Strategies for Developing Information Societies: The case of Romania

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ABSTRACT

In both economic and political terms, Romania lags behind most of the CEE developing countries. This situation deteriorates on a constant basis and is largely accounted for by very poor governance practices. Growing political and social alienation threatens even to undermine the existing democratic system, while double-digit emigration trend risks to deplete the country of its most qualified human capital. In short, Romania experiences a very serious structural problem that has minor chances to be addressed positively through the current ad-hoc relief measures. The solution proposed by this study consists in *recommending the implementation of a reformist agenda of e-governance based on two pillars: robust development of public sector information and large-scale application of Information and Communication Technologies.*

In conceptual terms, this strategy is assumed to produce a gradual shift from the citizen-as-customer to the more participative citizen-as-shareholder model of governance. In concrete terms, the medium-term benefits of this policy are *political* (enhancing the democratization process, increasing political accountability, and improving the tattered government-citizen relationship), *economic* (combating corruption, creating a transparent and competitive economic environment, and speeding up standard administrative processes for citizens and business), and *social* (restoring public trust, rebuilding social capital, and increasing the transparency, quality and efficiency of public services).

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Executive Summary

The development of information society is definitely one of the most important challenges that Central and Eastern European (CEE) countries must face in the near future. Concepts like *good governance, IT-enabled development strategy* and *public sector information* (PSI) have increasingly become interdependent[1] and hence, critically relevant, especially in the economic and socio-political context featuring the developing efforts of the CEE countries. In political terms, *PSI* is now credited with enhancing the democratization process, increasing political accountability, and improving the tattered government-citizen relationship. In economic terms, *PSI* is associated with combating corruption, creating a transparent and competitive economic environment, and speeding up standard administrative processes for citizens and business. In the social field, *PSI* is assumed to help restore public trust, rebuild social capital, and increase the transparency, quality and efficiency of public services. In short, *PSI is generally expected to become the future engine of political and economic development as well as the critical ingredient for any good governance practice.* However, weak institutional, legal and technological infrastructure, dearth of financial and human resources, bureaucratic resistance to change, as well as lack of leadership and strategic thinking constitute the main obstacles against the effective implementation of *PSI* in the CEE region.

By taking Romania as a case study, the objectives of the research project are the following:

- Examine the positions and action strategies of governmental bodies, EU institutions, and relevant civic interest groups with respect to the development of the Romanian *PSI, ICT* and *e-governance* sectors;
- Assess the degree of public access to information from Romanian state institutions;
- Discuss the medium-term implications of these strategies for the perspectives of the Romanian economic and political development;
- Devise recommendations for *PSI* regulations;
- Develop a policy paper on program strategies in the field of *PSI* policy.

[1] For a good overview of the subject see Richard Heeks, "Understanding e-governance for development," University of Manchester: Institute for Development Policy and Management, *Working Paper No. 11: 2001,* http://www.man.ac.uk/idpm/idpm_dp.htm#ig; R. Heeks, *Reinventing Government in the Information Age, International Practice in IT-Enabled Public Sector Reform* (London: Routledge, 1999); "Readiness for the Networked World: A Guide for Developing Countries," Information Technologies Group: Center for International Development at Harvard University 2000, http://www.cid.harvard.edu/ciditg; "Digital Opportunities for all: Meeting the Challenge," Draft Report of the *DOT Force,* version 3.0, Siena Plenary Meeting, 23-24 April 2001.

Although focused on the Romanian *PSI* sector, the policy paper is intended to serve more broadly as background material for policy recommendations to other countries from the region. The paper concludes with a triple set of policy recommendations (with regard to the institutional framework, the policy context, and the ICT infrastructure) for implementing a three-stage reformist agenda of e-governance based on two pillars: robust development of public sector information and large-scale application of Information and Communication Technologies.

In institutional terms, the study recommends the following measures:

- Establishing a single executive umbrella organization, *the Information Society Action Group – ISAG* with the task to promote, coordinate and implement IS efforts at the national level.
- Creation of a *Steering Council (SC)* affiliated to ISAG, composed of the main representatives of the private sector, IT associations, public administration, NGOs and professional organizations; the role of SC is to serve ISAG as a transparent and non-politicized platform.
- Appointment by ISAG of *Chief Information Officers (CIO)* (or e-Envoys) in every important central public administration unit.

In legislative and policy terms, the paper suggests Romanian authorities to:

- Amend existing legislative shortcomings such as the Draft Law of Classified Information, the law regarding access to public information, as well as the main pieces of legislation governing the public administration realm.
- Consolidate the PSI and ICT legislative framework by streamlining the current regulatory system governing the PSI sector and by building a self-sustainable system of dealing with the current and foreseeable limits of Romanian Information Society.
- Introducing and enforcing a code of e-practice across the main units of public administration.

In more technical terms, the paper advances a multiple set of targets to be achieved for upgrading the ICT infrastructure as well as for improving the quality of on-line delivery of public services.

General Description of the Issue:

The industrial-era model of government business is gradually coming to an end. Growing alienation of citizens vis-à-vis their political system, mediocre economic performances, and crumbling social bounds provide testimony against the piecemeal efforts to improve traditional governmental capacities of providing public services and collecting taxes. The rise of the "knowledge society" asks instead for the *reformulation of the very notion of governance*, according to which the traditional citizen-as-customer model must be replaced with the more participative citizen-as-shareholder concept[2]. Table 1 tackles comparatively the four major dimensions of governance across the two models:

Table 1: *Models of Governance*

	Industrial Era	**Digital Era**
Democracy	Representative	Participatory
Citizens	Passive Consumers	Active partners
Politics	Broadcast, Mass, Polarized	One-to-One
States	National, Mono-cultural	Global, Local, Virtual, Multi-cultural

Source: A. Samuel, "Governance in the Digital Economy: Beyond the Reinvention of Government," (May 1999), 5.

The role of government in the digital era rests thus on its ability *to harness efficiently Information and Communication Technologies (ICT)* in three main domains[3]:

- Improving government processes: e-Administration (cutting process costs, managing process performance, making strategic connections in government, creating empowerment).
- Connecting citizens: e-Citizens and e-Services (talking with citizens, listening to citizens, improving public services).
- Building interactions with and within civil society: e-Society (working better with business, developing communities, building civil society partnerships).

Despite some serious efforts and resources invested lately in this area, the state of play at the global level is rather modest. While the digital divide is growing fast between the developed and

[2] Alexandra Samuel, "Governance in the Digital Economy: Beyond the Reinvention of Government," Alliance for Converging Technologies (May 1999): http://www.actnet.com, 2.
[3] For more details see R. Heeks, "Understanding e-governance for development", 4-14.

the developing countries[4], many e-government projects experience serious problems even in the most e-committed countries of the world. Thus, none of the 53 developing countries assessed recently by an E-Readiness study were considered in May 2001 to be able to participate effectively in the global digital economy, although eight of them, most notably Estonia, have made some progress in terms of e-leadership, human resources, and e-business climate[5]. On the other hand, the inability of governments to manage large public IT projects risks to undermine current e-government efforts even in the OECD countries. According to a recent estimate, only 28% of all IT projects in 2000 in the US, in both government and industry, were successful with regard to budget, functionality and timeliness, while 23% were cancelled, and the remainder succeeded only partially, failing on at least one of the three counts[6].

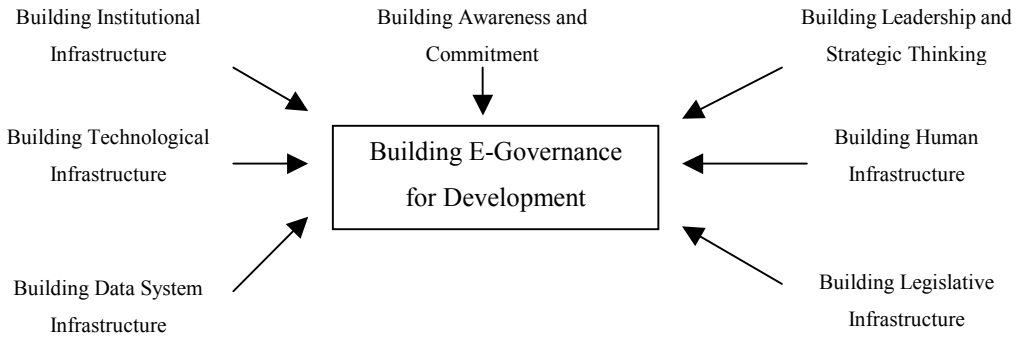
Getting ICT right:

- Establish appropriate governance structures;
- Think small;
- Use known technologies;
- Identify and manage risk;
- Ensure compliance with best practices for project management;
- Hold business managers accountable;
- Recruit and retain talent;
- Prudently manage knowledge;
- Establish environments of trust with private vendors;
- Involve end-users.

Source: OECD – The Hidden Threat to E-Government

While no recipe is universally applicable, a minimum set of recommendations for a successful implementation of ICT-enabled governance projects should pay attention to the local prospects of political and social stability, macro-economic conditions, supporting infrastructures, human resources, sustainability of the projects, timescales, and the balance between the internally and the externally-driven e-governance initiatives[7]. Fig 1 presents an exploratory strategic framework for addressing the e-governance challenge.

Fig. 1: *Strategic Framework for E-Governance initiatives*[8]



[4] "Understanding the Digital Divide", OECD (2001), http://www.oecd.org; "Digital Opportunities for all: Meeting the Challenge," Draft Report of the *DOT Force,* version 3.0, Siena Plenary Meeting, 23-24 April 2001.

[5] "Ready? Net. Go! Partnerships Leading the Global Economy," McConnell International (May 2001), www.mcconnellinternational.com.

[6] OECD, "The Hidden Threat to E-government: Avoiding large government IT failures," *PUMA Policy Brief No. 8* (March 2001), http://www.oecd.org/puma/

[7] Richard Heeks, "Building e-governance for development: *A Framework for National and Donor Action*," University of Manchester: Institute for Development Policy and Management, *Working Paper No. 12: 2001,* http://www.man.ac.uk/idpm/idpm_dp.htm#ig, 23-24.

[8] R. Heeks, "Understanding e-governance for development", 23.

Participative notions of governance based on ICT strategies bring distinctly to the front *the issue of public sector information*. High levels of mismanagement, corruption and inefficiency have taken a great toll on the developing efforts of the transitional CEE countries and have thrown their public sectors into a deep crisis. Consequently, the new paradigm of public sector reform evolves now around five dimensions: increased efficiency, decentralization of the decision-making, increased accountability, improved resources management, and the use of market forces and partnerships with the private sector[9]. As a result, public sector information started to be more and more acknowledged as a key resource for good governance, sound business, economic growth, and social harmony. The 1999 EU Green Paper highlighted several important contributions that public sector information can make in order to bring the Union closer to its citizens[10]:

- Increased transparency for citizens, employers, and administrations at all levels;
- Better mobility of the workforce within the EU;
- Active participation of citizens in the EU integration process;
- Removal of administrative obstacles to business and trade;
- Quick and easy access to relevant business information throughout Europe;
- Increased opportunities for job creation.

The EU Green paper drew also attention to the factors hindering the access and exploitation of public sector information (PSI) most notably the definitions and types of PSI, conditions for access (exemptions, time, quantity, format, tools), pricing models, and regulative issues (competition, copyright, privacy, liability)[11].

The launch of the *e*Europe initiative by the European Commission in December 1999 was the first concrete response taken at the European level to address the challenge of e-governance. In June 2000, the Feira European Council adopted a comprehensive *e*Europe Action Plan and called for its implementation before the end of 2002. The Action Plan was structured along three main lines:

- Objective 1 - A cheaper, faster, secure Internet;
- Objective 2 - Investing in people and skills (learning, working, and participating in the knowledge-based economy);

[9] Richard Heeks, "Information Systems and Public Sector Accountability," University of Manchester: Institute for Development Policy and Management, *Working Paper No. 1: 1998,* http://www.man.ac.uk/idpm/idpm_dp.htm #isps_wp, 7.
[10] For more details see "Green Paper on Public Sector Information in the Information Society," COM(98)585 (20 January 1999), http://europa.eu.int/comm/off/green/index_en.htm.
[11] Ibid.

- Objective 3 - Stimulate the use of the Internet (e-commerce, e-government, health on-line, European digital content for global networks - *e*Content, intelligent transport systems).

In December 2000, the Council adopted a set of 23 indicators for benchmarking the *e*Europe Plan, each of them being further sub-divided into a number of operational indicators (see Annex 1). For e-government, the basis for benchmarking was set by the following three indicators:

- Percentage of basic public services available online;
- Use of online public services by the public;
- Percentage of e-procurement carried out on-line.

All three of them were further operationalized on the basis of a list of 20 essential public services, 12 for citizens and 8 for businesses. A four-stage framework was devised to measure progress in bringing these services online: 1) posting of information online; 2) one-way interaction; 3) two-way interaction; and, 4) full online transactions including delivery and payment (see Annex 2).

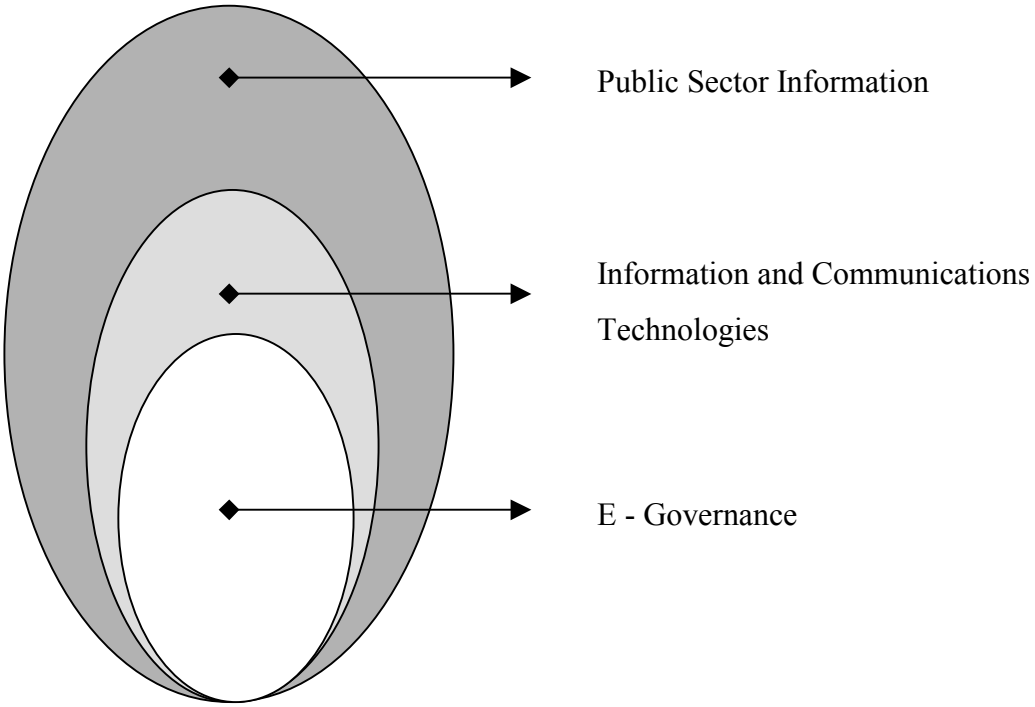
Equally important, at the European Ministerial Conference held in Warsaw on 11-12 May 2000, the CEE candidate countries to EU membership agreed to embrace the challenge raised by the EU-15 with *e*Europe and decided to launch an "*e*Europe-like Action Plan" *by and for* the candidate countries[12]. The initiative, named *e*Europe+, mirrored the priority objectives and targets of *e*Europe but provided for actions that tackled the specific needs of the candidate countries. Therefore, besides the three main objectives of *e*Europe, the CEE version included one additional chapter aimed at accelerating the putting in place of the basic building blocks for Information Society (liberalization of the telecommunication' sector, transposition and implementation of the *acquis* relevant to the Information Society). The *e*Europe + initiative was followed by a call for an *e*Europe + Action Plan prepared by the candidate countries for the June 2001 Göteborg European Summit. Similar to *e*Europe, the *e*Europe+ Action Plan took aim at accelerating reform and modernization of the economies in the candidate countries, encouraging capacity and institution building, and improving the overall competitiveness[13].

[12] "eEurope+ A co-operative effort to Implement the Information Society in Europe," Draft Outline of the Action Plan prepared by the Candidate Countries for launch during the Göteborg European Summit 15-16 June 2001 (23 March 2001), http://www.mcti.ro, 1.
[13] Ibid., 1-2.

Chapter summary

The aim of this section was to describe succinctly the contextual parameters at the international level of the policy problem to be analyzed in the next chapters. The argument consisted of three parts: first, it was pointed out that the very notion of governance is currently undergoing a profound change, shifting gradually from the citizen-as-customer concept to the more participative citizen-as-shareholder model. Second, it was emphasized that the new paradigm shift can be successfully managed only by harnessing efficiently Information and Communication Technologies (ICT) in three main domains: e-Administration, e-Citizens, and e-Society. Third, it was argued that public sector information represents the key resource for advancing the first two objectives. A schematic view of the connections between the three variables is shown in Fig 2. Besides drawing attention to the shortcomings associated with this process, most notably the growing digital divide between the developed and the developing countries, references were also made to the most recent initiatives in the field, such as the G8 DOT Force and especially the EU *e*Europe and *e*Europe + programs.

Fig. 2: *Managing E-governance*



Local background to the issue:

Ten years after the breakdown of the communist system, the process of democratic consolidation in Central and Eastern Europe (CEE) remains an ongoing task, save for a few noticeable exceptions such as Czech Republic, Hungary, Poland and Slovenia (see Table 2).

Table 2: *Comparative Indexes for Selected Post-Communist Countries*

	Transition Progress[1]	Economic Freedom[2]	Country Risk[3]	Press Freedom[4]	Political Freedom[5]	Corruption Perception[6]
Czech Republic	2.31	2.20	71.72	24 (F)	1.2 (F)	3.9
Hungary	2.12	2.90	69.98	28 (F)	1.2 (F)	5.3
Poland	1.66	3.15	66.66	19 (F)	1.2 (F)	4.1
Slovenia	1.92	3.10	72.97	21 (F)	1,2 (F)	5.2
Albania	4.43	3.75	21.69	56 (PF)	4.5 (PF)	NA
Bulgaria	3.56	3.60	37.83	26 (F)	2.3 (F)	3.9
Croatia	3.62	3.75	52.68	50 (PF)	2.3 (F)	3.9
Romania	3.89	3.30	50.49	44 (PF)	2.2 (F)	2.8
Slovakia	2.83	3.05	60.36	26 (F)	1.2 (F)	3.7
Ukraine	4.67	4.05	29.69	60 (PF)	4.4 (PF)	2.1

Sources:

1) A. Karatnycky et al (eds), *Nations in Transit 2001* http://www.freedomhouse.org; the overall rating includes the scores for democratization, rule of law and economic liberalization. The rating is based on a scale of 1 to 7, with 1 representing the highest level and 7 representing the lowest level of democratic development.
2) Kim R. Holmes and Brian T. Johnson, *1998 Index of Economic Freedom*, Washington: American Heritage Foundation 1998 (lowest score 5.0 highest score 1.25); The index is composed of 10 factors including trade policy, taxation, government intervention in the economy, monetary policy, wage and price control, property rights, capital flows and foreign investment, banking, regulation and black market;
3) *Euromoney* September 1997 (lowest risk score 100);
4) Leonard R. Sussman ed., *Press Freedom Survey 2001*, http://www.freedomhouse.org; The degree to which each country permits the free flow of information determines the classification of its media as "Free," "Partly Free," or "Not Free" from legislative, political, economic, and repressive measures. Countries scoring 0 to 30 are regarded as having Free media; 31 to 60, Partly Free media; and 61 to 100, Not Free media. This survey does not assess the degree to which the press in any country serves responsibly, reflecting a high ethical standard.
5) *Freedom in the World 2000-2001*, http://www.freedomhouse.org; "F," "PF," and "NF" respectively stand for "free," "partly free," and "not free." Countries whose combined averages for political rights and for civil liberties fall between 1.0 and 2.5 are designated "free"; between 3.0 and 5.5. "partly free"; and between 5.5 and 7.0 "not free."
6) The Corruption Perception Index is a compilation of 14 surveys from seven independent institutions, assembled by the Transparency International, Paris, 7 June 2001, http://www.transparency.de (ranges between 10 - highly clean and 0 - highly corrupt).

Besides the much-debated economic and political legacies, the quality of the model of governance applied in each country has exerted a decisive influence on the political and economic performances of these countries. Romania provides a critical illustration of this case,

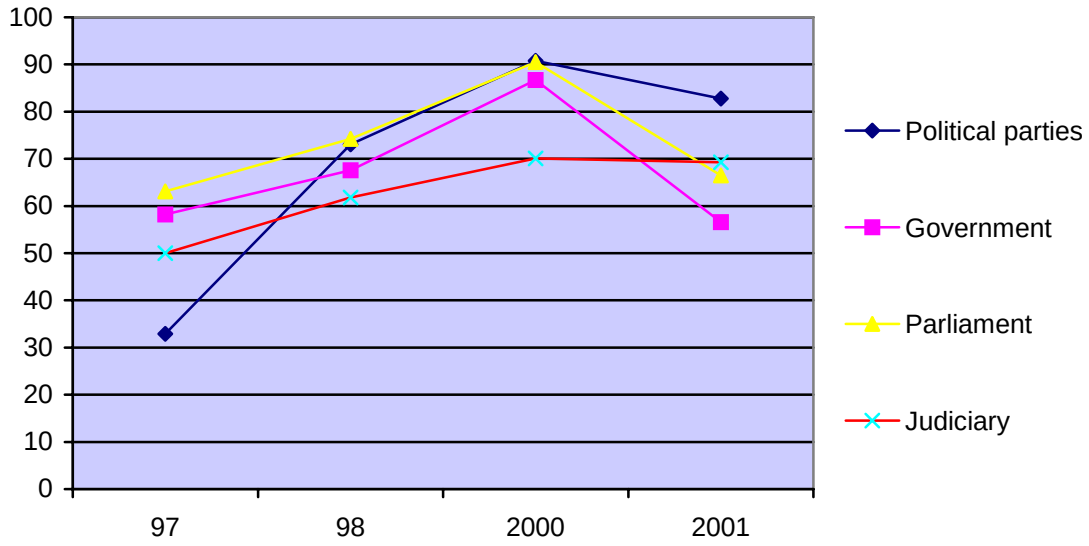
but as Table 2 suggests, its situation can be easily extrapolated to other countries from the region (i.e., Bulgaria, Albania, Ukraine, or some of the former Yugoslav states). In general lines, the Romanian "model of governance" has been characterized by the following features:

- Highly centralized decision-making;
- Large governments and fragmented administration;
- Unclear coordination mechanisms;
- Strong reluctance to delegate authority;
- Slow, inefficient and non-transparent administrative structures;
- Weak institutional framework and poor inter-departmental communication;
- Politicized law-enforcement structures and judiciary;
- Overlapping administrative competences and responsibilities;
- Shortage of professional and stable civil servant bodies;
- Absence of feedback systems and channels of communication between society and the state.

Some of these problems have eventually started to be addressed in the recent years, but the results are still modest and no comprehensive strategy for reforming the public sector is yet in sight. Unfortunately, the consequences of this state of affairs are becoming very serious, threatening even to undermine the very fabric of the political system. As shown in Graph 1, political alienation has reached a critical level. An average of 70 percent of the population has no confidence whatsoever in any of the main institutions of the Romanian democratic system: political parties, government, parliament and judiciary. The temporary relief that followed the general elections held in November 2000 seems now to have run out of steam with the public distrust of political institutions starting slowly to pick up again[14]. This situation is all the more aggravated by the fact that the scale of dissatisfaction with the perceived direction taken by the country, level of family poverty, and the government handling of corruption has remained constant and critically high, above the 60 percent threshold, in the last four years (see Graph 2[15]).

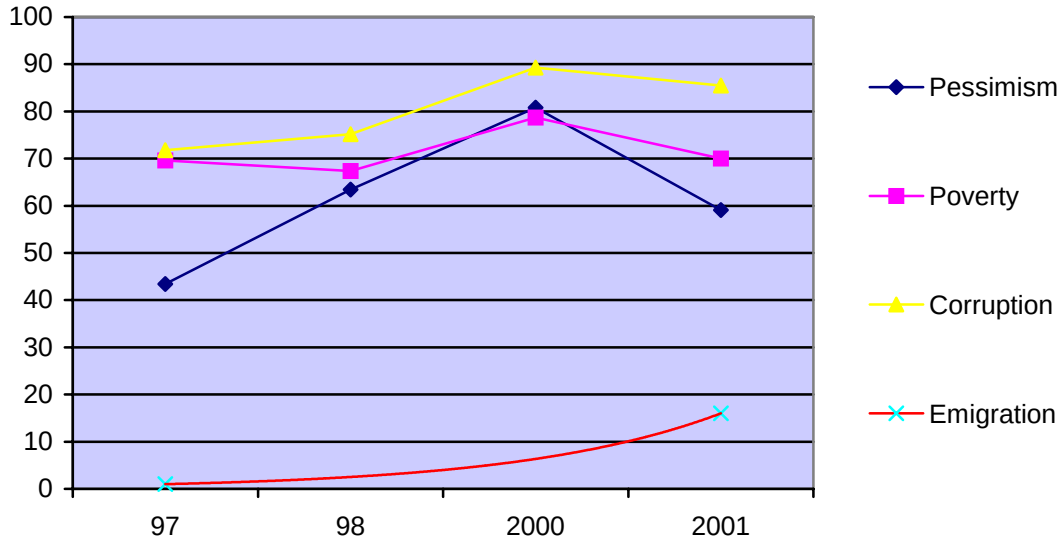
[14] UNDP – Romanian Academic Society. *Early Warning Report Romania*, No. 2, 3 (2001), http://www.undp.ro
[15] Both graphs are based on the data provided by the 1997-2001 Public Barometers of the Open Society Foundation, Bucharest, http://www.osf.ro

Graph 1: *Public distrust of political institutions*



This gloomy picture is further completed by the intention of every Romanian out of six to emigrate permanently (16 percent surge in the last four years). In short, ten years after the collapse of the communist regime, Romania proves still unable to find the right pace for political and economic development. Moreover, it has little chances to improve its current situation as long as it remains the prisoner of the same system of governance described above.

Graph 2: *Social alienation*



Recent EU transfer of institutional expertise via the PHARE Institutional Building, TAIEX (Technical Assistance Information Exchange Office), and Twinning programs, as well as of financial assistance for infrastructure development (ISPA, SAPARD) has been basically intended to tackle the core of the governance problem and to move it on a more positive track. However,

even in the most optimistic scenario (committed political reform, strong FDI flows, improved economic environment), the effects of the current pre-accession program will start to produce significant results only in the second half of the decade[16]. In addition, it remains questionable whether the present institutional framework can resist the pressure of a sudden import of EU assistance, without solid preparation. Although of a different nature and scale, previous programs of assistance run by the International Monetary Fund (IMF) and World Bank provide proxy clues about the potential side effects of the EU pre-accession programs:

- Administrative overstretch
- Bureaucratic entanglement
- Deformed institutional construction
- Poor orientation of the projects
- Low levels of absorption of funding
- Lost control over the monitoring and implementation phases
- Low return value.

Chapter summary:

The combination of the two factors discussed above, poor governance practices and growing political and social alienation, reveals in the case of Romania, and by extension of a few other countries from the region, the existence of a serious structural problem that, despite recent EU assistance, must be addressed through structural solutions and not by piecemeal improvements. Failure to restructure decisively the existing system of governance might have serious negative consequences on the stability of the political systems of the respective countries. A reformist agenda must necessary include the robust development of public sector information based on a large-scale application of Information and Communication Technologies.

[16] EU Directorate General for Economic and Financial Affairs, "The economic impact of enlargement," *Enlargement Papers,* No. 4 (June 2001), 31, http://europa.eu.int/economy_finance.

Current Situation

A. LEADING ACTORS

The evolution of the Romanian IS has been influenced by the actions of three types of actors: Romanian public authorities, public and private consultative bodies, and EU institutions. A list of the formally active institutions in all three sectors is presented in Table 3, while details on their attributes and competences are mentioned further below. An in-depth institutional analysis of all sectors will be advanced in the evaluation section. For the moment, only a small caveat seems necessary. Table 3 maps quantitatively the institutional framework operating in the three areas, but it says nothing about its qualitative features (efficiency, transparency, level of coordination etc.). Hence, it is probably useful to bear also in mind that only a few of the institutions highlighted in Table 3 are fully operational, since the intensity of the activity of MPI, GSNEIIS, FIS is rather mediocre, while SSIS and RAI are still on the drawing board waiting to be set up.

Table 3: *The institutional ringleaders*

Public sector information	ICT	E-governance
MPI	MCIT	GSNEIIS
MPA	MER	SSIS
Ombudsman	PCCIT	JHLC
PSINet (Club Europa)	GSNEIIS	RDG
	Research institutes	RAI
	Private sector	FIS

I. Public authorities:

- *The Ministry of Communications and Information Technologies* (MCIT) took over in December 2000 from the National Agency for Communication and Informatics (NACI) the executive role of state authority for developing policies and regulations in the communication and information sector.
- *The Ministry of Public Information* (MPI) is the Government`s specialized institution, which elaborates, promotes and applies the national strategy and policy in the

following fields of responsibility: public information, relations with the Romanians from abroad, and interethnic relations; it also administrates the Government`s website.

- *The Ministry of Education and Research* (MER) took over in December 2000 from the National Agency for Science, Technology and Innovation (NASTI) the legal authority for scientific and technological research and development.
- *The Ministry of Public Administration* (MPA) ensures the implementation of the Government's strategy regarding the local public administration and monitors the elaboration and the implementation of the reform programs by the ministries and the other central authorities.
- *The Parliamentary Committee on Communications and Information Technology* (PCCIT) was established in December 2000 with the goal to prepare and coordinate the legislative framework for supporting the efforts of the IT industry and for developing the Romanian Information Society.
- *The Group for the Strategy for the New Economy and the Implementation of the Information Society in Romania* (GSNEIIS) works under the MCIT authority and was setup early this year with the mission to propose a concrete action plan in response to the requirements set by the *e*Europe + initiative. In addition, the aim of the group is to define the 10-year strategy of implementation of the Information Society in Romania.
- *Prospective administrative bodies:* the Romanian Authority for Informatics (RAI) will be soon in charge with the protection of personal data; the State Secretariat for the Information Society (SSIS) will take over all the rights and duties of the National Commission of Informatics with the mission to set out, supervise, and evaluate IT strategies and to coordinate the development of the Romanian Information Society.
- *Technical bodies:* the National Regulatory Authority for IT and Communications and the General Inspectorate for Communications enforce telecom regulations, monitor licenses and authorizations, and control compliance with technical standards; the government-coordinated Office of Competition oversee the proper application of competition regulations; the Council for Telecommunications has an advisory role for the elaboration of policies and regulations in telecommunications and is composed by the representatives of the industry (operators, equipment and infrastructure producers, etc.)
- *The Ombudsman institution* (People's Advocate) was introduced by the 1991 Romanian Constitution, but it began the activity in December 1997, after the enactment of the organic law and the appointment of the first Ombudsman. The main duties of the People's Advocate are to take up complaints lodged by persons whose civil rights and

freedoms have been aggrieved by the public administration authorities, and to further assign and decide thereupon[17].

II. Consultative bodies:

- *The Romanian Academy of Sciences*: the Section for the Science and Technology of Information was founded in 1992 with the mission to encourage the domains of science and technology that are at the core of the information society. It has been a constant contributor to the various Information Society strategies formulated in the recent years.
- *The Forum for the Information Society* (FIS, since March 1997, under the aegis of the Romanian Academy) brings together various civil society groups with the intention to stimulate the interest in the Romanian society concerning the development of the information society, and to propose concrete measures and actions in this direction.
- *Research institutes:* The National Research and Development Institute for Micro-technologies (IMT) – national contractor of the EU ESIS project –, and to a certain extent the National Institute for Research and Development in Informatics (ICI) – the leading R&D IT center in Romania – have been the most active contributors to the recent efforts of developing the Romanian ICT sector[18]. Unfortunately, no think tank or public policy center has yet expressed a strong interest in IS issues and hence, this fields lacks adequate expert research and local knowledge resources. Given its recently achieved position of country-partner of PSINet, Club Europa constitutes now the only local source of expert knowledge on PSI issues.
- *Professional organizations*[19]: After four months of negotiations, the main IT&C associations in Romania – ANISP, ARIES, ATIC, ANIS - have recently agreed on the status of the Federation of Associations for IT&C. This move is expected to yield better coordination of the positions of the ICT associations and the IT industry on the issue of Information Society progress. The mission to create a leading portal on Romania as a tool for development, communication and knowledge exchange for Government, private sector and civil society at large has been taken up by the

[17] In its first three years of activity, the People's Advocate institution solved 61% of all complaints filed, 35 percent of which dealing with private property issues; see details at http://www.avp.ro

[18] Other research institutes are: Institute for Computers (ITC); National Communications Research Institute (NCRI); National Design Institute for Telecommunications (Telerom Proiect SA); Center for Economy Informatics and Cybernetics - Academy of Economic Studies – Bucharest.

[19] The main professional organizations in the field are: Association of Information Technologies and Communications of Romania (ATIC); National Association of Software Enterprises (ANIS); Romanian Association for Electronic & Software Industries (ARIES); Romanian Association for Research in Communication and Information Technologies (ROMINFOR); Business Software Alliance Romania (BSA); Romanian Association for Promotion of Higher Education of Economic Informatics (INFOREC); National Association of ISP (ANISP).

Romanian Development Gateway (RDG), which is an open partnership initiated by the World Bank, the Government of Romania, NGOs and prominent representatives of the private sector such as Microsoft and Compaq.

III. EU Institutions:

- The *EU-CEE Information Society Forum* was established in June 1995 as a consultative framework with the aim to avoid a further digital divide within the EU and to ensure that the EU candidate countries use the full potential offered by the Information Society. At its third meeting in October 1997, the Forum was replaced with a *Joint High Level Committee* (JHLC), comprised of EU and CEE government representatives, with the task to regularly review the implementation of the conclusions and recommendations of the Forum. The first progress report was presented at the European Ministerial Conference on Information Society, held in Warsaw in May 2000, during which the ministers from the candidate countries and the EU reached a consensus on the deployment of the European Model of Information Society through the launch of the *e*Europe + initiative. At the June 2001 Göteborg European Summit, the initiative was developed into an *e*Europe + 2003 Action Plan, that set out a roadmap and timeframe (until 2003) to accelerate reform and the modernization of the IS infrastructure of the candidate countries.
- *PSINet* is a preparatory action funded by the European Commission within the e-Content program. It explores and demonstrates the commercial potential of Europe's Public Sector Information (PSI) resources in digital content products and services through cross-border, public/private partnerships[20]. Among the key issues to be addressed are metadata and new forms of public/private partnerships and exploitation models. PSINet covers and involves the ten associated states of Central and Eastern Europe (C&EE) as well as all EU member states, on an equal footing. The aim of PSINet is to provide a working framework and to prepare the ground for a European PSI Network of Excellence to come into being. Club Europa is the Romanian partner of this project.

[20] PSINet is organised by: Essex County Council Librairies; EURA A/S – Regional Development Company Ringkoebing County; INETI – Instituto Nacional de Engejharia e Tecnologia Industrial; ISRDS – Consiglio Nazionale delle Ricerche-Institutio di Studi sulla Ricerca e Documentazione Scientifica; The Stationary Office Limited; MDR Partners; Club Europa – Bucharest; for further details see www.publicsectorinfo.com

B. POLICY OBJECTIVES

The main policy objectives pursued by the three categories of IS actors are outlined in Table 4 and discussed in more detail further below. Probably the most striking feature that comes out from the table is the *low degree of policy convergence* among the three sectors. With the exception of a certain concern for increasing IT support in the public administration, the policy strategies in the three sectors run on separate tracks with little coordination among them.

Table 4: *Reform targets*

Public sector information	ICT	E-governance
Ensuring public access to information (FOI legislation)	Telecom liberalization (Jan 2003)	Implementation of IS in line with the e-Europe+ objectives
Improving the relation between administration and public services users (integrated IS system)	Upgrading and extending the ICT infrastructure	Improving the legislative framework (e-signature, personal data protection, e-commerce, e-procurement etc.)
Establishing a body of professional, politically neutral public servants	IT support for the central and local public administration	One-shop governmental portal
Preparing the transition toward e-administration: digital processing of public services (population registration, residence permit, ID and passport record, electoral card, procurement)	Anti-fraud measures for IT systems, data transmission and storage; stricter enforcement of copyright regulations	Enhancing digital cooperation at the intergovernmental level within the framework of the Stability Pact (with Albania, Greece, FRY Macedonia, Yugoslavia, Cyprus)
Increasing citizens' participation to the decision-making process	Fiscal incentives and institutional facilities (technological parks) for the IT industry Better involvement into the Information Society Technologies (IST) Programme	

The Romanian ICT sector has constituted the object of several governmental strategies since 1990, but the overall results have been rather modest. The first Romanian Strategic Planning for the informatization of the country was developed in 1992, with French and Danish governmental support, by the National Commission for Informatics (CNI) had started its activity a bit earlier in 1990, as a specialized governmental body. Subsequently, the Romanian Ministry of Research and Technology (MCT) supported the launch of the National Research and Higher Education Network (RNC), run by ICI,

The 1999 Romanian National R&D Program in ICT

- SW technologies
- Intelligent Systems based on Micro-technologies
- Multimedia
- High Performance Computation and Networking
- IT for Business Processes
- Computer Integrated Production
- Language Technologies
- Communication Technologies
- Telematic Systems and Applications
- Support Activities.

Source: EU-CEEC Forum on Information Society; Panel on the Implementation of the Action Plan

while the national R&D program in IT (CEDINF) took off based on the EU ESPRIT project (1991) and the subsequent EU Fifth Framework and the IST Programs. Since then, the Romanian government has regularly adopted various plans for assisting the transition towards the Information Society (1997, 1999, 2000, and 2001).

The decision of the Helsinki European Council to start accession negotiations with Romania stimulated a more applied approach of the *Romanian government* to the IS policy. Drawing on the National ICT Strategy elaborated by a sub-commission "Information Society" of the *Romanian Academy* in consultation with several political and civil organizations, the National Development Strategy of the Romanian Economy, adopted by the government in March 2000, set out the following IS short-term objectives to be reached by 2004:

- ICT-based tax collection system.
- Country-wide IT network linking Romania to information flows, especially to those of the EU member states.
- ICT endowment of the education units including Internet connection to 80% of schools.
- ICT integrated system for environmental protection and early warning.
- Equal opportunities in terms of access to information, technological R&D, continuous education and training.

The recently adopted *eEurope + 2003 Action Plan* determined the Romanian government to accelerate the implementation and to extend the scope of the short-term IS objectives[21]. The first projects that were approved in view of opening public tender dealt with:

- Accelerating the introduction of computers and Internet access in schools;
- Introducing electronic information services for citizens – Info-kiosks;
- Building a development portal – Romania Gateway;
- Extending national networks for IT services;
- Extending the IT system for monitoring balance sheets and fiscal liabilities of companies with declaration capabilities on the Web;
- Stimulating Internet-based applications for e-government and e-business (videoconferences on the Web; electronic system for public procurement; web-based system for loading suppliers' invoices; cyber centers; virtual market; electronic referendum; B2B solution for customs services).

[21] Romanian Government, *Report on the Progress in preparing the Accession to the European Union: September 2000 – June 2001*, (June 2001), http://www.mie.ro, 178-9.

- Full liberalization of the telecom sector after January 1, 2003.
- Developing and upgrading the network infrastructure for data transmission and communications.

The agenda of the *Parliamentary Committee on Communications and IT* (PCCIT) overlaps only accidentally with that agreed in the *e*Europe 2003 + Action Plan. Falling prey to a traditional public culture of over-regulation, the PCCIT seems determined to flood the ICT sector with a laborious legislative package that lacks a coherent direction. While limited aspects of the e-signature, e-commerce, e-data protection, or anti e-fraud legislation are indeed necessary, the general tendency embraced by PCCIT is to duplicate legislation (such as the laws on e-documents, e-transactions, e-private currency, e-public attorney etc.) and to regulate excessively the private sector while failing to provide the much-needed leadership for expanding ICT applications and services to the public sector. Moreover, lack of a similar committee in the second chamber of the Parliament and especially, marginal political interest among the PCCIT members has given the current president discretionary control over the agenda of the committee. Hence, most of the activity of PCCIT consists either in rubber-stamping governmental initiatives or in providing a lobbying platform for the IT private sector.

Although concentrated largely on fiscal and legal facilities, telecommunication liberalization, as well as on a stricter enforcement of the existing copyright regulations, the objectives of *the private sector* have become increasingly visible for the government. Inspired by the *e*Europe initiative, an "*e*Romania group" was formed in 2000 that included local representatives of IBM, Compaq, Microsoft, Hewlett-Packard as well as of Romanian companies. The group advanced a concise document outlining a set of principles and objectives necessary for creating the Romanian IS. The project was relatively well received by the government and included:

- financial and institutional support for the local software industry and for ICT imports;
- credit facilities for SMEs which offer IT services;
- promotion of electronic services among public institutions (plastic cards for payments, online banking services, electronic tax forms, online access to public information);
- legislative reform: e-signature and e-protection of personal data;
- liberalization of the telecom market;
- strong investments in the ICT infrastructure;
- introduction of computer courses at all levels of education;

- creation of "technological parks" for the production of software.

The first stage of the *reform of the public sector* was initiated during the previous administration and dealt primarily with legislative issues: the Civil Servant Law (188/99), Ministerial accountability (155/99), Local public finances (189/1998), Prevention, disclosure and sanctioning of corruption (78/2000). Once the legislative framework established, the next stage should make sure it is applied properly. In this regard, the government expressed the intent to continue the reform of the public administration on four levels, as follows:

- Changes at the *strategic level*, whereby the role of the state should be redefined in order to delimit it from that of the private organizations;
- Changes at the *legal level*, with a view to diminish the density of legislative acts, and to allow for a larger use of framework laws, so as to give executive authorities a greater liberty of acting;
- Changes at the *organizational level*, oriented to reducing hierarchies, simplifying the procedures, increasing the flexibility of the possibilities of action, with a view to devolving the executive tasks to other non administrative bodies;
- Changes at the *cultural level*, concerning the values and the manner of action of the elected politicians, civil servants and citizens[22].

Public Administration Priorities

- Establishing a body of professional, politically neutral public servants
- Promoting administrative decentralization
- Increasing citizens' participation to the decision-making process
- Supporting the demilitarization of public services
- Improving the quality of the management of the local public services
- Securing a better coordination among the public authorities
- Establishing an integrated information system between the central and the local public administration
- Improving the relationship between administration and users of public services
- Preparing the transition toward e-administration

Sources: National Program for Accession of Romania to the EU (June 2001) and the Governmental Strategy for the Informatization of the Public Administration

The last stage of reform should build on this foundation and move to fully integrate ICT in the public administration. The short-term objective set by the government in this direction is threefold:

1. To secure a better coordination among the public authorities by creating an *integrated information system between the central and local public administration* that will cover the following:
   - IT support for the registry and archive offices;
   - Faster and safer communication channels among all decision-making bodies;
   - Improved citizens access and participation in the legislative process;

[22] Ibid., 243.

- Simplified registration and processing procedures of public petitions.

2. *To ensure public access to information* through the adoption and implementation of the Law regarding the Access to Public Information (FOI), and of the Code for Information Technologies Development and Use. Unfortunately, the Law of Classified Information that comes in the same legislative package cancels out most of the FOI provisions, rendering the latter almost useless.
3. *To develop a governmental portal* tailored on the UKOnline model that would offer an interactive point of entry for citizens to all relevant services delivered by the central and local administration. Given the critical shortage of resources, the execution of this project looks rather unlikely in the medium term. However, pending ongoing negotiations, a few segments might be incorporated into the Romania Development Gateway (RDG) project financed by the World Bank.

C. STATE OF PLAY

In terms of size and population, Romania is the second largest CEE country after Poland but one of the least developed economies of the region (see Table 5).

Table 5: *General socio-economic data for the CEE countries*

	Total Area (km^2)	Population (millions)	Nominal GDP ($bn)	GDP (% real growth)	Average gross monthly wages ($)	Inflation (% y-o-y)	FDI ($bn)	Unemployment (%)
Czech Republic	78,864	10.3	53.6	3.8	359	4.6	19.6	8.3
Hungary	93,030	10.0	45.6	5.2	325	10.3	20.5	5.6
Poland	312,684	38.7	173.0	2.3	542	6.9	40.5	15.8
Slovenia	20,253	2.0	18.6	4.6	877	9.7	2.7	11.8
Bulgaria	110,994	8.4	12.1	5.8	114	9.9	3.9	18.5
Croatia	56,510	4.8	20.2	4.1	579	6.8	4.5	22.6
Romania	238, 391	22.4	36.7	1.6	136	37.5	6	10.4
Slovakia	49,035	5.4	21.2	2.2	269	7.6	2.1	18.3
Estonia	45,227	1.4	5.0	6.4	329	5.8	2.3	6.8

Source: *Business Central Europe* (July/August 2001), 57; based on data from WIIW, ERBD, Eesti Pank, FT, ING Barings, CSFB, Reuters, national statistics as of January 2001.

This less fortunate economic situation has left a heavy imprint on the development stage of the Romanian IS. Recent estimates[23] put basic data on *IT infrastructure* and *Internet availability* at the following levels:

- 180 Internet Service Providers (ISP);
- 8, 976 web servers;
- 46, 574 Internet Hosts;
- 690,000 Internet users;
- 3.06 Internet penetration rate per 100 inhabitants;
- 3.2 PC penetration rate.

CEE PC penetration rate per 100 inh. (end of 2000):

- Slovenia: 27.3
- Poland: 15.5
- Latvia: 11.3
- Czech Republic: 13
- Bulgaria: 4.4
- **Romania: 3.2**

Source: ESIS II Report 2001

The ICT infrastructure includes basic telephony (17,2% national average penetration, compared with 52% for Western Europe and 64% for US), mobile telephony (10% penetration rate for

[23] National Association of Romanian ISP, RIPE, and IMT estimation 2000; for more details see "Romania Master Report," (January 2001), http://europa.eu.int/ISPO/esis/default.htm, and "Romania Development Gateway - E Readiness and Need Assessment," (2001).

NMT, GSM 900 and GSM 1800 systems), SDH radio network transmission, CATV (around 57% penetration rate), and satellite communications (fully liberalized sector since 1992). Despite recent investments in optical fibre network and the increased interconnectivity among the Romanian ISPs, through the BUHIX backbone, the speed and quality of data transmission and communication has remained rather modest[24]. However, the growth rate of the Romanian ICT infrastructure reaches one of the highest levels of the region.

CEE Internet Users (per 100 inh.):

- Estonia: 26.3
- Poland: 13
- Czech Republic: 10
- Hungary: 6.5
- Bulgaria: 5.3
- **Romania: 3.1**
- Albania: 0.2

Source: ESIS II Report - Information Society Indicators in the CEEC countries 2001

Internet availability and *affordability* represent two critical areas of the Romanian ICT sector that have a long way to go before reaching similar levels with other CEE countries. The total Romanian Internet market is around 90,000 accounts, 30,000 being corporate and the rest private. 95 percent of private Internet subscriptions is formed of dial-up subscriptions, while business access takes place mainly through dial-up (73%), rented line (16%) and TV cable (4%). GSM Internet connections account for only 1% of total business Internet subscriptions. In terms of Internet access, only 9% of Romanians ever used the Internet, 44% from public places, 31% from the office, 13% from the universities (the Romanian Education Network – RoEduNet – provides free Internet access to students) and 11% from home[25] (see Graph 3).

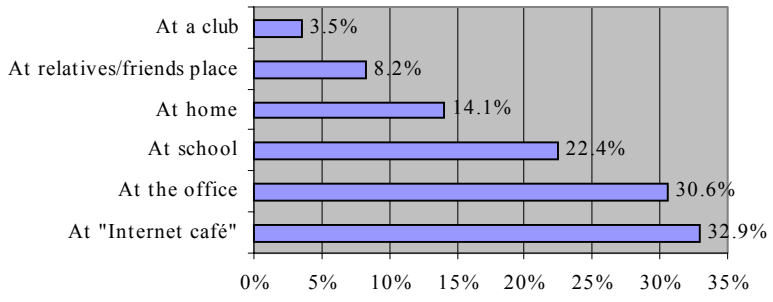
CEE Internet Hosts:

- Poland: 183, 087
- Hungary: 113, 695
- Czech Republic: 112,748
- **Romania: 46,574**

Source: Romanian National R&D Computer Network, ESIS II Report 2001

Despite a recent 50% discount for Internet access provided by the national operator RomTelecom, high telephone access fares represents the *main obstacle to better Internet penetration,* together with the relatively high prices of computers, and the low-to-moderate level of Internet literacy. This situation might change in the near future once full liberalization of the telecom market takes effect after January 2003 and the increasing competition in the computer hardware market will force prices to go down.

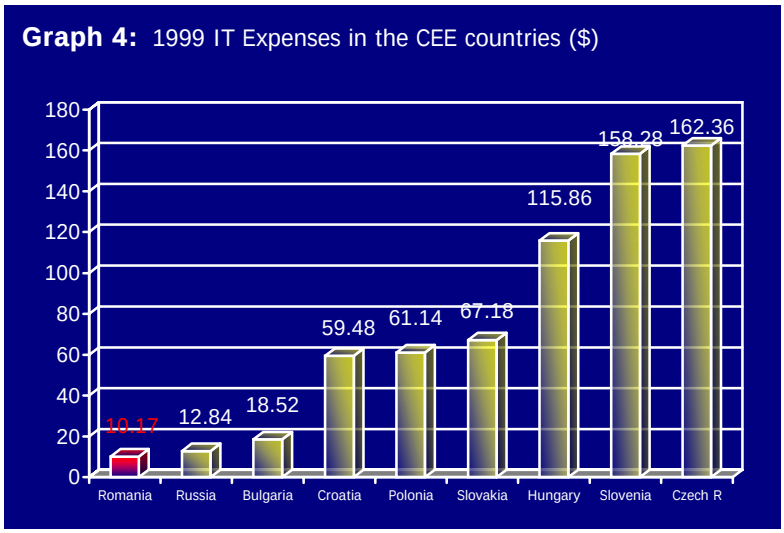
Graph 3: *Internet access points*



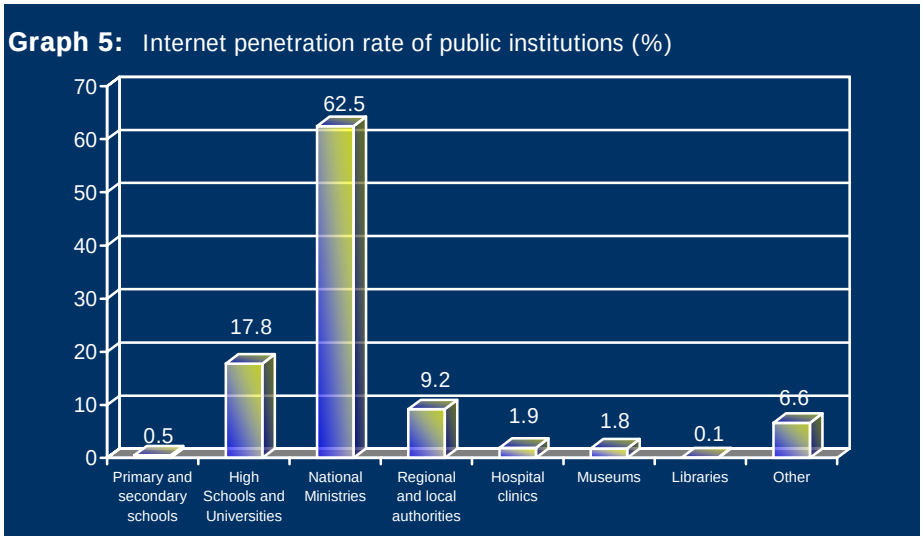
Source: Mercury Omnibus, December 1999

[24] "E Readiness and Need Assessment," 6, 14.
[25] Ibid., 11-13.

The overall *ICT spending* in Romania is estimated at about $35-38 per capita but the actual IT spending is rather low, around $12 per capita, especially when comparing with other countries from the region (see Graph 4[26]). Drawing mainly on World Bank and EU pre-accession funds, the Romanian government is the main IT investor, financing large infrastructure projects such as the construction of networks in the field of healthcare, postal services and public administration, but also small scale projects in partnership with the private sector (info-kiosks, web-based conference systems, e-procurement and e-market applications).



The modest levels of development and investment in the ICT infrastructure are especially reflected in the rate of *Internet penetration of public institutions* (see Graph 5[27]). Obviously, these figures do not comment on the quality of the official information made available on-line, issue that will be discussed in the next section. However, it is probably important to stress that almost 85% of the effort to move a minimum of public information to the Internet has been basically carried out in the last three years.



Leaving aside the commercial side, the most important *IT networks* belong to the academic and public administration sector. *The Romanian Education Network (RoEduNet)* was created in July

[26] ESIS Report II, "Information Society Indicators in the CEEC countries 2001".
[27] Ibid.

1993. It was conceived from the very beginning as an *open structure*, offering free access to the academic, scientific and cultural nonprofit institutions. After five years, the RoEduNet data communication infrastructure has succeeded in covering the entire national territory, as well as in connecting and offering services to more than 150 institutions. The structure remains open to all universities and non-profit scientific and cultural institutions. *The National Computer Network for Research (NCN)* started in 1993 as a PHARE program but later on the government, through the Ministry of Research and Technology, secured the financial support. NCN was created with the purpose of providing the scientific community with an instrument of access to data transfer services and connection to Internet at the lowest possible prices. At present, more than 90 R-D organizations, representing about 1300 individual stations, benefit of the NCN services. Other small-scale projects deal with setting up virtual libraries, providing children in orphanages and poor families with access to computers and to the Internet (the *Computer Clubs for Children* initiative), and supporting e-learning programs (i.e., iEARN network)[28].

Although completed in March 2000, the feasibility study for the Data Communications Network for Public Administrations (NetPAd) lacks yet the necessary financial resources required for implementation. Hence, the network connection at the level of the central administration rests on several information systems belonging to various ministries (Public Finance, Industry and Resources, Internal Affairs, Labor and Social Solidarity, Health & Family) and governmental bodies (General Directory of Customs, National Commission of Statistics). There is no impressive local administration network, although certain steps have been taken by a few City (Bucharest, Sibiu, Braşov) and County Halls (Harghita, Bistrița Năsăud, Constanța) to provide basic public information on-line and develop more interactive G2C applications. Another resource that might gain an important status in the near future is represented by the National Association of IT professionals from the Local Administration (NAITPLA) founded in October 2000 with the goal to increase public access to information by establishing an unitary information system in the public sector, as well as a national network of public administration in accordance with the national objectives and the EU standards[29]. Finally, the recently established Federation of Associations for IT&C seems determined to press forward with its own ICT agenda regardless the promises and intentions of the government. The first step announced by the Federation is to create an extensive communication network $150,000 worth.

[28] For more details see "E Readiness and Need Assessment," 20-21.
[29] The Public Administration Information Systems Professionals Association, http://www.aniap.ro

Political rhetoric notwithstanding, *public access to information* (PAI) remains a critical issue. From a legislative viewpoint, Art. 31 of the 1991 Romanian Constitution inscribed the right to information as a fundamental civic right, and assigned to the public authorities the obligation to provide accurate information on their activity to all citizens. These general constitutional provisions have been thereafter followed by several concrete but nevertheless weak PAI regulations concerning the activity of the Presidency (47/1994), Legislative Council (73/1993), Constitutional Court (47/1992), Local Administration (69/1991), Judiciary (92/1992) as well as by various sets of internal norms issued by the Romanian Government, the Chamber of Deputies and the Senate. While most of these institutions have set up by now Public Relations (PR) departments, none of them excels in providing high-quality and timely information to the public. A recent evaluation of the quality and reaction time of several central public institutions to public requests for information suggests that the state monopoly on public information has suffered only a moderate dent (see Table 6).

Table 6: *PAI efficiency in the central administration*

Institution	Reaction time (No. of days)	Type of document	Score
Senate	28	Report	4
Chamber of Deputies	6	Report	4
Government	30	Letter	2
Ministry of Foreign Affairs	-	-	0
Ministry of the Interior	-	-	0
Ministry of Education	-	-	0
Ministry of Justice	13	Report	4
Ministry of Labor	-	-	0
Ministry of Health	20	Letter	1
National Agency for Regional Development	7	Report	5
Constitutional Court	7	Report	5
People's Advocate	5	Report	5

Source: Ciprian Fartuşnic and Romanița E. Iordache, "Liberalizarea Accesului la Informație: Comentarii şi propuneri pe marginea proiectului liberal privind liberul acces al cetățenilor la informația publică," [The Liberalization of the Access to Information: Comments and proposals regarding the citizens' free access to public information] *Societatea Academică din România* Working Paper No. 20 (Martie 2001), 5; The score (0 – the lowest; 5 – the highest) ascribed to each institution was calculated based on the quality (accuracy, completeness) and reaction time in replying to a written request for the activity report of the respective institution.

The good news is that two important pieces of FOI legislation have been recently drafted, and debated by the Parliament. The first piece regulates exactly *the access to public information* and sets provisions for the conditions, sanctions, timeframe, and type of information that citizens and mass-media can request from public authorities and institutions[30]. The main criticism concerns the relatively limited scope of application of the law. PAI is basically conditioned on holding Romanian citizenship and requesting public information that does not pertain to a loosely defined set of exemptions (i.e., national defense, public security, the economic and political interests of Romania etc.). Hence, the *law of classified information* becomes critically important for ensuring a fair and effective access to public information.

The second piece of legislation deals with *the Code for Information Technology Development and Use*, which establishes the legal guarantees for freedom of information and natural person data protection in an IT environment (see Annex 4). The code applies to all members of the society and sets provisions for ensuring information freedom, data protection and security, and natural persons protection as to personal data processing. The application of the Code is managed by two governmental institutions: the State Secretariat for the Information Society is in charge with setting out, supervising, and evaluating IT strategies, as well as with coordinating their implementation. The Romanian Authority for Informatics checks on the lawful character of all personal data processing in the private and public sector.

The two pieces of legislation represent an important step forward in the direction of developing IS but they tackle only partially the core of the PSI and e-governance problem, which basically relates to *data accessibility* and *usefulness*. Pending the quality of the classified information law[31], the access to information law is intended to improve data availability, while the Code for IT Development and Use to prevent e-infringements of human rights. However, they do not address the issue of e-streamlining the public sector so that citizens can really benefit from the introduction of IT in the public administration. *As it stands now, public access to information refers only to making available a limited amount of information of questionable value*. In other words, it imports the shortcomings of the paper-based system but with little consideration for harnessing the full ICT potential in public administration namely, *consultation* and *active participation* of citizens in the public sphere. Table 7 provides an illustration to this point. With

[30] Ministry of Public Information, *Law no 544 regarding access to public information,* (12 October 2001); See Annex 3.

[31] The draft is still under review in the Chamber of Deputies after being returned as "unconstitutional" by the Constitutional Court; Art 16(2), 15 (e), 19, and 39 are widely considered by mass-media and civil society groups as anti-democratic and prone to abusive interpretation. Under this law, authorities enjoy basically unlimited discretion for withholding public information on grounds of state or professional secret.

few exceptions, the websites of the main public institutions are simple PR instruments of little use for citizens.

Table 7: *Web accessibility index of the main public institutions*

Public institutions	Information[1]	Consultation[2]	Active participation[3]	Overall score
Government	2.75	1.37	1	Low (1.70)
Ministry of Local Administration	2.66	1.5	1	Low (1.72)
Minister of Public Information	2.16	1.5	1	Low (1.55)
The Ministry of Communications and IT	3.86	3.15	1	Moderate (2.67)
Chamber of Deputies	4.25	3.58	1	Moderate (2.94)
Senate	2.93	1.94	1	Low (1.95)
Presidency	2.43	1.5	1	Low (1.64)
People's Advocate	2.83	1.66	1	Low (1.83)
Constitutional Court	1.95	1.3	1	Low (1.41)
Bucharest City Hall	1.75	1.2	1	Low (1.31)

Assessment made by the author on the basis of the following criteria (1 – low; 5 – high):

1) Basic public interest info: organizational structure, activity report, contact addresses, office hours; policy targets and guidelines; projects; Accessibility: site map layout, regular updating; archive; on-line databases; search engine/index, readability, retrieval time.
2) Feedback: information and communication policies; e-mail feedback component; polls and surveys; project tracking; reaction time to requests for public information; newsletters.
3) Interactivity: discussion forums; e-document transactions; focus groups and citizen panels; public procurement; on-line hearings.

The results presented in Table 7 make clear that neither public access to information, nor e-governance scores high as political priority. While most of public institutions surveyed in Table 7 have reached a moderate operational status in informative terms, none of them except for the Chamber of Deputies and MCTI is yet prepared to enter into the consultation phase. The active participation stage remains out of reach for all of them, at least in the medium-term. Moreover, the adoption of the Law of Classified Information might aggravate even further the current situation since most of its provisions regarding the definitions of state and professional secrets cancel out the rights and terms of the Law regarding the access to public information. As a final observation, central institutions seem though to perform much better from an IT viewpoint than the local administrations, fact that highlights the digital divide growing fast between the capital and the regional and local bodies. A set of policy recommendations to overcome this situation will be presented in the second part of the study. The next section will first take a look at the main institutional and policy obstacles that account for the current state of affairs.

D. GENERAL EVALUATION

A cross-examination of the data presented in the previous three sections points to the *weakness of the ICT infrastructure* and to the *modest level of economic development* of the country as the two key factors accounting for the present embryonic status of the Romanian information society. An evaluation summary of the main indicators of the Romanian ICT infrastructure is shown in Table 8. Although most of the indicators are now in a critical position, the medium-term prospects for improvement are cautiously optimistic given the current upward economic trend, the expansion of IT network projects, as well as the new coordination role assumed by the EU in this field via the *e*Europe + 2003 Action Plan.

Table 8: *Romanian ICT infrastructure indicators*

	Current status	**Medium-term prospects**
Internet availability	2	3
Internet affordability	1.5	3
Internet penetration of public institutions	1.5	2.5
IT networks	1.5	3
IT spending	2	2.5

Assessment made by the author: 1 – low; 5 – high.

Besides these factors, two other important variables have had a decisive role in the failure to act decisively on the IS front: *the institutional framework* and *the policy context*. The first one refers to the following issues:

- Exaggerate number of authorities involved
- Institutional instability
- Invisible leadership and strategic thinking
- Overlapping and/or unclear competence and responsibility boundaries
- No real strategy to bridge the communication gap between the various actors
- Inadaptability of the actors to reach constructive compromise on their agendas

As shown in the previous section, the number of actors involved in the field is quite large. Various ministers, governmental bodies, advisory committees, private institutions try legitimately to pursue their own interests which most of the time are neither clearly defined, nor stable, and hence rather difficult to compromise. Moreover, there is no stable institutional

platform to accommodate their views, to define a common strategy, and to implement it firmly. The average lifetime of the institution assumed to coordinate these efforts (MCIT) is about two years, not mentioning the political cleansing of the civil servants after every general election or even governmental reshuffle. Frequent re-organizations affect negatively the efficiency of the respective institutions by blurring the lines of administrative and political responsibility and by shifting competence attributes.

The institutional structure established by the current Romanian government provides a good example to illustrate this point. The Minister of Communications and IT (MCTI) should be in principle responsible for the entire IS activity. However, most of the important programs are managed by other institutions: the connection of schools to Internet is run by the Education ministry (with support from the World Bank), the computerization of the Health care system is coordinated by the Health ministry and regional insurance agencies, the reform of the tax collection system is managed by the Finance ministry and the local governments[32]. Even the existing and the future governmental portal are not completely assigned to MCTI (the existing government website is supervised by the MPI, while the design and maintenance of the RDG portal will be coordinated by an association that is only slightly connected to MCTI).

One would expect then MCTI to be at least in charge with drafting the national IT strategy. Since 1992 this objective has been accomplished by a committee of the Romanian Academy of Science in cooperation with the Forum for the IS. The reorganization undertaken by MCTI in December 2000 put the Group for the Strategy for the New Economy and the Implementation of the Information Society in Romania (GSNEIIS) in charge with this task. Unfortunately, this move seems now to have been prompted by simple public relations (PR) considerations rather than serious policy rationale, since the level of expertise available to GSNEIIS is rather limited. Except for a single meeting that took place in April 2001, the activity of GSNEEIIS has been basically limited to translating into Romanian the *e*Europe + Action Plan and to concluding, within the framework of the Stability Pact, a rather irrelevant memorandum of digital cooperation with Albania, Greece, FYR Macedonia, Yugoslavia, and Cyprus. More serious projects, including the most promised long-term strategy for developing Information Society are definitely not in sight. Moreover, the future of GSNEIIS itself is rather uncertain since the State Secretariat for the IS established by "the Code for Information Technology Development and

[32] UNDP – Romanian Academic Society. *Early Warning Report Romania*, No. 1 (2001), 33, http://www.undp.ro

Use" is supposed to assume full responsibilities in this sector immediately after the adoption of the law.

The second important division of MCTI, the Information Technology Promotion Group (ITPG), has been slightly more productive. Except for speeding up the adoption of a set of legislative proposals left over by the previous administration, ITPG was able only to initiate a disputed tax-relief proposal for IT companies and to open public tender for 20 IT pilot projects. Some of them are now under review for being expanded to the national level such as e-procurement, e-custom services, info Kiosk, cyber-center, e-job, web-conference, e-tax-payment, cash-flow management, and the national network of information services. Unfortunately, the e-governance value and efficiency of these projects can be hardly assessed since all technical criteria of performance and selection have been kept out of public scrutiny. However, in view of the existing offers on the private market, the web-conference and e-job projects have questionable value as governmentally driven initiatives. The e-tax initiative can make nice headlines in the papers but it can hardly stimulate any financial payments as long as the complementary e-banking component does not really exist. The e-referendum project fuels even stronger skepticism since it is presumed on the explicit use of a personal ID card that basically eliminates the secrecy of the voting intent. Last but not least, the timeframe and financial resources required for the implementation of these projects are specified in rather unclear terms, fact that raises serious doubts about the concrete contribution and prospects of success of these projects for fostering the developing of the Romanian Information Society.

In short, despite certain progress, the overall results achieved so far by MCTI are rather modest. It neglected to demarcate the IS competences among the various ministries and governmental bodies and hence, it failed to provide the necessary level of leadership for coordinating e-government and IS efforts at the national level. The internal reorganization undertaken by the ministry has proved so far unsuccessful in generating the expected results. GSNEIIS has an uncertain status and its activity is below the critical level of efficiency and competence. ITPG seems to be the only MCTI body that functions in relatively good conditions. With a few exceptions, the initiatives and projects advanced by ITPG for fostering e-governance are on the right track, but the implementation stage is nevertheless open to question. In addition, these projects lack a clear and coherent direction, except for a vague and ad-hoc connection with the *e*Europe + Action Plan, the implementation of which lags nevertheless behind. Finally, the coordination and mediation role expected to take place between MCTI and the rest of IS actors

has been reduced to a few conferences of limited interest, while critical issues about IT surveillance and digital divide have been not even addressed officially.

Institutional entanglement has been also facilitated by the gradual departure of the Ministry of Public Information (MPI) from its original objectives. Hence, instead of coordinating the efforts for ensuring better access to public information, MPI has been rendered into a simple PR governmental instrument, in charge with conducting political spin and image campaigns. Consequently, the leading activity of MPI consists of improving the approval rates of the Prime Minister, the government, and the ministers, most often by resorting to PR campaigns that are on the border of democratic legality[33]. Under these circumstances, the results achieved in terms of improving the access to public information in the last 15 months of activity are necessary sub-mediocre. The minister advanced three legislative initiative in the field, two of them dealing with the Law of public access to information (LPAI, see Annex 3) and the methodological norms required for its implementation, while the third outlining the "Conception regarding the territorial system of public information". As argued in the previous section, the current weaknesses and limits of LPAI are harshly amplified by the restrictive provisions of the Law of Classified Information to the extent that the access to public information is going to be limited to what the government and local authorities will deem "appropriate" for public knowledge. In view of the aggressive PR practices deployed currently by MPI, the envisaged territorial system of public information resembles rather an extended network of political control than a genuine instrument of public information.

The *policy context* has also exerted a negative influence on the evolution of the Romanian IS by way of the following set of factors:

- Fascination for sophisticated grand projects
- Uncritical submission to the technocratic myth
- Public preferences for over-regulation
- Persistent disregard of the design-reality gap
- Inability to build policy convergence and coherence
- Entrenched institutional culture of secrecy and lack of transparency

[33] Evenimentul Zilei. *Ministerul Dezinformarii [The Ministry of Disinformation]*, (11 June 2001), available at http://www.evenimentulzilei.ro/politica/?news_id=35301

The cumulative negative effect of these tendencies simply adds up to the institutional weaknesses described above. The failure of all Romanian IT national strategies elaborated since 1991 to produce the expected results is largely accounted for by their poor design.

As shown in the third section, large-scale projects have been drawn up with little consideration for meeting them with the available financial and human resources (i.e., the NetPad communication network). IT technicians have been put into key decision-making positions (see GSNEIIS) although the strategic planning for developing the IS requires broader intellectual capacities, capable of understanding also the political, economic and social implications of the project. The perception of a "legislative vacuum" has unfortunately stimulated fervor for over-regulating a sector that usually thrives from deregulation (see the current efforts of the Parliamentary Committee on Communications and IT). Misconstrued governmental competences have led the authorities to embark on commercial tasks (web-conferences, e-job), or to defy democratic rights (privacy of the voting intent in case of e-referendum). Rigid planning may also prevent flexibility for on-the-ground implementation (i.e., e-tax payment system without a solid e-banking infrastructure support). Finally, competing interests, political priorities, and a paranoiac cult for secrecy proved too sharp to consent to better policy convergence, coherence, and openness (see the case of the aggressive PR practices of the Ministry of Public Information at the expense of genuine public information activity, or the law of classified information that cancels PAI provisions).

Table 9: *Impeding factors*

	Public Sector Information	ICT	E-governance	
Economic development	2	5	3	Medium
ICT Infrastructure	5	5	5	High
Institutional framework	4	5	4	High
Policy context	4	5	4	High

Assessment made by the author: 1 – low impact; 5 – high impact.

In conclusion, the evolution of the Romanian PSI, ICT and e-governance sectors depends on four key factors: the general economic development of the country, the consolidation of the ICT infrastructure, the improvement of the institutional framework, and the adjustment of the policy context. Based on the arguments presented so far, this chapter concludes with an estimate of the negative impact of these four factors on the development of the three sectors. As shown in Table

9 the ICT infrastructure represents at present the key impediment, followed by the institutional framework and the policy context. In other words, reaching progress in developing Information Society is basically a matter of improved organizational skills and good expertise, not necessary an economic issue, although the ICT infrastructure may absorb serious financial resources.

Developing tools and practices

A. REFORM OBJECTIVES

In both economic and political terms, Romania lags behind most of the CEE developing countries. This situation deteriorates on a constant basis and is largely accounted for by very poor governance practices. Growing political and social alienation threatens even to undermine the existing democratic system, while double-digit emigration trend risks to deplete the country of its most qualified human capital. In short, Romania experiences a very serious structural problem the resolution of which requires more than ad-hoc relief measures. Hence, the objective of this study has been to approach the relationship between development and governance from a different angle, capable of providing a swift and sustainable solution to the policy problem highlighted above.

The answer consists in *recommending the implementation of a reformist agenda of e-governance based on two pillars: robust development of public sector information and large-scale application of Information and Communication Technologies.* In conceptual terms, this strategy is assumed to produce a gradual shift from the citizen-as-customer to the more participative citizen-as-shareholder model of governance. In concrete terms, the medium-term benefits of this policy are political (enhancing the democratization process, increasing political accountability, and improving the tattered government-citizen relationship), economic (combating corruption, creating a transparent and competitive economic environment, and speeding up standard administrative processes for citizens and business) and social (restore public trust, rebuild social capital, and increase the transparency, quality and efficiency of public services).

Guiding principles for successful information, consultation, and active participation of citizens in policy-making

- *Commitment* at all levels: politicians, senior managers, public officials
- *Rights* to access information, provide feedback, be consulted and actively participating in policy-making
- *Clarity* of the policy objectives, governmental roles and citizens' responsibilities
- *Time*: public consultation and active participation should occur as early as possible in the policy process
- *Objectivity, reliability, relevance, accessibility and completeness* of public information
- *Adequate resources*: technical, human, financial
- *Coordination* across governmental units
- *Accountability* for the governmental use of citizens' input
- *Evaluation* of governmental performance in providing public information, conducting consultation and engaging citizens
- *Active citizenship*

Sources: OECD (2001) *Citizens as Partners: Information, Consultation and Public Participation in Policy-Making*

A close examination of the evolution of the Romanian PSI, ICT and e-governance policies helped explain the unsatisfactory accomplishments of these three sectors by reference to four key

impeding factors: the general economic development of the country, the poor status of the ICT infrastructure, the weaknesses of the institutional framework, and the rigidity of the policy context. However, the effects of these four factors are not distributed evenly. E-governance progress is basically a matter of improved organizational skills and good expertise, not necessary an economic issue. The ICT infrastructure lacks indeed crucial financial resources, but much can be achieved only by improving the institutional framework and the policy context. Moreover, the "success stories" of the leading CEE candidates to EU membership, Hungary, Poland, Czech Republic, and Slovenia supports the argument that economic development is actually the outcome, not necessary the pre-condition, of good institutional and policy reform.

Having identified the key problem, examined the local background to the issue, and evaluated critically the current situation, the next logical steps must be necessary practical: to advance a set of reform objectives and to meet them with concrete policy recommendations. Accordingly, a sound e-governance agenda should rest on a concrete set of action measures capable of streamlining the public sector in all aspects: institutional, policy, and infrastructure. Although inspired by the Romanian experience, the following proposals of policy reform are drafted with a view to extend their scope of application to other countries in the region that face similar problems: Bulgaria, Yugoslavia, Slovakia, Macedonia, or Moldavia. In response to the problems highlighted in the General Evaluation section, Table 10 advances a triple set of reform objectives for improving the ICT infrastructure, the institutional framework and the policy context. In cumulative terms, these reform objectives serve to better engage citizens into policy making by providing information on-line, creating on-line opportunities for citizen feedback and consultation, as well as by stimulating public participation.

Government to Citizen interaction

- *Channels:* websites, portals, surveys, search engines, life-events, kiosks, CD-ROMs, emails, on-line chats, on-line fora
- *Type of information:* governmental structures, policy proposals and agendas, legislation, administrative procedures
- *Limits:* privacy, data security, data validity, digital divide, budgetary constraints, IT skills, lack of coordination across organizational sub-units

Sources: OECD (2001) *Citizens as Partners: Information, Consultation and Public Participation in Policy-Making*

The reform of the ICT infrastructure should concentrate on two key targets: extending the network of on-line public services and increasing the rate and quality of Internet penetration. The first objective relies on committed governmental programs of "informatization" of the public administration as well as on developing quality standards for providing data and services on-line. Given the sensitivity of the IT sector to issues of over-regulation and fast-pace technological change, legislative intervention should be exerted with caution mainly in the field of data privacy and security, while e-administration programs must be designed on the basis of small-scale but

integrated projects. In view of the existing economic constraints, the second reform objective of the ICT infrastructure is more difficult to achieve, but a medium-term strategy in the field must nevertheless pay attention to a few critical issues, such as increasing Internet affordability, stepping up efforts for reducing digital divide, and developing broadband IT networks.

Table 10: *Reform objectives*

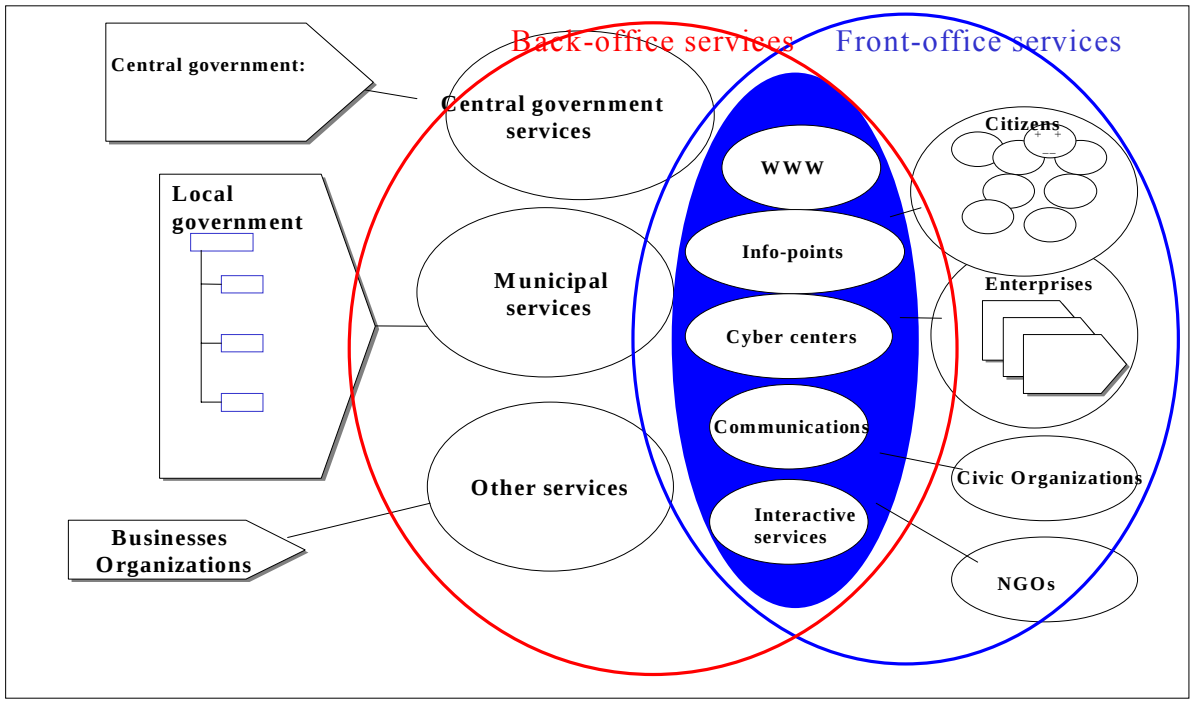
ICT Infrastructure	Institutional framework	Policy context
Robust PC and Internet penetration of public institutions	Drastic reduction of the number of authorities involved	Objectivity and political impartiality
Reliable, useful, complete, objective and easy access on-line public services	Institutional stability backed up by administrative decentralization and public openness	Clear identification of medium-term objectives and resources
Active caution in regulating the ICT sector; strict enforcement of privacy and data protection	Strong leadership, strategic thinking, and coordination capacity	Policy convergence, clarity, coherence, and continuity
Concentration on small-scale but integrated projects	Clear competence and responsibility boundaries	Drastic simplification of the regulatory framework
Extensive development of broadband IT networks	Effective communication strategy among the actors involved	Genuine efforts for enforcing a culture of public debate, policy consultation and active participation
Increased Internet affordability; quick deregulation of the telecom sector	Early and sincere involvement in the policy process of all important actors	Flexibility in implementation, but with strict enforcement of deadlines
Tax incentives and subventions for increasing IT spending and reducing digital divide	Clear procedures of accountability and evaluation	Combined decision-making expertise (political, economic, technical)

The reform of the institutional framework should be guided by three principles: simplification, transparency, and efficiency. The first principle deals with the issue of administrative overlapping and inter-bureaucratic disputes fomented by the inflated number of authorities involved as well as by unclear responsibilities and competence boundaries. The second principle addresses the issues of accountability, evaluation procedures, and communication strategy applied in public administration. The third principle stresses the need for decentralization of

public services, institutional stability, strategic thinking, strong leadership, and active involvement of all key actors in the policy process. To a certain extent, the reform of the policy context is even more important than that of the previous two sectors since it implies a profound revision of the basic parameters of conducting public policy. For the very same reasons, progress in this area is supposed to take longer than in other sectors. Critical reform objectives encompass depolitization and professionalization of the administrative structure, promotion and consolidation of an open culture of public debate, consultation and active participation, as well as robust upgrading of project management abilities.

At the same time, a reformist e-governance agenda should be concerned not only with setting ambitious objectives but also with monitoring their proper implementation. As argued in the previous sections, the pursuit of separate policy objectives in the three sectors, with no or little

Fig 3: *Streamlining PSI*



connection between them, represented one of the important causes of failure of the successive Romanian IS strategies. Consequently, the key goal of integrating back- and front-office public services into an interactive, citizen-oriented, and user-driven ICT network has been critically compromised. This situation must be now changed. As shown in Fig 3, the process of streamlining the public sector information must rely on an integrated approach that combines institutional restructuring with good policy expertise and sound ICT strategy, along the lines specified in Table 10.

B. POLICY RECOMMENDATIONS

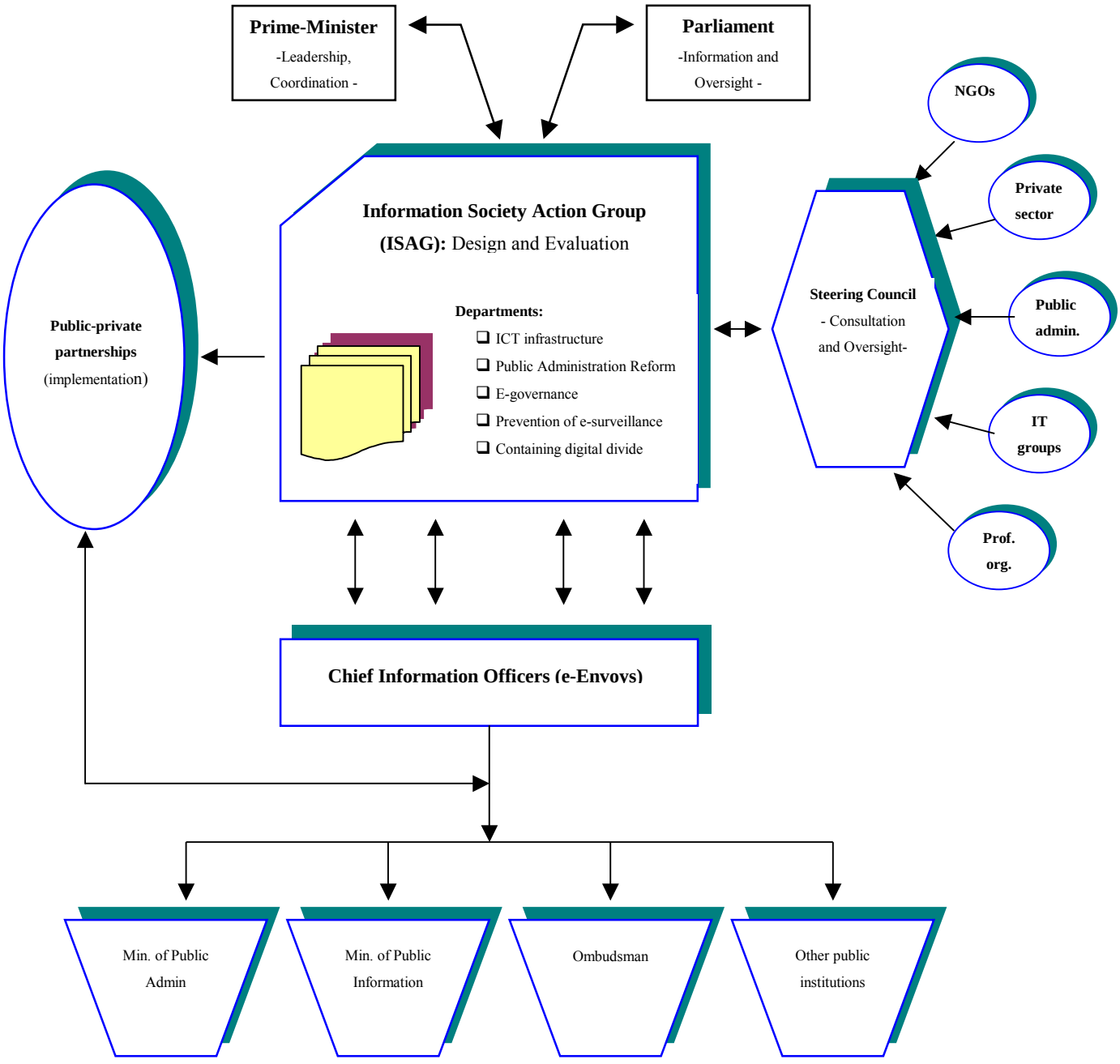
In view of the successful IS experience of countries like Canada, US, UK, Singapore, Norway or Estonia, it is safe to claim the reform objectives outlined in the previous section can be reached within a reasonable horizon of time (3-5 years) provided that the level of political support, capital of expert knowledge, and allocation of financial resources multiply by at least a factor of three from the existing levels over the next five years. In concrete terms, an integrated approach to the issue of developing the Romanian Information Society encompasses three closely connected stages:

A. Institutional restructuring and consolidation (3-9 months; see Fig. 4):

- Establishing a single executive umbrella organization, *the Information Society Action Group – ISAG*, for a minimum period of five years in order to ensure institutional stability and policy continuity, with the task to promote, coordinate and implement IS efforts at the national level; for reasons of efficiency and political transparency, ISAG must be directly accountable to the highest executive authority, the Prime-Minister, but should report its activity to the Parliament every year; by combining political, economic and technical expertise, ISAG should be ideally structured in five key departments in charge with the design and evaluation of projects on: the ICT infrastructure, Public Administration Reform, E-governance, Prevention of electronic surveillance, Containing digital divide; the implementation of these projects should be operated by public-private partnerships; the budget of ISAG should be fixed by law to a minimum of 2-3% of GDP (approx. $ 0.7– 1 billion) for the next 5 years.
- *Creation of a Steering Council (SC)* affiliated to ISAG, composed of the main representatives of the private sector, IT associations, public administration, NGOs and professional organizations; the role of SC is to serve ISAG as a transparent and non-politicized platform for accommodating the views of all actors involved, securing their participation in the process from the early phases, collecting proposals, actions measures and benchmark procedures, and stimulating public debate on the documents produced by ISAG; together with the specialized parliamentary committees, SC will oversee the activity of ISAG.
- Appointment by ISAG of *Chief Information Officers (CIO)* (or e-Envoys) in every important central public administration unit: Ministry of Public Administration, Public Information, Education, Health, Industry, Justice,

European Integration, Parliament, Senate, Presidency, Ombudsman, etc. CIO should be made accountable to ISAG and be in charge with supervising the application of ISAG decisions, coordinate the implementation of information policies, evaluate progress every three months based on independent criteria agreed upon by SC, and provide feedback to ISAG.

Figure 4: *IS institutional framework*



B. Policy adjustment (12-36 months):

Acting upon the recommendation of SC, IASG must take the lead in reforming the policy context via the following set of measures:

- *Amending existing legislative shortcomings:* cancellation of the Draft Law of Classified Information and replacement with a democratically formulated Law of Military Secrets that must define in unequivocal terms a very limited class of non-public information; the new law must eliminate the category of "professional secrets" and must state clear deadlines and procedures for declassification; the current law of access to public information must be amended in the same spirit, by expanding the category of public information to all state and governmental documents that do not fall within the provisions of the new version of the Law of Military Secrets (i.e., Art. 12 of the law should be rescinded completely except for subsections d and e; see Annex 3); the reform of the existing legislative framework of the public administration (the Civil Servant Law (188/99), Ministerial accountability (155/99), Local public finances (189/1998), Prevention, disclosure and sanctioning of corruption (78/2000)) should be also set high on the political agenda and be guided by the following five principles: depolitization, professionalization, efficiency, transparency, and public participation.
- *Consolidating the PSI and ICT legislative framework* (see Table 11): While taking great care to avoiding duplication and excessive regulation, ISAG and SC must nevertheless exert leadership in the field by advancing several key pieces of IS legislation. One direction of action is to streamline and consolidate the current regulatory system governing the PSI sector. This move implies an efficient institutional and legislative e-government framework, comprehensive electronic access to public information including to a prospective e-Archive of public information, as well as prompter and more complete delivery of public information via a Governmental Paperwork Elimination Act, eventually tailored, adapted and improved after the US model. A second direction is to build a self-sustainable system of dealing with the current and foreseeable limits of Romanian Information Society. In ideal terms this presupposes a multi-stage program of extension of broadband Internet access throughout the whole society, timely solutions to the issue of digital divide, and especially, diligent efforts toward the formation of a body of local expertise on IS related matters.

Table 11: *Consolidated ICT and PSI legislative framework*

Law	Objective	Target group
Act on Electronic government	Establishing the institutional and legislative framework for moving governmental services on-line	Central and local administration
Act on Electronic Access to Public Information	Improving transparency, consultation and active participation	Individual citizens, interest groups
Government Paperwork Elimination Act	Reducing red-tape, improving transparency	Public administration, individual citizens, interest groups
Act on establishing E-Archive of Public Information	Improving transparency	Individual citizens, interest groups
Act on addressing the issue of the digital divide	Preventing social and technological gaps, fostering active participation	Disadvantaged regions and communities
Broadband Internet Access Act	Developing the information infrastructure	Society
Internet Research and Development Act	Formation of a body of local expertise on IS related matters	Academia, private sector

- *Introducing and enforcing a code of e-practice across the main units of public administration*. The code must set out a minimum number of principles to govern public policy projects:
    - Be open to public hearings whenever possible; exceptions must be carefully justified.
    - Avoid political insulation by including all relevant political views.
    - Be citizen-oriented with the user in mind or as participant in the planning process;
    - Include the public in evaluation exercises (i.e., via citizens' panels).
    - Help build communities around e-services by delivering value-added content, stimulating interactivity, consultation, and active participation.
    - Reach across the digital divide and provide affirmative outreach to citizens who might not have the necessary expertise or access to equipment.
    - Give preference to public-private partnerships in the implementation phase.

C. *ICT* (12-48 months):

- Set out a multi-stage strategy of informatization of all major units of public administration.
- Complete the implementation of the Data Communications Network for Public Administrations (NetPad).
- Initiate full deregulation of the telecom system.
- Finalize the integration of the existing information networks: Public Finance, Industry and Resources, Internal Affairs, Labor and Social Solidarity, Health & Family, General Directory of Customs, National Commission of Statistics.
- Develop broadband connectivity (of minimum 2 megabits per second), facilities and services, eventually by using RoEduNet and the National Computer Network for Research (NCN) as starting points of a national-wide network ring.
- Create tax incentives for e-banking services.
- Apply national-wide standards of quality and assessment for portals and websites of public institutions.
- Expand the network of Internet public access points (libraries, museums, universities and info-kiosks).
- Set up a roadmap and timeframe for accomplishing the objectives stated in the *e*Europe + Action Plan.
- Create public databases of e-government applications and good practice examples to be further used by the local administration.
- Encourage dissemination of best practices in the field by setting up a semi-annual rating system of evaluation of all public sector websites;

To conclude, e-governance reform is not empty talk, but an absolute political, economic and social priority for Romania, unfortunately not well-acknowledged so far. Given the poor economic conditions of the country and the relatively unstable political and social context, e-governance reform based on robust development of PSI and large-scale application of ICT could provide a swift and sustainable solution to the torn relationship between development and governance experienced by Romania in the last decade. Certain efforts have been made in this direction, but with limited results. The aim of this research paper was to canvass the main sources of failure in achieving positive outcomes in this policy area, to examine the limits and pitfalls of information strategies and policies, and to propose accordingly a set of policy recommendations. The author expresses the hope the solutions advanced in this paper will be

able at least to stimulate an informed debate among the concerned actors, as well as to make a meaningful analytical contribution to this emerging field of study.

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ANNEXES:

1. List of eEurope Benchmarking indicators
2. *e*Europe 2002 Plan: Impact and priorities
3. The Law Regarding the Free Access to the Information of Public Interest.
4. The Code for Information Technology Development and Use (data security and privacy).

CONSEIL DE L'UNION EUROPÉENNE

Bruxelles, le 20 novembre 2000

13493/00

LIMITE

ECO 338

NOTE

de :	la Présidence
au :	COREPER/CONSEIL
n° doc préc. :	10486/00 ECO 216 CAB 7 SOC 266 EDUC 117
Objet :	Liste des indicateurs d'étalonnage pour le plan d'action *e*Europe

Lorsque la Commission a adopté son projet de plan d'action *e*Europe en mai 2000, elle y avait annexé une liste préliminaire d'indicateurs qui permettraient de mesurer les résultats concrets de l'application du plan d'action dans l'Union européenne.

Ce souci de mettre en œuvre une approche fondée sur l'étalonnage a été réaffirmé par le Conseil européen de Lisbonne, qui a demandé à la Commission et aux Etats-membres de mettre en œuvre le Plan d'action *e*Europe, en utilisant une méthode ouverte de coordination et d'étalonnage.

Depuis le sommet de Santa Maria de Feira, le Conseil, de concert avec la Commission, s'est attaché à définir et consolider une liste d'indicateurs qui pourraient être à même de remplir cet objectif double d'étalonnage et de mesure de l'impact concret de la mise en œuvre du plan d'action. Dans cette optique, des réunions de groupes d'experts provenant des Etats-membres ont été organisées par la Commission, en collaboration avec la Présidence, dans le cadre général de la coordination effectuée par le groupe de travail du Conseil « Services de la Société de l'information », qui s'est vu confier la tâche de suivi de la mise en œuvre du plan d'action *e*Europe. Dans ce cadre, on pourra citer à titre d'exemple le groupe ESDIS, ou la réunion d'un groupe ad hoc d'experts sur l'étalonnage d'*e*EUrope. La réunion informelle des Ministres en charge de la fonction publique et de l'Administration, organisée par la Présidence le 7 novembre dernier à Strasbourg, a également permis de cadrer cet exercice dans le domaine du gouvernement en ligne (*e*Government).

Lors de sa dernière réunion, qui s'est tenue le 13 novembre 2000, le groupe du Conseil « Services de la société de l'information » a approuvé la liste d'indicateurs, jointe en annexe à ce document, sous réserve d'ajouts et précisions ultérieurs qui seront fournis par les différents groupes à haut niveau, tels que ceux relatifs aux transports, à la santé, ou au gouvernement en ligne. Le groupe a réaffirmé le caractère évolutif de cette liste d'indicateurs, qui pourra être revue, affinée ou complétée, notamment en fonction d'éventuelles évolutions du plan d'action *e*Europe.

La discussion a également mis en évidence la nécessité, pour assurer la qualité et la fiabilité de l'exercice d'étalonnage, que les données disponibles soient suffisamment récentes, et que les définitions et les sources de collecte des données relatives aux indicateurs soient suffisamment homogènes sur l'ensemble du territoire de l'Union. En conséquence, le groupe est convenu de demander à la Commission de travailler en étroite collaboration avec les offices statistiques nationaux des Etats-membres pour renseigner les indicateurs, et de permettre aux Etats-membres de faire des commentaires sur les résultats lorsque ceux-ci le jugent nécessaires, et tout particulièrement dans les cas où la source des données ne provient pas des offices nationaux de statistique.

A la lumière de ce qui précède, la Présidence soumet au Conseil le projet de liste d'indicateurs ci-annexé pour adoption, et transmission au Conseil européen de Nice, dans le cadre du rapport d'étape de la mise en œuvre du plan d'action *e*Europe.

ANNEX

List of *e*Europe Benchmarking indicators[1]

Cheaper, faster Internet

1. Percentage of population who regularly use the Internet

Definition: all forms of use to be included, no matter where. Population □15. Regularly to be defined at least weekly.

Source: Sample survey/Eurobarometer

Frequency: 6 months

Supplementary indicators:

(i) Total number connected to be sub-divided by place of access: home, work, school, Public Internet Access Points (PIAP), cyber café, mobile, other

(ii) frequency of use: survey respondents to be asked how often they use the Internet (monthly, weekly, daily).

(iii) Social data: age, gender, income and occupation of respondent

(iv) Type of use, e.g. e-mail, shopping, information search.

(v) International comparisons, if possible, USA, Japan, other OECD on comparable basis

2. Percentage of households with internet access at home

Source: Sample survey/Eurobarometer

Frequency: 6 months

Supplementary indicators:

Percentage of households with high speed access at home (high speed defined as ADSL, cable, satellite, fixed-wireless, UMTS)

[1] The Commission shall work closely with Member States National Statistical Offices in estimating the indicator values and will allow Member States to make comments on the results where necessary, especially in cases where values do not originate from Member States National Statistical Offices.

3. Internet access costs

Definition: price to indicate separately for peak and off-peak times; prices should include VAT. Basic indicator to be Commission study with methodology modified to include new forms of access (e.g. cable modem) and different possibilities in the different Member States (fixed fee, local loop reductions etc.) OECD to be used to provide non EU comparison

Sources: Commission study + OECD

Frequency: 6 months

Supplementary indicators:

(i) Costs of different frequency of use: 20, 30, 40 hrs/week, unmetered rates

(ii) Cost of high speed access - e.g. cable, ADSL

(iii) Identify cheapest access by MS in addition to overall basket

Faster Internet for researchers and students

4. Speed of interconnections and services available between and within national research and education networks (NRENs) within EU and world-wide

Definition: Speed of interconnections between NRENs already available from Dante web site; this to be regularly updated as TEN-155 is replaced by GEANT. Member States to provide supplementary information of *the maximum speed (core speed) of their NREN*. Focus to be on the identification of bottlenecks.

Source: Dante + Member States

Supplementary indicators:

(i) Minimum speed requirement for the NREN (if such a requirement exists).

(ii) Extent to which primary and/or secondary schools are being connected to the NREN.

Secure networks and smartcards

5. Number of secure servers per million inhabitants

Definition: OECD definition as supplied by existing survey. Defined as number of servers that use applications to secure their transactions.

Source: OECD (original source: Netcraft)

Frequency: 6 months (Netcraft surveys monthly)

Supplementary indicators:

(i) Number of public and private CERTs (Computer Emergency Response Teams)

(ii) Percentage of computers equipped with a security device (smart card reader, security software etc.)

6. Percentage of Internet-using public that have experienced security problems

Definition - Security problems defined as credit card fraud, virus attacks etc.

Source - Sample survey/Eurobarometer

Frequency – 6 months

European youth into the digital age

7. Number of computers per 100 pupils in primary/secondary/ tertiary levels

Definition: include only computers used for teaching purposes

Source: Sample survey/Eurobarometer – Member States

Frequency: annual

Supplementary Indicator:

Hours of computer use per pupil per week

8. Number of computers connected to the Internet per 100 pupils in primary/secondary/ tertiary levels

Definition: include only computers used for teaching purposes

Source: Sample survey/Eurobarometer – Member States

Frequency: annual

Supplementary Indicator:

Hours of Internet use per pupil per week

9. Number of computers with high speed connections to the Internet per 100 pupils in primary/secondary/ tertiary levels

Definition: high speed defined as ADSL, cable, satellite, fixed-wireless, UMTS (in future); only computers used for teaching purposes to be included

Source: Sample survey/Eurobarometer – Member States

Frequency: annual

10. Percentage of teachers using the Internet for non-computing teaching on a regular basis

Definition: regular to be taken as using the Internet on a weekly basis

Source: Sample survey/Eurobarometer

Frequency: annual

Working in the knowledge-based economy

11. Percentage of workforce with (at least) basic IT training

Definition: % of workforce (including unemployed) that has received computer training,

Source: Sample survey/Eurobarometer

Frequency: annual

Supplementary indicators:

Data to be disaggregated by gender, age, employed/unemployed, income and/or employment level.

12. Number of places and graduates in ICT related third level education

Definition: 3rd level defined as education after secondary school at an institute of further or higher education (e.g. university or college). ICT-related to be defined in relation to the listing produced by the *Generic Skills Profiles for the ICT Industry in Europe* Project. This would measure input (no. of places) and output(number of graduates).

Source: Member States

Frequency: annual

Supplementary indicators:

(i) data to be disaggregated by gender

(ii) percentage of third level students in ICT-related education.

13. Percentage of workforce using telework

Definition: current survey definition: "*telework occurs when paid workers carry out all, or part, of their work away from their normal places of activity, usually from home, using information and communication technologies*". The definition may be revisited to include wider forms of telework.

Source: Sample survey/Eurobarometer

Frequency: annual

Supplementary indicators:

(i) data to be disaggregated by gender and by kind of job (sector/level)

(ii) Percentage of the workforce covered by telework framework agreements

Participation for all in the knowledge-based economy

14. Number of Public Internet Points (PIAP) per 1000 inhabitants

Definition: PIAP are publicly provided centres providing access to the Internet regardless of their public and/or private provider and whether access is free or not though excluding fully private Internet cafés

Source: Member States

Frequency: annual

Supplementary indicators

(i) Number of public access points (excluding private initiatives) per 1000 inhabitants

(ii) Number of free public access points per 1000 inhabitants

(iii) Percentage of libraries offering Internet access to the public.

15. Percentage of central government websites that conform to the WAI accessibility guidelines at A level

Definition: central government sites will be easier to monitor than local or regional government. Definition of WAI accessible at level A is clearly laid down by the Web Accessibility Initiative.

Source: to be established by an expert group on *e*Accessibility

Frequency: Data will be regularly updated as improvements come on line.

Supplementary indicators:

% of central government sites with higher level AA and AAA rating

Accelerating e-commerce

16. Percentage of companies that buy and sell over the Internet

Definition: Indicators in this area to be redefined with reference to the EUROSTAT survey of e-commerce.

Source: Eurostat, if needed special survey (e.g. Eurobarometer)

Frequency: annual

Supplementary indicators:

(i) Broken down by size and sector

(ii) % of turnover from e-commerce

(iii) Sales should include those to business partners (B2B) and private customers (B2C).

Government on-line

17. Percentage of basic public services available on-line

Definition: basic services to be defined by the eGovernment working group

Source: Study in co-operation with Member States

Frequency: – 6 months

18. Public use of government on-line services - for information/ for submission of forms

Definition: to be defined by the eGovernment working group

Source - Study in co-operation with Member States

Frequency - 6 months

19. Percentage of public procurement which can be carried out on-line

Definition: Advisory Committee on Public Procurement

Source: Study in co-operation with Member States

Frequency: 6 months

Health on-line

20. Percentage of health professionals with Internet access

Definition: number of Primary Care Physicians (PCPs) with internet access in consulting room/office

Source: Sample survey/Eurobarometer

Frequency: annual

Supplementary indicators:

Percentage of PCPs using the Internet to communicate with:

- ✓ pharmacies
- ✓ Secondary care (administration)
- ✓ Secondary care (clinical)
- ✓ patients

21. Use of different categories of web content by health professionals

Definition: use for information on evidence based medicine, pharma info, disease information etc.

Source: Sample survey/Eurobarometer

Frequency: annual

Supplementary indicator:

Supplementary indicators could be collected (from Member States and by survey) in support of the above data. The exact number and definition of these and the above benchmarks will be discussed in the High Level Committee on Health (HLCH)

European digital content for global networks

22. Percentage of EU web sites in the national top 50 visited

Definition: 'EU website' to be defined mainly through national domain name language and content.

Source: Commission Study

Frequency: annual

Supplementary indicators:

(i) Breakdown by type of site - ISP or search engine, services (e-commerce, databanks), info-media, games and entertainment, educational, other.

(ii) Number of personal websites

(iii) Amount of government information (by pages or by megabytes) which is digitalised and available on line

(iv) Employment in the on-line content sector

(v) Number of Internet hosts per 1000 inhabitants (from OECD)

Intelligent Transport Systems

23. Percentage of the motorway network (vs. total length of network) equipped with congestion information and management systems

Source: Special survey

To be discussed, together with other potential indicators, in the context of the High Level Committee on Transport.

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 13.3.2001
COM(2001) 140 final

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

Impact and Priorities

A communication to the Spring European Council in Stockholm, 23-24 March 2001

Contents

Communication to the Stockholm Spring Summit

*e*Europe - impacts and priorities

Preface

In the year since the Lisbon Summit, the information society in Europe has developed considerably further. Nearly one third of EU homes are now connected to the Internet and nearly two thirds of Europeans now have a mobile phone. Almost half of workers use computers in their jobs. Electronic commerce between companies is growing and forcing companies to restructure their businesses. This is only the beginning. More powerful computers, Internet-enabled mobile terminals and faster networks are to come and with them will come a restructuring of the entire economy. The decline in technology stocks which is partly due to exaggerated expectations do not invalidate this analysis.

To realise the potential of the new economy, there is a need for structural reform. Public administrations often remain too much stuck in traditional ways of working. Modernising the public sector is no longer primarily a matter of introducing new technologies; working practices and rules must be changed to realise the benefits of technology. Governments are slower to get services online, electronic public procurement is not yet a reality more than simply accepting emailed bids (e.g. e-market places are not being used) and public sector information crucial to value-added services is not made readily available in all Member States. Progress has nevertheless been made in some areas, notably in the speed with which the legislative framework for the new economy is being established.

The Internet sector is now big enough to exert an influence on the entire economy. The public sector must lead, not trail, in the take-up of new technologies. It must both establish the legal framework for the private sector to flourish and exploit technology to bring more efficient delivery of public service. The European Council should emphasise that the transition to the information society remains critical to future growth and therefore eEurope continues to be a major policy objective.

1. Introduction

*e*Europe's objectives are to accelerate the development of the information society in Europe and to ensure its potential is available to everybody - all Member States, all regions, all citizens. Progress towards these objectives has been documented in the reports from the European Commission[1] and the French Presidency[2], which were submitted to the Nice European Council. Welcoming these reports the Heads of State and Government concluded:

'At its Stockholm meeting it [the European Council] *will examine an initial report on the contribution which this plan has made to the development of a knowledge-based society as well as the priorities for its future implementation. In the same context, the contribution which the plan has made to modernising the civil service in the Member States will also be examined in the light of the meeting of Ministers for the Civil Service held in Strasbourg.'*[3]

This communication is the European Commission's contribution to this discussion. It builds on the Commission's strategy report to the Spring Summit in Stockholm[4] by developing its *e*Europe element. It is also based on discussions with Member States in Council and ad-hoc working groups.

In accordance with the request made in Nice, the communication is structured in two sections - firstly an analysis of the impact of *e*Europe on the knowledge based society, including the modernisation of public administrations in the Union and secondly proposals for concrete steps to make progress in some key areas of *e*Europe.

2. Impact of *e*Europe on the knowledge-based society

This section will look at the extent to which the knowledge-based society has arrived in the Member States, by providing a first overview of the results of the *e*Europe benchmarking. The benchmarking of *e*Europe is based on a set of indicators agreed by the Internal Market Council on 30 November 2000[5]. These indicators were chosen as representative of progress in areas targeted by *e*Europe on Member States level. The indicators are part of the "open method of co-ordination" and will therefore allow a comparative analysis between Member States which in time will include indications of best practice. This will enable policy

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1 The eEurope Update, COM(2000) 783, November 2000, http://europa.eu.int/comm/information_society/eeurope/documentation/update/index_en.htm

2 Note by the Presidency for the Nice European Council on the eEurope Action Plan, webpage as above.

3 http://ue.eu.int/en/Info/eurocouncil/index.htm, Presidency conclusions, Nice European Council, paragraph 25.

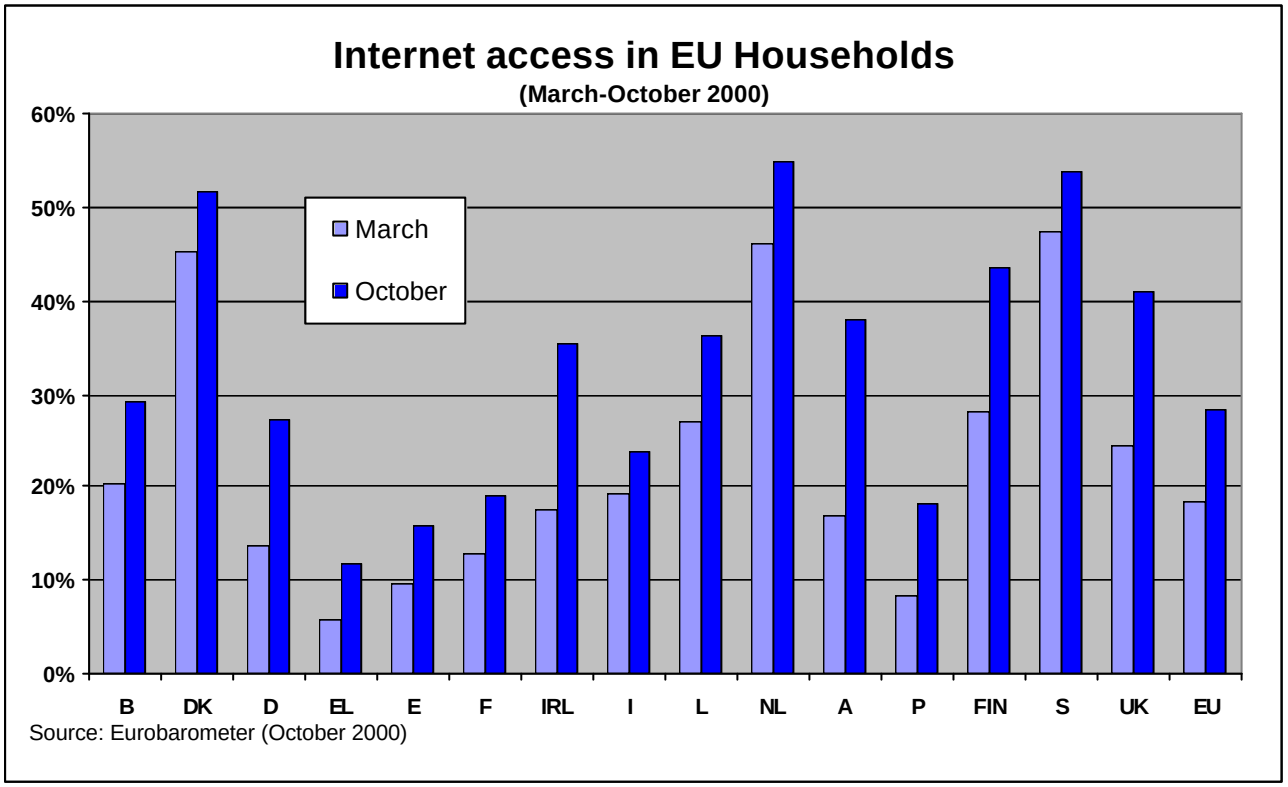
4 Communication from the Commission, *Realising the Union's potential: consolidating and extending the Lisbon strategy*, Contribution of the European Commission to the Spring European Council, Stockholm 23 – 24th March 2001, COM(2001) 79.

5 The list can be found in the Note from the French presidency as in [2] above.

conclusions to be drawn, in particular to identify areas where actions need reinforcement.

Data have already been collected for several of these indicators. Work will continue to gather the remaining data within the coming months. **The available results are published in more detail on the *e*Europe Website[6].** The following analysis gives a first assessment and helps to identify the priorities for *e*Europe with a view to the Stockholm European Council.

2.1. Benchmarking: Cheaper, faster, more secure Internet



Internet penetration at home is showing encouraging levels of growth. In the half year between March and October 2000 penetration rates at home increased from an average of 18% to 28%. Although there are continuing differences between the Member States, those with the lowest Internet penetration have experienced the fastest growth.

Many people in Europe access the Internet in non-domestic environments, particularly in work, at school or in college. When these are included, the overall total of *Internet users* in the EU comprises about 40% of the population. However, this includes occasional users and to obtain a more accurate figure, the Commission is currently undertaking a survey to establish the number of regular users[7] in Europe.

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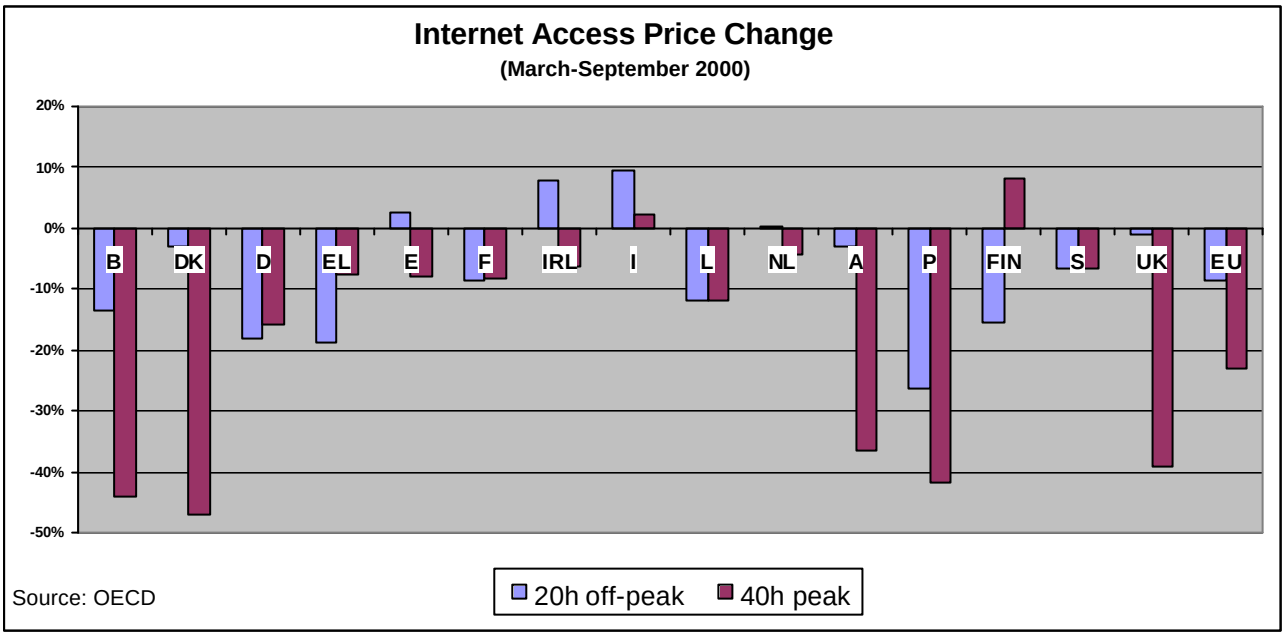
6 http://europa.eu.int/comm/information_society/eeurope - soon to become http://www.europa.eu.int/eeurope

7 The agreed definition is to classify a 'regular user' as someone who uses the Internet at least once a week.

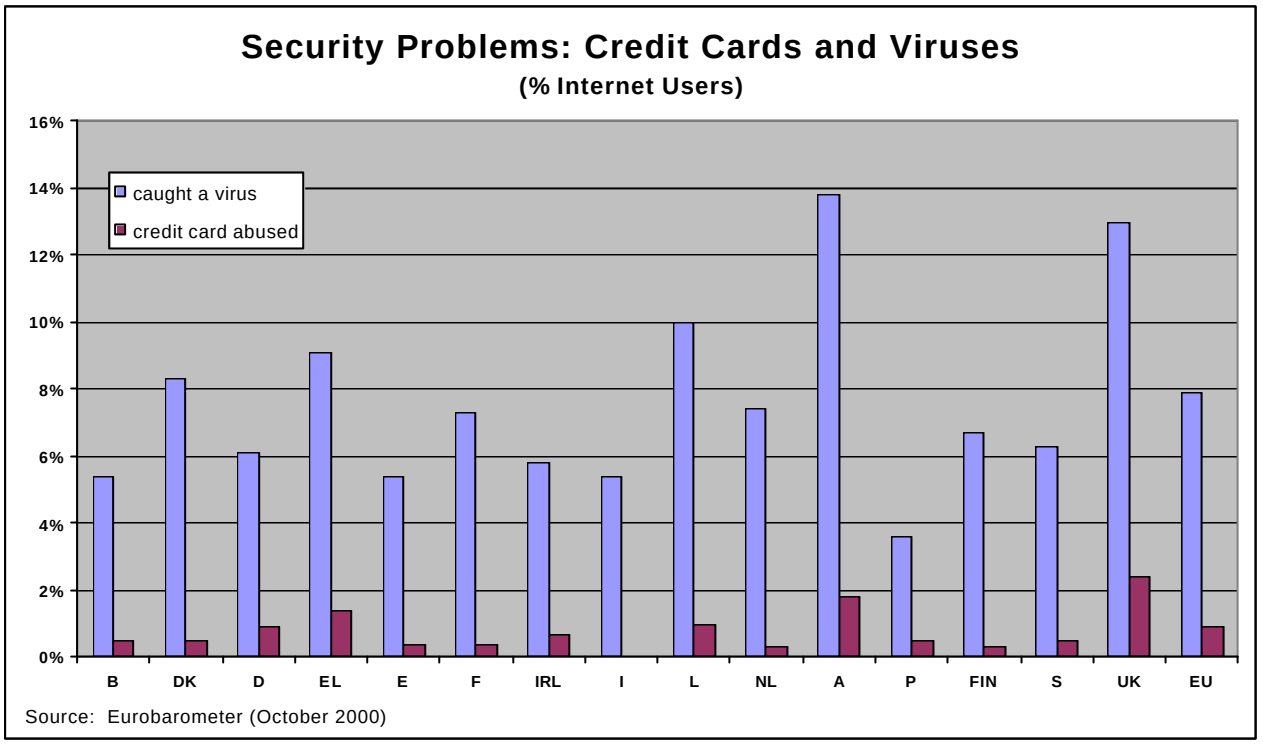
High speed Internet is just beginning to be introduced in Europe. Technologies like ADSL(1.1% of EU Internet households) and cable Internet modems (7.8%) are not yet widely diffused but introducing competition to local access networks should bring prices into the reach of far more residential customers. Local loop unbundling is now being introduced, following agreement at Community level at the end of December and will help to stimulate the deployment of ADSL services.



Internet access costs have reduced quite considerably since eEurope was launched. The OECD has estimated[8] that between March and September costs for 20 hours a month at off-peak times (representative of private household use) reduced by an average of 8.6% in the EU. For 40 hours at peak rates (the more relevant costs for business), prices have fallen by 23.0% in six months. Nevertheless crucial differences in costs remain between Member States, which are broadly correlated with penetration rates.

Security problems, both real and perceived, are widely seen to be an inhibiting factor for e-commerce. A Eurobarometer survey conducted for eEurope in Autumn 2000 found that around 17% of all Internet users had experienced certain problems. The majority of these related to receiving too many unsolicited emails (9%), which is more an intrusion of privacy than a security threat. Viruses, however, are a major security issue and these were encountered by around 8% of users. Credit card abuse was experienced by only around 2% of users.

8 *Communications Outlook 2001*, OECD, forthcoming.



In relation to the security of business networks there is little data available on this understandably confidential subject. One of the few is the number of secure socket layer (SSL) servers. The OECD found that, on a per-capita basis, the USA had six times as many secure servers as the EU and that this divide had not narrowed between their March and September 2000 surveys[9].

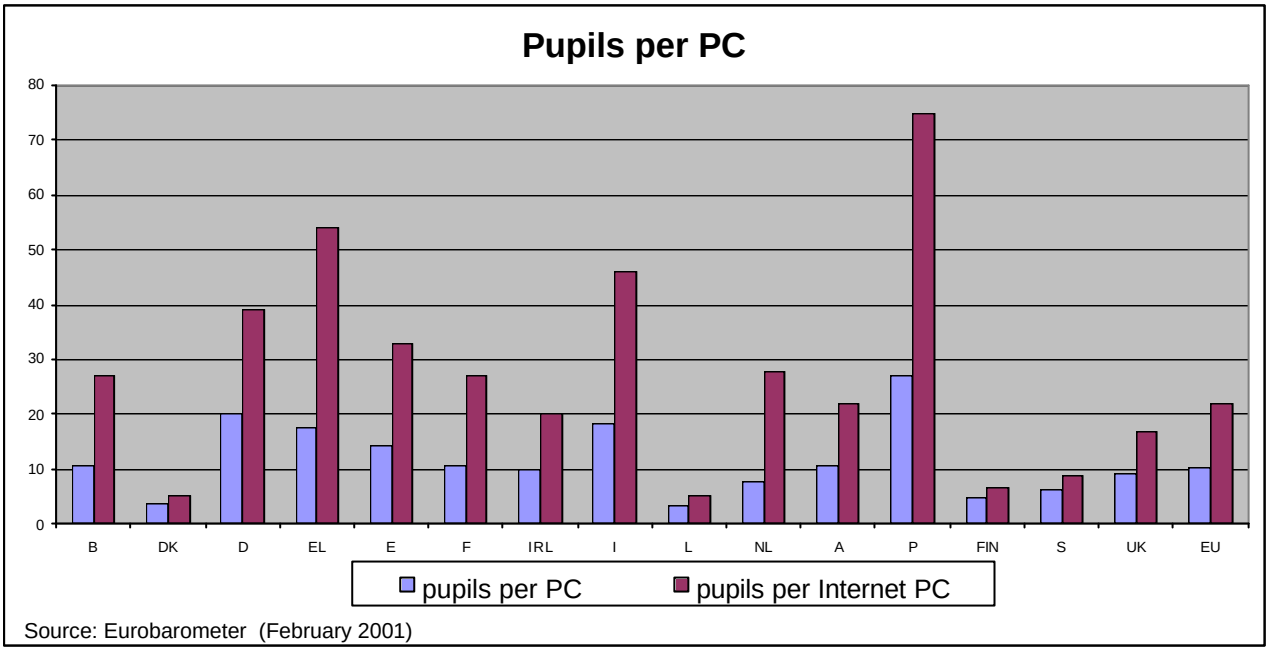
2.2. Benchmarking: Investing in people and skills

The percentage of *schools equipped with computers and Internet connections* is now high throughout Europe. A Eurobarometer survey carried out in February 2001 found that on average, for educational purposes, 94% of European schools were equipped with computers and 79% connected to the Internet. These findings are relatively consistent for a majority of Member States.

Regarding the technology used by schools to connect to the Internet, about two thirds (63%) use an ISDN line, while most of the others connect through a standard dial-up line (34%). For the time being, ADSL (4%), cable modem (6%) and satellite (4%) remain marginal ways for schools to connect to the Internet.

These overall figures say little about the ease with which pupils access computers and the Internet. For this, the number of pupils per PC provides a better indication. The average school in the EU has a computer for every 10 pupils and an Internet-enabled computer for 22 pupils, although there are discrepancies between the Member States. These findings suggest that many countries will need to increase their efforts if the *e*Europe targets for digital literacy are to be reached.

9 Surveys carried by Netcraft, reported in OECD Communications Outlook.



On average, 23% of workers in the EU have *received formal computer training*. There are large differences between the Member States, with particularly low levels of formal training in some Member States. Nevertheless, 45% use computers in their jobs.

Data are available for 12 countries on number of *public internet access points*(PIAPs) which indicate that, in most Member States, there is less than 1 PIAP per 10.000 inhabitants[10]. Usage figures from Eurobarometer indicate that less than 3% of Europeans use public access points.

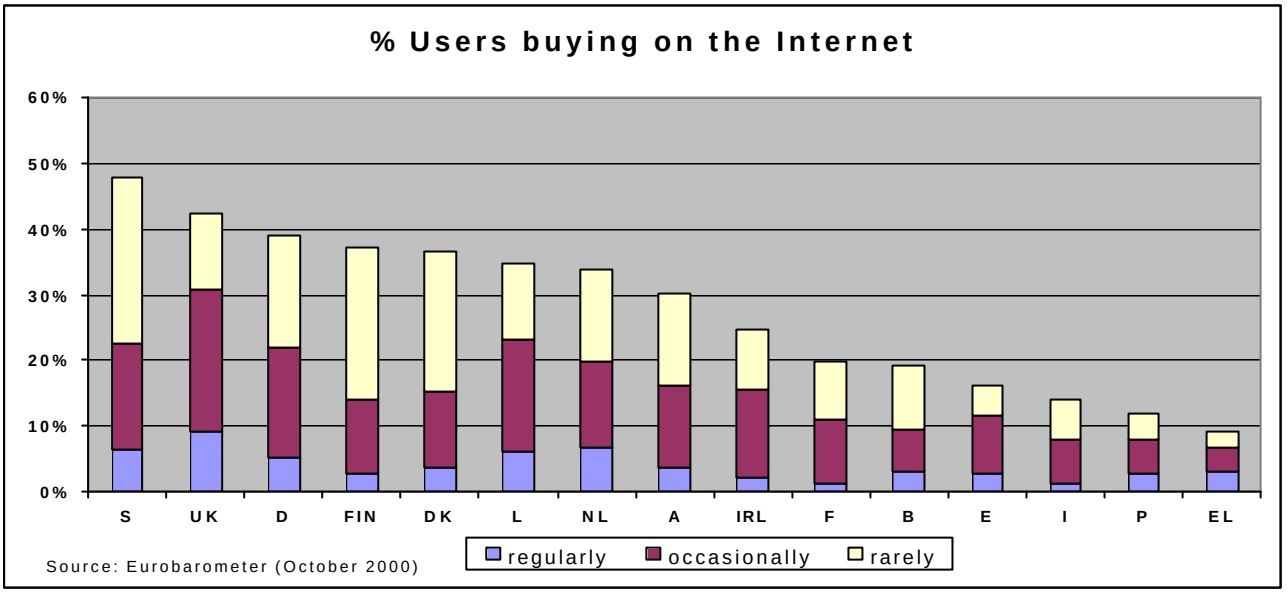
Figures on the number of *ICT-related third level training places* are not yet available from all Member States. Comparison of those figures available reveals large differences - from over 10% of all places down to less than 2%.

Already 5.6% of workers use *telework*, although significant differences exist between Member States. Denmark is well ahead of all others with 17.6% of workers teleworking regularly or occasionally. Danish 'best practice' here is likely to be a reflection of a supportive legal environment and favourable tax measures and a positive social framework. Overall more men than women have the opportunity to use telework and it is most widespread amongst managers. Further details of progress on the employment and social dimension of the information society can be found in a recent working document of the Commission services[10].

[10] SEC (2001) 222, 7/02/2001, http://europa.eu.int/comm/employment_social/soc-dial/info_soc/esdis/documents.htm

2.3. Benchmarking: Stimulate the use of the Internet.

e-commerce is less developed in Europe than in the US. The Eurobarometer survey found only a minority of Internet users (less than 5%) buy regularly on the Internet, but around 25% more buy "occasionally" or "rarely".



Business is more active, reflecting strong growth in business to business e-commerce. However last year a Eurobarometer survey of companies in certain key sectors related to Internet development found that, even in this relatively 'informed' group only just over a quarter sold either to other companies or consumers on the Internet. These results indicate that e-commerce has some difficulties to take off in EU industry. The Commission is launching further surveys and studies to gather more information on behaviour of both consumers and companies on-line.

The use of *online government services* is developing in the Union. About 25% of Internet users have accessed government websites. However most interactions are passive - i.e. information search and downloading. Only 10% of Internet users have used public websites to submit forms. The level of interactivity varies by Member State with the Netherlands, Finland, Sweden and Denmark all having levels of more than twice the average.

Low levels of interactivity were also observed in a Eurobarometer survey (Spring 2000) of local government which showed that although 56% of local authorities had a website, only 28% had electronic versions of official forms and only 8% allowed citizens to send these forms back by e-mail. Work is underway to complete this picture with more extensive information on what governments really offer.

Further indicators are being developed in order to benchmark progress in bringing *basic public services on-line*. So far, efforts have focused on securing clear definitions. Discussions with Member States have resulted in a draft list of these basic public services (attached in annex) which is to be endorsed by the Internal Market Council

on 12th March. The challenge now is to fulfil the commitment made in Lisbon and ensure that all citizens, including those with disabilities, have interactive access to these services.

Another Eurobarometer in Spring 2000 showed that almost 50% of *general practitioners* had Internet access at work. Figures are highest in Sweden, the Netherlands and Denmark. The same survey showed that doctors' *main exploitation of Internet* was to consult professional databases and to consult with other doctors. The levels of interaction with patients is rather low - only 12%.

2.4. Conclusion - the impact of *e*Europe on society

The impact of digital technologies on markets and employment has been widely documented. The impact of digital technologies on society, on patterns of inter-actions, values and perceptions is much more difficult to assess. They are subtle, take a longer time and are open to interpretation.

The benchmarking results show that the dissemination of digital technologies is progressing. Penetration in households is rising quickly. The number of users is multiplying. **However one of the most striking features to emerge from this analysis is that the full potential of these digital technologies for efficiency gains is not yet being exploited.** So far, not even 5% of Internet users shop online on a regular basis, only 10% interact with their government online.

New technologies require a learning process before they are well used. However it is not just a question of learning how to use new technologies, **it is also a question of adapting old habits and practices**. Investment in digital technologies will only show its full potential for efficiency gains if the institutions, concepts and operating practices of the old economy are adapted to make full use of these possibilities. Adaptation in the public sector has so far been relatively slow in Europe. This no longer primarily a question for technicians. What is needed for an effective transition is leadership from politicians.

Furthermore, the rapid development of information and communication technologies brings an increasing risk of disparity between regions, in terms of access to the information and knowledge society. At a time when Europe faces growing challenges from global competition in this area public authorities at all levels - community, national, regional and local - must be particularly attentive to this risk. The danger of a true digital divide makes it even more important that the public authorities deal with exclusion from the information society. The new activities generated by the information society tend to be concentrated in a few urban centres, leading to dense, high performance networks which only link the economies of the central regions of Europe.

To address this issue, the Commission recommended that every regional development plan should include activities to encourage access to the information

society. For the Objective 1 regions alone, it is estimated that €6 billion of Community funds will be mobilised during the 2000-2006 programming period.

The ministers for the civil service met in Strasbourg in November 2000 and adopted a **resolution on eGovernment**. A Working Group has been established to consider the impact of eGovernment on the structures and systems of public administrations, the potential it offers for greater interaction with citizens and business and the opportunities for pan-European electronic services. A Work Programme is being prepared for adoption in the first half of 2001. The Commission is actively involved in this initiative. In addition, eGovernment is among the priorities being examined with candidate countries to help to prepare their public administrations for accession.

The contribution of the *e*Europe 2002 Action Plan to the knowledge based economy and society is only observable over longer periods of time. The eEurope benchmarking process will measure dissemination. Wider impacts on the economy can only be measured in the medium term as learning effects filter through. The extent to which these effects are realised depends on the willingness to change. There are signs that eEurope has helped to establish an environment supportive to such flexibility. It is already possible to identify a **accelerating, activating** and **priority setting** impact of eEurope, as has been documented in the Commission and Presidency reports to the Nice European Council.

3. Priority areas to be addressed

As progress towards the *e*Europe targets varies in speed and extent, Member States have requested that further efforts be made. The Stockholm European Council provides an opportunity to further strengthen the key activities of *e*Europe. Some areas below are already included in the above mentioned strategy paper of the Commission. Other issues have been discussed in the Council Working Group on Information Society Services and in special workshops with Member States. The eight areas selected have been identified through this process, i.e. in co-operation with the Member States and the Presidency.

3.1. New framework for electronic communication services

The ongoing liberalisation of the telecommunications market is the EU's main tool to create the essential infrastructures for a dynamic new economy, providing new services and lower prices for the end-users. The most recent step forward was the harmonised introduction of local loop unbundling which is of crucial importance for the development of high speed Internet. Full and rigorous implementation of this Regulation is an urgent task for all Member States.

Encouraging progress has been made in Council and the European Parliament with respect to the new regulatory framework. The remaining difficulties have to be resolved as a matter of urgency without compromising the need for a simplified, pro-competitive, and sufficiently harmonised framework. Therefore, **the adoption**

of the regulatory framework for electronic communications and its rapid implementation in the Member States should be a given high priority.

3.2. High speed infrastructure

The deployment of high speed networks is primarily a task for the private sector operating in the competitive environment for communication services. Investments in broadband infrastructure and new markets need a favourable regulatory environment. This again underlines the importance of reaching agreement rapidly on the new framework.

- Multimedia wireless systems have the potential to become an alternative for broadband access networks in competition with ADSL, cable and other technologies. The deployment of fixed wireless access infrastructures, especially in the lower frequencies (e.g. 3.5 GHz), is also one way to rapidly achieve broadband Internet access in rural and less-populated areas. Harmonised usage of such frequencies in Europe, for which the CEPT has identified spectrum bands (i.e. from 3.5 GHz to 40 GHz), is essential to a wider rollout of this technology. This would allow the industry to realise economies of scale, thereby overcoming the cost barrier which still prevents wider deployment of multimedia wireless systems. **Member States should be encouraged to work towards co-ordination of frequency allocations and licensing conditions for such services at Community, European and global levels**.

- Digital television shows great potential to bring broadband access to a large number of potentially-excluded households. By allowing broadband access via a familiar terminal which is already present in 97% of EU households, it enables those who may be reluctant to buy a computer to become part of the network, through a significantly cheaper investment. **Member States should co-operate to facilitate the introduction of digital television services with Internet capabilities and promote interoperability** within the framework of voluntary, industry-led standardisation.

- A new Internet protocol is required in order to enlarge the IP numbering space and thereby facilitate mobile Internet and the development of new and more secure services. Europe risks running out of IP addresses by 2005 if action is not taken now[11]. At present, the new Internet Protocol Version 6 (IPv6), which enables almost limitless address space[12], is gradually being introduced. However this process needs to be speeded up to prevent bottlenecks and increase quality. This is an issue of importance to a wide range of industries which will be producing goods with embedded Internet

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11 The address space of IPv4 is limited to a few hundred million unique identifiers, of which 74% are already allocated to North American organisations.

12 Theoretically IPv6 would bring a million billion billion addresses / m^2 of the earth's surface.

access, including cars and consumer electronics as well as mobile communications.

- Member States should make a commitment to progressively **introduce IPv6 in their publicly owned networks**, e.g. those for research and administrations.

- The Commission will **increase support for testbeds** through its research, TEN Telecom and IDA programmes.
- The Commission will invite Member States to work together with industry in **an ad-hoc group** which, should provide proposals by the end of 2001 in order to accelerate the introduction of IPv6.

3.3. eLearning and eWorking skills

The agreement on providing Internet access to schools by 2001 and on ensuring the training of teachers by the end of 2002 were amongst the most far reaching commitments achieved at Lisbon. Now that the technology is being brought into the classroom, new challenges are emerging. At the same time the wider problem of lack of digital literacy amongst workers is becoming more pressing. The Commission's strategy report to the Spring Summit in Stockholm[4] underlined the digital skills gap as a priority area for action. In addition the recent joint informal meeting of employment and telecom ministers in Luleå underlined the urgency of tackling this issue[13] and supported the establishment of a taskforce on skills and mobility in European labour markets. The challenge of digital training and skills for workers has been monitored in the follow-up to the 'Strategies for Jobs in the Information Society'.

Four areas are particularly urgent and therefore require targeted action: the **training of teachers;** the **adaptation of school curricula** to fully exploit the potential of the Internet for education and innovative pedagogical methods; **the assurance of access to high quality multimedia resources** through broadband connections. Building on the conclusions of the Lisbon European Council and the *e*Learning: Designing Tomorrow's Education" initiative, the Commission intends to adopt the *e*Learning action plan in March 2001 to mobilise all relevant Community programmes and instruments to accelerate the implementation of the *e*Learning initiative in particular to address the ICT skills gap and promote digital literacy for all in Europe.. Member States and the Commission should **implement the 2001 Employment Guidelines, the *e*Europe and *e*Learning initiatives and ensure the necessary investments** to:

- aim at a target of at least one multimedia computer per five pupils,
- accelerate appropriate **training programmes** in digital technologies, especially for teachers and trainers,

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13 http://eu2001.se/static/eng/docs/rundresa010305.asp

- **adapt school curricula** to enable new ways of learning and teaching using Internet and multimedia,
- **upgrade Internet access** for learning and training establishments to higher bandwidth via ADSL, cable, wireless access, or other means,
- stimulate the availability of **high-quality educational multimedia content** and services[14], including those exploiting cultural heritage, as well as appropriate virtual learning environments.
- support **research**, through the IST programme, on e-learning advanced technologies and standards and their applications, to support Europe's move to an effective knowledge-based economy.
- Address **the skills gap** in information and communication technologies in the EU, by tackling its structural causes, promoting life-long learning and supporting increased dialogue and co-operation between the social partners, educational institutions and other stakeholders.

3.4. e-Commerce

Rapid **implementation of the electronic signature and e-commerce Directives, in particular of the country of origin approach,** is vital to enhance legal security both for business and consumers by ensuring over-all coherence of the Community legislative framework for electronic commerce. This will be a key factor in enabling European business and consumers to buy and sell across national borders as easily as within their national market. However more needs to be done to boost consumer confidence in e-commerce, if the disappointing uptake of business to consumer e-commerce is to be addressed.

The cross-border dimension of the Internet brings into play a series of important issues in the field of jurisdiction and applicable law at global level. However more action is needed in non-regulatory areas. The rapid **development of online dispute settlement systems and codes of conduct for e-commerce** in the EU and at global level is a matter of urgency to increase consumer confidence and business predictability. The Commission will make concrete proposals on how to further their development and diffusion.

SMEs are often the most wary of developing their e-commerce potential due to a lack of knowledge of the legislative framework and a fear of new technology. The Commission's **'go digital' initiative** which will be launched shortly will support SME's in their efforts to move into e-commerce and to trade across national borders.

3.5. e-Inclusion

As the Information Society advances it becomes more important to ensure that disadvantaged people are not left behind. The emerging risks of digital

[14] Inter alia using the IST, eContent, Socrates and Leonardo Programmes

divide underline the urgency of preventive actions for specific target groups mobilising both public and private actors.

The Nice European Council stressed the importance of the fight against poverty and social exclusion in Europe and launched a **'Social Inclusion Process'** based on an open method of co-ordination. One of its key objectives is e-Inclusion which aims to fully exploit the potential of the knowledge based society and ensure that no-one is excluded from it, taking particular account of the needs of people with disabilities.

- The Stockholm European Council should call on the Member States to ensure that the information society dimension is fully addressed in their National Action Plans on Social Inclusion to be submitted by June 2001.

- In support of this process ESDIS[15] will draw up a report on e-Inclusion by end 2001 to enhance the co-ordination of policies to prevent a digital divide in Europe.

3.6. e-Government

EU institutions and national public administrations should make every effort to use information technology to develop efficient services for European citizens and business.

Public administrations should:

- develop **internet-based services** to improve access of citizens and businesses to public information and services,
- use the Internet to **improve the transparency of the public administration** and to involve citizens and business in decision making in an interactive fashion. Public sector information resources should be made more easily available, both for citizens and for commercial use,
- ensure that digital technologies are fully exploited within administrations, including the use of open source software and electronic signatures.
- establish electronic marketplaces for **e-procurement**, building on the new Community framework for public procurement.

The IDA Programme is a valuable tool in supporting the development of pan-European interactive public services as well as ensuring exchange of best practice between Member States.

3.7. Secure networks

The need for action in the area of network security has become increasingly evident in recent months. Increases in high profile sabotage, like the 'I Love You' virus and

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15 High Level Group on Employment and the Social Dimension of the Information Society.

denial of service attacks, have raised public awareness about the potential for real economic damage arising from the insecurity of networks.

In spite of this pressure for action, progress in this area has been relatively slow, beyond the smart card activity where the Commission will stimulate the implementation of "common requirements"[16]. The reasons lie in its complexity in terms of political, organisational and technical issues, the decentralised and global nature of the Internet and the vast number of different applications, which require appropriate information security. The Commission recently adopted a Communication on cyber-crime[17] which foresees the establishment of an EU Forum on cybersecurity and cybercrime, but more needs to be done to improve network security as such.

A working meeting with Member State experts and industry took place in Brussels on February 2nd to discuss the development of common approaches to some of these issues. A consensus emerged that concrete progress can be made in the following areas:

- **Establishment and co-operation of CERTs** (Computer Emergency Response Teams) to prevent and respond to incidents for the benefits of enterprises, governmental bodies and citizens in all Member States.
- Improved co-operation on **network security in the Union** aimed at documenting and analysing security problems, informing market actors and developing solutions.
- **Support for research and technological development** in network security needs to be strengthened both at Community and Member State level.

3.8. Mobile Communications

In parallel with Internet developments, mobile telephony has seen large growth rates in the European population. Overall penetration rates are now over 60% in the Union. These high rates should help to give Europe a strong lead in mobile Internet when the 3rd generation (3G) networks are rolled out. However, preparation for 3G has been hampered by the high cost of licences in some Member States which has co-incided with uncertainty in the high tech stock market.

Discussions with Member States have revealed a strong interest in securing a supportive environment for mobile communications to ensure that one of Europe's most dynamic industries will continue to strive. This will require movement on the following issues:

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16 The common requirements are available on: www.cordis.lu/ist/ka2/smartcards.html

17 Creating a safer society by improving the security of information infrastructures and combating computer related crime, COM (2000) 890, http://europa.eu.int/ISPO/eif/InternetPoliciesSite/Crime/crime1.html

- The Commission has already tabled a proposal for a Decision on a regulatory framework for radio spectrum policy in the Community. **Adoption of this Decision** is urgently required.

- The introduction of IPv6 (see proposed action above) is instrumental for quality **mobile Internet**

- Strong **support for technological development** is needed through the national and Community research programmes if Europe is to maintain leadership in the future.

An analysis of the state of play in 3G licensing in Europe and more detailed proposals for actions are included in a Commission Communication[18].

4. eEurope+ : an initiative by and for the candidate countries

The process of preparing for enlargement is closely linked to the need to modernise the economies and institutions of the candidate countries. Such modernisation is a key aim of *e*Europe.

At the European Ministerial Conference held in Warsaw on 11-12 May 2000, the candidate countries recognised the strategic goals agreed at the Lisbon European Council and **undertook to take up the challenge set by the EU Member States** by developing their own *e*Europe-like Action Plan - eEurope+ - that would adopt all the strategic goals and objectives of eEurope, but contain their own specific national measures and target dates.

The Joint High Level Committee on the Information Society (JHLC), composed of government representatives from the CEECs, met in October 2000 to outline such a plan, *e*Europe+. This plan is currently being finalised. The objectives of this initiative would be:

- The acceleration of the adoption of the acquis communautaire in IS-related areas, harmonisation of the regulatory framework and the liberalisation of markets,

- The implementation of national action plans, taking account of the eEurope objectives and the monitoring and benchmarking of progress towards these objectives,

- Awareness raising of the potential of the new economy amongst the public sector, business and the general public.

- Promote exchange of best practice

[18] The introduction of Third Generation Mobile (3G) in the European Union: State of play and the way forward,.

Member states should therefore welcome the initiative and efforts of candidate countries to pursue the goals and objectives of eEurope+. Community support could be provided through EU programmes which are available to candidate countries.

5. Next Steps

Last year saw rapid breakthroughs in the Internet in Europe. Through the *e*Europe initiative, the information society became one of the key elements of the Lisbon strategy. This high level commitment is beginning to bear fruit, but the current economic context makes *e*Europe **even more important than last year.** There is a further need to stimulate the use of the Internet and to foster structural reform in order to reap the full benefits of the new economy.

*e*Europe actions must continue to be given high priority. The Commission will ensure their regular monitoring to ensure effective implementation. In addition, the integration of *e*Europe priorities in several Community policies contributes to the achievement of the eEurope targets. Both the Broad Economic Policy Guidelines and the Employment Guidelines take *e*Europe priorities into account. Regional policy is contributing to the success of *e*Europe through initiatives like eRegio[19].

Whilst *e*Europe is widely known in business and policy circles globally and has been widely emulated (most recently in eJapan) maintaining the momentum and focusing European level actions on the key issues requires constant commitment from policy makers.

The **benchmarking exercise** needs to be consolidated. All studies and surveys required to complete the first round of indicators will be launched in the first half of 2001, with the aim to have a complete set of indicators by end 2001. Values will then continue to be monitored either at six monthly or yearly intervals. Finally the results of the benchmarking will inform the identification of best practice and support mutual learning in the context of the 'open method of co-ordination'.

[19] See "The regions and the new economy - new guidelines for innovative actions under the ERDF" COM (2001) 60.

ANNEX

Draft common list of basic public services

For *e*Government, the following two indicators are the basis for benchmarking.

- Percentage of basic public services available online,
- Use of online public services by the public.

To make these indicators operational, Member States have agreed to a common **list of 20 basic public services**, 12 for citizens and 8 for businesses**.** Progress in bringing these services online will be measured using a **four stage framework:** 1 posting of information online; 2 one-way interaction; 3 two-way interaction; and, 4 full online transactions including delivery and payment. Data will be collected in surveys twice a year.

	Public Services for Citizens
1.	Income taxes: declaration, notification of assessment
2.	Job search services by labour offices
3.	Social security contributions (3 out of the following 4): • Unemployment benefits • Family allowances • Medical costs (reimbursement or direct settlement) • Student grants
4.	Personal documents (passport and driver's licence)
5.	Car registration (new, used and imported cars)
6.	Application for building permission
7.	Declaration to the police (e.g. in case of theft)
8.	Public libraries (availability of catalogues, search tools)
9.	Certificates (birth, marriage): request and delivery
10.	Enrolment in higher education / university
11.	Announcement of moving (change of address)
12.	Health related services (e.g.interactive advice on the availability of services in different hospitals; appointments for hospitals.)
	Public Services for Businesses
1.	Social contribution for employees
2.	Corporation tax: declaration, notification
3.	VAT: declaration, notification
4.	Registration of a new company
5.	Submission of data to statistical offices
6.	Customs declarations
7.	Environment-related permits (incl. reporting)
8.	public procurement

PARLIAMENT OF ROMANIA

THE CHAMBER OF DEPUTIES

L A W

Regarding the Free Access to the Information of Public Interest

The Chamber of Deputies adopts the present bill.

CHAPTER I

GENERAL PROVISIONS

Art. 1. – The free and unrestrained access of one person to any information of public interest, defined in this way through the present law, constitutes one of the fundamental principles of the relations between persons and public authorities, in accordance with the Constitution of Romania and the international documents ratified by the Parliament of Romania.

Art. 2. – In the sense of the present law:

a) by *authority* or *public institution* it is understood any authority or public institution, as well as any state company (*régie autonome*), which uses public financial resources and carry on its activities on Romania' s territory, in accordance with the Constitution;

b) by *information of public interest* it is understood any information regarding or resulting from a public authority' s or a public

institution' s activities, irrespective of the support, or the form, or the mode of expressing the information;

c) by *information regarding personal data* it is understood any information regarding an identified or identifiable natural person.

CHAPTER II
THE ORGANIZATION AND FUNCTIONING OF ACCESS TO THE INFORMATION OF PUBLIC INTEREST

Section 1
Common Provisions Regarding the Free Access to the Information of Public Interest

Art. 3. The providing, by the public authorities and institutions, of the free access to the information of public interest is accomplished " ex officio" or by request, through the agency of the compartment for public relations or of the person especially appointed with this view.

Art. 4. – (1) In order to provide any person' s access to the information of public interest, the public authorities and institutions are bound to organize specialized informing and public relations

compartments or to appoint persons discharging functions within this domain.

(2) The functions, organization and functioning of the public relations compartments are established on the basis of the provisions of the present law, by the Organization and Functioning Regulations of the respective public authority or institution.

Art. 5. – (1**)** Every public institution or authority is bound to report " ex officio" the following information of public interest:

a) the legal regulations which settle the organization and functioning of the public authority or institution;

b) the organization structure, the functions of the departments, the functioning schedule, the hearings schedule of the public authority or institution;

c) the surname and the first name of the persons within the leading structure of the public authority or institution and of the clerk responsible for the dissemination of the public information;

d) the contact coordinates of the public authority or institution, respectively: the title, address, phone numbers, fax numbers, e-mail address and the web page address;

e) the financial sources, the budget and the book-keeping balance sheet;

f) the public authority' s or the public institution' s own programmes and development strategies;

g) the list of the documents of public interest;

h) the list of the categories of documents produced and/or managed, according to the law;

i) the modalities of disputing the public authority' s or the public institution' s decision whenever a person considers that he/she was prejudiced relative to his/her right to access to the requested information of public interest.

(2) The public authorities and institutions are bound to publish and update yearly an informative bulletin which will contain information stipulated within the Art. No. 1.

(3) The public authorities are bound to make public " ex officio" a periodical activity report, yearly at least, which shall be published in the Official Gazette of Romania, the 2nd Part.

(4) The access to the information stipulated within Paragraph (1) is attained through:

a) display on the premises of the public authority' s or the public institution' s headquarters, or publishing in the Official Gazette of Romania or in the mass media, the public authority' s or the public institution' s own publications as well as web page;

b) consulting information on the premises of the public authority' s or the public institution' s headquarters, in spaces especially settled with this view.

Art. 6. – (1) Any person has the right to request and to obtain from the public authorities and institutions, according to the provisions of the present law, information of public interest.

(2) The public authorities and institutions are bound to provide for the persons, by the persons' request, the information of public interest, requested in writing or verbally.

(3) The request in writing for the information of public interest contains the following elements:

a) the public authority or institution to which the request is addressed;

b) the requested information, so that it would allow the public authority or institution to identify the information of public interest;

c) the solicitor' s surname, first name and signature, as well as the address on which the answer is requested.

Art. 7. – (1) The public authorities and institutions are bound to answer in writing the request for the information of public interest in 10 days' time, or, depending on the case, in maximum 30 day' s time since the enrolling of the request, according to the difficulty, complexity, volume of the documentary researches and urgency of the request. In case that the duration necessary for identifying and disseminating the requested information exceeds 30 days, the answer shall be communicated to the petitioner in maximum 30 days' time, on condition that the petitioner should be informed in writing about this situation in 10 days' time.

(2) The refusal of communicating requested information shall be justified and communicated in 5 days' time since the receiving of the petitions.

(3) The request for and the acquiring of the information of public interest can also be accomplished digitally, if the necessary technical conditions are met.

Art. 8. – (1) As regards the information requested verbally, the clerks within the information and public relations compartments are bound to specify the characteristic forms and conditions of the access to the information of public interest, and they shall supply the requested information at once.

(2) In case that requested information is not available at once, the petitioner is guided to request the public information by writing, and then the request shall be settled by the terms stipulated within the Art. No. 7.

(3) The information of public interest requested verbally is communicated within a minimal programme settled by the public authority' s or public institution' s leading structure, programme which shall be displayed on the premises of the public authority' s or the public institution' s headquarters, and which shall be carried on compulsorily during the institution' s functioning, including a day a week after the functioning schedule.

(4) The registry activities regarding the petitions cannot be included in this schedule and they are carried on separately.

(5) The information of public interest requested verbally by the mass media shall be communicated, as a rule, immediately, or in maximum 24 hours' time.

Art. 9. – (1) In case that the request for the information involves the realization of copies of the documents belonging to the public authority or institution, the petitioner shall meet the expenses of the copying services, according to the law.

(2)- If, as a result of the received information, the petitioner requests further information related to the documents possessed by the public authority, this request will be dealt with as a petition, the answer being sent within the terms stipulated in articles No. 7 and 8

Art. 10. – The public authorities' and the public institutions' activity involving answering the petitions and hearings, carried on according to the specific competences of the respective authorities, if this activity regards formal approvals, authorization, services performance and any other requests but the information of public interest, does not come within the provisions of the present law.

Art. 11. – (1) The persons who make studies or do research in their own interest or in professional interest have access to the public authority' s or the public institution' s documentation fund, on the basis of personal request, according to the law.

(2) The copies of the documents belonging to the public authority or to the public institution are carried out according to the provisions stipulated within Art. No. 9.

Art. 12. – The following information makes an exception relative to the free access of the citizens, stipulated within Art. No. 1.:

a) the information regarding national defence, public security and order, if this type of information belongs to the categories of the classified information, according to the law;

b) the information regarding the authorities' debates, as well as the information regarding Romania' s economic and political interests,

if this type of information belongs to the categories of classified information, according to the law;

c) the information regarding economic or financial activities, if their publicity jeopardizes the principle of honest competition, according to the law;

d) the information regarding personal data, according to the law;

e) the information regarding the procedure in a penal or disciplinary investigation, if the result of the investigation is jeopardized, if confidential sources are disclosed, if the life, the physical integrity or health of a person are jeopardized in the course of or as a result of the investigation.

f) the information with respect to the judiciary procedures if their publicity jeopardizes the insurance of a fair trial or the legitimate interest of any of the parts involved in the trial

(2) The responsibility for applying measures of protecting the information stipulated within Paragraph (1) rests upon the public persons and authorities holding the mentioned type of information, as well as upon to the state institutions entrusted by law to ensure the security of information.

Art. 13. – Information favouring or hiding the breaking of the law by a public authority or institution cannot be included in the category of classified information and constitute information of public interest.

Art. 14. – (1) Information regarding the personal data of the citizen may become information of public interest only in so far as it affects the citizen' s capacity of officiating when holding a public position.

(2) The public information of personal interest cannot be transferred among the public authorities but on the basis of a legal obligation, or on the basis of previously written consent of the person who has access to that information according to Art. No. 2 within the present law.

Section No. 2
Special Provisions Regarding the Access of Mass Media to the Information of Public Interest

Art. 15. – (1) The access of the mass media to the information of public interest is guaranteed.

(2) The activity of collecting and disseminating the information of public interest, carried on by mass media, constitutes a materialization of the citizens' right of access to any information of public interest.

Art. 16. – (1) In order to provide the access of the mass media to the information of public interest, the public authorities and

institutions are bound to appoint a spokesperson, who shall belong, as a rule, to the information and public relations compartments.

Art. 17. – (1) The public authorities are bound to organize periodically – as a rule, once a month, press conferences in order to inform about the information of public interest.

Within the press conferences, the public authorities are bound to answer relative to any information of public interest.

Art. 18. – (1) The public authorities are bound to grant, without discrimination, the accreditation to the journalists and the mass media representatives.

(2) Accreditation is granted by request, in 2 days' time since its registration.

(3) The public authorities may refuse to accredit a journalist or withdraw one journalist' s accreditation only on account of acts which hinder normal carrying on of the public authority' s activity, and which are not related to the respective journalist' s opinions as expressed in the press, in accordance with the law and within the law.

(4) The refusal to grant accreditation to a journalist and the withdrawal of a journalist' s accreditation are communicated by writing and do not affect the respective press organ' s right to obtain accreditation for another journalist.

Art. 19. – (1) The public authorities and institutions are bound to inform the mass media in due time about the press conferences or any other public actions organized by them.

(2) The public authorities and institutions can' t deny in any way the access of the mass media to the public actions organized by them.

(3) The public authorities, which are bound, due to their own functioning and organization law, to carry on specific activities in the presence of the public, are bound to allow the press' access to the respective activities, the dissemination of the materials obtained by the journalists being to have respect only for professional deontology.

Art. 20. – The mass media are not bound to publish the information provided by the public authorities or institutions.

CHAPTER III
PENALTIES

Art. 21. – (1) The explicit or tacit refusal of the employee appointed by an authority or a public institution to carry out the provisions of the law, constitutes a breaking in the law and brings about the disciplinary responsibility of the culprit.

(2) Against the refusal mentioned within Paragraph (1) there can be handed in a complaint addressed to the respective public authority' s ϖ to the respective public institution' s manager, in 30 days' time since the harmed person has taken note of the respective refusal.

(2) If, after the administrative investigation, the complaint proves well-grounded, the answer shall be transmitted to the harmed person in 15 days' time since the complaint has been handed in, and the answer shall contain both the initially requested information of public interest and the mention of the disciplinary penalties taken against the culprit.

Art. 22. – (1) In case that a person considers that he/she has been harmed respective to his/her rights recognized by the law, the respective person may hand a complaint to the administrative contentious section of the Court within whose area the respective person's domicile or headquarters are situated, or within whose area the authority's or public institution's headquarters are. The complaint shall be handed in 30 days' time since the expiry of the period stipulated within Art. No. 7.

(2)The Court can force the public authority or the public institution to provide the requested information of public interest and may order the paying of moral and/or patrimonial damages.

(3) The Court's decision is subject to appeal.

(4) The Court of Appeal's decision is definitive and irrevocable.

(5) The complaint and the appeal are both cases judged by Court, by emergency procedure and are exempted of stamp fee.

CHAPTER IV
TRANSITORY AND FINAL PROVISIONS

Art. 23. – (1) The present law will go into effect 60 days after its publishing in the Official Gazette of Romania

(2) Within 60 days after the publishing in the Official Gazette of Romania , the Government will elaborate, if ordered by the Ministry of Public Information, the methodological norms for its coming into force.

Art. 24. – (1) In 60 days' time since the going into effect of the present law, the Ministry o Public Information, the Ministry for Communication and Information Technology and the Ministry of Public Finance shall submit to the Government proposals regarding the necessary measures so that the information of public interest should become available progressively, through the agency of digitally data bases accessible to the public on the national level.

The provisions stipulated within Paragraph (1) shall refer inclusively to the endowment of the public authorities and institutions with adequate calculation technique equipments.

Art. 25. On the date of the going into effect of the present law, any contrary provisions are abolished.

This Bill was adopted by the Senate within the meeting on June, 21, 2001, in accordance with the provisions of Article No. 74, Paragraph (2) within the Constitution of Romania.

The President of the Senate, Alexandru Athanasiu

THE PARLIAMENT OF ROMANIA

The Chamber of Deputies — The Senate

DRAFT LAW

The Code for Information Technology Development and Use

Contents

Title I. General Provisions

Art. 1

1. This Code establishes the legal framework within which information technologies shall be developed and used, sets the principles and measures which guarantee the freedom of information and the natural person protection against personal data processing, and stipulates the duties and rights of natural and legal persons who carry out such activities
2. The law aims at valorizing the possibilities given and the benefits yielded by information technologies to socio-economic development, and to the development of human relationships in general, while providing for data coherence, quality and timeliness, for the eradication of misinterpretations and the generation of a database for analyses and decision-making, and making no prejudice to data security and privacy.

Art. 2

Specialized terminology, in the acceptance of the law, is presented in Appendix, which is a constitutive part of the law.

Art.3

Freedom of information shall be acknowledged, guaranteed and defended in conformity with the country's laws, and the international treaties which Romania is part of.

Art.4

3. The law provisions will equally and without discrimination apply to all members of the society, who are involved, or who are not, in the development and use of information technologies.
4. The law provisions set and, respectively, promote the principle of information freedom and reliability, the principle of personal data protection, of data security and trustfulness in IT as well as the principle of data broadness and data access, with a view at realizing the global information society through integrating and making the information systems compatible with traditional systems, pursuant to international rules and world trends in the field.
5. The IT-based activities shall be carried out only within the legal framework and to the extent to which there are fair and honest modalities for data acquisition and checking. Natural and legal persons who take part in such activities should observe the law provisions and guarantee the lawfulness of the information resources available to them and of data collection, processing, use and distribution.

Art.5

The State will support the societal informatisation process and the society progress towards an *information-based society* to be hereinafter called the *information society*, through observing this Code and the generally admitted principles, including international acts which Romania is part of.

Art.6

6. Informatisation is viewed as a strategic goal of outstanding importance, a back-up of the reform in the Romanian society, and will receive financial and organizational support from the State.
7. The State will, under the law provisions, support private companies' competitive engagement in the informatisation project, for the development of IT domestic industry, especially software industry, and of international co-operation in the field.

Art. 7

This Code will be completed with all due provisions in the international rules or in the EU statutes on human rights, which Romania is part of .

Title II. Information Freedom

Art. 8

8. Data traffic via computer all over Romania is unbarred, within the legal framework, for those who participate in it as individual persons or as networks or information systems users.
9. Transborder flow and traffic of the data subject to automatic processing or of the data which are collected to be automatically processed, will be lawful in so far as they will cause no damage to human rights and liberties, to civil obligations, to the secret and confidentiality required for the safeguard of the state order rule and public order, for national security defense.

Art. 9

In order to protect human rights and liberties, natural and legal persons who are users of software products or services will have the obligation:

10. to make sure that the products and services are not liable to prejudice human rights and individual liberties, taking appropriate measures;
11. to assume the responsibility for not fulfilling the obligations at lett. a);
12. to make reparations to those who were offended through the obligations at lett.a) being broken.

Art. 10

13. Save for the exceptions at paragraph 2), any public or publishable data, of any type or in any field, may be freely stored and processed, with no restrictions and without any moral or material obligations from the data holders in their field of activity.
14. It is considered to be "sensitive data" and are not to be stored or processed otherwise than under law provisions:
    a) the data about race and ethnic origin of a person, his political convictions, religious faith and other beliefs, about a person's state of health and sexual life, about family and personal relations or those about penalties;
    b) confidential and secret data about national defense and the state order rule.

Art. 11

15. To store hardware, software and data, and to carry out electronic processing on the programs and data, which will result in software products and services for one's own use, will be permitted under the law provisions.
16. In so far the activities defined at paragraph 1) will extend beyond someone's area of activity, to access other holders' databases, they will have to be conformant with the law provisions.

Art. 12

17. The data under traffic via any technical equipment and/or material supports will benefit, with both producer and receiver, carrier respectively, from the same legal protection as that guaranteed to the secret of mail and of telephone calls.
18. In order that the lawfulness of his activity should be justified, the data carrier has the authorization of recording, for some while, the messages which have been sent and/or received by him, or any other information testifying the completion of the task, if technically necessary.

Title III. Data Protection and Security

Chapter 1. Data Security

Art. 13

19. Data security provision shall be compulsory for private life protection, for keeping the secret of business and bank operations, for intellectual property protection, and the order rule protection.
20. Data security in information systems will be guaranteed by the protection of the data electronically stored, processed or transmitted against the risk of their being lost, damaged or altered, or against their unauthorized use or disclosure, either accidentally or on purpose.
21. In order to guarantee data security, the information systems owners should make use of the communication infrastructure, of operating systems and data base management systems, administrative procedures or of any other means necessary for this purpose, all of them being security measures proof.

Art. 14

In so far this will not be an infringement of this law, civil service authorities which have acquired the data should, upon request and free-of-charge, supply them to other public administration authorities, provided that they are legally entitled to store, process and use the required data.

Art. 15

Natural and legal persons have, upon request, access rights to aggregated public data , and to the methodology for defining the terminology used in public data collection and processing, and in current classifications and lists, so that the data privacy should be ensured, except for those which may be prejudicial to the state security and public order. These rights shall be exercised in accordance with legal procedures . A natural or legal person, who has been denied the data access, may appeal to the Romanian Authority for Informatics.

Art. 16

The Army and other compartments of the national defense system shall apply special data security measures , in accordance with their inner regulations.

Chapter 2. Factors Responsible for Data Quality and Security

Art. 17

All databases, no matter if they are organized to be locally stored and interrogated, or if they are referred in data and information sent to third parts, including a non computer transmission, shall be so structured as to consider all the criteria for the quality and security of data they store.

Art. 18

22. A factor responsible for data processing will be designated to all the databases in the public sector.
23. The person responsible for data processing should:
    a. see to meeting all legal criteria for a lawful operation of a database;
    b. see to making the data stored, processed and/or distributed meet the requirements of accuracy, integrity, structure, secret or privacy, which are presupposed for observing the law provisions;
    c. be conscientious, trustful and diligent in carrying out his database management activities;
    d. represent the database holder to the State Secretariat for the Information Society and the Romania Authority for Informatics, to their proxies, to law courts and third parts.

Art. 19

24. Computer network managers will be appointed to operate
    a. on all public, private or joint computer networks;
    b. on all the communication and telecommunication networks which, in accordance with law provisions or contractual terms, transmit signals , which are computer data- either rough or processed, either clear or encrypted, either simple or organized as information or information lumps.

(2) A computer network manager will have:
a. to guarantee the computer network safety;
b. to guarantee the computer network operation integrity;
c. to observe all legal provisions on the computer network operation;
d. to show high competence in the computer network management;
e. to represent the database holder to the State Secretariat for the Information Society and the Romania Authority for Informatics, to their proxies , to law courts and third parts.

Art. 20

The data processing responsible persons and computer network managers will also have:
a. to take proper technical and organizational measures for data protection against accidental or unauthorized damage, their accidental loss and alteration or against unauthorized access; to keep a balance of the security measures costs, data types, processing type and potential hazards;
b. to take specific security measures for the case when the data can be accessed directly in the network;
c. to stipulate, when subcontracting for processing, explicit clauses regarding data security and processing safety;
d. to prepare, improve the knowledge of and test the staff in their subordination, who , through their duties, are given access to personal data, so that they should keep the data privacy; data communication to third parts will only be possible with the express approval of the person responsible for data processing and under the law provisions;
e. to forbid data reading, alteration or damage; to keep secret the identity covered by pseudonyms and anonymity to others than the legally entitled authorities.

Art. 21

25. Data processing responsible persons and computer networks managers shall be designated, respectively nominated by the owners of the databases and/or computer networks, and will report to them.
26. The positions of computer network manager and data processing responsible person in public administration will be held by civil servants.

Art. 22

On carrying out the duties incumbent on them according to this law, data processing responsible persons and computer networks managers will be fully responsible, including ethical aspects, regardless given conditions, notifications, subcontracting for processing with third parts or any other circumstances which could impair their responsibility.

Title IV. Natural Persons Protection As To Personal Data Processing

Chapter 1. The Object Under Protection and the Enforcement Domain

Art. 23

This Code main goal is to protect individual rights and liberties, especially the right to private life and correct image as to personal data processing, in the context of the IT fast progress and of the strengthening of international co-operation.

Art. 24

27. Except for the processing done by a natural person for carrying out strictly private and personal activities, the provisions of this title will apply to fully or partially automatic processing of personal data as well as to non-automatic processing in public and private sectors.
28. The non-automatic archives' and registers' holders will, through their managers and staff, bear full responsibility in case of non-observance of the provisions of this title on non-automatic processing.

Chapter 2. Data Quality and the Lawfulness of Processing

Art. 25

Personal data to be processed should be:

a. fairly and lawfully processed;
b. collected for well-defined, explicit and lawful purposes, and used for those purposes;
c. adequate and strictly necessary for the purposes they are collected and further processed for;
d. accurate and, if necessary, updated; non-accurate and incomplete data should be deleted or corrected;
e. stored in such a manner as to allow the identification of the persons concerned, and for a while no longer than that required for attaining the goal they have been collected or further processed for; on the expiry date, the data should be erased or destroyed.

Art. 26

Personal data processing will be lawful if done under one of the following conditions:

a. the person concerned consents on it;
b. the processing is part of a contract on personal data concluded with the person concerned, or is part of an agreement of the same kind, or if the person concerned requests that such contract or agreement is concluded;
c. it serves to protect the welfare of the person concerned;
d. it is done within a legal framework, or has been the object of a previous decision of the Romanian Authority for Informatics, made through respecting the Code provisions;
e. the processing should be done for observing a legal provision or for fulfilling a task of public interest;
f. the processing should be done in order to prevent an imminent public danger or a danger threatening another person's prevailing rights.

Art. 27

29. The processing of data of the type at Art. 10, paragraph 1), lett. a) will be forbidden unless one of the following conditions holds:
    a. the person concerned has explicitly consented on such a processing, or

b. the processing is done in order to protect the welfare of the person concerned, who might not be in physical or legal capacity to consent;
c. the processing is done as one of their lawful and guaranteed activities, by a foundation, association or any non-profit, political, philosophical, religious or trade union organization, provided that the processing only concerns their members or persons whom such an organization has contacts with in their field of activity, or
d. the processing is done on the data expressly revealed by the person concerned, or it serves in ascertaining, exercising or defending his right at law -court.

(2) Paragraph 1) will not apply when data processing takes place for causes related with preventive medicine, medical diagnosis, medical treatment prescription, provided that the data processing is done by a person vowed to professional secret.

(3) Data about penalties and law suits, or about national defense and the state order rule, as well as data about administrative or civil penalties may only be processed if supervised by the public authorities legally entitled to this.

Art. 28

Any identifier of a natural person, which has general applicability, may only be used if the Romanian Authority for Informatics approves it, and also defines the terms of use.

Art. 29

The person responsible for personal data processing has also the following express duties:

a. to give prior notification to the Romanian Authority for Informatics, through established procedures, upon any kind of processing which falls under this title coverage;
b. to stick to the approval given by the Romanian Authority for Informatics for the cases defined at Art. 32, paragraph 2, and to provide the additional information which might be asked for
c. to guarantee the rights protection of the natural person concerned, as stipulated by this Code.

Art.30

Personal data transfer to other countries will be permitted provided that these countries guarantee a protection level at least as high as that of this Code. It is compulsory to get the approval of the Romanian Authority for Informatics for carrying out such activities.

Chapter 3. Notification

Art. 31

30. Previous to its start, any personal data processing should be notified to the Romanian Authority for Informatics. The notification should include:
a. name and address of the person responsible for data processing;
b. purposes, and if the case is, nomination of processing;
c. recorded and/or processed data types;
d. third parts categories authorized to receive the data;
e. law provisions for data processing;
f. date of notification;
g. data transfer to other countries;
h. procedures which will guarantee data security

(2) Depending on the type of processing, the Romanian Authority for Informatics may ask for information other than that at paragraph 1).

(3) Prior to operating it, any change of the data at paragraphs 1) and 2) should be notified.

Art. 32

31. If , following notification, the Romanian Authority for Informatics will find that processing show risks of prejudicing the rights and liberties of the natural persons concerned, they may exert control measures in advance to starting the processing, while notifying the data processing responsible person on this.

32. For the cases stipulated at paragraph 1), the Romanian Authority for Informatics should, within at most two months since notification, let the data processing responsible person know about the control result.
33. Provided that within at most twenty days since notification the data processing responsible persons are not knowledgeable of the control to be exerted previous to starting processing, they may start processing.
34. The data processing responsible person whose notification to the Romanian Authority for Informatics has been invalidated, may legally dispute this invalidation.

Art. 33

Any notification made to the Romanian Authority for Informatics should be put down in the registers of public and private sectors. Both registers, which are managed by the Romanian Authority for Informatics, are public documents. The public sector register reading could be restricted for one of the reasons presented at Art. 37.

Chapter 4. A Person's Rights As To Personal Data Processing

Art. 34

35. The person responsible for data processing should inform the natural person concerned whom he collects the personal data from, on at least the following:
    a. name and address of the person responsible for data processing;
    b. the aim of processing for which data have been collected, and, if the case is, the law into force based on which the data collection takes place;
    c. third parts whom the data may be transmitted to;
    d. the natural person's right to access and correct his personal data;
    e. the obligation or non-obligation to answer questions which will allow data collection;
    f. the repercussions inferred by giving a false answer.

(2) The Romanian Authority for Informatics will be free to decide, given some special circumstances under which data collection might take place, whether additional information should be provided to the person concerned.

Art. 35

36. For the case when the data collection is not performed directly on the natural person concerned, and save for the case when the person concerned knows about this, the person responsible for processing has the obligation that, before its being used for the first time, the following information should be made available to the person concerned:
    a. the goals of processing;
    b. the envisaged data types;
    c. the third parts whom the data are to be addressed to;
    d. the natural person's right to access his personal data and to correct them.

(2) Paragraph 1) does not apply when, for processing purposes related with statistics, scientific research or history, and for professional reasons, the notification of the person concerned is impossible, or when data processing and communication are law provisions.

Art. 36

Any natural person has the right to ask the data processing responsible person to:
a. acknowledge, within a reasonable while and without delay, on whether there exists a processing of his personal data, and transmit these data in an intelligible form;
b. have, if the case is, these data either corrected or erased and destroyed, or locked, when their processing does not comply to the provisions of this title;
c. have the provisions at paragraph b) enforced, and, if the data have been transmitted to third parts, acknowledge on the processing carried out by the latter.

Art. 37

37. The right to notification as stipulated at Art. 34 and Art. 35 and the access right as stipulated at Art. 36 may be denied, confined or postponed if such a measure should be taken for:

a. state security;
b. national defense;
c. prosecution;
d. public order;
e. major public interest;
f. control and inspection activities by public authorities;
g. protection of the person concerned or of another person's prevailing right.

(2) For all these cases control will be exerted by the Romanian Authority for Informatics, on their own initiative or if asked by the person concerned.

Art. 38

In addition to the rights stipulated at Art. 36, the natural person concerned has the right to:

a. object, for lawful reasons, to his personal data being processed;
b. elude a private administrative decision or a public authority decision which, based on his personal data processing, makes appreciation on his behavior, only taking into consideration personal data processing, yielding a sketch of his character and personality;
c. know the considerations of an automatic processing of which results are unfavorable to him;
d. dispute, if the case is, the types of data collected by the person responsible for data processing;
e. be acknowledged, within a reasonable while and without delay, on whether there exists a processing of his personal data, and be transmitted these data in an intelligible form;
f. have, if the case is, these data either corrected or erased and destroyed, or locked, for as long as their processing does not comply to the provisions of this title;
g. get, upon request, the data concerning himself and being processed for publicity and marketing purposes;
h. be notified, in the case of lett. f) or if his personal data have also been transmitted to third parts, on the processing carried out by the latter;
i. be compensated by the person responsible for data processing, whom the database holder joins, if he suffered a prejudice following an unauthorized processing or any other action running counter to the provisions of this title.

Art. 39

38. The natural person concerned, whose opinion is that his rights are violated, may in turn complain to:
   a. the data processing responsible person;
   b. the Romanian Authority for Informatics;

   their obligation being that of answering the complaint within at most a fortnight.

(2) The decision made by the Romanian Authority for Informatics may be disputed at the qualified judge's office.

Title V. Electronic Document and Its Probative Value

Art. 40

39. The parties' commitments and the probative means for these and for payments, as the laws into effect provide for, will add information technology-related means, to be called electronic documents .
40. It is acknowledged to be an electronic document any electronic representation of facts, things and situations which are legally relevant, and are liable to be expressed in an intelligible form.

Art. 41

Electronic documents should present a form enabling their reading and automatic processing by the natural and legal persons interested.

Art. 42

41. Electronic documents may consist in numerical data, texts, graphs, static or animate images, sound or voice records, and in general in any other automatic construction or reproduction of facts and things, or expressions of some situations, with the observance, as far as the electronic form is concerned, of the requirements defined at Art.41.
42. Electronic documents, if those at paragraph 1), will keep full evidence of the facts and things represented, provided that the person whom they are invoked against, does not dispute their conformity to the facts and things; if he does, the evidence will be contrasted to the primordial document.

Art.43

In inceptive forms, electronic documents can be submitted unsigned, but when complete and final they will bear an electronic signature which is a computer code thereby it is possible to identify the producer and to ascertain the validity of the act or document contents and/or to declare the integrity of the data stored and transmitted and/or the calendar date. On realizing the electronic signature, cryptographic methods can be used.

Art. 44

An electronic document bearing an electronic signature or being undisputed, bears equivalence, in what regards both its basic and procedural effects, to a document signed in person.

Art. 45

43. Electronic documents' acquisition, storage, processing, retrieval and distribution should fully observe the record rules so that to make sure of:
    a. their conformity with the data which the records originate from;
    b. their protection against any possible damage, alteration or unauthorized replacement;
    c. their public or private character, including their confidentiality and secret, if such data types are present.

2) Electronic documents' record, stocktaking, sorting, preservation and use, as well as their being deposited for ever should be done in compliance with the current law provisions on the national archives.

Art. 46

44. Ministry of Justice together with the State Secretariat for the Information Society may, upon request, authorize the notary offices which have their own hardware and are connected to communication networks, to carry out the following IT- related activities:
    a. the original document loading on computer together with the electronic signature of the public notary in the authorized notary office;
    b. transmission, reception and retransmission of the electronic documents of the type of those defined at lett. a);

2) A primordial document, in the acceptance given at paragraph 1), means the acts and procedures which a public notary currently deals with, legal advice on notarial matters as well as all the records and statistics legally kept by notary offices.

Art. 47

The electronic document defined at Art. 46, paragraph 1), lett. a) has the probative power of a copy which conforms with the original.

Art. 48

Authorized notary offices defined at Art. 46 will constitute, in addition to their paperwork records, electronic records of their own. Under law provisions, these records will be open to consultation by the persons interested.

Art. 49

Chambers of lawyers, legal advisers and translators authorized by the Ministry of Justice may load, send, receive and retransmit electronic documents, under the authorization defined at Art. 46, paragraph 1).

Art. 50

Legal persons acting as information technology operators in the data flow, the authorized computerized notary offices, the persons responsible for data processing and computer network managers, the information technology operators in public and private sectors, and users should co-operate with, inform and support one another for making the computerized offices and their related databases work properly, to safely record and use data and documents, to create and ideally use computer networks and office automation equipment, to enhance IT reliability and to exert due control for making such a reliability actual, to ensure data security by their physical, technical and moral protection.

Art. 51

45. The Government will, according to the title provisions on acknowledging the probative value of electronic documents, decide on the administration of electronic documents produced and used in public administration, law-courts and prosecutor's office, following discussions with the State Secretariat for the Information Society, and based on suggestions from public administrative units and with at least the approval of Ministry of Justice, Ministry of the Interior and the Department for Local Public Administration.
46. The Government decision mentioned at paragraph 1) will establish both the types of envisaged electronic documents and their form and terms. A standardized form of electronic documents should result and be compliant with the international rules.

Title VI. Infrastructure

Chapter 1. The State Secretariat for the Information Society

Art. 52

47. National Commission of Informatics will be reorganized to become the State Secretariat for the Information Society. The State Secretariat for the Information Society takes over all the rights and duties of National Commission of Informatics to the extent to which, under law provisions or on contractual clauses, such rights and duties do not expire. The State Secretariat for the Information Society will substitute for National Commission of Informatics in all their on-going litigation.
48. The State Secretariat for the Information Society which is a specialized body of the Government is the state authority for the information society development in Romania, of which mission is to set out, supervise and evaluate IT strategies and to co-ordinate their implementation in Romania.

Art. 53

49. Head of the State Secretariat for the Information Society will be a state secretary appointed by the Prime Minister order. He will represent the State Secretariat for the Information Society in their contacts with other public administration authorities , economic agents and other legal and natural persons in the country and abroad.
50. By virtue of his competence, the head of the State Secretariat for Information Society issues orders and instructions, methodologies, regulations, technical recommendations, and other acts for the implementation of the information society policies in Romania. He will approve any regulation which concerns the information society sphere, including domestic regulations for international trade in the IT

Art. 54

51. The main competence of the State Secretariat for the Information Society are:
    a. to set out, in collaboration with the other interested factors, the strategy for the information society development in Romania, and submit it to the approval of the Government;
    b. to learn about world trends in the field so that the strategy defined at lett. a) should be updated;
    c. to co-ordinate strategic actions and submit quarterly status reports on the progress of the information society to the Government;
    d. to represent, under law-abiding conditions, the Government of Romania in their contacts with European and international organizations in the information society sphere;
    e. to allocate funds for a consistent development of the information system for public administration;
    f. to submit to the Government efficient policies for the private sector development, the information society driven force in Romania;
    g. to submit to the Government a set of rules for encouraging the development of software products and services, thus making Romania join the software producers and vendors community;
    h. to launch and approve the development of national standards which will meet national requirements and be conformant to the European and international standards in the IT field;
    i. to approve strategic planning for the societal informatisation for public administration units, public institutions, national societies and others of the kind, and to delegate, if the case is, on bidding evaluation commissions;
    j. to co-ordinate public data transmission networks set up, which will observe the standards recommended by the EC;
    k. to allocate and manage e-mail addresses within the global information networks operational in Romania;
    l. to carry out and support international co-operative actions in the IT field by their participation in the projects of European, regional and world organizations;
    m. to fulfil other duties incumbent on them under law.

(2) The Government will decide on the organization and the activity of the State Secretariat for the Information Society and on the maximum number of positions to be held there.

Art. 55

52. To financially support the strategic planning for the information society, funds will be annually allocated from the state budget, through the budget of the State Secretariat for the Information Society. For 1998 the sum from the state budget directed to the State Secretariat for the Information Society will be of at least 0.45% of the GNP.
53. For the purpose defined at paragraph 1), the State Secretariat for the Information Society will attract and manage funds allocated through international programs, and domestic private money legally earned. They will be responsible for their spending.
54. The funds mentioned at paragraphs 1) and 2) will also cover the costs for public institutions' access to global information networks.

Art. 56

55. In order to train and specialize people working in IT public institutions, to organize the public administration's software products and services quality certification, and to control them, the State Secretariat for the Information Society may designate technical organizations responsible for drawing up and enforcing regulations and technical standards in the IT field;
56. The State Secretariat for the Information Society will themselves carry out nation-wide projects or will delegate such a competence to public institutions in their subordination, or to commercial societies.

57. The State Secretariat for the Information Society will co-ordinate the Research Institute for Informatics (ICI).
58. The IT activities defined at paragraphs 1), 2), 3), to be carried out by profile technical organizations and commercial societies, will be financially supported mainly from extrabudgetary sources.

Art. 57

If so authorized by the State Secretariat for the Information Society , Romanian operators in the IT field may represent the Romanian state and join global computer networks and global information systems as actors in the international or the EC data flows, or others of the kind, while observing the obligations and meeting the conditions they have been commissioned for.

Chapter 2. The Romanian Authority for Informatics

Art. 58

In order to carry out IT -related activities and to protect human rights and the legal interests of the natural and legal persons involved in such activities, the Romanian Authority for Informatics will be set up, as an independent authority, with a legal status and as a professional group of the civil society.

Art. 59

59. The Romanian Authority for Informatics has 9 members, appointed for a five-year commission by the State Secretariat for the Information Society, as follows:
    a. a person to be appointed on the People's Advocate recommendation;
    b. a Professor specialized in constitutional law to be appointed on the recommendation of the Rectors' National Council;
    c. a Professor specialized in IT to be appointed on the recommendation of the Rectors' National Council;
    d. three persons to be appointed following the recommendation made by civil organizations acting in favor of human rights;
    e. three persons to be appointed following the recommendation made by civil organizations acting in the IT field;

(2) The Romanian Authority for Informatics will elect their president out of their members.

(3) The quality of member of the Romanian Authority for Informatics makes the following incompatible:

a. to be a member of the Government;
b. to hold executive positions in commercial societies which offer IT& C products and services;

(4) The Romanian Authority for Informatics will give their vote on each case of failure or success of their members in completing their tasks. Those members who proved to be unfit will be looked upon as ex officio resigned.

(5) Members of the Romanian Authority for Informatics will only be permitted to give up office if they resign or are proved not to be able to fulfil their tasks for more than two months.

(6) The Romanian Authority for Informatics will ask for permission to replace both their members who were incapable of fulfilling their tasks and those who resigned.

(7) If, while being commissioned, a member of the Romanian Authority for Informatics ceases to exert his competence, the person replacing him will only be commissioned for the time left up to the completion of the five -year commission of the former;

(8) A representative of the State Secretariat for the Information Society will participate as observer in the deliberations of the Romanian Authority for Informatics.

Art. 60

60. The Romanian Authority for Informatics makes decisions in their own field of activity, which will be compulsory.

61. The Romanian Authority for Informatics will approve their office instructions.

Art. 61

62. The Romanian Authority for Informatics will have their own staff who reports to the authority of their president. The president of the Romanian Authority for Informatics will appoint the natural persons who are on the control, record, settlement and decision staff acting on their behalf and who may ask for the Public Ministry support for carrying out, under law provisions, inspection and control missions.
63. The members and natural persons of the Romanian Authority for Informatics should keep, for as long as they are on duty and even after retiring, the professional secret as to the information they have become knowledgeable of in the work process.
64. The informaticians requested by the Romanian Authority for Informatics to provide information or to witness, will be absolved from keeping professional secret.

Art. 62

The activity of the Romanian Authority for Informatics will benefit from state subsidies and funding through fees and taxes collection, through donations and other statutory returns. Their kind and amount are to be decided by the Government.

Art. 63

65. Under law provisions, the Romanian Authority for Informatics will check on the lawful character of all personal data processing in public and private sectors. They will
    a. receive and analyze notifications on personal data processing, notifying, if the case is, the persons responsible for data processing on the results of the checking;
    b. establish the contents and form of their notification acts and of the registers for public and private sectors;
    c. work out non-sophisticated norms and admit departures from these for notifications on certain types of personal data processing;
    d. authorize the persons responsible for data processing and computer networks managers, thus having the possibility of checking on their profile and expertise;
    e. undertake, on their own or upon receiving complaints and appraisals, control actions. For this, the Authority may access all the processing befalling under this law;
    f. have checking competence, that is the competence of accessing the data under processing and gathering all the information required for this checking;
    g. decide, if finding out that the provisions of this law are violated, on a provisional suspension or on the interruption of data processing, on partial or full deletion of the processed data and on informing prosecutor's office or judge's office;
    h. make public available the list of personal data processing, including:
    -name and address of the person responsible for data processing;
    -processing purposes and, if the case is, their description;
    -types of recorded and processed data;
    -third parts categories being given access to data;
    -law or regulations effective on processing;
    -date of notification.

(2) In case of informing the prosecutor's office or the judge's office, or of suing, the Romanian Authority for Informatics may determine a preventive sequester upon the information system which processes the data.

(3) The Romanian Authority for Informatics may exert control actions on how the law provisions on recording and processing confidential and secret data are observed.

(4) The Romanian Authority for Informatics may co-operate with similar authorities in other countries, for mutual assistance, as well as with residents in other countries in order to obtain and protect their legal rights with respect to data processing.

(5) The Romanian Authority for Informatics may be called to act as above by an IT authority or a control authority from abroad.

Art. 64

66. The Romanian Authority for Informatics will check on the enforcing of the Code provisions on data security. Thus they will:
    a. receive and analyze any complaints or appraisals made by natural or legal persons on
        - data security guarantee;
        - being denied the access right to aggregated public data and to the methodology for defining the terminology used in public data collection and processing as stipulated at Art. 15;
        - failure in fulfilling the duties incumbent upon the persons responsible for data processing and upon computer networks managers, as stipulated at Art. 18, paragraph 2), Art. 19, paragraph 2) and Art. 20.
    b. undertake on their own or upon receiving complaints and appraisals, control actions, as stipulated at lett a);
    c. determine, on finding out that the provisions of this law are violated, provisional suspension or interruption of data processing, correction and deletion of data, and the notification of the prosecutor's or the judge's office;
    d. contribute to amiably resolving contradictory states which might appear between the natural and legal persons involved in IT-related activities.

    (2) Whenever necessary, the Romanian Authority for Informatics, may , as far as the laws and regulations of the country stipulate for a special treatment of some personal or non-personal data types, or a data transmission is going to take place, either directly or via third parts, from a country which is not part to the international or the EU regulations on human rights, civil liberties and duties, and the order rule of the participating states permits, impose special restrictions on transborder data flows.

Art. 65

67. The Romanian Authority for Informatics will be asked for their opinion on issuing various acts on human rights' and liberties' protection as to personal data processing;
68. The Romanian Authority for Informatics may submit directly to the Government or through the State Secretariat for the Information Society, proposals for drafting laws or amending those into effect on personal data processing.

Title VII. Liabilities and Penalties

Art. 66

Those not observing the provisions of this law will be liable, as the case is, to civil, material, administrative, disciplinary, offending and penal sanctions, based on the principles of the legal responsibility system in the Romanian legislation.

Art. 67

It will be an "IT offence" the deed in criminal law or in special laws which was committed by means of IT or against IT, to be punished with imprisonment, as there stipulated, of which maximum interval will be 3 years longer.

Art.68

69. The following deeds, which jeopardize the data truthfulness, will be IT offences:
    a. the deed of a person who, deliberately and without being authorized, accesses the public or private information system for the capture, storage, processing and distribution of data and/or programs, or for altering, damaging and destroying hardware, data and/or software, all being legally protected, is a law infringement and will be punished by 2 to 7 years of imprisonment;
    b. the deed of a person who deliberately causes data embezzlement, program disturbance, alteration and erroneous data transmission so that the data flow should be disturbed and

the participants in it should become suspicious with each other, is a law infringement and will be punished by 3 to 10 years of imprisonment.

(2) An attempt at the deeds stipulated at paragraph 1), lett. a) and lett. b) will also be punished.

Art. 69

Unauthorized access to public and private data flows and computer networks, no matter if followed by listening, recording or other uses in one's own or others' behalf, constitutes an infringement of insinuation in data privacy and will be punished by 2 to 7 years.

Art. 70

The deed of a person who, while accidentally entering public or private data flows and computer networks, does not renounce the activities stipulated at Art. 68, paragraph 1), lett. a) or Art. 69, and does not at once acknowledge on his accidental access to the Romanian Authority for Informatics either, will be punished by 2 to 7 years of imprisonment.

Art. 71

If the deed stipulated at Art. 68, paragraph 1), lett. a) and lett. b), Art. 69 and Art. 70 is committed by an IT employee or by any other person who looks for some advantages, the upper limit of his punishment will take 3 years more.

Art. 72

70. In case of computer frauds consisting in unauthorized use of software products, the instance may, either ex-officio or upon the request of the prosecutor's office, of a petitioner or of civil part, pronounce the seizure of the hardware by means of which the fraud was done, as well as the confiscation of all products or illegal copies obtained or distributed by fraud.
71. The instance may also dispose that illegally possessed or used software products or copies of them should be returned to the entitled person.

Art. 73

72. Upon the entitled person's request, the court may, as far as the case is pending, consent on putting a defraint upon the hardware or software under incrimination.
73. The court sentence may also include the concerned hardware seizure.
74. For future sequestration and confiscation, the hardware will be put a seal on as it is and will be unplugged or disconnected from any networking.

Art. 74

75. The following will represent infringements:
    a. disobeying of the recommendations or authorizations from the Romanian Authority for Informatics given under this law;
    b. non-recognition of the final decisions made by the Romanian Authority for Informatics or non- implementation of these decisions in due time.

    (2) Penalties for those violating these dispositions will be fines of lei 900,000 to lei 5,000,000 for the case at lett. a) and lei 3,000,000 to lei 30,000,000 for the case at lett.b)

    (3) Penalties will also hold for legal persons.

    (4) Findings of violations and penalizing fall under experts' responsibility, purposely commissioned by the State Secretariat for the Information Society and the Romanian Authority for Informatics.

Art. 75

76. The infringements defined at Art.74 also fall under the provisions of Law 32/1968 on violations' ascertaining and punishing.
77. The Government will decide on other violations to come across only in the IT field.

Art. 76

Fines on contravention and their amount, as well as due indemnities following IT trials will, according to the Government decision, be indexed by the inflation rate.

Title VIII. Final Provisions

Art. 77

The staff of the State Secretariat for the Information Society and the Romanian Authority for Informatics involved in enforcing the provisions of this Code will be worthy bonuses which will depend on their contribution. They will come from a special fund set up by a 15% deduction from the fines cashed under this law.

Art. 78

On the date of this Code coming into force, the following will be repealed:

a. Law-Decree 105/8th February 1990 on setting up National Commission of Informatics, which was published in Romania's Official Register No.24/ 9th February 1990.
b. Government Decision No. 215/1995 on the organization and the activities of National Commission of Informatics, which was published in Romania's Official Register No.70/ 18th April 1995.
c. Any other provision running counter the provisions of this Code.

Art. 79

This Code will come into effect within 90 days since its being published in Romania's Official Register.

APPENDIX Explanations to Specialised Terminology

Electronic document: as defined at Art. 40 of this Code.
/drawing up, storage, record, processing, retrieval and distribution of electronic documents: all these are activities performed on electronic documents
IT-related activities: information and data acquisition, storage, memory loading, transmission, processing, use, distribution, display, conversion
Database: a collection of data conceptually structured to describe the data characteristics and the links between their components, covering one or several application areas / *SR ISO/CEI 2382-1/01.08.05*
/data bank: an organization which provides services based on the operation of one or several databases
/legal operation of a database or data bank: law provisions based on which the database owner or holder executes software services
Computer code (as to electronic signature): computer data of a natural person, which are legally equivalent to his personal signature
/cryptographic methods: methods for hiding the semantic contents of linguistic expressions
Data privacy: a data characteristic signifying that the data availability is limited to a certain user group
The consent of the person concerned (about natural persons protection as to personal data processing): a testimony of specific and intelligent free will thereby the person concerned consents on his personal data processing
A copy of a software product: the copy of a software product made on a permanent storage (such as diskette, hard disk, magnetic cassette, magnetic tape, etc.)
Personal data: any type of data concerning an identified or identifiable natural person (called subject); **an identifiable person** is a person who may be identified, directly or indirectly, mainly addressing an identification number, or generally resorting to one or several elements possibly defining his identity (for instance , physical, physiological, mental, economic, cultural, social elements) *according to Art. 2, paragraph (a) in the 95/46/EC Directive of the European Parliament and the Council of Europe of 24th October 1995 on natural persons protection as to personal data processing and on free circulation of such data*
Public data: the data which may be freely accessed
Aggregated public data: public data which are generated by statistical-mathematical processing of primary data and which express economic and social coefficients as well as global and regional ratios in various fields (e.g. economic growth, productivity ratios, birth rate, mortality rate, criminality rate, etc.)
Computer data (Art. 8): an interpretation of information in a conventional form suitable for computer communication and automatic processing/ *SR ISO/CEI 2382-1/01.01.02*
/data accuracy, integrity and privacy (Art.18): semantic characteristics of computer data in a given context which is legally established and acknowledged as such
/nominal data: data of which aggregation will result in identifying a person, not each data item being however acknowledged as an identifier
Hardware: all physical objects making computer systems
Data flow: data routing during one or several processing
/ data traffic: backward and forward data flow among two or several users
Data fund: all the data pertaining to a pre-established context
/data structures (Art. 45): how to organize data
/data access: how to access data on computer

Personal numeric code, with general applicability (Art.28): a code meant to identify a natural person, to be used as public data and to apply in all the sectors of economic, social, political and religious life. *Some restrictions on using such codes are made in Art. 8, paragraph* 7 of *the 95/46/EC Directive of the European Parliament and the Council of Europe of 24th October 1995 on natural persons protection as to personal data processing and on free circulation of such data*

Sensitive data: as defined at Art. 10 of this Code

/confidential or secret information and data: information and data which are characterized as "private"(see the above explanation)

National information infrastructure of public administration: includes

-information nucleus consisting of general-purpose databases (checklists, permanent registers, public data banks) which guarantee data coherence in public administration and public access, and also,

-data communication infrastructure in public administration, based on the communication infrastructure development and modernization, so that data transmission and access capacities at national, regional and local levels should exist

Information technology operator: a legal person who can supply a wide range of qualitative and safe computer services, as required by European and international standards

Authorized person (on natural persons protection as to their personal data processing): a natural or legal person, public authority or any other organization which processes personal data in behalf of the person responsible for data processing

Personal data processing: any activity or set of activities automatically performed on personal data, say collection, record, structuring, storage, adaptation, alteration, retrieval, interrogation, use, transmission, distribution, availability, alignment, aggregation, locking, deletion, destruction of such data *According to Art. 2*, paragraph (b) *of the 95/46/EC Directive of the European Parliament and the Council of Europe of 24th October 1995 on natural persons protection as to personal data processing and on free circulation of such data*

Data processing - fully or partially automatic processing, non-automatic processing (Art. 33): a data conversion activity, automatically done, fully or partially, or non-automatically done

Data generation/ data generator: a generation activity, and the person who carries out such an activity

Software product: a consistent set of data and/or programs resulting from running a software product or software package. In a different sense of this notion, the software packages themselves may be looked upon as software products

Factor responsible for data processing: a natural or legal person, public authority or any other organization, authorized to make decisions on the data processing goals and means

Software service: a service available on the market for information systems design, development, implementation, operation and maintenance

Program: a series of actions performed for attaining an objective

/computer program: a sequence of statements and/or instructions written in a programming language, helping in a function or problem solving

/instruction: a computer command

/programming language: a set of rules for formalizing, according to the language deviser's idea, the statements and instructions addressed to a computer

/program code: following a program formalization based on the procedures of a programming language

Information resource: any component of an information system, which contributes to the required operations execution/SR *ISO/CEI 2382-1/01.01.23*

Computer network: a set of interconnected data processing nodes for data communication purposes/SR *ISO/CEI 2382-1/01.01.45*

/public data transmission network: a public computer network

/**computer network manager** (Art.19): a person legally responsible for the computer network concerned
/ **communications and telecommunications network** (Art. 19): a set of interconnection nodes and links,
with respect to data transmission only
Data security: a characteristic of data meaning their safety in case of an event occurrence, which could damage their integrity
Computer system (data and information processing system): a set of hardware and software enabling data processing/SR *ISO/CEI 2382-1/01.01.20*
/**advanced data and information processing system**: such a system which has one or more local-area networks
Information system: an information processing system, together with the related organizational resources such as human, technical and financial resources which provide and distribute information /*SR ISO/CEI 2382-1/01.01.22*
Information society: describes an economy and a society where a major role is played by knowledge and information acquisition, storage, processing, transmission, dissemination and use, also including the development of interactive communication techniques; significant factors in this process are: *technology-* e.g. how to set up and extend data transmission networks (data buses and information highways, respectively) and how to develop user-friendly man-machine interfaces, *industry-* e.g. multimedia production and services divisions, *work environment* -e.g. job data exchange and new working modalities (tele-working, working at home) and *all societal cultural forms-* e.g. education, culture, transport, life style. *Politically*, the information society should be a democratic society, *economically*, it should determine a considerable economic growth, and *culturally*, it should turn into a knowledge based society benefiting proper information and knowledge./ *German Federal Ministry for Education, Science, Research and Technology, 1996- ISPO/germany/initiative/iik0@ e.html.*
/***Global information society***: see above, but only from an information point of view
Software: all or part of the programs, procedures, rules and related documentation of an information processing system/*SR ISO/CEI 2382-1/01.01.08*
/**software industry**: the industry for software production
Data source/recipient/carrier: i.e. the person who generates, respectively receives, respectively carries the data
Information technologies: all the technologies which are proper to computer science, as well as to that segment of communication science which ensures data transmission in computer networks
Third parts (about natural persons protection as to their personal data processing): a natural or legal person, public authority or any other organization, anybody else other than the person concerned, the factor responsible for data processing or a person authorized to carry out personal data processing
Database holder/computer network holder: database owner, computer network owner
/ **person responsible for data processing** (Art.18) /**computer network manager** (Art.19): a person who is legally responsible for data processing and for computer network management respectively
IT traffic: a backward and forward data and software products transfer among two or several users
/**actor in IT traffic**: a person participating in this transfer
/**electronic data traffic**: electronically realized data flow
/**transborder data flow**: data flow among persons located in two or several countries
Anonymity (about natural persons protection as to personal data processing): personal data change so that they may not be associated with the person concerned any longer