

Developing Infrastructural Frame for Nationwide Management of Spatial Information's in Croatia

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Content

- Way toward NSDI strategy
 - Main tasks
 - Specifics of Croatia
 - Legislative framework
 - Infrastructure framework
 - Undertaken steps
- Establishment of digital data environment
 - Customer orientation
 - Horizontal networking
 - Conclusion

Way toward NSDI strategy

- SGA initiated studies for launching activities towards establishment of infrastructural frame
 - Review of EU requirements for Geographic Information Infrastructure in Croatia (BlomInfo A/S, 2001)
 - Study on Development of the National Spatial Data Infrastructure, (Conterra GmbH, 2005)
- Governmental strategy recognize NSDI as one of the strategic tasks
- 1st (operational) step - establishment of national spatial geoportals
- 2nd step - drafting legislative framework

".....The Government will modernize the cadastre and geodetic system; launch a program to bring the land registry into line with the cadastre and geodetic register according to the standards of the European Union, with the aim of establishing an integrated system throughout the entire country. The Government will also initiate work on national infrastructure for spatial data. "

The Program of the Government of the Republic of Croatia for the 2003-2007 Mandate, 23rd December 2003, have defined "THE PRIORITIES OF THE GOVERNMENT OF THE CROATIA"

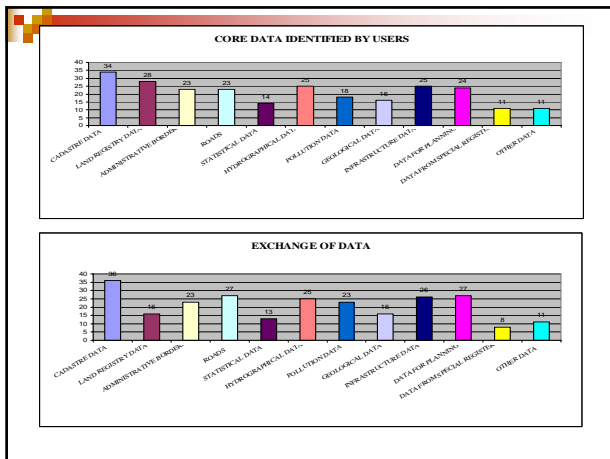
Main tasks are to:

- exploit already available data
- make spatial data more accessible and interoperable
- create interoperable spatial information across national and EU borders
- raise usage and awareness of spatial data,
- providing support in implementation of proposed roadmap for NSDI establishment
- create infrastructural framework for integration of various data sets and their broad usage

Specifics of Croatia

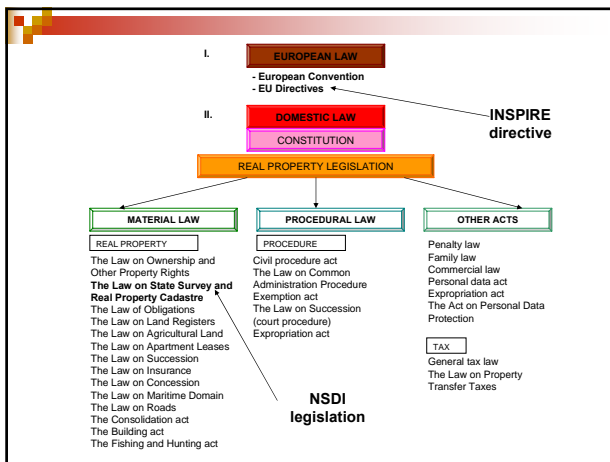
- limited existence of modern databases
- strong need for development of new datasets and GI Systems
- lack of interoperability
- missing policy on exchange and integration of data.
- institutional weaknesses about ICT strategy
- duplication of data widely present
- data exchange culture of spatial data seeks for support and legislation
- parallel processes in production of GIS systems are present but not yet overwhelming (threat and opportunity)

Therefore questionnaire was undertaken inside Croatian GI society identifying situation, problems and expectations



Legislative framework

- Proposal of new Act on State Survey and Real Property Cadastre including NSDI chapter, compiled to INSPIRE Directive, is in Governmental procedure
- Legislation proposal includes:
 - definition and content of NSDI,
 - defines stakeholders and their obligations,
 - defines spatial data included in NSDI,
 - definition of metadata and metadata services,
 - interoperability of spatial data services,
 - criteria for spatial data usage and exchange and
 - NSDI bodies (political, organizational & operational) their members and responsibilities.



Infrastructure framework

- Includes-legislative, institutional and organizational framework
- defines spatial data, standards, harmonisation and interoperability of collected spatial data, leaving at the same time to each institution (ministry) freedom to write specific technical regulation under the domain of their area of competence.
- Infrastructure framework will create environment for new processes, exchange and share of data, driven by the existing organizational culture and customer need, supported by technology as facilitator

- Nationwide management of spatial information is building its idea on decentralization, harmonization of data and activation of NSDI together with well planned and supported education
- Putting difference services in use, giving different perspective over data through visualization the awareness about use and purpose of data will increase
- Clear three-level organizational structure is proposed (NSDI Steering Committee – 16 major stakeholders, NSDI Board and Work groups)

Steps already undertaken by SGA

- **Establishment of digital data environment** – towards the goal of having all spatial data in digital form till year 2010.
- **Customer orientation**– towards the goal of satisfying customer need for availability of data
- **Horizontal networking of stakeholders** – multiinstitutional projects having goal of rising awareness and including stakeholders in NSDI development

Establishment of digital data environment

- new **topographical database** in scale 1:20.000 and production of topographical map 1:25.000 – (20 million € investment, project should finish in year 2008)
- **ortophoto** coverage of Croatia in scale 1:5000 – delivery deadline end of 2007.
- **cadastre map** scanning and vectorization (50% of sheets are scanned and 33% vectorized)
- **Cadastre resurvey** of most interesting parts of Croatia - biggest investment in our national programme - 172 cadastral municipalities, out of 3.350 covering Croatia, are newly surveyed or in resurveying process
- For those cadastre municipalities as well as vectorized ones **central vector data base** of cadastral maps has been developed

Customer orientation

- Questionnaires have identified as the most important issue for customers and stakeholders to be availability of data!
- Therefore SGA launches several projects:
 - Cadastral data browser www.katastar.hr. (parallel with the land registry data browser, available on web page www.pravosudje.hr.)
 - Geo-portal establishment as a major tool for dissemination of graphical spatial information, for providing metadata services and to serve as a NSDI communication and interaction platform

- Establishment of the Croatian Positioning System – abbreviated **CROPOS**, to be established for entire territory of Croatia till the end of year 2007
- Establishment of the **Joint Information System** including land registry and cadastre data base as one IT system providing modern functionalities and security
- First phase operational till mid 2008, full functionality in **three years**

Horizontal networking

- governmental institutions, public enterprises, county and municipal authorities, private sector
- horizontal networking is a tie through execution of specific projects of common interest by creating environment for stakeholders easier to make investments in area of production and usage of spatial data, as well enabling private sector to be able to deliver expected products
- **SUCH PROJECTS ARE:**
 - **GIS for national parks and cultural heritage** (Ministry of Culture and SGA),
 - Joint production of ortophoto maps and other spatial data for the purpose of establishment of **CROMAC GIS**, (Croatian Mine Action Centre and SGA)
 - Joint digitalization and production of spatial data for the purpose of establishment of **vineyard cadastre**, (Croatian Institute for Vineyards and Vines and SGA)
 - **INTERGEO 2006 EXHIBITION** – Croatian model of public-private partnership

Conclusion

- major effort undertaken to establish legislative and infrastructural framework for SDI in Croatia
- awareness raising about role of spatial data in society and relevancy of quality issues
- solutions for most Croatian problems regarding GI sector is in creation of NSDI as open dynamic idea supported by strong political will and technology driven performance.
- answers and reactions on questionnaire identify urgent need for NSDI and their services, defining high level of motivation among stakeholders
- huge expansion of usage of spatial data is expected! NSDI is seen as a trigger of this expansion where the level of development and incorporation of SDI in society will be measure of its success.

Thank you for
your attention!

INTERGEO 2006 FAIR - HALLE C3

11.10.2006. - 09:00-10:30 - **e-Katastar** – The Browser of Cadastral Data,
Room 05

09:00-10:30 - Establishment of the National Spatial Data **Geoportal** in Croatia
Room 11b