



Spatial Data Infrastructures in Europe: State of play Spring 2004

Summary report of Activity 4 of a
study commissioned by the EC
(EUROSTAT & DGENV) in the
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1. EXECUTIVE SUMMARY

By revisiting the most pertinent websites, reviewing a limited number of new publications and consulting national SDI-experts with a 1 year interval, we were able to improve and update the state of play 2003 reports regarding the NSDI in 32 European countries. Based on the 32 updated country reports we compiled an overview table displaying the major characteristics of the NSDI anno 2004 and compared it with the situation of 2003. Like for 2003, the overview table was summarized into a simple classification of the NSDI, which again was compared with a similar classification for 2003.

From the country reports and a closer examination of a number of identified websites, a list of candidate geodatasets for inclusion in INSPIRE was compiled, regarding five priority data themes: Transport, Hydrography, Elevation, Cadastre, Addresses. Major criteria for the selection of candidate datasets were (i) availability and accessibility of metadata, (ii) coverage of the national territory, (iii) spatial detail equivalent with a cartographic scale in the range of 1:10.000 – 1:50.000, (iv) analytical (vector) character.

More candidate geodatasets were found for the topographic themes 'Transport', 'Hydrography' and 'Elevation' than for the 'Cadastre' and 'Addresses' themes although many NSDI are being built on projects aiming at the modernization of the cadastral systems. However, relatively little information has been found about the exact nature and outcome of these cadastral projects. The information provided by the metadata services on which the selection of the geodatasets was based was for most cases not detailed enough to make a fair assessment. On-line exploration and exploitation metadata in English seem to be rare.

The country reports and hence the overview table compiled for the 32 countries is more complete than it was in 2003. In addition a number of errors or doubtful interpretations were corrected. Countries for which most new or more correct information was collected are AT, FR, IT, LU, CY, CZ, SK, TR and LI. Most changes occurred in the categories 'Organisational Issues' and 'Access Services'. For the former category, especially the level of operability has changed (9 countries). Also web mapping and other access services have been enhanced in several countries or were better understood by the authors.

As a result of the changes which occurred and the corrections which were done, the typology of NSDI is modified. CY, BG, RO and TR have entered the typology at the lowest level of operability. GR, LU, CZ, SK, BE-WA, FR have all gone up one class of operability. PT is a special case. Due to the take over of the NSDI- project by a NDP, PT shifted from the major category 'Not NDP-led' to the other major category 'NDP-led'. All other NSDI-initiatives were found to be stable, knowing that the applied typology is not sensitive to subtle changes.

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3. ABBREVIATIONS AND ACRONYMS

The following list presents the abbreviations and acronyms commonly used in this report. Abbreviations and acronyms used in the annexed country reports are listed in those reports.

EC	European Commission
EFTA	European Free Trade Association
ESDI	European Spatial Data Infrastructure
EU	European Union
FOI	Freedom of Information
GI	Geographical Information
GII	Geographical Information Infrastructure
GIS	Geographic Information System
GMES	Global Monitoring of Environment and Sustainability
GSDI	Global Spatial Data Infrastructure
INSPIRE	Infrastructure for Spatial Information in Europe
ISO	International Standards Organisation
JRC	Joint Research Centre of the European Commission
LSDI	Local Spatial Data Infrastructure
NA	Not Applicable
NDP	National Data Producer
NMA	National Mapping Agency
NGO	Non Governmental Organisation
NIA	No Information Available
(N)SDI	(National) Spatial Data Infrastructure
PPP	Public-Private Partnership
PSI	Public Sector Information
RSDI	Regional Spatial Data Infrastructure
TEN	Trans European Network
TSDI	Thematic Spatial Data Infrastructure

4. INTRODUCTION

With the INSPIRE legal initiative, the European Commission addresses the creation of a European Spatial Data Infrastructure that will allow the public sector users at the European, national, regional and local levels, users in private, research and NGO-environments and the citizen, to discover, access and acquire spatial data from a wide range of sources in an interoperable way for a variety of uses at conditions which do not restrain its use. The EC and the INSPIRE expert groups firmly recognize that the building blocks for such an ESDI consist of the operational or emerging national, regional and local SDI.

This report presents the state of play in Spring of 2004, of SDIs and their building blocks in 32 European countries, i.e. the 15 former EU-Member States, the 10 new EU-Member States, the 3 EU-Candidate Countries and the 4 EFTA-Countries. The report is conceived as an annex to the state of play Spring 2003 report. Especially changes which occurred between spring 2003 and spring 2004 regarding the state of NSDI are highlighted.

Alike for spring 2003, focus is on the state of play of the general purpose SDI-efforts which are ongoing or planned at the national public sector level.

The report is conceived as follows:

- The next (fifth) chapter recalls the objectives of Activity 4 of the State of Play study of which this report is a deliverable;
- The sixth chapter relates to the 'materials and methods' for this study. The approach and methods are presented used to (i) collect the relevant information and process it into updates of the country reports, (ii) update a simple typology for the studied SDIs, SDI-components and SDI-likes and (iii) produce for five important data themes (Transport network, Hydrography, Elevation, Cadastral Parcels and Addresses) an overview table of candidate geodatasets for inclusion in INSPIRE;
- The results are summarized in chapter seven. It provides an overview table of the state of play of SDI for each of the 32 countries in spring 2004 but also includes a matrix highlighting changes which occurred between 2003 and 2004. Also the outcome of the typology exercise for 2004 is presented and compared with the one elaborated for 2003;
- In separate volumes, the 32 updated country reports are presented. The overview spring 2003 and the NSDI-typology spring 2003 are included as annexes for further reference. Also the overview tables for the five selected data themes are annexed;
- An executive summary, which can also be read in terms of a number of conclusions of the study, is available as the first chapter.

5. OBJECTIVES OF AND ASSUMPTIONS FOR THE STUDY (ACTIVITY 4)

5.1 Objectives of Activity 4

An SDI consists of many elements and most European countries are in the progress of developing or have made plans to develop some -but not necessary all- of these elements. Most of the players are continuously producing or updating data and metadata, improving procedures and standards, changing national and international collaborative agreements, copyright or data access policies. With this in mind, it was judged useful to not only describe the state of play of NSDI in Europe at one moment in time (i.e. spring 2003) but also to monitor the dynamics of the NSDI over a period of 2 more years. Activity 4 of the study is devoted to the first update, valid for spring 2004. A second update, valid for spring 2005, will be conducted under Activity 5. It is clear that the approach and reporting format for Activities 4 and 5 have to be similar to the ones for the previous activities as to enable comparison and change assessment.

An additional objective for Activity 4 was the compilation for five important data themes (Transport network, Hydrography, Elevation, Cadastral Parcels and Addresses) of an overview table of candidate geodatasets for inclusion in INSPIRE, with a description of their characteristics.

5.2 Assumptions for the study

Throughout all activities of this study, the emphasis is on general purpose SDI-initiatives, i.e. SDIs for which the promotion of the sharing and re-use of reference and core thematic data is the core activity. In all countries this type of SDI is developed mainly by public sector players. SDIs focusing thematic environmental data have also been considered but other types of thematic SDI have only been mentioned. Secondly, attention was focused on initiatives focusing the national scale, i.e. NSDI, rather than lower level initiatives

However, when a national SDI is clearly lacking and regional SDIs are strongly developed, we did not limit to stating that no NSDI exists, but instead focused on either the most important, best developed or the most representative lower level SDIs in that country. Especially in decentralised countries regional SDIs are often pertinently present. For example, although efforts are made in Spain to develop a NSDI, we included a description of the more advanced regional SDI-initiative of Catalunya. In the case of Belgium the three regions (Flanders, Wallonia and Brussels) are each independently developing their own SDI and these initiatives are hence described.

Comparison of NSDI is done for the national level only in order to guarantee comparability, except for Belgium (see Section 6.2).

Only freely accessible resources and known contacts are used to describe the state of play spring 2004.

6. APPROACH

6.1 Update of the identification and description of (N)SDI-initiatives in 32 countries

Activity 4 clearly builds upon the results of Activities 1 to 3 of the study. The regular country reports presented as one part of the results of Activity 3 were used as the basis for update. They were made available to NSDI-experts and the wider public through the INSPIRE website in the fall of 2003. An invitation was sent out to provide comments and corrections. Early spring 2004, a selected list of experts were contacted in person and asked for particular comments and corrections. In addition, the project team has carried out a limited review of web sites and recent publications.

For the sake of completeness, we repeat below the way in which the Spring 2003 version of the 32 country and summary reports have been elaborated:

- From the reference characteristics of the five components of an ESDI (Legal Framework and Funding Mechanism, Geographic data (i.e. Reference and Core Thematic Data, Thematic Environmental Data), Metadata, Access Services, Standards) as identified in the final version of the Position Papers of five of the INSPIRE working groups¹ we compiled late 2002 an exhaustive list of items according to which the (N)SDIs could be described. This resulted in a so-called check-list based on which the relevant elements could be extracted from the consulted information sources. After rearranging, the list was used as the template for the description of the (N)SDI in the country reports;
- The description was performed in two stages, resulting in a first and a second version of the country report. Compared to the structure of the first version, the second was extended by sections containing report meta-information, an executive summary and a section on the method used to compile the report. Section titles for which no information could be found have been dropped in the second version;
- In the first stage (September – December 2002), the country reports were compiled based on the consultation of various web sites, documents and project references readily accessible. Most resources were gathered from the internet;
- Since for some countries, almost no information could be found in this way, some key persons were contacted. However this could not be done for all countries in the limited time and budgetary frame. In addition, a list of information sources has been sent to all INSPIRE Working Group members in order to get feedback about its completeness. Sporadically, new data sources could be identified that way;
- 31 country reports (Switzerland and Liechtenstein were combined in 1 report) resulted from the first stage. This means that in every country at least one NSDI- or NSDI-related initiative was found. In each of them, the consulted information sources were listed in the last chapter;
- In the second stage (April-June 2003), the country reports were submitted to experts in each of the 32 countries. The experts were identified through the INSPIRE expert committee. In some countries, the report was handed over to other organizations and persons for further update. In this way, for most of the reports, corrections and updates were provided. The name and affiliation of the then contributing experts is still available in the present version reports which are annexed to this summary report (Annex 9.1).

¹ The five INSPIRE working groups dealt with Architecture and Standards, Data Policy and Legal Issues, Implementation Structures and Funding, Reference Data and Metadata, Environmental Thematic User Needs)

- Through the visits to nine countries performed in the scope of Activity 2, some extra information could be collected which, where relevant, was added to the country reports spring 2003.

6.2 Comparative summary of the (N)SDI

As was the case in the 2003 report, a subset of the information gathered through Activity 4 is presented by country in an overview table (Table 2 in Section 7.1). The presented items relate to a number of organizational issues and to the five generic components of an SDI, as valid for spring 2004. They can be considered as the building blocks of the SDI under study. The items or building blocks are expressed as statements (see Table 1) and the assessment of the studied SDI-initiative has been made in terms of whether it is (1) in full agreement with the statement, (2) in partial agreement, (3) not in agreement or (4) whether not sufficient information is available for assessing the level of agreement. In Annex 9.2, we also include the table as compiled for the 2003 situation.

With this type of rating, reality is of course strongly simplified. E.g. the fact that a particular NSDI is evaluated as being in agreement with the three statements about the metadata component only means that substantial work has been done in relation to metadata. This implies that the practical meaning of these 'indicators' to assess progress made over time with respect to metadata production and implementation, is limited.

For every country a NSDI-initiative is assessed, except for Belgium. In Belgium 3 regional initiatives of which 2 major ones are being developed which together cover the entire country. The scope of these regional initiatives is much larger than the initiative at national level which at present is not consolidated. In other countries (Germany, Spain), significant regional initiatives are also deployed. However, since the collected information on these regional initiatives does not cover the entire countries and since at the national level in those countries, relevant activities are ongoing or planned often aiming at interconnecting the regional projects, we have assessed the national level.

The 2003 and 2004 tables are mutually compared in an additional table highlighting the new or corrected information which has been collected and the progress some countries have made in developing their NSDI.

6.3 Typology of (N)SDI in 32 countries

The primary goal of the typology as elaborated for the 2003 report and repeated for the 2004 situation, is to recognise the different types of SDI for the assessment of their potential contribution for the development and implementation of a successful European SDI. In the typology, we emphasize the matters of coordination since it is obvious that coordination is the major success factor for each SDI and since coordination is tackled in different ways according to the political and administrative organization of the country. The way an SDI-initiative is coordinated is undoubtedly one of its more pertinent characteristics.

In order to make the typology also useful for monitoring purposes, the degree of 'operationality' of the SDI is taken into account. The latter is a rather subjective assessment of the level of the services the SDI is providing, which is based on the assessment of the building blocks of the SDI in Table 2. It does not mean that all characteristics of NSDIs as can be derived from the INSPIRE-position papers, are in place. It rather means that production of GI is coordinated to at least a certain extent and that users of GI are supported in finding and re-using GI through SDI-mechanisms.

By comparing the classification of the NSDI between 2003 and 2004, major changes in the characteristics of the NSDI can be easily identified as shifts between classes of the typology. It is obvious however that the simple and broad nature of the typology cannot lead to the detection of subtle changes.

From the more complete description of the status of SDIs for 2003, it was obvious that in almost every European country (Bulgaria was an exception to this), one organization

of the NDP-type (NMA, Land Survey Service, Cadastral Agency) is present having the formal mandate to, a.o. maintain the national geodetic reference system, produce topographic reference data and –often- coordinate data production and dissemination with other players. As such the NDP has an implicit mandate to set up an SDI, albeit mainly from the producers' perspective. We considered this as the most basic level of SDI. User communities may or may not be active in steering committees and/or advisory boards for the NDP and NSDI. A GI-association may or may not exist, be active or not.

We distinguished countries with this type of GI-coordination from those where, of course NDP are also present, but where the NMA or another traditional data producer is not the main coordinator of the NSDI. In those countries the SDI is rather driven by a council of ministries or administrative departments, a GI-association or another type of partnership of –mainly- data users. Fundamental to this type of SDI-initiative is that the participants are willing to share each other's spatial data and those acquired from third parties and to remove the obstacles preventing this. From this perspective, participants are mainly users of GI which is acquired from the data producers. The initiative may result in a joint framework for negotiation of the SDI-participants with the data providers for optimal conditions of data characteristics, conditions or licenses for use and re-use, price, access. Such partnerships may be based on (i) a formal mandate or law, (ii) a (temporary) project agreement or (iii) voluntary contributions.

In each distinguished group, the degree of operability as derived from the presence and accessibility of the other SDI-components was included as a further discriminating factor.

7. STATE OF PLAY OF SDIs, SPRING 2004

7.1 Summary overview of state of play Spring 2004

Table 2 contains a summary of the information compiled for the (N)SDIs in 32 European countries as valid for spring 2004. Colours indicate whether the studied (N)SDIs are in large, partial or no agreement with the statements about the SDI-building blocks introduced in Section 6.2 and presented in Table 1 of this Section. The summary table for spring 2003 is presented in Annex 9.2. Table 3 is a change table. It highlights the SDI building blocks for which the assessment in 2004 is different from the one in 2003.

I. Organisational issues		
Level of SDI	1	The approach and territorial coverage of the SDI is truly national
Degree of operability	2	One or more components of the SDI have reached a significant level of operability
Coordination	3	The officially recognised or de facto coordinating body of the SDI is a NDP, i.e. a NMA or a comparable organisation (Cadastral or Land Survey Agency, i.e. a major producer of GI)
	4	The officially recognised or de facto coordinating body for the SDI is an organisation controlled by data users
	5	An organisation of the type 'national GI-association' is involved in the coordination of the SDI
Participants	6	Producers and users of spatial data are participating in the SDI
	7	Only public sector actors are participating in the SDI

Table 1: Selected building blocks for an SDI

II. Legal issues and funding		
Legal framework	8	There is a legal instrument or framework determining the SDI-strategy or -development
Public-private partnerships (PPP)	9	There are true PPP's or other cofinancing mechanisms between public and private sector bodies with respect to the development and operation of the SDI-related projects
Policy and legislation on access to public sector information (PSI)	10	There is a freedom of information (FOI) act which contains specific FOI legislation for the GI-sector
Legal protection of GI by intellectual property rights	11	GI can specifically be protected by copyright
Restricted access to GI further to the legal protection of privacy	12	Privacy laws are actively being taken into account by the holders of GI
Data licencing	13	There is a framework or policy for sharing GI between public institutions
	14	There are simplified and standardised licences for personal use
Funding model for the SDI and pricing policy	15	The long-term financial security of the SDI-initiative is secured
	16	There is a pricing framework for trading, using and/or commercialising GI

Table 1 (continued): Selected building blocks for an SDI

III. Reference Data & Core Thematic Data		
Scale and resolution	17	Geodatasets exist which provide a basis for contributing to the coverage of pan-Europe for the INSPIRE-selected data themes and components
Geodetic reference systems and projections	18	The geodetic reference system and projection systems are standardised, documented and interconvertible
Quality of reference data & core thematic data	19	There is a documented data quality control procedure applied at the level of the SDI
Interoperability	20	Concern for interoperability goes beyond conversion between different data formats
Language and culture	21	The national language is the operational language of the SDI
	22	English is used as secondary language
IV. Metadata for reference data and core thematic data		
Availability of metadata	23	Metadata are produced for a significant fraction of geodatasets of reference data and core thematic data
Metadata catalogue availability + standard	24	One or more standardised metadata catalogues are available covering more than one data producing agency
Metadata implementation	25	There is a coordinating authority for metadata implementation at the level of the SDI
V. Access and other services for reference data, core thematic data and their metadata		
Metadata	26	There are one or more on-line access services for metadata on reference data and core thematic data
Data	27	There are one ore more on-line access services for reference data and core thematic data
Web mapping	28	There are one or more web mapping services available for reference data and core thematic data
VI. Standards		
Standards	29	The SDI-initiative is devoting significant attention to standardisation issues

Table 1 (continued): Selected building blocks for an SDI

VII. Thematic environmental data		
Thematic Environmental data	30	Thematic environmental data are covered by the described SDI-initiative or there is an independent thematic environmental SDI

Table 1 (continued): Selected building blocks for an SDI

7.2 Change table 2003-2004

Country	Organisational issues (I)							Legal issues and funding (II)									Reference data & core thematic data (III)						Metadata (IV)			Access services (V)			Standards (VI)	Environmental data (VII)	Country								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				29	30						
AT	■	■										■	■					■																			AT		
BE																																					BE		
DE	■																																				DE		
DK	■																																				DK		
ES					■																																ES		
FI																																					FI		
FR	■	■		■				■	■				■	■		■																					FR		
GR		■																■																			GR		
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SK		■																																				SK	
BG	■																																					BG	
RO																																						RO	
TR	■	■	■	■	■	■	■	■																														TR	
CH																																						CH	
IS																																						IS	
LI		■																																				LI	
NO																																							NO

- In better agreement than in 2003
- In less agreement than in 2003
- Change due to removal of 'unknown', error correction or second opinion
- No change compared to 2003

Table 3: Changes between status of NSDI building blocks between spring 2003 and spring 2004

In 2003, apart from Turkey, significant information has been compiled for all investigated countries. Organisational issues and items related to metadata and access services were well covered. Although legislation on freedom of information, copyright and protection of privacy has been reviewed, few elements have been found pertaining specifically to GI. For issues of data quality and interoperability, information was lacking for most countries.

For a significant number of statements for which in 2003 no assessment could be made, information has been collected enabling their assessment in 2004. The degree of completeness of the information is indeed significantly higher in 2004 than it was in 2003. In addition a number of errors have been corrected and some doubtful appreciations of 2003 adjusted.

From the change table it can be concluded that most NSDI-initiatives are rather stable while for some of them (SK, FR) progress seems to have been made. Indeed the changes pertain almost exclusively to the 'in better agreement' rating. Only in one occasion, i.e. Portugal where the NSDI-project was taken over by a NDP, a change towards 'in less agreement' is registered where the involvement of an organization controlled by data users (statement #4) is concerned.

7.3 Typology Spring 2004

The classification rules set out in Section 6.3 lead, for 2003, to the typology presented in Annex 9.3. Based on the updated information for 2004, Table 4 is obtained.

Like for 2003, countries are divided over two distinct groups. In countries of the first group, a NDP (NMA or a similar type of agency like a National Land Service, Cadastral Agency, ...) is the officially mandated or de facto leading organization for the establishment of the NSDI. At a second level, the further involvement of associations or communities of data users in the coordination activities is taken into account. Involvement in this respect means that user organizations are present in bodies defining the mandate of the lead agency for the NSDI and/or advising upon the NSDI-projects. Finally the degree of operability of the SDI-initiative, i.e. whether one or more of its components are operational or whether the NSDI is rather in the planning stage, is considered.

The second group of countries have NSDI-initiative(s) led by a council of ministries or administrative departments, by a (non governmental) GI-association or other type of partnership of mainly data users. This group is further subdivided according to the presence or absence of a legal or otherwise formal mandate for the SDI-coordination. At the third level, the operability of the initiative is used as a discriminating factor.

In 2003, for Cyprus, Romania and Turkey no feedback was received for the country report, so the collected information was regarded as not being consolidated and therefore these countries were not included in the typology. Bulgaria was not classified since it was not clear at all whether there was coordination. Based on the extra information which was collected, those four countries could be included in the typology for 2004. They are marked *italic* in the table. Countries which changed class in the typology in 2004 as compared to 2003 are marked **bold**.

Level I	Level II	Level III	EU-15	EU+10	CC-3	EFTA-4	Class
NDP-led	users involved	operational	DK, FI, SE, PT	HU, CZ		IS, NO	1,1,1
		partially operational	AT, GR, LU	PL			1,1,2
		not operational					1,1,3
	users not involved	operational		SI			1,2,1
		partially operational		LT, SK		LI	1,2,2
		not operational		EE, LV, MT, CY	RO, BG, TR		1,2,3
not NDP-led	formal mandate	operational	BE-VL, DE, IT, IE			CH	2,1,1
		partially operational					2,1,2
		not operational					2,1,3
	no formal mandate	operational	NL, UK, BE-WA				2,2,1
		partially operational	FR				2,2,2
		not operational	ES				2,2,3

Table 4: Classification of countries according to type of NSDI

The countries which were not classified in 2003 are now all in class 1.2.3, i.e. NSDI-initiatives which are NDP-led, in which users are not explicitly involved and which have a low level of operability.

Four countries in which the NSDI is NDP-led shifted one class up. GR, LU and SK are now considered to be partially operational rather than not operational. CZ shifted to the class 1.1.1, i.e. NDP-led with users involved and with a significant level of operability.

In the group of NDP-led NSDI, PT presents a special case. In 2003 it was rated operational, not NDP-led but with a formal mandate. Since the NSDI-project was taken over from the National Centre for GI by the newly created Portuguese Geographic Institute, the change of class for PT is dramatic.

In the group of non NDP-led initiatives, IT and IE are now being rated as operational (with formal mandate). The RSDI of Wallonia in Belgium made important progress and is also appreciated as being operational, but still in a situation without formal mandate for the inter-administration group which is in charge of the RSDI. The fact that FR shifted from not to partially operational is mainly due to a too negative appreciation of the efforts of the French actors in 2003.

8. ACKNOWLEDGMENTS

For the compilation of the update, spring 2004, of the summary report on the state of play spring 2003 of (N)SDIs in Europe and of the related country reports, the authors have been able to rely on formal and less formal inputs from various persons and organizations, whom are gratefully acknowledged:

- The EC-officials from Eurostat, DGENv and JRC, guiding this study;
- All experts who have provided correcting and completing remarks to the country reports. Their names and affiliations are mentioned in the meta-information section of each report;
- Many of the participants to the INSPIRE-expert and other meetings, who during and after the meetings have provided valuable suggestions and information of conception and completion of this report.

9. ANNEXES

9.1 Regular country reports

The 32 country reports are separate documents available in printed form, as .DOC or .PDF-files. The naming convention for the digital documents is the following:

Rcr04COUNTRYCODEvx.doc or rc04rCOUNTRYCODEvx.pdf

with

- Rcr04 standing for 'regular country report 2004'
- vx standing for the version number, e.g. v4
- COUNTRY CODE as in Annex 9.5

9.3 Typology for 2003

Level I	Level II	Level III	EU-15	EU+10	EFTA-4	Class	
NDP-led	users involved	operational	DK, FI, SE	HU	IS, NO	1,1,1	
		partially operational	AT,	CZ, PL		1,1,2	
		not operational	GR, LU			1,1,3	
	users not involved	operational			SI		1,2,1
		partially operational			LT	LI	1,2,2
		not operational			EE, LV, MT, SK		1,2,3
not NDP-led	formal mandate	operational	BE-VL, DE, PT		CH	2,1,1	
		partially operational	IE, IT			2,1,2	
		not operational				2,1,3	
	no formal mandate	operational	NL, UK				2,2,1
		partially operational	BE-WA				2,2,2
		not operational	ES, FR				2,2,3

Table 6: Typology of NSDI for 2003

9.4 Overview tables for five data themes

9.5 Country codes

EU-15	
AT	Austria
BE	Belgium
DE	Germany
DK	Denmark
ES	Spain
FI	Finland
FR	France
GR	Greece
IE	Ireland
IT	Italy
LU	Luxembourg
NL	The Netherlands
PT	Portugal
SE	Sweden
UK	United Kingdom
Accession Countries	
CY	Cyprus
CZ	Czech Republic
EE	Estonia
HU	Hungary
LT	Lithuania
LV	Latvia
MT	Malta
PL	Poland
SI	Slovenia
SK	Slovak Republic
Candidate Countries	
BG	Bulgaria
RO	Romania
TK	Turkey
EFTA countries	
CH	Switzerland
IS	Iceland
LI	Liechtenstein
NO	Norway
Non-European countries	
AU	Australia
CA	Canada
US	United States of America

Table 18: Acronyms for countries