

## 8 e-Government

### 8.1 Domain Description

E-government plays an important function in mediating government actions. Its role will continue to grow as communications technologies become more widespread. Already, communications technologies change the way that government operates by facilitating information dissemination, communications, and transactions. E-government comprises a number of functions currently filled by traditional modes of communications. Transactions that today require face to face contact, letter writing, or telephone communication may soon be replaced by electronic interaction.

Member States have made a commitment to the development of e-government. To this end, governments have chosen to turn e-government into a reality by making government services more accessible and more efficient. However, because of the evolving nature of information technologies and telecommunications, the requirements of building e-government are still not fully understood. Thus, it is not clear how expensive e-government will be or how long it will take to implement. Even so, momentum continues to carry this process forward.

SIBIS research into e-government examines how the implementation of e-government is coming about. Three different aspects of e-government are to be separated for analysis: government-to-citizen, government-to-business and government-to-government. Some government agencies have taken steps to create interactive sites for citizens and businesses to transact, while others restrict their presence to online information. National policy documents show how the governments of Member States are choosing to orient their efforts on e-government. Many documents sketch out a view of what e-government could be. One aspect of e-government that is treated is the expectation that it will be used by all, or at least by many. In addition, these documents consider the opportunity to redesign government processes while implementing e-government. Based on the Action Plan of the European Commission and the individual Member State Action Plans, three central tasks can be distinguished<sup>1</sup>:

- ÿ Electronic delivery of services ("Open Government"): increasing the quality of electronic government information.
- ÿ Citizen and business access to public information ("Customer orientated Government"): developing electronic services and "customer orientated" interactive service provision (authentication service, signature certifications, electronic forms, help desks and call centres, public e-mail and contact directories, job banks) and back office operations (transaction monitoring, information exchange, client feedback, etc.). Many administrative areas are concerned: land registry, taxes, passports, welfare and social service, revenue, etc.
- ÿ Improvement of internal working procedures within the central government but also between government agencies (regional representatives of ministries) and decentralised public authorities (regional and local authorities).

### 8.2 Description of major problems and gaps in statistical coverage

Existing statistics mainly focus on the availability and accessibility of electronic government services online. They consider specific government services and the level of sophistication that these services have attained. This provides a view of how the e-government infrastructure is progressing. A necessary complement to these statistics that has not developed to the same extent is a set of measures of e-government adoption and usage as

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<sup>1</sup> Public strategies for the Information Society in the Member States of the European Union; OECD Science, Technology and Industry Scoreboard, 2001

well as of user satisfaction. Most indicators to measure the usage of the electronic services are still in the development phase.

Indicators that examine the adoption, usage and user satisfaction of e-government are important because the success of e-government ultimately depends on its use and for this reason it is important to understand whether the expected consumers of e-government services are taking advantage of what is being offered to them. If not, it would be useful to understand what barriers stand in the way of realising the e-government vision that has been formulated by the European Commission in its Action Plan.

### 8.3 New indicators overview

To map the progress of e-government across different countries, a hierarchical structure of all relevant indicators was developed. This framework clearly identifies the parties involved in the elaboration of e-government. For each party, the potential of e-government is a dimension of interest. Complementary to this vision is a measure of usage that identifies barriers to usage, convenience of usage, level of usage and type of usage. The hierarchy is further analysed to define new indicators and suggest how they might be measured. This approach is followed for each of the parties: citizens, business and government. Existing indicators are mapped onto this hierarchy and gaps are identified. The gaps are the basis for proposed indicators. The table below shows two types of indicators:

- ÿ indicators for which data will be gathered on a pilot basis in SIBIS;
- ÿ additional indicators that were identified as useful measures of the status of adoption of e-government but that cannot be piloted in the SIBIS surveys for a variety of reasons, mostly because no survey of governmental organisations is being conducted in the scope of the project.

Where the thematic domain shows government, the area of interest is intra-government communication, which could be within a government agency or reach across agencies.

Thematic Domain	Sub-domain	Selected new level 1 indicators	Piloting in SIBIS
<b>Business Usage</b>	Level of usage of e-government	Current usage of Internet or EDI to access government services:	SIBIS DMS
		ÿ Payment of social contribution for employees	
		ÿ Corporation tax declaration	
		ÿ VAT declaration	
Demand for e-government	ÿ Submission of data to statistical offices	SIBIS DMS	
	ÿ Obtaining environment-related permits		
Barriers to the use of e-government	ÿ Preference for using electronic means for above services compared to conventional means of data transfer	SIBIS DMS	
	ÿ Perceived barriers and advantages of online government services		
Cost of e-government	ÿ Cost comparison of e-government and conventional channels of communication	—	

Thematic Domain	Sub-domain	Selected new level 1 indicators	Piloting in SIBIS
<b>Citizens Usage</b>	Demand for e-government	Preference for using online or conventional (face-to-face, telephone or mail) method to carry out specific government transactions: Ě Tax declaration / filing income tax return Ě Use of job search services of public employment service Ě Request for passport, driver's licence, birth certificates or other personal documents Ě Car registration Ě Declaration to the police, e.g. in case of reporting theft Ě Searches for books in public libraries Ě Announcement of change of address	SIBIS GPS
	Access to e-government	Ě Access to above government services by Internet	SIBIS GPS
		Ě Access to above government services by other means (face-to-face, call-center, ...)	—
	Experience with the use of e-government	Ě Experience using above government services via the Internet	SIBIS GPS
		Ě Availability of necessary technologies to use e-government	—
Barriers and advantages	Ě Faced barriers and advantages of online government services	SIBIS GPS	
Willingness to use e-government	Ě Willingness to use online government services	SIBIS GPS	
<b>Government</b>	Training needed to access e-government	Ě Training barriers preventing the use of e-government services within government	—
	Equipment needed to access e-government	Ě Existence of inadequate equipment to enable the implementation of e-government	—
	Demand	Ě Preferred ways of interacting within government	—
	Shortcomings and advantages	Ě Perceived shortcomings and advantages of e-government services	—

Individual indicators provide insights into the development of e-government. In certain instances, these indicators may be combined to give composite indicators that provide better insight into the situation of interest. Existing composite indicators integrate measures of e-government achievement across individual government services. These are combined to show how well government responds to citizen and to business needs. Till now, these composite indicators are only calculated for the Netherlands, but the project will check the possibility to adapt them to all EU Member States, also making use of data collected via the SIBIS surveys.