SDI Self-Assessment Framework

Version 20-08-2010

1.   The context: eSDI-NET*plus* Project

eSDI-NET*plus* Project is aimed to bring together SDI key players and target users in the Thematic Network established as platform for communication and exchange between stakeholders involved in creation and use of SDIs. The Project started in September 2007.

During 2008 and 2009 eSDI-NET*plus* Project prepared a "Methodology for describing sub-national SDIs" (eSDI-NET*plus* 2008), derived from that an operational "Evaluation Framework", analyzed some 135 sub-national and thematic SDIs across Europe. In order to assess analyzed SDIs criteria, indicators, weighted indexes were defined (http://www.esdinetplus.eu/assessment/methodology.html),
It is very important and has to be highlighted that this assessment process was set and experimented against analyzed SDIs. In this process, discussing on analysed SDIs, it was understood that some of proposed indicators had poor indicating qualities, others were ambiguous... Meanwhile, in the background, more or less openly, some "models" of SDI were outlined, and some implementation trajectories and key success factors were singled out.
The results of this assessment process were presented in the *European SDI Best Practice Awards 2009 Learning from Best Practices*, International Conference held in Turin, Italy, 26th and 27th November 2009. Twelve sub-national SDIs were commended as excellent Best Practices (http://www.esdinetplus.eu/best_practice/outstanding.html).
Adopted methodology and the overall assessment process was presented and appreciated in various international context, and there were positive interactions with some initiatives at global level (United Nations 2009, p 17).
 SDI self-assessment framework derives from this experience.

eSDI-NET*plus* Project ends in August 2010.
The Project legacy is:
-    in general, a network and a platform to exchange experiences in the field of SDI and GI, that will be managed by EUROGI,
-    a reference database of sub-national and thematic SDIs, available on the web, and
-    this *SDI self-assessment framework* (SDI-SAF)

2.   What *SDI self-assessment framework* is intended for

The SDI-SAF is intended to work in two directions.
First of all its purpose is to help SDI's officials (or SDI's steering committee) in characterising and describing their SDI. It can be seen as a check-list useful to better focus key issues in developing an SDI.
We know that the creation of an SDI and its implementation trajectory depend on many and various factors: some of them are structural (a favourable legislation, strength of Local Authorities, overall technological development of the country, the economic situation…), others are quite random (attitudes of involved people and their willingness of cooperating, a well disposed politician…). So, if we can state "each spatial data infrastructure is a special case", this assumption could result in a short-sighted approach.
To single out and to follow a successful implementation path in developing an SDI needs understanding of its own strengths and weaknesses. **Self-understanding implies comparisons and measuring against others.**

SDI-SAF is also intended to work in the opposite direction, from SDIs to SDIs community: by facilitating comparison among various SDIs practices, it fosters networking and sharing experiences among similar SDIs.
The eSDI-Net*plus* project has set up a reference database of sub-national SDIs across the EU (http://www.esdinetplus.eu). At the present time more than SDIs are referenced. In the context of INSPIRE processes, this database was found a very useful source of information about organisational and technical issues, as well as about funding, licensing and staffing. It is openly accessible.

This **reference database** (partly restructured compared to the present version) will manage the information that will be collected on the base of *SDI Self assessment framework*. It will be maintained over time by EUROGI, the European Umbrella Organization for GI. (http://www.eurogi.org/).

All sub-national and thematic SDIs are invited to self-assess themselves using SDI-SAF and to feed the reference database. Joining it incurs no costs or obligations. Even partial information about an SDI will still enable users to find similar operations in their own or other countries, whatever those similarities might be. The database facilitates the exchange of information about common issues even though applications or levels of administration may be very different.

3. What an SDI is: an operational definition

The first institutional definition of SDI was provided in the US in 1994: *"National Spatial Data Infrastructure" ("NSDI") means the technology, policies, standards, and human resources necessary to acquire, process, store, distribute, and improve utilization of geospatial data"* (US Executive Order 1994). This definition highlights mainly SDI's goals.

INSPIRE Directive defines SDI: *" 'infrastructure for spatial information' means metadata, spatial data sets and spatial data services; network services and technologies; agreements on sharing, access and use; and coordination and monitoring mechanisms, processes and procedures, established, operated or made available in accordance with this Directive"* (INSPIRE 2007, art 3). This definition describes key components of SDIs

"SDIs are formal arrangements which main goal is to increase access and availability of geographic data across a given area. The goal is … to try reducing costs, to share... data between themselves, to realise or to foster services for itself and for citizens, and to enhance the diffusion of public data to other stakeholders, especially private companies and citizens.
SDI differs from, for example, a complex geographic information system of a territorial body as an SDI cannot operate without catalogues, assign key role to metadata and serve data to external users. It requires solving issues related to integration and harmonisation of data from different owners and data producers..." (eSDI-NETplus 2008, p 6).

The term SDI is nowadays sometimes overused, e.g. for denoting what you could better term a corporate or departmental GIS.
SDI's key characters, to be recognised in SDIs good practices, are:
- the core is organising catalogues and metadata and producing data services,
- data are produced and owned mainly by external subjects or SDI's partners,
- consequently, co-operating is the essence of SDIs: issues related to data integration and harmonisation and to data property rights have to be handled
- users are mainly external, various skilled: often their needs are not well known.

4. Key recognised success factors in creating and implementing sub-national SDIs

The following list is the (daring) attempt to summarize in few lines a receipt, some key points learnt in eSDI-Net*plus* Project.
A successful SDI:
- networks, fosters collaboration, encourages partnerships and promotes cooperation within itself, across levels of government, and between governments and private institutions,
- involves real applications over an extended period of time
- awareness raising has to be seen as a concrete specific task
- is standards compliant

This list absolutely does not claim to be complete or indisputable.

5. Use of SDI-SAF

SDI-SAF is a framework of indicators. Definitions of indicators and indexes underpinning OECD activity (very often quoted) can be used as reference:

"The OECD terminology points to two major functions of indicators:
- *they **reduce the number of measurements and parameters** that normally would be required to give an exact presentation of a situation. As a consequence, the size of an indicator set and the level of detail contained in the set need to be limited. A set with a large number of indicators will tend to clutter the overview it is meant to provide.*
- *they **simplify the communication process** by which the results of measurement are provided to the user. Due to this simplification and adaptation to user needs, indicators may not always meet strict scientific demands to demonstrate causal chains. Indicators should therefore be regarded as an expression of **"the best knowledge available"**.*

DEFINITIONS
- *Indicator: a parameter, or a value derived from parameters, which points to, provides information about, describes the state of a phenomenon/environment/area, with a significance extending beyond that directly associated with a parameter value.*
- *Index: a set of aggregated or weighted parameters or indicators.*
- *Parameter: a property that is measured or observed."*

(OECD 2003) (bold types in the text are added)

SDI-SAF has to be "*as simple as possible but not simpler*" (Albert Einstein). Indicators in the SDI-SAF have to be *"as little as possible"* and *"as much as needed"* (INSPIRE JRC team). These two withering quotations (both well known) synthesizes effectively the "balance challenge" that is behind preparing this assessment framework.

In SDI-SAF qualitative indicators are coded and presented as multiple choice questions. Quantitative (numerical) indicators are classified and transformed in multiple choice questions too. Multiple choice questions are introduced in order to make easier and to speed up the use of self-assessment framework, to reduce linguistic barriers and, what is more important, to help locating each SDI practice in a "explored" and partly "measured" space, primarily by SDI's officials themselves.

6. Next possible steps

6.1 Building scale of measurement for indicators and weighted indexes.
Originally quantitative indicators are already measured on some measurement scale. It could be reasonable to normalize indicators on a common scale, to say 0-10, in order to make numbers easier comparable and more understandable. In this step only a bit of subjectivity is introduced, e.g in defining what values are "outliers" and have not to be considered. On the contrary, for qualitative indicators it is a tricky issue: it means to assign scores, grades..., steps that are highly subjective.

Indicators can be weighed and aggregated in order to build synthetic indexes. This is an usual procedure and you can find e.g. a classification of countries for "quality of life" expressed by a number.
Dealing with SDIs this process of aggregating indexes has not to go to much on. An important lesson learnt from eSDI-Net*plus* Project is: SDIs are quite different, each SDI holds some specificities. So, the synthesis process has to stop before we miss these specificities.

Indicators and indexes do not transform intrinsically subjective processes in objective ones, but are useful in order to clarify assessments of various aspects and give overall comparative coherence to assessments.
Indicators, weights, indexes are highly debatable, questionable; in the sense they are useful for debating and reasoning. In case of using indexes in SDI-SAF a open debate on scores, weights… has to be planned, obviously supported by eSDI-Net*plus* network.

6.2 Providing a shared SDI typologies classification
eSDI-Net*plus* Project collected a lot of detailed information on sub-national and thematic SDIs, but the step of producing descriptions of typical, or better, archetypal SDIs (from the point view of dimension, mix of partners, users, development path…) has not been mature by the end of the Project. A (at least) tentative list of descriptions could be provided in some months, with the support of eSDI-Net*plus* network.
In the context of SDI-SAF this list of archetypal SDIs could work as a kind of summary, a "control character", like the last character in some codes.

6.3 Comparing or integrating SDI-SAF with European Interoperability Framework
eSDI-Net*plus* Project that described and evaluatet sub-national SDIs, offered an opportunity even to collect information on SDIs compliance with the European Interoperability Framework (EIF). In fact, the indicators matrix built by eSDI-Net*plus* Project can be re-used from a different point of view, in order to measure a confidence degree of SDI with respect to the European Interoperability Framework.
A tentative aggregation of pertinent sets of eSDI-Net*plus* indicators for each EIF Underlying Principles introduced by the draft of the EIFv2.0 (IDABC 2008) was carried out (see Farruggia and Vico 2010a, Farruggia and Vico 2010b). Proposed process does not need two separate SDI assessments. So, SDI managers and stakeholders can take advantage of EIF Underlying Principle compliance assessment, auto-verifying strengths and weaknesses on which to take actions in order to improve the interoperability of their organisation.

The refinement of this methodology to assess SDI compliance with EIF has to consider:
- the definition of the SDI-SAF, as described in this document
- the final version of the EIF v2.0.

The next step is to revisit all the process done, now considering the indicators as defined within SDI-SAF, to carry out a new aggregation of pertinent sets of them for each of the Underlying Principles.
Two warnings have to be mentioned:
- being careful on the method adopted in assigning SDI-SAF indicators to EIF Underlying Principles
- looking at the four interoperability levels dimensions (legal, organisational, semantic and technical) defined within EIFv2.0, in order to verify if it possible to go beyond the level of general principles and enter in more details on an operational context.

Anyway, as far as EIF is concerned, the final version v2.0 will have to be considered. In fact, while this document is being written, the EIF v2.0 is still under revision. Such a process seems to be near to the end. The version v2.0 might differ from the draft considered in this document. For instance, a version of the draft that circulates on the web introduces 12 UPs instead of 10. Such underlying principles fall into three different categories:
- the first principle sets the frame for community action in the area of European Public Services;
- the next group of underlying principles reflect generic user needs and expectations;
- the last group of underlying principles provides a foundation for collaboration between public administrations.

7.   References

eSDI-eNETplus, WP2, 2008, *D2.01 List of common parameters to assess SDI initiatives,* June 19 2008

European Interoperability Framework (EIF) for pan-European eGovernment services (PEGS), 2008, *Draft document as basis for EIF 2.0*, http://ec.europa.eu/idabc/en/document/7728 (accessed 13 March, 2010)

Farruggia S., Vico F., 2010a, "SDI Assessment Looking Towards the European Interoperability Framework", in: *Proceedings of 2010 INSPIRE Conference*, Krakow, 22-25 June 2010

Farruggia S., Vico F, 2010b, "An SDI Assessment Tool Looking Towards the European Interoperability Framework", in: *Proceedings of the 4th International Conference on Methodologies, Technologies and Tools enabling e-Government, MeTTeG10*, 1- 2 July 2010 - Olten, Switzerland

Fast S., Farruggia S., Michi I, Rix J., Roccatagliata E., Saio G., 2010, *Dissemination and Awareness Plan (Final),* eSDI-Netplus, Deliverable D4.1-3, June 2010

INSPIRE, 2007, *Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE),* http://www.ec-gis.org/inspire/

INSPIRE Network Services Drafting Team, 2008, *INSPIRE Network Services Architecture (Version 3.0)*, http://inspire.jrc.ec.europa.eu/reports/ImplementingRules/network/D3_5_INSPIRE_NS_Architecture_v3-0.pdf (accessed 13 March, 2010).

OECD. Organisation for Economic Co-operation and Development, 2003, *OECD Environmental Indicators. Development, Measurement and Use,* http://www.oecd.org/dataoecd/7/47/24993546.pdf

United Nations, 2009, *Eighteenth United Nations Regional Cartographic Conference for Asia and the Pacific* Bangkok, 26-29 October 2009. Report of the Conference, http://unstats.un.org/unsd/METHODS/CARTOG/Asia_and_Pacific/18/Report/English.pdf

US Executive Order 1994, *Executive Order 12906, April 13, 1994*, http://www.fgdc.gov/publications/documents/geninfo/execord.html

8. SDI-SAF Table of indicators

Field name	Description	Coding
ID	State Code + Progressive Number (2 digits), e.g. IT02	Text
Country		Text
NUTS	NUTS Level (generally speaking): - Country - group of regions - Region - Province, Department… - District, Metropolitan Area… - Municipality see http://en.wikipedia.org/wiki/NUTS.	- Country = 0 - group of regions = 1 - Region = 2 - Province, Department… = 3 - District, Metropolitan Area…= 4 - Municipality = 5 - missing = 9
NUTS_ name		Text
SDI_name		Text
URL		hyperlink
Contact Person	Name	Text
Contact_person's e-mail	e-mail address of contact person	
Date_of_ compiling		Date

SDI_objectives	SDI mission and objectives (max 100 words)	Text
General_purpose/ thematic_SDI	A 'traditional' sub-national general purpose SDI serves multiple administrative tasks (typically local or regional government); a thematic SDI serves a particular theme such as forestry or flooding, but still requires multi agency participation.	- general purpose SDI = 1 - thematic SDI = 2 - missing = 9
Legal_ status	Who is legally in charge of SDI? - institution or company created ad hoc - association or consortium of various public bodies (an association is seen as something more "light" then an ad hoc institution or company) - association or consortium of various private and public bodies - SDI is in charge of an existing body and is "embedded" in it	- ad hoc institution or company = 1 - association of public bodies = 2 - association of p/p bodies = 3 - embedded = 4 - missing = 9
Legitimacy	Is there a state or regional law establishing the SDI, or stating the need of robust GI for accomplishing specific tasks (spatial planning, strategic environmental assessment…)?	- a state law = 1 - a regional law = 2 - other act = 3 - missisng = 9
Workforce	Full time equivalent (FTE) employees in SDI organisation and management (not in data production)	- FTE employees none = 0 - FTE employees 1-2 = 1 - FTE employees 3-5 = 2 - FTE employees 6-10 = 3 - FTE employees 11-20 = 4 - FTE employees > 20 = 5 - missing = 9
Organizational_ model	SDI's organizational model - centralized model: a stable (more or less) group of people is in charge of SDI, they are employed in the SDI's body or in the key partner's body - distributed model: most of activities related to SDI's management and improvement are fulfilled by a network of small groups of people, that likely are employed in partners' bodies - externalised model: most of activities related to SDI's management and improvement are fulfilled outside partners bodies	- centralized model = 1 - distributed model = 2 - externalised model = 3 - missing = 9
Year_of _creation		- < 2000 = 1 - 2000-2004 = 2 - 2005-2007 = 3 - 2008-2009 = 4 - 2010 - = 5 - missing = 9

Stage_of _development	How would you describe your SDI, still developing or mature?	- still developing = 1 - mature = 2 - missing = 9
Quantity_1	Number of datasets (or datasets series) in the SDI Dataset means identifiable collection of data [ISO 19115]; data set series are collections of data sets sharing the same product specification [ISO 19115]. In INSPIRE terminology "layer" does not exist: it is supposed to deal with a specific data organisation.	- < 10 = 1 - 10-19 = 2 - 20- 49 = 3 - 50-99 = 4 - 100-199 = 5 - 200- 499 = 6 - >=500 = 7 - missing = 9

Trajectory_ Quantity_1	Variation of number of datasets or datasets series in the last year
	   - this number is more or less stable
	   - this number increased less than 10%
	   - this number increased more than 10%
	   - this number decreased
		- number stable = 1
		- number increased less than 10% = 2
		- number increased more than 10% = 3
		- number decreased = 4
		- missing = 9

Focus_themes	SDI's focus themes (more than one check is possible; if necessary fill the 'write in' box)
	   - spatial planning
	   - environmental protection and management
	   - natural parks, nature conservation
	   - heritage protection and management
	   - tourism
	   - risk and disaster management
	   - water management
	   - mobility and transportation
	   - agriculture
	   - production and industrial facilities
	   - utilities and government services
	   - statistics
	   - meteorology
		- 'write in' box
		- missing = 9

Quantity_2	% of datasets (or datasets series) in the SDI that could be included in INSPIRE Spatial Data Themes List of Annex I, II and III	- all (100%) = 1 - more or less 80% = 2 - more or less 50% = 3 - < 50% = 4 - missing = 9

Quantity_3	% of datasets (or datasets series) that are provided with a visualization service (WMS)	- all (100%) = 1 - more or less 80% = 2 - more or less 50% = 3 - < 50% = 4 - missing = 9
Trajectory_ Quantity_3	Variation of [Quantity_3] in the year before filling date - this percentage is more or less stable - this percentage increased less than 10 points - this percentage increased more than 10 points - this percentage decreased	- percentage stable = 1 - increase less than 10 points = 2 - increase more than 10 points= 3 - this percentage decreased = 4 - missing = 9
Quantity_4	% of datasets (or datasets series) that are provided with a download service (WFS or different)	- all (100%) = 1 - more or less 80% = 2 - more or less 50% = 3 - < 50% = 4 - missing = 9
Trajectory_ Quantity_4	Variation of [Quantity_4] in the year before filling date - this percentage is more or less stable - this percentage increased less than 10 points - this percentage increased more than 10 points - this percentage decreased	- percentage stable = 1 - increase less than 10 points = 2 - increase more than 10 points= 3 - decrease = 4 - missing = 9
Quantity_5	% of datasets (or datasets series) in the SDI provided with standard metadata (ISO19115, INSPIRE IR, Dublin Core….)	- all (100%) = 1 - more or less 80% = 2 - more or less 50% = 3 - < 50% = 4 - missing = 9
Trajectory_ Quantity_5	Variation of [Quantity_5] in the year before filling date - this percentage is more or less stable - this percentage increased less than 10 points - this percentage increased more than 10 points - this percentage decreased	- percentage stable = 1 - increase less than 10 points = 2 - increase more than 10 points= 3 - decrease = 4 - missing = 9
Quantity_6	% of services in the SDI provided with standard metadata (ISO19115, INSPIRE IR, Dublin Core….)	- all (100%) = 1 - more or less 80% = 2 - more or less 50% = 3 - < 50% = 4 - missing = 9

Trajectory_ Quantity_6	Variation of [Quantity_6] in the year before filling date - this percentage is more or less stable - this percentage increased less than 10 points - this percentage increased more than 10 points - this percentage decreased	- percentage stable = 1 - increase less than 10 points = 2 - increase more than 10 points= 3 - decrease = 4 - missing = 9
Quality_1	As far as data quality is concerned (more than one check is possible) - quality thresholds are "imposed" to data producers for the dataset to be available through the SDI - the SDI operational body performs quality checks and document the results before adding a given dataset into the SDI - information regarding quality must be documented in the SDI by the producers - no mandatory elements regarding quality is requested by the SDI.	- missing = 9
Quality_2	Does the SDI enable value-adding services (more than one check is possible; if necessary fill 'writing in' box)? - thematic maps production - spatial analysis (buffer, spatial interpolation…) - indicators computation - coordinates transformation - other, fill 'write in' box	- 'write in' box - missing = 9
Technology_1	Does the SDI have geoportal facilities, i.e. are there functions that let merge information from various portals or platforms in order to support data sharing?	- yes = 1 - no = 2 - missing = 9
Technology_2	Is there a discovery service (CSW, cfr. INSPIRE IR for Discovery and View Services)?	- yes = 1 - no = 2 - missing = 9
Technology_3	Is there a metadata catalogue with a search engine (also not INSPIRE compliant)?	- yes = 1 - no = 2 - missing = 9

Technology_4	Is there a view service (WMS, cfr. INSPIRE IR for Discovery and View Services)	- yes = 1 - no = 2 - missing = 9
Technology_5	Is there a WebGIS for view functions (also not INSPIRE compliant)?	- yes = 1 - no = 2 - missing = 9
Partners_1	What is the leading party in developing or implementing the SDI? - Local Authority - other public body - private body - no strong leading party	- Local Authority = 1 - other public body = 2 - private body = 3 - no strong leading party = 4 - missing = 9
Partners_2	How would you describe your SDI, data producer (e.g. mapping agency) led or non data producer led?	- data producer led = 1 - non data producer led = 2 - missing = 9
Partners_3	Overall number of partners in the SDI (Local Authorities, public and private bodies)	- 1 = 1 - 2-5 = 2 - 6-10 = 3 - > 10 = 4 - missing = 9
Partners_4	Check list of involved partners types (more than one check is possible): - municipalities - utilities - public owned instrumental bodies - provinces or department - other public authorities (river basin authorities…) - special spatial planning authorities (natural park authorities…) - others, fill the 'write in' box	- 'write in' box - missing = 9
Partners_ binding_ mechanisms	If not defined by legal requirements referred to SDI's legal status, what are partners binding mechanisms? - partners binding mechanisms is defined by legal requirements referred to SDI's legal status - there are formal agreements - only informal agreements - jointly owned companies - other	- binding mechanisms defined by legal requirements = 1 - formal agreements = 2 - some formal and some informal agreements = 3 - only informal agreements = 4 - jointly owned companies = 5 - other = 6 - missing = 9

Networking_1	Is there a structured and formalized network of all stakeholders that are involved, or potentially could be involved?	- yes = 1 - no = 2 - not applicable = 8 - missing = 9
Networking_2	How does this network work (more than one check is possible, if necessary fill the 'write in' box): - newsletter - periodic meetings - online communications - steering committee - other, fill the 'write in' box	- 'write in' box - missing = 9
Networking_3	Is some training of (present or potential) users organized and/or offered ?	- yes = 1 - no = 2 - users training not needed = 3 - missing = 9
Networking_4	Does SDI take part to or promote exchange of experience (working groups, forums) among the SDI organizations of its Territory, Country as well as abroad?	- yes= 1 - no= 2 - missing= 9
Networking_5	Does SDI take part to or maintain communication channels with national/international bodies of the GI sector?	- yes= 1 - only at national level = 2 - no= 3 - missing= 4
Sustainability_1	In the last two years, have you done socio economic impact analysis?	- yes = 1 - no = 2 - missing = 9
Sustainability_2	Are all costs shared among all partners (in cash or in kind)?	- yes = 1 - no = 2 - not applicable = 8 - missing = 9
Sustainability_3	Has the SDI a specific budget / clear business model to sustain it? - there is one specific budget = 1 - costs are clearly assigned to partners' budgets = 2 - no clear budget = 3	- one specific budget = 1 - costs assigned to partners' budgets = 2 - no clear budget = 3 - missing = 9
Sustainability_4	Mechanism of funding could include funding and personnel. If this issue seems not to be already appropriately covered, a comment can be added	text

Sustainability_5	Does the SDI clearly deal with legal aspects (intellectual property rights – IPR, public sector information – PSI, data base protection – DBP...)? - a set of general and comprehensive rules is defined - this issue is dealt on the case by case basis - this issue is not clearly dealt	- a set of general rules is defined = 1 - on the case by case basis = 2 - not dealt = 3 - missing = 9
Use_1	Are all languages (and dialects) relevant for SDI covered?	- yes = 1 - no = 2 - missing = 9
Use_2	Is the SDI also in a foreign language? - yes completely - yes partly (only some pages) - multi-lingual tools (dictionary, thesauri, ...) are available - no	- yes completely = 1 - yes partly = 2 - multi-lingual tools = 3 - no = 4 - missing = 9
Use_3	Did the SDI carry out a users' requirements analysis last two year?	- yes = 1 - no = 2 - missing = 9
Use_4	Are there procedures to assess SDI usage and the user satisfaction (more than one check is possible)? - formal regular satisfaction questionnaire - on-line user feedback - formal user group - annual meeting - help line - other. - no procedures	
Use_5	Is there a service performance measurements (more than one check is possible)? - number of accesses to services - response times measurement - down load times measurement - other - no service performance measurements	
Use_6	Medium estimated number of unique users per month ("unique" means a user is counted just once per month)	- < 50 = 1 - 50-99 = 2 - 100-199 = 3 - 200-499 = 4 - 500-999 = 5 - >=1000 = 6 - missing = 9

Use_7	What is the level of openness of the SDI? Access	- free access for all = 1 - free access only for registered users belonging to specific groups = 2 - partially free access partially registered = 3 - not applicable = 4 - missing = 9
Use_8	What is the level of openness of the SDI? Payment	- paying = 1 - not paying = 2 - partially paying = 3 - not applicable = 8 - missing = 9
Use_9	What is the main SDI's target (only one check)?	- Local Authorities = 01 - National Authorities = 02 - other public sector bodies = 03 - private sector = 04 - NGOs = 05 - research and academia = 06 - schools = 07 - general public, citizens = 08 - other = 10 - missing = 99

Users_ profiling	User profiling: broadly distribution of users			In each cell insert the broad percentage out of the users total. The sum of percentages can be greater than 100: a user can perform more than one task.
		Internal [Intranet]	Controlled (e.g. professionals) [Extranet]	General public [Internet]	
	discovery	%	%	%	
	view	%	%	%	
	download	%	%	%	
	on-line service	%	%	%	
	up-load	%	%	%	