GNSS Activities at
VSB – Technical University of Ostrava, Czech Republic

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Content

- VSB – Technical University of Ostrava
- Institute of Geoinformatics
- Geoinformatics study branch
- GNSS as a part of geoinformatics
- Our activities
VSB – Technical University of Ostrava

- Polytechnical university (faculty of economics, mining and geology, electrotechnics and informatics, precautionar sciences, etc.)
- Established more then 150 years ago
- More then 19 000 students
- Nearly 3 000 employees
Institute of Geoinformatics

- Established in 2002
- History from 1993
- 10 employees
- 10 PhD students in regular study
- Complex system of geoinformatics education
- Research and development projects
Geoinformatics study branch

- Bachelor degree
- Engineering degree
- PhD degree
- All of them in regular and distant form
- Life-long education
- More then 320 students at present
- Habilitation nad professor titules
GNSS as a part of geoinformatics

• Two subjects taught:
  – Global navigation satellite systems
  – Geoinformation technologies

• Student projects
• Diploma theses
• PhD theses
Research and development projects

• We are under process of establishing two reference DGPS stations:
  – At our building in Ostrava (GPS+GLONASS)
  – At the top of Lysa Hora hill (GPS only)
• Ostrava will be included into CZEPOS
• Both will be part of the DGPS network for checking of CZEPOS
• At least one of them should be part of EUREF
Research and development projects

Applications of GPS and DGPS in the field of:

• Intelligent transport systems
  – Hazardous materials transport monitoring
  – Dynamic navigation
  – In car units (Intel)

• Emergency response services

• GPS meteorology (CHMI, VUGTK)
Research and development projects

• Field mapping:
  – Development of database of landslides in Moravian-Silesian Region for regional government (more than 700 areas) (2004-2005)
Research and development projects

• GNSS for international projects:
  – Trans boundary catchment management (TRANSCAT) (2003-2005; 5th FP of EU)
Research and development projects

• Other projects:
  – MIDAS – metainformation system about geodata sets used in the Czech Republic, developed in cooperation with the Czech association for Geoinformation for the Ministery of Informatics, nowadays metainformation system of public government

http://gis.vsb.cz/midas
(in Czech only)
Datový soubor

Veřejná správa a služby
Legislativa, Administrativa, Doprava, ...

Příroda
Ekologie, Fauna, Voda, Národy, Dvuzrůstů, ...

Společnost
Bezpečnost, Skolství, Historie, Myslivost, ...

Ekonomické aktivity
Bankomátská, Přímysl, Zemědělství, ...

Polohopisná a výškopsní data
DPZ, Základní mapy, Geokódování, Geodézie, ...

Využití území
Katastr, Limity, Územní rozvoj, ...

Infrastruktura
Doprava, Ingeneerské sítě, ...

Správa a ochrana majetku
Bezpečnost, Kčový management, Pajštovny, ...
Research and development projects

- Other projects:
  - WebCastle – case study locator
    - metainformation system about European GI projects
    - developed for EUROGI
    - EUROGI selected this metainformation system as the only system in Europe
    - we continue development of the WebCastle and its permanent operation at our server cluster

http://gis.vsb.cz/webcastle
Welcome to WebCastle

>>Enter New Version 2.3<<

Web based Case study locator is developed in a framework of the GINIE project

The case study services should raise the awareness of the benefits to be enjoyed from the use and exploitation of geographic information and brings the benefits of GI towards [European] citizens.

The main objective of WebCastille is deposition, maintenance and distribution of description of case studies. The core description is formalised through metadata, which are compliant with ISO 19115 (metadata for geographic information). The short description of metadata items can be visited in a proposal of Metadata Items.

Except of case studies Webcastle enables a description of organisations, persons and documents, which are related to case studies. WebCastille offers searching engine for all type of registered objects and retrieving information, link to original sources and related subjects.

We need your participation. Webcastille NEEDS TO BE POPULATED with case studies

Please send any comments to Jan Ruzicka

Authors: Jirí Horák, Branislava Horáková, Jan Ruzicka, Eva Paulmerová, Tomas Duchoslav VSB-Technical University of Ostrava + CAGI (Czech association for geoinformation), Ostrava - Prague, Czech Republic
Case study

SHOW ALL

SELECTING BY:

- alphabetic
- category
- organisation

SEARCHING TEXT
A National and Regional Development And Spatial Planning Information System (TelR) The TelR project was first launched in 1995 at the assignment to the Regional Development Office of...

An environmental Atlas of City of Prague An Atlas Project provides current and past environmental information on Prague. Information is mainly...

An interactive Environmental Atlas for Slovenia The information system and Atlas was developed in response to the Slovenian policy of access to pub...

Coastal Management in Catalonia Information Service about the Catalonian Coast for all those involved in the management of the coast...

Drawing the Boundaries The UK Countryside and Rights of Way Act 2000: the right to roam required the publication of all ope...

Early Warning and Information System for Geologic Hazards in Iceland Living in a region of the world where there is a lot of seismic activity as in Iceland that s...

Educational support programme: SauerGIS The SauerGIS project is a nationwide Swedish educational programme aimed at enhancing the use of geo...

Fluvial Control Information System: The Fluvial Control Information System is an Internet system for public purposes, which accesses the...

Genetic research into cardiovascular disease: The main objective of the research project was to identify the family form of the genetic structur...

Healthcare: Promoting the healthcare quality for all at a cost as low as possible is an objective for decision m...

Hungarian national register (VINSIS) In order to Hungary to be eligible for the European Union (EU) funds, the MARD, as the coordinating...

Maps and Beauty: Strategic planning, tactical selling and for monitoring the growth of a sales region...

Maps for Meteorological Forecasting: State of the art meteorological and hydrological system that provides accurate weather forecasts for...

Planning of sale, transport and marketing: Planning of sale, transport and marketing regions with the help of the Business Mapping System DISTR...

Planning Public transport: To enable the respective department of the state of Lucerne, to develop a key to distribute the body...

Reducing Road Casualties: The objective was to monitor road casualties with the objective redesigning road layouts to improve...

Reorganizing field service for improved expansion: Using maps, a company’s field service was reorganized. Subsequently expansion in the market was...

Reorganizing the Ambulance Service: The new regulation on working hours, which France stimutated the ambulance service operators of the dops...

Remote and Assistance Services: The introduction of client-server technologies and the GIS technology enabled a significant improve...

Road Safety: Intelligent Speed Adaptation: Between 1999 - 2002 the Swedish National Road Administration conducted a large-scale trial involv...

Seamless Citizen Service Delivery: Local government is responsible for the delivery of a very wide range of services to the local commu...

Silence Map of the Netherlands: Creating a silence map. By making visible these silence islands it is possible to indicate the speci...

Slovenian Citizen Oriented Information Service: A one-stop-shop for online information about Slovenia...

Spatial coherence of ecological networks for Northern Europe: The Netherlands is actively working on the realization of a European ecological network of which the...

Stock Farming – Streach Policy: In 1996 the Netherlands needed to review the national policy related to the impact of the outcome...

Pages: 1 2

Number of records: 34
## Case study

### Identification

<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>An environmental Atlas of city of Prague</th>
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### Description

<table>
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<th><strong>Abstract</strong></th>
<th>The Atlas Project provides current and past environmental information on Prague. Information is maintained and provided by the City of Prague.</th>
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<td><strong>Character set(s)</strong></td>
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<td><strong>Purpose of production</strong></td>
<td></td>
</tr>
<tr>
<td><strong>WWW address(es)</strong></td>
<td></td>
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</tbody>
</table>

### Extent (temporal, spatial)

| **Geographical area(s)** | Czech Republic |
| **Timeframe of case study** | Time period of case - 2001 thru May 2004 |
| **Date of case study creation** | 2001 |

### Classification

| **ISO Topics** | boundaries, elevation, environment, imagery/EaseMapsEarthCover |
| **Keywords** | environment, impact assessment, Agenda 21, freedom of information |

### Metadata of metadata

| **Date of the metadata update** | 13 November 2003 |
| **Metadata language** | English |
| **Metadata character set(s)** | usASCII |
| **Metadata contact(s)** | People: Sole | Organisations: City of Prague |

### Related organisations

| **City of Prague** | (Is Publisher of, Is Metadata contact of, Is Author of) viewed object |

### Related persons

| **Sole** | (Is Contact point of, Is Metadata contact of) viewed object |

### Related case studies

No records

### Related documents

No records

Logged user: guest, Metadata owner: GIME
Case Study

An Environmental atlas for the City of Prague
Jaroslav Solo/ City of Prague Jaroslav.Solo@cityofprague.cz
Petr Hurych/ Hydrosoft Veleslavin, hurych@hv.cz

Keywords – Environment, Impact Assessment, Agenda 21, Freedom of Information

Description of Application
The City of Prague has since the early 1980s collected and maintained environmental data on the territory of the City of Prague.
Conclusions

• We feel GNSS as an integral part of geoinformatics and geoinformation technologies

• GNSS is key component of any mobile geoinformation technologies and their applications dealing with spatial information in the field
Conclusions

• We develop many educational and research activities, both on the national and international level
• We are open to cooperation on both levels
Thank you.