, and information technology companies have acquired adequate experience. The proposed interventions, finally, will be realized under the light of best practices and particular effort will be made for the training of human capital.

The vision of an electronically modernized Greek Public Administration, as reflected in the business plans, should not take the form of another list of good intentions which will fail to get actually implemented. It should be shaped within the body of Greek Public Administration. The only way to success, apart the effective operational coordination at an organizational level, is the strict implementation according to the time schedule and the budget, as well as the rational monitoring and evaluation of the process through clear quantitative and qualitative indicators.

The Hellenic E-government Strategy advocates that electronic services (e-services) should be characterized by ubiquity, uniqueness of reference (i.e. single point of service), de-materialisation, quality and cost-effectiveness. E-services are seen as essential business infrastructures that should only be planned and deployed as such. The Greek government set out essential methodological steps for developing and implementing e-services that included (State Services Commission, 2004):

- identifying critical areas of service.
- determining business priorities and critical success factors.
- identifying business partners and building consensus.
- determining the scope of a pilot application.

One step to solve the problems outcome above, is the formation of dedicated e-government legislation in Greece. Additionally, there is currently no legislation governing the use of electronic means in public procurement in Greece.

Moreover, the reengineering of the internal processes has, surely, to be achieved at a maximum degree, since it is the basic prerequisite for the modernization of the Public Administration according to the basic principles of e-government. On the other hand, the effective dissemination of information,

both within the framework of the organizational coordination, and towards the improvement of the electronically provided services to the end users, cannot be easily controlled from the very beginning. The general culture of the Greek society is the main factor which will set, on the one hand the level of inter-agency cooperation for the production of qualitative outputs and outcomes, and on the other hand, the e-government acceptance degree by the citizens-customers.

The planners in each agency should take into consideration the aforementioned critical factors for the maximization of the benefits resulting from the e-government projects and re-adjust the strategic goals, in accordance with the changes in the preferences of the end users and the speedy developments in the IT sector.

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