

SDI Workshop ICCG3

Spatial Data Infrastructures: enabling sharing of data in South-East Europe

Wednesday, 16 June 2010

Workshop Report

The workshop took place on 16 June 2010 and was organized by AGISEE; it is partly funded by the European Commission's e-content+ programme as part of the project "eSDI-Net+" (<http://www.esdinetplus.eu>). It follows the "eSDI-Net+" workshop in Thessaloniki in February 2009, where SDIs from all countries in South-East Europe were presented. It also follows the International Conference "SDI Best Practice Award 2009" that took place on 26th and 27th November 2009 in Turin, Italy, with its award ceremony of the 12 best European SDIs as best practice cases.

The workshop was part of the **International Conference for Cartography and GIS (ICCG3)**: <http://www.cartography-gis.com/>. The audience consisted therefore mainly of the participants of this conference.

The workshop aimed at informing participants about geographic information systems and spatial data infrastructures, what are their benefits and why we need them, but goes further in explaining how to build them in presenting practical examples. Thus, the workshop aimed at:

- Exchange of experiences in developing and setting up of shared GIS and SDIs.
- Learning from each other to understand critical issues in South-East Europe.

The workshop targeted SDIs at sub-national – local or regional – level, in accordance with the project "eSDI-net+".

It started with a keynote speech by Joachim Rix, coordinator of the project esdi-net+ and was then organized in two sessions, separated by the lunch break. The first session presented general aspects of spatial data infrastructures and standards, and the successful spatial data infrastructure of Catalonia. GIS and SDI developments in South-East Europe were presented after the lunch break.

The workshop was an excellent summary on GIS and SDI development on local and regional level with an emphasis on South-East Europe. Actors in the region, with the representatives of municipalities in particular, could meet and exchange information; they appreciated very much to obtain information on what is happening in other cities and countries in the region. It is for sure a good start for further exchanges and communication in the region. Further contacts will be necessary, and more countries will have to be involved. The workshop is continued with a mailing list offered by OGC and AGISEE, and future meetings are envisaged.

During the workshop, it was announced that the Open Geospatial Consortium (OGC) (<http://www.opengeospatial.org>) and AGISEE, the Association for Geospatial Information in South-East Europe (<http://www.agisee.org>) have established a cooperative relationship to promote the importance of open standards in the development of spatial data infrastructures and raise the awareness of interoperability in South-East Europe.

The ultimate goals of the relationship are to create a group of people who will advance innovation and use of standards in the geospatial domain and to present the interest and requirements of this South-East Europe group to international standardisation efforts.

The two organizations encourage interested persons to join a new mailing list that has been created to:

1. Inform members of the mailing list about issues of standardisation in the geospatial domain and related domains;

2. Inform members about new standards developments, innovations and implementations;
3. Provide a forum for the exchange of information and experience.

Interested people are invited to open the following link and register to the mailing list:
<https://lists.openeospatial.org/mailman/listinfo/agisee.forum>.

The mailing list will be mainly in English to enable participation from all countries in the region, but posts in national languages are nevertheless welcome.

Agenda of the Workshop

12:00 a.m. - 12:30 a.m. Keynote speech 3

Joachim Rix, Technical University of Darmstadt (Germany), Coordinator of project eSDI-net+: Spatial Data Infrastructures: The Subnational Dimension in the European Context

12:30 p.m. – 2:00 p.m. WORKSHOP - First Part

Moderators: **Ulrich Boes**, *Bulgaria* and **Athina Trakas**, *Germany*

12:30	Ulrich Boes, AGISEE	Introduction to workshop, Presentation of esdi-net+ project, report about Thessaloniki SDI workshop, February 2009	Bulgaria
12:50	Ulrich Boes, AGISEE	Introduction into SDIs	Bulgaria
13:05	Athina Trakas, OGC-Europe	SDI standards, the role of standardization organizations	Germany
13:20	Jordi Guimet, IDEC	Best practice SDI from Western Europe: IDEC, Catalonia, Spain	Spain
13:50	Questions and Answers		

2:00 p.m. – 3:00 p.m. lunch break

3:00 p.m. – 5:00 p.m. WORKSHOP – Second Part

Moderators: **Ulrich Boes**, *Bulgaria* and **Athina Trakas**, *Germany*

15:00	Ulrich Boes, AGISEE	SDI and GIS training framework - the Vesta-GIS project	Bulgaria
15:20	Miljenko Lapaine, University of Zagreb	Croatia NSDI	Croatia
15:40	Elda Maci, Municipality of Tirana	The GIS and SDI of the municipality of Tirana	Albania
15:55	Atanas Sirekov, Municipality of Burgas	The GIS and SDI of the municipality of Burgas	Bulgaria
16:10	Georgi Selensky, Municipality of Plovdiv	The GIS and SDI of the municipality of Plovdiv	Bulgaria
16:25	Murat Güneri, İstanbul Great Municipality	The GIS and SDI of the greater municipality of Istanbul	Turkey
16:40	Roundtable, concluding discussion, future actions and follow up		
17:00	End of Workshop		

Participants

The workshop addressed people interested in the SDI theme, data owners on sub-national level who would like to make their data available via SDIs or shared GIS and people or institutions who would like to build up SDIs. The participants were mainly those of the International Conference for Cartography and GIS (ICCG3). In total, 42 people participated in the workshop.

The participants were from 18 countries. Bulgaria was with 15 participants the best represented country, followed by Brazil, Czech Republic, Pakistan and Turkey with 3 participants each. Two participants each were from Germany and Spain; other countries were represented by one delegate. Eighteen delegates were

from academia, fifteen from public organizations and fourteen from the private sector.

Overview of the Presentations

The workshop was preceded by the conference keynote speech by Joachim Rix, Technical University of Darmstadt (Germany), coordinator of the project esdi-net+, who presented the project, which is funded by the e-content+ programme of the European Commission. He explained the context of the project, defined the relation to initiatives such as INSPIRE, GMES, GEOSS, Digital Earth, in saying that it will be necessary to provide user access across initiatives and that the esdi-net+ project contributes to opening up different initiatives by networking and creation of awareness. He presented the selection of best practices cases of SDI developments in Europe and the project's SDI database that will be publicly accessible. The funded phase of the project will end in August 2010, with EUROGI taking over the role of managing the network and thus guaranteeing sustainability of the project and its results.

Ulrich Boes, president of AGISEE, opened the workshop in presenting the goals of the workshop and setting the relation to the previous workshop in February 2009 in Thessaloniki. He presented definition of spatial data infrastructures, both informal and formal ones, explained the difference between an SDI and a GIS and spoke about issues of SDI development. Athina Trakas, European director of the Open Geospatial Consortium (OGC), followed in presenting the role of standardisation bodies in the field. She explained the importance of interoperability, gave an overview of the OGC, its standards and its process of standards development. Athina concluded with presenting the regional activities of the OGC and in particular the activities in South-East Europe, where OGC and AGISEE had just concluded a collaboration agreement that was announced at this workshop. The corresponding press release is published at <http://www.opengeospatial.org/pressroom/pressreleases/1239>.

Mr. Jordi Guimet presented IDEC, the Catalan Spatial Data Infrastructure, which he defined as a network of tagged web map services containing documented geoinformation and other resources. IDEC started in 2002, became operational in 2004 and is today a demand driven, user and application centric service. He explained the benefits of this SDI and demonstrated that it is heavily used. The data from IDEC are used in many application areas such as tourism, cooperation between regional government and local authorities, local equipment maintenance and activities for control and reporting. In the future, IDEC will emphasise more quality and also include interfaces to sensors. IDEC's geo-portal is accessible at <http://www.geoportal-idec.cat/geoportal/eng>.

The afternoon session started with a short presentation of the project VESTA-GIS (<http://www.vesta-gis.eu/index.php>), which is a web based brokerage service for training and for mobility in the area of GIS and SDI; various SDI training courses are accessible via the VESTA-GIS web site. This was followed by a presentation of the successful national spatial data infrastructure of Croatia, delivered by Prof. Miljenko Lapaine, University of Zagreb, Faculty of Geodesy. He presented the organizational, legal and technical aspects of the development of the Croatian national spatial data infrastructure, showing their web services for access to data and their metadata catalogue, and for access to cadastral data. There is a well developed institutional framework, and various working groups define the details of the Croatian SDI. Miljenko continued with regional activities in the Western part of South-East Europe, pointing to awareness raising activities, as for example the Croatia NSDI and INSPIRE day that took place last November in Varazdin and is planned again for November 2010 in Osetija. Emphasis is put on cooperation between all interested and concerned actors.

The presentation by Mrs. Elda Maci, Gis Manager of the Municipality of Tirana, Albania, demonstrated the need for better urban management using GIS and showed the components of the municipal GIS. The development of the GIS of the Municipality of Burgas in Bulgaria, presented by Mr. Atanas Sirekov, IT Director, started in 1994. Today, an integrated geoportal is offered that serves many applications and includes functionality for medical waste management, local elections, tourist guidance and many others. A similar development and functionality was presented by Mp. Georgi Selensky from the Municipality of Plovdiv in Bulgaria. The GIS applications of the Istanbul Metropolitan Municipality were illustrated by Mr. Murat Güneri. He showed applications such as the Istanbul city guide, which is also available on mobile phones, traffic map, control of construction sites and street works, public transport information system. Murat further explained the structure of the Istanbul Metropolitan Municipality and of its GIS directorate, and the architecture of their GIS.

Conclusions

The preceding workshop in Thessaloniki, February 2009 concluded that SDIs in the region are not completely realized, only some of their elements exist and many differences exist between the countries. The general political situation has an impact on the development of SDIs, along with a lack of willingness of decision makers, the lack of a clear mandate and the lack of cooperation. Existing initiatives and projects are not coordinated, and the data are old and scattered. Further there is a lack of understanding and training. Users and applications act often as driving force for data sharing. Important are cadastre with land registration, and agriculture. The workshop in Thessaloniki ended in defining the need for a clear mandate and vision for SDI development, as it had been done in an exemplary way in Croatia. A need for awareness creation, training, education and learning from others is reported, and it would be necessary to be open to other and new approaches.

These conclusions were partially confirmed at this workshop, although with different words. The general situation in the region constitutes the context for reforms in the region and for SDI development. Determining factors are the economic and social system, the number of new states, heavy transition and devastation, the status of private ownership, the introduction of a real-estate market and its fast development. The political stability grows under the influence of EU processes.

SDI is recognized in the region as important conceptual and operational question and its development follows the general trend of GSDI and INSPIRE development. Basic NSDI legislation is considered necessary and is adopted in 3 countries (Croatia, Macedonia, Serbia) and the corresponding national mapping agencies are in charge of implementation. In Bosnia and Herzegovina, legislation is pending however. Challenges to be faced are that SDI is a new concept and as usual, new concepts are not readily accepted. It is in fact a challenge to accept this concept and to implement it. Capacity or rather its lack is a further challenge, and missing people and knowledge are recognized as a main obstacle for fast and successful establishment of any kind of SDI.

Having said this, there is a lack of awareness, among the politicians, stakeholders and in the own profession, there is lack of capacities and lack of knowledge. Various national data bases are under development, but data transfer and exchange culture is relatively low.

The role of the national mapping agencies has to be emphasised for SDI establishment; they are the most important actors in an SDI and would satisfy national as well as European needs. National mapping agencies are movers of geoinformation society development and their early involvement is very important. They are one of the main producers of spatial data and collect and manage spatial information and as such, they are one of the important leaders in SDI establishment and can contribute to awareness raising, sharing of best practices and education. Generally, the role of the national mapping agencies is significant, not only as producers of data but also as important leaders in SDI establishment.

There are several projects in the region, but in many cases, they are not sustainable. Funding is traditionally assured through donors. Further promising funding sources are the state budget through the national mapping agencies as SDI coordination bodies, or through local authorities, or by Public-Private Partnerships through different projects.

Concluding, it can be said in quoting Atanas Sirekov that GIS and SDI is a dream, but a possible dream.