



Report of EuroSDR workshop “EuroSDR-project Atlas of INSPIRE Implementation methods” (29 – 30 April 2009)

Academy palace, Room Ockeghem, Hertogstraat 1, Brussels, Belgium

Organisers

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Introduction

Implementing well-performing Spatial Data Infrastructures (SDIs) is not a straightforward, linear process due to a complex of interdependent aspects such as legal, economic, technological, organisational, and public administrative. In order to meet the INSPIRE directive, it is relevant for EU member states to know the key elements that lead to successful SDI implementation. In addition, identifying key areas for further research gives the scientific community the possibility to carry out research supportive of the INSPIRE implementations. The EuroSDR-project 'INSPIRE atlas of implementation methods' aims to meet these issues by studying the current (on-going) experiences of the INSPIRE implementations, and by providing a structured overview of INSPIRE implementation methods across the member states with references to the key documents in every state. Moreover, the project aims also to define a research agenda for INSPIRE related topics.

As a start to accomplish these (research) objectives, a workshop was organised in Brussels (29-30 April 2009). This workshop was attended by 28 persons from 10 countries (Belgium, Bulgaria, Croatia, France, Germany, Slovakia, Sweden, Switzerland, The Netherlands, United Kingdom). The attendees were SDI-practitioners or SDI-scientists. Another workshop is planned for 14-15 January 2010 in Brussels.

This report presents briefly the workshop questionnaire that was distributed to the participants and the preliminary results, the workshop itself, the workshop observations, research questions, remarkable workshop quotes, and suggestions for follow up actions.

Questionnaire

Workshop input from the participants, in the form of a questionnaire, was considered to be an essential source of information for the workshop. The questionnaire, completed before the workshop, formed the basis for the workshop presentations and discussions. The answers were structured according the following themes: Organisational, Economic, Legal, and Technological (the questions were not structured on topics to give the respondents the possibility to answer in any direction). In the answers and the follow-up discussions, the participants were able to express their INSPIRE experiences in the context of several themes, and to learn from each other in a structured way. In addition, the input formed a basis for having an overview of the current implementation methods and experiences.

The following 14 questions were asked to the participants:

- Which organisations of your country are the most active in complying to INSPIRE?
- Which professional sector in your country has been the most influential in the preparation to implement INSPIRE?
- Which initiatives/changes to cope with INSPIRE have been completed?
- Which initiatives to cope/comply with INSPIRE are still on hold?
- Which articles of the INSPIRE directive cause you the biggest headaches, and why?
- Which laws and/or regulations are adapted as a direct result of INSPIRE?
- Which organisations have adapted their internal structures and activities in order to cope with INSPIRE?
- Which changes in operational management have you enforced or observed as a direct result of INSPIRE?
- Which changes in maintenance management have you enforced or observed as a direct result of INSPIRE?
- Which policy is applied to the investment management of INSPIRE?

- Where do you think are still ineffective structures and/or operations when dealing with spatial data?
- Which uncertainties are you still coping with?
- What is the main success that the introduction of INSPIRE has achieved so far?
- What key strategy do you recommend for the implementation of INSPIRE?

Before the workshop started, answers from Belgium, Bulgaria, Croatia, Germany, Slovakia, Sweden and The Netherlands were received and documented in a handout.

Preliminary analysis results of the questionnaire responses

Below, a number of preliminary results are listed. A more detailed analysis of the responses has still to be performed, after more responses have been received (the questionnaire will be distributed in November to increase the response). The results are categorized by themes: Organizational, Economic, Legal, and Technological

- Organizational results:
 - Internal structures have not so much been changed, yet new partnerships and projects are more regularly developed and set up. Ultimately, this has resulted in another ratio of task allocations (regular vs. project work)
 - None of the respondents has undertaken any measures or changes in maintenance of data.
- Economic results:
 - There is very little known or prepared in terms of investments. There are no clear policies or guidelines; neither do any respondents have clear idea what to invest in. This seems even more remarkable given the responses that many new activities need to be undertaken. Part of the reason may be that organizations have to comply with many new EU and national regulations and directives.
 - The issue of inefficiencies is seldom described in economic (production; customer; market; cost price) terms, but contributed to poor coordination, lack of standards, pending legal requirements.
 - None of the respondents mention any economic success factors or success stories.
- Legal results:
 - Articles on data sharing and responsibilities for each data theme seem to confuse a number of respondents.
 - Pending legal reform/compliance causes many legal uncertainties.
 - To provided insight into which organizations have to comply to / act upon INSPIRE, the NL made a tool.
- Technological results:
 - Data specifications are still unclear, and create uncertainty how to specify internally in organizations.

It seems that an incremental approach is useful when awaiting certain decisions on details, and when anticipating a negotiated SDI environment. Another remarkable result is that most participants contribute the awareness of spatial issues to the introduction of INSPIRE. As a final result can be mentioned that the INSPIRE State-of-Play documents (from other countries) are considered to be useful in the development of strategic plans.

Brief description of the Workshop 29- 30 April 2009

29 April

After a welcome and Introduction to the Programme by Ingrid Vanden Berghe (Belgium), several speakers presented their national strategy examples from an organisational perspective dealing with issues such as coordination, task division and capacity building (Ivan Philipov (Bulgaria), Désirée Veschetti Holmgren (Sweden), Christine Giger (Switzerland), and Sandra Wijngaarden (The Netherlands)). This morning session was closed by some questions and remarks referring to the content of the presentations (see main observations and remarkable quotes further in this document). In the afternoon, there was the opportunity to participate to the Staten-Generaal “Flanders Geoland”, a formal meeting with key decision makers in Flanders (Belgium). The aim of this event was to contribute to the development of a strategy for the Flemish SDI. The main difficulty to attend this afternoon event was the Dutch language of communication.

30 April

The second day started with presentations about strategy examples from a more technological perspective dealing with issues such as web services, standards and e-government facilities (Andreas von Dömming (Germany), Sanja Zekušić (Croatia), Katarina Leitmannova (Slovakia), Ingrid Vanden Berghe (Belgium)). After the lunch break, Peter Woodsford (United Kingdom) and Roger Longhorn (xxxx) presented strategy examples from a more economic perspective dealing with issues such (funding and pricing. The workshop ended with some follow-up activities suggested by the organisers and participants (see the end of this document). Discussing the strategies from a more legal perspective, discussing the mentioned strategies, and discussing the SDI-research agenda in more detail will be done during the second workshop.

Main observations during the workshop

- Coordination of SDI appears to be problematic and the type of coordination needed unprecedented (in the public sector). Never before has coordination of the technology been so invasive in the operational activities of each SDI stakeholder. Key characteristics of new SDI-coordination strategies that might be included in the Atlas are: “do not compete with each, but complete each other” (Belgium); “seduce and align” (The Netherlands); “leave discretionary space for organizational flexibility” (Switzerland), “what is resolved, creates confusion at the same time” (UK).
- People are eager to learn from other countries, and share with other countries and professionals, yet do not know how this can be done best (regular meetings? professional coaching? Web-based guidelines?).
- Complying to INSPIRE remains context and contingency specific, because of existing national organizational, economic and legal structures and cultural histories. Yet, a few general similarities exist:
 - All countries have to comply, one way or another, and will all be punished if they don't comply, also one way or another;
 - Coordination of INSPIRE related activities seems to work best if applying softer steering instruments – incremental approaches; seduction rather than

- coercion; complete rather than compete; seek complementary rather than compliance; keeping flexibility rather than tight organizational and decision structures;
- SDIs are a negotiated result. It is therefore necessary to build up skills and capacity in negotiating;
 - There is a need to balance INSPIRE requirements with other EU, national requirements (Egov related, PSI related, etc.).
- There is still a clear difference in how to position and embed INSIPRE in existing regulations, activities and organizational structures between new (e.g. Bulgaria, Slovakia) and accession members (e.g. Croatia) of the EU versus older members of the EU (Germany, Netherlands, Belgium, UK, Sweden). Hence, no uniform guideline or best practice can be generated.
 - The Swiss model of seeking INSPIRE compliance seems to be working, even though (or maybe because?) Switzerland is no EU member.
 - There are no clear guidelines or economic models to follow for the respective agencies. Rather than focusing on absolute cost and benefit assessments (ex post / ex ante), which are rather static and represent only one moment in time, perhaps one could use the changes of costs and changes of benefits that working with INSPIRE brings about. In other word what are the extra costs that complying to INSPIRE bring about, and what are the extra benefits and opportunities that complying bring about.

Research questions

During the workshop several research questions were identified:

- How to coordinate INSPIRE implementation in one country?
- Has something similar been coordinated before? Can we, for example, learn from e-governance and PSI interoperability that has been started since 2000?
- Is the basic question for implementing INSPIRE successfully, how to manage information?
- How to coordinate a network required for INSPIRE (technical part is similar for every country; coordination is different)?
- How to involve stakeholders in the INSPIRE implementation process (in many countries the stakeholders are limited to the governmental organizations)?
- Who are the users and how to involve them?

Remarkable quotes

During the workshop, several remarkable quotes were made:

- “Quite a lot has been resolved; yet, quite a lot of confusion has been generated as well”.
- “We learned how to cooperate in the process of developing our national SDI”.
- “Do not compete with each, but complete each other”,
- “Seduce and align”
- “Leave discretionary space for organizational flexibility”

Possible follow up actions

Possible follow-up actions as suggested by the organisers and participants are:

- Distributing the questionnaire to other INSPIRE-coordinators using EuroSDR-, EuroGI-networks.
- Updating the questionnaire response from Belgium, Bulgaria, Croatia, Germany, Slovakia, Sweden and The Netherlands.
- Designing and analyzing a 2nd questionnaire in start of 2010 through www.surveymonkey.com ; main emphasis could be on guideline alternatives, and choice between alternatives. The results could be directly usable for the respective agencies. Examples of questions:
 - Types of coordination:
 - which of the following coordination activities / tools would your agency be willing to adopt:
 - incremental strategies (as in NL)
 - consensus building (as in Belgium)
 - Web-based tools (as in Germany)
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 - How would you like to learn from or share your experiences with other countries :
 - Regular meetings
 - Professional coaching (on site)
 - Web-based tools
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 - Economic steering instruments:
 - How would you like to measure or indicate your success economically:
 - Market growth figures
 - Value-chain figures
 - Cost – benefit results
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 - In the restructuring of the budgets, would your agency prefer:
 - A general (software-based or web-based) budgeting tool
 - Direct help or coaching from an experience-based expert from another country
- Adding an evaluation question to the questionnaire asking if you would have followed the same strategy regarding the current INSPIRE implementation.
- Testing the validity of the answers of the questionnaire by having different answers from different stakeholders for the same country.
- Collecting references to key documents regarding the INSPIRE implementation of each country.
- Adding an “incremental” approach (grow by scaling up) in each of the themes (legal, economic, technology, organizational) to the Atlas. Scientifically, this is a design problem (how to ? – question). As with any design, there should be validation of some kind. This could be done through the 2nd questionnaire
- Investigating why the coordination of SDI is experienced as problematic and exploring what are possible solutions for this SDI-coordination problem.

- Collecting results of Cost-Benefit studies regarding the INSPIRE implementation.
- Writing articles - summary of survey findings and / or workshop observation could be presented. Ideas for key message / title /publication outlet:
 - Message: The implementation of INSPIRE requires a gradual and incremental approach; only then a series of key milestones and successes can be achieved and measured; Title: INSPIRE – towards an incremental approach - outlet GI conference paper –
 - Message: The best practice of SDI implementation is a collection of incremental and domain based implementation steps; Title: design and testing of INSPIRE implementation guide - outlet: IJGIS
 - Message: Organizations in different EU countries can learn from each other even though their national contexts are different; Title: INSPIRE - Balancing compliance with complementry - outlet: IJSDIR
- Writing an EuroSDR-handbook that includes all the answers of the questions, the interpretation of the analysis results, a compilation of the existing implementation methods and experiences, a research agenda for INSPIRE related topics, and a reference list of key documents regarding the implementation of INSPIRE in the Member States.
- Publishing the INSPIRE Atlas in a wiki environment. In this way, a broad community could contribute to this resource. This wiki could provide the necessary background information to evaluate and implement the components of the INSPIRE implementation strategy, and could include topics relating to organizational, economic, technological, and legal strategy issues.
- Aligning the EuroSDR ‘Atlas’-activities with INSPIRE State-of-Play activities to avoid duplication and to be complementary.
- Aligning the EuroSDR ‘Atlas’-activities with AGILE-activities regarding the research agenda.

The next workshop is planned for the 14th and 15th of January 2010. Before a detailed analysis of (new) responses has to be performed, the website has to be updated with information about the latest progress, the content of the INSPIRE Atlas has to be clarified, a prototype of the Atlas has to be designed, a research agenda has to be proposed, and the 2nd workshop has to be prepared.

The presented PPTs and additional information regarding the first EuroSDR Workshop “Atlas of INSPIRE Implementation methods” can be found at:

http://www.spatialist.be/statgen/EuroSDR_090430.html

Gewijzigde veldcode