

## EC SUPPORT LAND MANAGEMENT, GEODESY AND CARTOGRAPHY PROJECT

# **NSDI** Framework in Croatia

Croatia is on its way to joining the European Union, thus becoming part of the European information society. Improving the existing National Spatial Data Infrastructure in line with international standards such as INSPIRE is therefore a key factor for efficient management of spatial data and future economic development. This article focuses on one very important element of this process: setting up legal and institutional frameworks.

The Croatian government recognises the need for National Spatial Data Infrastructure (NSDI) improvement and has included this as part of Croatian e-Government infrastructure. Over recent years there have been various NSDI-linked initiatives and activities, most originating from the State Geodetic Administration (SGA), the national mapping and cadastral agency (NMCA). An NSDI is the connection between the public sector and a national and international spatial-data network. It provides support for government, private company and citizen decision making. One prerequisite for fast and sustainable growth of an NSDI is a well organised "spatial data society" in the sense of open collaboration between public, private and academic sectors. This partnership relies on a jointly held vision and a consensus process that unites Croatian principles and the skills and readiness of those capable of and willing to contribute to the NSDI.

#### New Legal Framework

The first legislation concerning the NSDI in Croatia came into force in February 2007: a law on State Survey and Real Estate Cadastre. A chapter of this defines the NSDI as a set of measurements, standards, specifications and services which aim at enabling effective gathering, management, exchange and use of georeferenced spatial data within the framework of e-government. The law defines NSDI and metadata, describing the content of metadata information, services, NSDI data and subjects required to participate in its establishment and maintenance. Most importantly, it sets out an institutional framework and defines NSDI bodies and their responsibilities. Note that at the time this law was being prepared definition of the INSPIRE directive was in its final phase. And although Croatia is not yet an European Union (EU) country (see Figure 1) and is therefore not required to apply the INSPIRE directive, it was decided to take it into account, thus rendering the information society ready to implement INSPIRE the moment Croatia became a member of the EU. This has resulted in a high level of compatibility between the law and the INSPIRE directive. This law establishes a basic NSDI framework as a first step towards the transfer of INSPIRE to national regulations.

#### Institutional Outline

The law defines an institutional framework of three NSDI bodies and their responsibilities (see Figure 2). The main NSDI governing body is the NSDI Council, a political body formed on 31st May 2007 and responsible for managing establishment of the NSDI. It consists of fifteen members, representatives of the Central State Administrative Office for E-Croatia, the Ministries of Defence, Justice, Sea, Tourism, Transport and Development, Agriculture, Forestry and Water Management, Science, Education and Sports, Culture, Economy, Labour and Entrepreneurship, the State Geodetic Administration, the Central Bureau of Statistics, the Croatian Hydrographic Institute, the Croatian Geodetic Institute, the Association of Geodetic-Geoinformation Specialists, the Croatian Employers Association, the Association of Information-Communication Specialists, and the Croatian Chamber of Architects and Civil Engineers. Basic tasks of the Council are to decide on the aims, strategies, policy and fundamental activities of the NSDI institutional framework; to harmonise NSDI activities with state policy and programmes; to co-ordinate planning and use of state funds for NSDI development; and to secure strong political support for overall NSDI development processes.

The NSDI Committee is a permanent executive body for NSDI establishment, responsible for initiating and co-ordinating activities at operational level, and for public relations. It currently consists of three representatives of the NSDI Council, two of the State Geodetic Administration, and the heads of working groups.

### Working Groups

Working groups, special interest groups and projects are temporary or permanent working bodies responsible for aspects of concept and

implementation. Their members are representatives of the state authorities at all levels, users and producers of spatial data, research and educational institutions etc. These bodies are appointed and dismissed by the NSDI Committee, with approval of the NSDI Council. A prerequisite for forming such a body is a clearly defined mission and detailed plan of execution. In October 2008 two working groups were created: one for NSDI technical standards, and one for spatial-data sharing policies. Their mission is the co-ordination, development and maintenance of technical implementation specifications enabling interoperability of geo-services and meeting the needs of NSDI subjects, fostering extensive use and exchange of spatial data. There is a plan to this year form three new working groups to work on the NSDI business case, co-ordination between the NSDI and e-government and capacity building for NSDI.

The SGA acts as the NSDI

Coordination Body, a secretariat of the NSDI Council, co-ordinating all NSDI bodies and providing technical support.

#### Concluding Remarks

Some important steps towards NSDI improvement in Croatia have already been taken, but future moves will be crucial for success. The new law on State Survey and Real Estate Cadastre establishes a legal and institutional framework and provides for further development and harmonisation with INSPIRE. Key factors in any future steps will be strengthening political support, capacity building, improving coordination of activities and data sharing, and enhanced leadership.

#### **Further Reading**

Bacic, Ž., Rašic´, Lj., Landek, I., Malnar, N. (2008); Building Croatian Spatial Data Infrastructure in Line with the European Standards, Proceedings of ISPRS Commission IV Congress, Beijing, China.

Cetl, V, Roic, M., Mastelic Ivic, S. (2009); Creation of an NSDI strategy - Case Study Croatia, International Journal of Spatial Data Infrastructures Research, vol. 4.

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