Inter-Regional GI2011-X-BORDER-SDI / GDI

SYMPOSIUM

EUROPEAN BORDER REGIONS - MAP © COURTESY BY AEBR, 2011 (Compiled at IfL, 2007)

FINAL PROGRAMME DRAFT

(AGENDA, AUTHORS, ABSTRACTS, ANNEXES)

23. # 24. MAY 2011

BAD SCHANDAU (SAX) # DECIN (CZE)

This event has been supported by European Commission (EU-Programme "Inter-regional Collaboration") in Free State of Saxony (2007-2013)

EUROPEAN BORDER REGIONS

"GeoINSPIRE'd X-border-SDI/GDI for Digital Europe 2020"

SUSTAINABILITY OF INTER-REGIONAL COLLABORATION

The GeoINSPIRE'd Main FOCUS of GI2011
is about X-border-GI/GIS/GDI-Awareness, Innovation & Research on
X-PSI / X-INSPIRE – Data, Service and "*Best Practices*"
of GEO-ENVIRO-SPATIO-Applications
towards INSPIRE'd Geoportals4Everybody !

PROGRAMME COMMITTEE:

MEMBERS OF PROGRAMME & ORG COMMITTEE:

- Dr. J. BLACHOWSKI (PL), Dr. K. CHARVAT (CZ), C. CORBIN (UK), Dr. J. FURDIK (SK), Dr. K. JANECKA (CZ),
- Dr. P. KUBICEK (CZ), Dipl.Ing. W. MAYER (AT), Dipl.Ing.Tomas MILDORF(CZ), J.THURSTON (CA).
- Doz. Dr. F. HOFFMANN (DE), Prof. Dr. S. KLOSS (DE), Dr. K.-D. MICHAEL (DE), Prof. Dr. I.ROCH (DE).

REFERENCE INFORMATION & INTERNET URL'S:

- **CCSS-Praha** [http://www.CCSS.cz]
- **IGN-Dresden** [http://GDI-SN.blogspot.com]
- **UWB-Plzen** [http://www.PLAN4ALL.eu] + [http://www.SDI-EDU.zcu.cz]
- **SOCIAL NETWORKS** [INSPIRE-FORUM] + [FACEBOOK] + [LINKEDIN] + [TWITTER]

IMPRESSUM:

Herausgegeben von / Published by
Founding Members of IGN e.V.:

Doz. Dr. Frank HOFFMANN, CSc
IGN – Vorstandsvorsitzender, Dresden
INNOVATION. Grenzüberschreitendes Netzwerk e.V.

Dr. Karel CHARVAT
CCSS – President, Praha
Czech Center for Science and Society

INNOVATION. Grenzüberschreitendes Netzwerk
(Gemeinnütziger e.V. / Non-profit Organization)
c/o IGN-Vorstand, Martin-Andersen-Nexö-Str. 4
D – 01217 DRESDEN / Saxony / Germany

- SKYPE: [fh_ign]
- INTERNET: [http://www.IGN-SN.de]
- WEBLOG: [http://www.GDI-SN.de]
- EMAIL: [info@GDI-SN.de | Vorstand@IGN-SN.de]
- TEL/FAX: [+49-351-403.2729 # FAX: +49-351-401.4260]

Willkommen in der grenzüberschreitenden Euroregion *Elbe # Labe*
Welcome in the cross-border Euroregion *Elbe # Labe* (EEL)

Inter-Regional GI2011-X-border-SDI/GDI-Symposium

PROGRAMME
&
PROCEEDINGS

Bad Schandau
23. Mai 2011

Decin
24. Mai 2011

IMPRIMATUR TO PRINT
20. Mai 2011

GI2011 – CROSS-BORDER – SDI/GDI – SYMPOSIUM FOR EUROPEAN BORDER REGIONS – 23./24. MAY 2011

TOWARDS GEOINSPIRE'D X-BORDER-SDI/GDI FOR EUROPEAN BORDER REGIONS IN DIGITAL EUROPE 2020 !

IGN, CCSS and UniWB are organizing this professional event, following their long-time education and research activities to achieve better SDI/GDI awareness and closer cooperation in EUROPEAN BORDER REGIONS to adapt to the EU Strategy of "*Europe 2020*" and the Action Plan "*Digital Europe 2020*". The EU Directives on re-using of Public Sector Information (**PSI**) and development of Infrastructures for Spatial Information in Europe (**INSPIRE**) are strategic opportunities and challenges for more than **200 EUROPEAN BORDER REGIONS.**

Therefore, you are welcome to participate at this GI2011-X-border-SDI/GDI Symposium to be held as the "*11th Sächsisches GIS-Forum*" at May 23rd in **BAD SCHANDAU** (SAX) & "*1st Bohemia # Saxonia GIS-Forum*" at May 24th in **DECIN** (CZE). Both these GI2011 events should inform on the progress of EU-Directives **PSI** for re-using public sector information, as well as on **INSPIRE** about interoperability of X-border Data, Services & Applications, especially in **EUROPEAN BORDER REGIONS.**

The GI2011-X-border-SDI/GDI Symposium is presenting existing and still yet developing ***cross-border*** SDI/GDI Geoportal solutions to demonstrate the ***transformation, harmonization*** and ***integration*** processes of independent WebGIS-Portals into more complex SDI/GDI Frameworks. The importance of the "***borderless***" OpenStreetMap (OSM) will be highlighted too !

Examples of the very few existing cross-border Geoportals should have been presented like DP-PLIS, REGIOGDI-BE/BB, REGIOGDI-MRH, X-GDI-RONDUIT, REGIOGDI-RKN, GIS-GRANDEREGION, SIGRS/GISOR, DACH+, CENTROPE-Map/Statistics, REGIOCxD, as well as the less known developing SDI's from other **EUROPEAN BORDER REGIONS** now focusing on INSPIRE principles, but unfortunately, not all of these border regions have used the opportunity to present **lessons learned and strategies developed.** Nevertheless, the presentation of National **Czech INSPIRE Geoportal** will be one of the highlights of the **GI2011** Symposium !

The Goal of GI2011 Symposium is *to share* information, knowledge, and expertise, ***to learn*** from SDI and OSM „*best practices*", as well as ***to exchange and discuss*** European awareness and research projects (***NATURNET***, ***SDI-EDU***, ***HUMBOLDT***) and other European networks (***GEOPORTAL4EVERYBODY***, ***PLAN4ALL***, etc.) introducing innovative geomatics technologies, demonstrating cost-benefit approaches, as well as discussing the **frameworks for PSI, GI & SDI policy**, **organization** and **technologies** behind the **INSPIRE** process.

The GI2011-X-border-SDI/GDI-Symposium has its focus as well on actual EU research projects and "best practice" networks like ***ESDIN*** (EuroGeographics et al.), ***GEOPORTAL4EVERYBODY*** (CCSS & UNSDI.cz), ***PLAN4ALL*** (UWB & CCSS), and ***SDI-EDU*** (UWB) to share the experience and advanced knowledge directly with participants registered from **local and regional organizations in EUROPEAN BORDER REGIONS**. The GI2011-Participants will share a „***Round Table Discussion Session***" on **PSI & INSPIRE** challenges important for border regions.

The Locations of GI2011-Symposium are situated in the Center of the **Euroregion „*Elbe # Labe*" (EEL),** at the first day to be held in **Bad Schandau** (SAX), and at the second day in **Decin** (CZE), both located in the *Cross-border National Park Region of* ***"Bohemia # Saxonia Switzerland"***. The first day ends with an **INVITATION** to a **SOCIAL EVENING** taking place as "*Get together @ Lounge Room*" in Restaurant of "Hotel Posta" at Decin City Center.

An Exhibition at Castle Decin is informing about **[** Eger border treaty between Bohemia and Saxonia **]** more than 550 years ago signed in Eger (Cheb) between Bohemia and Saxonia in year 1459.

The [Interactive Historical Map **]** was developed as a X-border-**Exhibition**-Project **[„GRENZRÄUME"]** in the **Euroregion EEL** which is open for visiting at both **[** Castle Weesenstein (SAX) **]** and **[** Castle Decin (CZE) **].**

Dresden & Praha and **Plzen: April 23rd , 2011**

IGN e.V. (Dresden) # **CCSS** (Praha) & **UniWB** (Plzen)

GI2011 – RAHMENPROGRAMM - AGENDA

Interactive Agenda: **Bad Schandau** (23.05.2011) < *ELBE* **x** *LABE* > **Decin** (23./24.05.2011)
(By STRG+Clicking on Hypertext a new website can be opened from where to get more logistics, travel and additional touristics information)

DATE	TIME	GI2011-X-border-Symposium-AGENDA	LOCATION
17./18.05.	Private !	[German INTERGRAPH-GEO-Forum]	[Dresden - ICC]
17.-22.05.	Private !	[41th International DIEXIELAND-JAZZ-Festival]	[Dresden - City]
22.05.	**19:00- -22:00**	**Arrival of Keynote Speakers & Accomodation / Invitation by IGN & CCSS for Keynoters+Invited Guests**	**DDH-Hotel-Pension / BOW-Panorama-Center**
23.05.	**09:00**	**Arrival & Registration of Participants** (for travel & logistic info by car, train, ship see **[http://GDI-SN.blogspot.com]**	**[Bad Schandau] (SN)**
	10:00	**OPENING & [Multivision Show in NPC]**	[Bad Schandau - MAP]
	11:00	**X-SDI/GDI-Session 1** (OPENING, MultivisionShow, X-Policy)	[Bad Schandau - NPZ]
	12:00	**Lunch-Break**	[Bad Schandau - Wetter]
	13:00	**X-SDI/GDI-Session 2** (PSI/INSPIRE & Awareness in EBR) Cross-border GEO+ENVIRO+SPATIO Data Sharing	[Bad Schandau-Google]
	14:30	**Coffee break**	[Bad Schandau-Webcam]
	15:00	**X-SDI/GDI-Session 3** (Status of X-GI/GIS/GDI across EBR)	[Bad Schandau-NPark]
	16:00	**X-SDI/GDI-RT-Session 4** (G4E - RoundTableDiscussion)	[Elbe/Labe-Staustufe]
	17:00	**X-Relocating** to Decin & Relaxing at Hotel accommodations	[Decin Hotels] (CZ)
	19:00- -22:00	**[Social "*Get together*" Event Decin @Castle RoseGarden]**	[Decin-Castle|Burg] (EN|DE)
23.05.	**22:00**	**End of Day 1**	[Decin-Ubytovani] (CZ)
24.05.	**08:00**	**Registration at Conference Location of Decin Castle**	**DECIN (CZ)**
	09:00	**OPENING** & **X-SDI/GDI Session 5** (X-GDI/SDI-Integration)	**[DECIN-City] (CZ)**
	10:30	**Kaffeepause / Coffee-Break**	[DECIN-Zamek] (CZ)
	11:00	**X-SDI/GDI-Session 6** (X-Mapping/ X-Statistics/ X-Planning) **Cross-border Applications**	[DECIN-Castle] (EN)
	12:00	**Mittagspause / Lunch-Break**	[DECIN-Burg] (DE)
	13:00	**X-SDI/GDI-Session 7** (Education, Innovation & Research) **GEOSS and GMES Applications**	[Travel-Tips] (EN)
	14:30	**Kaffeepause / Coffee-Break**	[DECIN-WebCAM] (CZ)
	15:00	**X-SDI/GDI-Session 8** (X-PSI/-INSPIRE-Challenges in EBR) **Brainstorming & Conclusions** for EuropeanBorderRegions	[DECIN-Video] (EN)
	16:00	**Closing of the GI2011-X-border-Symposium**	[DECIN-Cruise-MAP] (EN)
24.05.	**17:00**	**Post-Symposium Social Guided Tour for Invited Guests**	**DECIN (CZ)**

Important Deadlines for active Authors:

30.03.2011	**Registration FORM for passive participants** will be available for registration and social events !
31.03.2011	**Information for Keynoters + Authors** & preliminary GI2011-X-border-Symposium Agenda DRAFT
25.04.2011	**Summary delivery by Authors** (Summary template.doc to be used/sent: [Mailto:GI2011@CCSS.de])
15.05.2011	**Präsentation delivery (PPT) by Authors** (to be sent: [Mailto:GI2011@IGN-SN.de])
23.05.2011	**Poster delivery by Authors** at Registration DESK for **Exhibition 24.05.** at DECIN Conference Location

*) **Präsentationen** erfolgen sich ergänzend in Deutsch und Englisch – **Example:** Abstract (RU), Summary (EN), PPT (DE), Presentation (EN)
) **Sprache: Es erfolgt keine simultane Übersetzung der Vorträge / **Language**: There will be no simultanous translation of presentations
***) **Keynotes:** ca. 20-30 min (incl. 5 min Q & A) / **Presentations**: ca. 10-15 min (incl. 5 min Q & A) **as fixed in the Final Programme**
****) **Internetzugang:** vorhanden / **WiFi Connectivity** as well multimedia tools and devices will be provided

Final Programme 23. Mai 2011

@ NPZ – Bad Schandau (SAX)

LOCATION ADDRESS: National-Park-Zentrum, Dresdner Str. 2b, D – 01814 BAD SCHANDAU
(Use car parking lots at nearby *Elbe* river, 100 m from NPZ)

09:00 | 10:00	**Anmeldung im Nationalparkzentrum Bad Schandau (SAX) / / Registration in the National Park Center of Bad Schandau (SAX)**	**Opening Moderators**
10:00	**CHARVAT** (CZ) / **HOFFMANN** (DE): **Opening & Welcome Addresses by CCSS, IGN** and by Local / Regional Authorities of **Bad Schandau / Euroregion "*Elbe#Labe*"**	Dr. Michael
10:15	**NATIONALPARK-ZENTRUM-Multivision:** Film: Natur protection in Cross-border "Bohemia # Saxonia Switzerland" (15 min)	
10:30	**KEYNOTE by RAMIREZ** / AEBR – Generalsekretär (ES): Grenzüberschreitende Regionen in Europa – Eine Bestandsaufnahme	
11:00	**KNIPPSCHILD** (DE): Nothing – But a waste of time and money ? – Specifics of cross-border cooperation in the …	Dr. Hoffmann
11:20	**KEYNOTE by THEVENET** / EUROINSTITUT – Stellv. Direktorin (FR): Characteristics and Challenges for successful cross-border cooperation	
11:50	**BENDEL** (DE): Grenzüberschreitende Verflechtungsräume und Analyse von Fachdaten zur Beschreibung …	
12:00 | 13:00	**Mittagspause / Lunch break**	
13:00	**Einführung POSTER-Kurzporträts / Introduction to POSTER-Descriptions** by **MAYER** – PROGIS (AT) + **BLACHOWSKI** & WBU-Team + **FURDIK** & STUBA-Teams (SK) + **GEDRANGE** & IOER-Team (DE)	**Posters**
13:15	**KEYNOTE by MAYER** (AT): GIS-Software across AGRI applications and integration of BING-Maps	Dr. Charvat
13:45	**RAITIS** / DZERVE / ALBERTS (LV): The "BIZBIZ"-Tool as an online platform for cross-border education in the SDI-EDU project	**Webcast**
14:00	**JANECKA** (CZ) & SDI-EDU-Team: LEONARDO „SDI-EDU-Project" as a framework for vocational education in EU BorderRegions	
14:15	**KLIMENT** / OGGIONI (IT): Bringing Eco-Biological Metadata to the INSPIRE metainformation world	**Webcast**
14:30 15:00	**Kaffeepause / Coffee break**	
15:00	**KEYNOTE by CHARVAT** (CZ): The pyramide or spider network – towards social geospatial space in European Border Regions	Dipl.Ing. MAYER
15:25	**KAFKA** / CHARVAT (CZ): Sharing metadata across Europe – Experiences from ONEgeology and PLAN4ALL research …	**Webcast**
15:35	**CHARVAT** / VOHNOUT (CZ): ENVIROGRIDS towards "Black Sea" catchment regions – cross-border SDI for water and …	
15:50	**ALBERTS** & ICMS-Team (LV): Economic activity in cross-border marine habitats	**Webcast**
16:00	**ROEHNERT** / GEDRANGE / NEUBERT (DE): Cross-border data harmonization in practice – examplified by German ATKIS & Czech ZABAGED	
16:20	**HOFFMANN** (DE): Challenges and opportunities for EBR – Analysis of X-border-Geoportals and GeoINSPIRE'd …	
16:40	**FINAL Day 1: "Round Table"** Discussion & Summarizing	Dr. Hoffmann & Dr. Charvat
17:00	**RE-Locating from Bad Schandau (SAX) across the border via Hrensko (CZE) to DECIN (CZE)**	
17:30 19:30	**Accomodation and Relax time etc. at Hotels** Location of Hotel **"Ceska Koruna"** [Masarykovo náměstí 60, CZ - 40501 Děčín]	**Accomodation**
19:30 | |	**Abendveranstaltung im „Lounge Room" des Restaurants „Hotel zur Post"** Location @ [Masarykovo náměstí 9, CZ - 40501 Děčín | Lounge Room] ***Social Get together at "Lounge room"* of Restaurant "Hotel Posta" in Decin**	**Get_together**
22:00	**End of Day 1**	

*) **Hinweis**: Änderungen vorbehalten! / **Comment**: Changes may apply!

Final Programme 24. Mai 2011

@ Castle – Decin (CZE)

Zámek Decin, Dlouhá jízda 1254, CZ – 40502 DECIN

(USE LOCAL PARKING LOTS IN CITY CENTER, NO PARKING AREA AT CASTLE FACILITY, CA. 400 M WALKING TO ZAMEK)

Opening	Visit the Touristic Information Center ! **Conference location is in Historic hall beyond the Castle Portal**	**Moderators**
09:00	**KEYNOTE by STERN** – Project manager of SIGRS / GISOR-X-border-Projekt (FR): Cross-border-GIS – The "Geographic Information System of the Upper Rhine" …	Dr. Charvat
09:30	**SCHRENK** & CEIT / PGO – Teams (AT): CENTROPE-Map & CENTROPE-Statistics – X-border Geodata Infrastructure with…	**Webcast**
09:45	**BLACHOWSKI** / MALCZEWSKI / BELOF (PL): The bicycle route of St. James Way in Lower Silesia project	
10:00	**MILDORF** & UWB-PLAN4ALL-Team (CZ): Spatial planning in Europe – A challenge or a piece of cake ?	**Webcast**
10:15	**MIRBACH** / LANG (DE): Development of a decision support system for monitoring the transboundary Lake "*Constance*"…	
10:30 11:00	**Kaffeepause / Coffee break**	Castle
11:00	**KEYNOTE by BLACHOWSKI** / MALCZEWSKI (PL): The regional node in spatial planning for the functional area of Wroclaw – WWIIP	Dr. Janecka
11:15	**CEPICKY** / CHARVAT (CZ): HS-Layers and PyWPS components for spatial data networking infrastructure	**Webcast**
11:45	**VOHNOUT** (CZ): Geoportal for everybody (G4E) – opensource tools supporting border regions	
11:30	**KLIMENT** (SK): Testing of SDI components – A fundamental interoperability element within INSPIRE and…	**Webcast**
12:00 | 13:00	**Mittagspause / Lunch break**	Castle
13:00	**KEYNOTE by FAUGNEROVA** & CENIA / IBM / HSRS –Teams (CZ): Czech solution for INSPIRE Geoportal - The Czech Gateway to national SDI	**Webcast**
13:20	**CHARVAT /** CEPICKY / VOHNOUT (CZ): HABITATS – Cross-border data harmonization of protected areas for tourism purposes	Dr.Hoffmann
13:40	**JANECKA** & UWB / BOS / ZPR – Teams (CZ / LV): Part **1:** Zemgale spatial planning data – Experience from x-thematical data modeling	
13:50	**BERZINA** & UWB / BOS / ZPR – Teams (LV / CZ): Part **2:** Zemgale spatial planning data – Experience from x-thematical contents harmonization	
14:00	**LACH** (PL): Cost & Benefit factors of regional SDI's of western, central and eastern parts of EU	
14:15	**VIDEO by CHRISTL** – President of OSGeo and Technical Coordinator of ESDIN-Project (DE): Architecture perspectives of a pan-european SDI – ESDIN – "Best practices" towards ELF	**ESDIN Videocast**
14:30	**CHARVAT** (CZ) & **HOFFMANN** (DE) **– Final „Round Table" Diskussion –** Towards GeoINSPIRE'd X-border-SDI/GDI for EU Border Regions in Digital Europe 2020 ! **Abschlußdiskussion des GI2011-Symposium # Closing discussion & Recommendations**	+ Hr. Stern + Dr. Furdik + Fr. Berzina + Dr. Neubert + Dr. Janecka + Fr. Thevenet + Dr.Blachowski
15:00	**Fakultativ: Schloßbesichtigung mit Ausstellung „Grenzräume / Hranice" /** Facultative Viewing of the Castle and Exposition "Border spaces / Hranice"	Zamek-DC
16:00	Fakultativ: Abschiedsmeeting im Schloßkaffee & Besuch des Souvenir-Shops für Touristen # # Welfare Meeting in the Castle Coffee Pub & Visiting the Touristic Souvenir Shop	Facultative !
|		
19:00	**Post-Symposium-Event** Guided tour for invited keynote guests only…	IGN

*) **Hinweis**: Änderungen vorbehalten! / **Comment**: Changes may apply!

Schlußredaktion / Final Status as per: 5. Juli 2011

GI2011 – CROSS-BORDER – SDI/GDI – SYMPOSIUM FOR EUROPEAN BORDER REGIONS – 23./24. MAY 2011

Nationalparkhaus Bad Schandau © NationalparkZentrum

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Decin - Děčínský (Castle) zámek nad Labem © Wikipedia.cz

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Castle / Zamek – Decin: Copyright by (cc) [http://cs.wikipedia.org/wiki/Soubor:Decin001.jpg]

Inter-Regional GI2011-X-border-SDI/GDI-Symposium

AUTORENLISTE

Bad Schandau

23. Mai 2011

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AUTORENLISTE – GI2011

34: HS-LAYERS AND PYWPS COMPONENTS FOR SPATIAL DATA NETWORKING INFRASTRUCTURE

Jachim CEPICKY & Karel CHARVAT
HSRS – Help Service &Remote Sensing – Benesov (CZ)

35: HABITATS - CROSS BORDER HARMONIZATION OF PROTECTED AREAS FOR TOURISM PURPOSES

Karel CHARVAT & Jachym CEPICKY & Premysl VOHNOUT
CCSS – Czech Center of Sciences & Society – Praha (CZ)

36: ENVIROGRIDS TOWARDS *"BLACKSEA"* CACHMENT REGIONS – CROSS-BORDER SDI FOR WATER AND LAND MANAGEMENT

Karel CHARVAT & Premysl VOHNOUT
CCSS – Czech Center of Sciences & Society – Praha (CZ)

37: SDI - THE PYRAMIDE OR SPIDER NETWORK – TOWARDS SOCIAL GEOSPATIAL SPACE FOR EUROPEAN BORDER REGIONS

Karel CHARVAT & Premysl VOHNOUT
CCSS – Czech Center of Sciences & Society – Praha (CZ)

38: ARCHITECTURE PERSPECTIVES OF A PAN-EUROPEAN SDI (VIDEO) ESDIN – BEST PRACTICES – TOWARDS THE EMERGING EUROPEAN LOCATION FRAMEWORK – SPATIAL DATA INFRASTRUCTURES BEYOND SCHEMA HARMONIZATION

Arnulf CHRISTL
President of OSGeo and Member of OGC-Architecture-Board
METASPATIAL – Bonn (DE)

42: CZECH SOLUTION FOR INSPIRE GEOPORTAL – THE CZECH GATEWAY TO NATIONAL SDI

Jitka FAUGNEROVÁ, Jiří KVAPIL, Jiří HRADEC – CENIA – Praha (CZ)
Jaroslav PŠENIČKA – IBM – Praha (CZ)
Štěpán KAFKA – HSRS – Benesov (CZ)

43 + 103: HE RIVER "*DANUBE*" AS A CROSS-BORDER DEVELOPMENT DETERMINANT FOR CITY OF BRATISLAVA

Jurai FURDIK & Rostislav ONDRUŠ, Denisa ŠEBOVÁ
STUBA – Slovak Technical University – Bratislava (SK)

44 + 104: URBAN STRUCTURE TRANSFORMATION OF THE PERIPHERAL BORDER DISTRICTS OF CITY BRATISLAVA

Juraj FURDÍK, Ivor MEČIAR, Rostislav ONDRUŠ, Denisa ŠEBOVÁ
STUBA – Faculty of Architecture, Slovak University of Technology – Bratislava (SK)

45: CHALLENGES AND OPPORTUNITIES FOR EUROPEAN BORDER REGIONS
ANALYSIS OF CROSS-BORDER GEOPORTALS FOR GI/GIS/GDI & GEOINSPIRE'D INFRASTRUCTURES OF DATA, SERVICES AND APPLICATIONS

Frank HOFFMANN
IGN – INNOVATION. Grenzüberschreitendes Netzwerk e.V. – Dresden (DE)

46: LEONARDO "SDI-EDU" PROJECT AS A FRAMEWORK FOR VOCATIONAL EDUCATION IN EUROPEAN BORDER REGIONS

Karel JANECKA, Tomas MILDORF*, Vaclav CADA*, Karel JEDLICKA*, Otakar CERBA*, Jan JEZEK*, Radek FIALA* & Jiri HIESS** – CAGI** – Praha (CZ)*
UWB – University of West Bohemia – Department of Mathematics, Section of Geomatics – Plzen (CZ)*

50: SHARING METADATA ACROSS EUROPE – EXPERIENCES FROM "ONEGEOLOGY" AND "PLAN4ALL" RESEARCH NETWORKS

Stepan KAFKA & Karel CHARVAT
HSRS – Help Service & Remote Sensing – Benesov (CZ)

51: TESTING OF SDI COMPONENTS – A FUNDAMENTAL INTEROPERABILITY ELEMENT WITHIN INSPIRE AND NATIONAL SDI'S

Tomáš KLIMENT, Martin TUCHYŇA**, Marcel KLIMENT****
** CNR (IT) & STUBA – Slovak University of Technology – Bratislava (SK)*
*** SEA – Slovak Environmental Agency – Banská Bystrica (SK)*
**** SPU – Slovak University of Agriculture – Nitra (SK)*

52: BRINGING ECO-BIOLOGICAL METADATA TO THE INSPIRE METAINFORMATION WORLD

Tomáš KLIMENT – CNR (IT) & STUBA – Slovak University of Technology – Bratislava (SK)
Alessandro OGGIONI – CNR (IT) – Italian National Research Council – Verbania-Pallanza (IT)

53: NOTHING – BUT A WASTE OF TIME AND MONEY ? SPECIFICITIES OF CROSS-BORDER COOPERATION IN THE GERMAN-POLISH-CZECH BORDER TRIANGLE

Robert KNIPPSCHILD
TUD – University of Technology – Chair of Spatial Planning – Dresden (DE)

54: COST & BENEFIT FACTORS OF REGIONAL SDI INFRASTRUCTURES OF WESTERN, CENTRAL AND EASTERN PART OF EUROPE

Robert LACH
IGPIM – Secretary of National Contact Point for PLAN4ALL Project – Warsaw (PL)

55: GIS-SOFTWARE ACROSS AGRO APPLICATIONS AND INTEGRATION OF BING MAPS

Walter H. MAYER
PROGIS Software GmbH – Villach (AT)

59: SPATIAL PLANNING IN EUROPE – A CHALLENGE OR A PIECE OF CAKE?

Karel JANECKA, Tomas MILDORF, Vaclav CADA, Karel JEDLICKA, Otakar CERBA, Jan JEZEK & Radek FIALA
UWB – University of West Bohemia – Department of Mathematics, Section of Geomatics – Plzen (CZ)

61: DEVELOPMENT OF A DECISION SUPPORT SYSTEM FOR MONITORING THE TRANSBOUNDARY LAKE "*CONSTANCE*" WITH THE GENESIS PROJECT FRAMEWORK

Stefan MIRBACH & Ulrich LANG
IKP – Ingenieurgesellschaft Prof. Kobus und Partner GmbH – Stuttgart (DE)

65 + 105 + 106: CROSS-BORDER DATA HARMONISATION IN PRACTICE – EXAMPLIFIED BY GERMAN ATKIS AND CZECH ZABAGED DATA

Sylvia RÖHNERT, Claudia GEDRANGE & Marco NEUBERT
IOER – Leibniz Institute of Ecological and Regional Development – Dresden (DE)

69: CENTROPE MAP AND CENTROPE STATISTICS – CROSS-BORDER GEODATA INFRASTRUCTURE WITH USER-DEFINED THEMATIC MAPS

Manfred SCHRENK, Clemens BEYER, Christian EIZINGER –
CEIT ALANOVA – Central European Institute of Technology, Department for Urbanism, Transport, Environment & Information Society, Schwechat (AT)
Walter POZAREK – PGO (Planungsgemeinschaft Ost / East Austrian Planning Assoc.) – Vienna (AT)

70: CROSS-BORDER GIS – THE "GEOGRAPHIC INFORMATION SYSTEM "GISOR/SIGRS" OF THE UPPER RHINE" EXAMPLE

Boris STERN
CG68 – GIS Section - SIGRS/GISOR Conseil Général du Haut-Rhin - 68000 COLMAR (FR)

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Deputy Director
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Premysl VOHNOUT
CCSS – Czech Center for Sciences & Society, Praha – CZ

TOWARDS GEOINSPIRE'D X-BORDER-SDI/GDI FOR EUROPEAN BORDER REGIONS IN DIGITAL EUROPE 2020 –

FINAL DISCUSSION & CONCLUSIONS ON

AWARENESS, INNOVATION & RESEARCH ON ACCESSIBILITY, INTEROPERABILITY AND USABILITY OF GEO - / ENVIRO - / SPATIO – DATA, SERVICES AND APPLICATIONS – SUPPORTING THE ASSOCIATION OF EUROPEAN BORDER & CROSS-BORDER REGIONS (AEBR) –

MODERATORS:
Karel CHARVAT & Frank HOFFMANN

CONTRIBUTORS:
I. BERZINA; J. BLACHOWSKI; J. FURDIK; K. JANECKA; R. LACH; M. NEUBERT; B. STERN; A. THEVENET.

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PROCEEDINGS

Abstracts
Posters and Summaries

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Dr. Karel CHARVAT – CCSS
Dr. Klaus-Dieter MICHAEL – VSBI
Dr. Gudrun HOFFMANN – FAA
Prof. Dr. Siegmar KLOSS – IGN
Prof. Dr. Isolde ROCH – IOER
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GI2011-X-BORDER-SDI/GDI-SYMPOSIUM

ADDRESSING THE 11TH "SÄCHSISCHES GIS-FORUM" = THE FIRST "BOHEMIA & SAXONIA GIS-FORUM" ACROSS THE BORDER OF EUROREGION EEL

23.5.2011: **BAD SCHANDAU** (SAX) # 24.5.2011: **DECIN** (CZE)

Frank HOFFMANN & **Karel CHARVAT**
Founding Members of the Non-profit charity Association IGN e.V.
"INNOVATION. GRENZÜBERSCHREITENDES NETZWERK"

WELCOME ADDRESS TO THE "11. SÄCHSISCHES GIS-FORUM" THE "FIRST BOHEMIAN & SAXONIAN GIS-FORUM" 2011

Keywords: *AEBR, Austria, Awareness, Bavaria, Bohemia, BOWGIS, CENTROP-MAP/STATISTICS, Cross-border, DACH+, Data-Pool, Education, ESDI, ETC/4A, EU-Directives, Euregio, Europe, FP6/7, GDI, Geodata, Geomatics, Geospatial, GI2000, GI2011, GIS-GrandeRegion, GSDI, INSPIRE, Interoperability, INTERREG/4A, LifeLongLearning, NATURNET+, NSDI, OpenGIS, Pilot projects, PSI, RAPIS, Regions, Saxonia, SDI, SIG-GR, SIG-RS, Spatial planning, Strategy seminars, Sustainability, Usability, X-SDI, X-GDI.*

Contents:

The implementation of EU Directives on **ACCESS** (*Public Access to Environmental Information*), **PSI** (*Public Sector Information*), and **INSPIRE** (*Infrastructure for Spatial Information in the European Community*) and other is determined by

- the globalization processes of economy,
- the rapid high-tech development changes, as well as
- the way decision processes have to be improved after the global financial crisis

in order to monitor environment and natural resources, **to prevent** climate changes, and **to overcome** the challenges of economic growth, energy and finance crisis over all ***Europe of (Border) Regions.***

- ***The test results based on the EU-Project NATURNET+REDIME*** *(NNR) and received until* ***2009*** *have demonstrated the urgent needs for Geo**INSPIRE**'d action, as for* ***syntactic interoperability****, as for* ***semantic and linguistic interoperability*** *needs of applications based on harmonized and integrated Geo-/Enviro-Webservices, especially across EU borders.*
- ***The*** *"**Status-quo**" tested in NNR project has been challenging to solve existing problems in harmonizing* ***scaleability*** *and* ***quality*** *of x-border data, information, applications, as well as providing* ***guidelines and learning resources*** *for stakeholders and decision makers at administrative and institutional levels.*
- ***Therefore, X-border-INSPIRE'd*** *approaches, technologies, models and application solutions need better* ***awareness, education and training*** *for integrated problem solving by* ***administrations, business, companies, governments, decision makers and citizens*** *at all levels across borders in* ***EUROPE OF REGIONS.***

But, the main barriers and, as well as important technical **challenges,** are the ***geodetic transformation, semantic harmonization*** *and* ***cartomatic generalization*** of **GEO/ENVIRO/SPATIO** data and datasets and their ***integration*** based on **interoperable webservices** from ***local*** via ***regional*** into ***national*** level to build an european homogenous

- ***Infrastructure of Spatial Information across European Border Regions (INSPIRE-X-EBR)*** !

Research and development for comprehensive ***use and re-use*** of ***public sector*** *(e.g. statistical, sensoric, spatial and non-spatial)* ***data, information, and applications,*** as well as web-based and mobile communication technologies (ICT) can help to improve european strategies and to enable sustainable decision making for regional development, but this needs:

- **accessibility** ***to analytical, sensor & statistical data*** about the environment openly available to associations, citizens, communities (ACCESS Directive 2003/4/EC),
- **availability** ***of sectoral & thematical information*** from public administrations & agencies to be re-usable by private SME's & start-up firms (PSI Directive 2003/98/EC),
- **interoperability** ***of integrated, web-based geoscientific, environmental and spatial services*** (INSPIRE Directive 2007/2/EC),

in order to provide the knowledge basis for ***sharing*** of environmental information systems (**SEIS**), ***integrating*** of geographical, environmental and topographical data, services & applications (**SDI**), and ***developing*** a single information space in Europe (**SISE**) and ***improving*** awareness and learning support for making sustainable decisions on local, regional and cross-border levels across Europe of Regions.

IGN, CCSS and UniWB are organizing together this professional event, following their long-time education and research activities to achieve better SDI/GDI awareness and closer cooperation in EUROPEAN BORDER REGIONS to adapt to the **EU Strategy of "*Europe 2020*" and the Action Plan "*Digital Agenda of Europe 2020*".** The EU Directives on re-using of Public Sector Information (**PSI**) and development of Infrastructures for Spatial Information in Europe (**INSPIRE**) can support and improve strategic opportunities and challenges for more than **200 EUROPEAN BORDER REGIONS.**

Therefore, you are welcome to participate at this GI2011-X-border-SDI/GDI Symposium this year to be held traditionally as the "*11th Sächsisches GIS-Forum*" in **BAD SCHANDAU** (SAX) and as the very "*1st Bohemia # Saxonia GIS-Forum*" in **DECIN** (CZE). Both these GI2011 events should inform on the progress of EU-Directives **PSI** for re-using public sector information and implementation of **INSPIRE process** on interoperability of X-border Data & Services in **EUROPEAN BORDER REGIONS.**

The Goal of GI2011 Symposium is ***to share*** information, knowledge, and expertise, ***to learn*** from SDI and OSM „*best practices*", as well as ***to exchange and discuss*** European awareness and research projects (***NATURNET, SDI-EDU, HUMBOLDT***) and other European networks (***GEOPORTAL4EVERYBODY, PLAN4ALL***, etc.) introducing innovative geomatics technologies, demonstrating cost-benefit approaches, as well as discussing the **frameworks for PSI, GI & SDI policy**, **organization** and **technologies** behind the **INSPIRE** process.

The GI2011-X-border-SDI/GDI-Symposium has its focus as well on actual EU research projects and "best practice" networks like ***ESDIN*** (EuroGeographics et al.), ***GEOPORTAL4EVERYBODY*** (CCSS & UNSDI.cz), ***PLAN4ALL*** (UWB & CCSS), and ***SDI-EDU*** (UWB) to share the experience and advanced knowledge directly with participants registered from **local and regional organizations in EUROPEAN BORDER REGIONS**. The GI2011-Participants will share a „***Round Table Discussion Session***" on **PSI & INSPIRE** challenges important for border regions.

That's the way developing ***Sustainability of European cross-border, trans-national and inter-regional collaboration*** and setting up ***innovative contents for a lifelong-learning process (LLP)*** in order to realize ***step-by-step*** the **INSPIRE strategy for Europe** until 2019 and probably beyond 2020.

The GI2011-Symposium should continue the ***usability road-map*** of the already finished EU-FP6-Project **NaturNet+Redime (NNR)** lead by CCSS (Prague) which has been developed further the NNR tools within the Framework of **EU-FP7**-Programme since its finalization at the end of 2007 and transferred its deliverables now into several new EU-Projects like: ***NN+, METASCHOOL, HUMBOLDT, PLAN4ALL, SDI-EDU, BRISEIDE*** *etc.* under the leadership of our Czech colleagues, e.g. all they are members of an innovative NETWORK of High-tec-GeoInfo SME's and Universities lead by **CCSS** (*Czech Center for Science & Society*) and nowadays to be transferred to other **REGIONS of EUROPE.**

Therefore, we w'd like transforming ***Quantity*** of **10** Years '**Sächsisches GIS-Forum**' and the results of **FP6/7 Research** activities now into a new ***Quality*** supporting ***Sustainability of X-border & Inter-regional Collaboration, especially for the tri-national areas across borders of CZ+PL+SN.de !***

Finally, the Organizers, the non-profit Associations CCSS & IGN, as well as UniWB would like to say you:

- **WELCOME** to our inter-regional, trans-national & cross-border participants, guests and authors celebrating the traditional **Anniversary** of "**11. Sächsisches GIS-Forum**" as a cross-border forum event, the "**1. Bohemia # Saxonia GIS-Forum**" by contributing, discussing and exchanging **cross-border-awareness, information and experience**;
- **THANK YOU to the** ***keynote experts, session speakers, poster contributors and tele-presenters*** **finally from 10 Countries:**
  - **AT + CZ + DE** (BW +SN) + **EU** (AEBR +ESDIN +EUROINSTITUT) + **FR + IT + LV + PL + SK**

  ready to share with local, regional and cross-border communities their vision, information, knowledge and expertise, the way forward for better citizens awareness, metadata and cross-border data interoperability and sustainability of x-border & inter-regional communication, coordination and collaboration.
- **ACKOWLEDGEMENT** is given to several ***organizations and companies*** providing conference materials like ***flyers***, ***posters***, ***fact sheets, demos, reports,*** and supporting us to organize this GI2011-Symposium, important especially for our colleagues from CEE countries, **especially the following supporters have to be named** (see p. ??? for details):
- **AEBR, Alsac-Region-CG68, CCSS, ESDIN, ESRI-Press, EUROINSTITUTE, FREE STATE OF SAXONY, GeoSN, IGN-SN, K21 MEDIA AG, KOGIS/SWISS TOPO, KULK-CZ, MIR/GLPA-BERLIN/BRANDENBURG, MOT-FR, NATIONALPARKZENTRUM, PROGIS-AT, SENATSVERWALTUNG-Berlin, SIG Media GmbH&Co.KG/Köln, SIGRS/GISOR-FR, STUBA-SK, UniWB-CZ, WBU-PL, ZAMEK-DECIN-CZ.**

Dresden / Praha 23. Mai 2011

Authors

Doz. Dr. Frank HOFFMANN, CSc & Dr. Karel CHARVAT

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CZECH CENTER OF SCIENCE & SOCIETY
[http://www.CCSS.cz]

Contact

IGN - **I**NNOVATION. **G**renzüberschreitendes **N**etzwerk e.V.
c/o IGN-Vorstand, *Martin-Andersen-Nexö-Str. 4*, D-01217 DRESDEN / Saxony / Germany
Email [Mailto:Vorstand@IGN-SN.de] + [Mailto:info@GDI-SN.de]

distance in which individuals are clustered: Dot sizes: = 1,000+ = 100 - 999 = 10 - 99 = 1 - 9 visits
As per 14th May 2011 @ 07:58 GMT – **Total access** since 28 Dec 2007: **7.463**.
3.800 visits shown above as from 30 Dec 2009 to 18th Apr 2011 - Previous 24hrs: **15**

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IGN e.V. - INNOVATION.Grenzüberschreitendes Netzwerk (X-border Network) - ***is a non-profit Association (gemeinnütziger Verein) for Education, Development and Knowledge Transfer*** - has been founded first in 2002 as "***GDI-Sachsen***" (i.G.) - the final outcome of the "*OpenGIS Strategy Seminar*" series in GI2000 & GI2002 at "*Bildungswerk Ost-West*" (BOW), but was re-founded later on as the follow-up "**IGN**" (e.V.) at September 2nd, 2003, by Czechia and Saxonia experts of Cartomatics, Cyberlaw, Cybernetics, Geomatics, Economics, Mediamatics, Pedagogics, Regional Development and Spatial Sciences.

Its main goals: supporting GEO - ENVIRO - SPATIO - oriented Awareness, Business and Openness in Training, Education and Research on GeoINSPIRE'd Interoperability, Sustainability, and Usability of spatial Data, Services and Applications for X-border-Infrastructures of Spatial Information (X-INSPIRE) in EUROPE of REGIONS.

IGN has been registered by Dresden City Court officially as a Non-profit Association, October 16th, 2003
[http://www.IGN-SN.de/Registration.pdf] - [Mailto:Vorstand@IGN-SN.de]

The CCSS – Czech Center for Science and Society – is an Association of high tech SMEs, the public administration and research organizations. It is an *independent, non-profit and non-governmental* organisation. It is a type of virtual centre of excellence with the focus on the implementation of new communication and navigation technologies which have potential for sustainable development.

The CCSS co-operates with a wide range of institutions and individuals, home and foreign ones. It is focused on research & development activities in the field of *international research projects* and utilization of modern technologies. CCSS supports co-operation networks of the small and medium business within the framework of regional economies and helds intensive contacts, particularly in *Europe, Asia, Africa and South America.*

CCSS is focused on transfer, analyses and development of the most advanced GI & ICT technologies which are contributing to the growth of productivity not only in industrial enterprises but in the branch of small and medium business as well. CCSS is active in the *agriculture, industry, trade and services,* predominantly in *agricultural regions*.

The priority of activities of CCSS is Environment protection and Crisis management. In this field CCSS is active in European FP7 research and "*best practice" excellence & social networks.*

GRENZÜBERSCHREITENDE REGIONEN IN EUROPA – EINE BESTANDSAUFNAHME

Martín Guillermo-Ramírez
ARBEITSGEMEINSCHAFT EUROPÄISCHER GRENZREGIONEN - AGEG

ABSTRACT – OPENING KEYNOTE

Keywords: *AEBR, AGEG, ARFE, Border regions, Cooperation, Cross-border, Europa, Euroregionen, EVTZ, EGTC, GECT, Europe, Grenzregionen, Integration*

Contents:

Grenzübergreifende Zusammenarbeit ist inzwischen eine der Hauptaufgaben der Europäischen Union. In der Vergangenheit wurden viele Einrichtungen geschaffen, mit denen die Grenzregionen vorangebracht werden sollen:

Euroregionen, Arbeitsgemeinschaften, Netzwerke *oder kürzlich die* ***EVTZ's*** (*Europäischer Verbund für territoriale Zusammenarbeit*). All diese haben die grenzübergreifenden Regionen in ein unersetzliches Werkzeug verwandelt, um Europa den Menschen näher zu bringen.

Grenzregionen sind häufig dünn besiedelt, leiden an mangelhafter Infrastruktur sowie an der Abwanderung ihrer gut ausgebildeten Kräfte. Manche sind allerdings auch urbaner Natur mit Millionen Einwohnern und auf diese Weise Beispiele für europäische Metropolen.

In diesen ganz unterschiedlichen Gebieten, in denen Europa jeden Tag gelebt wird, gibt es beispielsweise Zentren alter Traditionen, ebenso aber auch Zusammenschlüsse, in denen Stadt-Land-Partnerschaften entstehen.

An unseren Binnengrenzen (aber auch an den Außengrenzen und darüber hinaus) ist nahezu alles möglich: dort, auf den ehemaligen Schlachtfeldern, zeigt sich heute Europa von seiner besten Seite. Auf den Narben der Vergangenheit entstanden die ***Wirkungsstätten der europäischen Integration***.

Author

Martín Guillermo-Ramírez
Secretary General
Association of European Border Regions (AEBR)

References

[http://www.AEBR.eu]
[Grenzüberschreitende Regionen in Europa]

Contact

Association of European Border Regions (AEBR)
Enscheder Str. 362, D-48599 Gronau
Tel.: +49 (0) 2562 - 702 19
Fax: +49 (0) 2562 - 702 59
E-Mail: [m.guillermo@aebr.eu] | Web: [www.aebr.eu]

ECONOMIC ACTIVITY IN CROSS-BORDER MARINE HABITATS

M. ALBERTS, A. IKAUNIECE, P. BRUNS, J. KALNINS, J. MARTINSONS
IMCS, Riga - LV

ABSTRACT

Keywords: *biotope, habitats, INSPIRE, meta-data, modelling SDI, species*

Abstract:

Latvian marine coastal habitats are currently represented by various datasets owned by Latvian Institute of Aquatic Ecology (LIAE). As the coastal region encompasses also protected areas (***Natura 2000***) with limited allowed actions the ***knowledge on location of habitats and their value*** is essential for all types of economical activities.

The cross-border nature of any marine data on habitat situation therefore is relevant also for the other countries sharing the Baltic Sea area. The provision of information about possible economical activities in marine areas is one of the pilot cases in INSPIRED HABITATS project. Its ***infrastructure and platform implementation*** is planned as compliant to INSPIRE requirement. To be more closer to citizens, stakeholders, science enthusiasts & businessmens the INSPIRED HABITATS project is trying to use also ***social networks*** to attract all these user groups and experts to validate the ***pro's and con's*** for INSPIRE data models and its usage to solve real world problems.

This is the first INSPIRE compliant habitats and species distribution meta-data and data model implementation trial in Latvia. Continuous data model evolution is being implemented due to changing user requirements and development of INSPIRE Directive data model specifications.

The Data model implementation is developed by Latvian Institute of Aquatic Ecology (**LIAE**) in collaboration with Institute of Mathematics and Computer Science of the University of Latvia (**IMCS**). The Database consists of monitoring and observation data about habitats, species and physical characteristics collected during the last 35 years. Bottom type, physico-chemical features – temperature and salinity regimes, content of oxygen and nutrients, density of benthic animals have been sampled and measured for a few decades in the framework of ***national marine monitoring.***

SDI software implementation is based on open source components and follows ideas of European project **PLAN4ALL** that allows adaptation of solution easily in future for other countries across the ***Baltic Sea area.***

Authors

Dr. math. Māris ALBERTS, Dr. biol. Anda IKAUNIECE, Bc. Ing. Peteris BRUNS,
Dr.comp.sc. Janis KALNINS, Dr.comp.sc.Janis MARTINSONS

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Contact

IMCS – Institute of Mathematics and Computer Science – University of Latvia (LV)
Department of Real time systems
Raina bulvaris 29, Riga, LV-1459 Latvia
Tel: +371 67226997 Fax: +371 67820153
Email: [alberts@latnet.lv]

CROSS-BORDER INTERWEAVEMENT

AN ANALYSIS OF DATA AVAILABILITY DESCRIBING CROSS-BORDER INTERWEAVING OF SAXONY'S BORDER REGIONS

Frank BENDEL
Dresden University of Technology, Institute of Geography (DE)

ABSTRACT

Keywords: *data availability, cross-border interweavement, regionalization*

Contents:

This presentation contains the following thesis of diploma research:

- Interconnected cross-border regions, a new shape for cross-border areas
- The regionalization and their possibilities for the delimitation of regions
- The procedure of data research for cross-border development
- Data availability in Saxony describing cross-border interweavement
- First steps to compare the data availability between Saxony and the so-called MORO-Regions
- Measures for a better data availability

Author

Dipl.-Geogr. Frank Bendel

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Contact

Frank Bendel
phone: 0049 351 482 9364

Email: [bendel.frank@yahoo.de]

SUMMARY

The following lines are not forming a summary in the proper sense. The author rather wants to give more detailed information for a better understanding.

Interconnected cross-border regions:

Within the context of the European integration border regions gain more and more importance. By now above **30**% of the EU-citizens live in border regions what makes up **40**% of the EU-territory. Soon Germany recognized that some of these areas are using important metropolitan services behind the border. But up till now there are not any overall concepts for such interconnected cross-border regions.

Therefore, these geographical markets are currently examined in a research project of the Federal Planning Agency.

Common characteristics of cross-border regions:

- strong intra-regional cross-border linkages
- Actors possess extensive experience in cross-border cooperation, which is also institutionalized.
- The regions are important in terms of growth and innovation as well as the European integration and cohesion.

Possibilities used for delimitation of regions:

The delimitation of regions depends on the intended purpose. Within the diploma-thesis ways of delimitation of regions were utilized to find measurable indicators of cross-border linkages. Substantially there are three basic sectors to delimitate regions, the social, the economic and the political sector. Additionally measurable indicators were assigned to those sectors. To achieve comparability for the research results an existing indicator-set was used.

Examples of the indicators:

- purchasing power
- price level
- cross-border commuters
- customer flow
- strenght of frontier traffic
- cross-border projects

Procedure of the data research:

- experimental design of the survey: research of documents
- survey method: telephone interview
- survey instrument: standardized interview guide
- sample structure:
  Number and composition of the survey population is unknown.
  Therefore a pyramid scheme was used.
  All in all **104** institution and **142** actors were polled.

ZEMGALE SPATIAL PLANNING DATA - EXPERIENCE FROM CROSS-THEMATICAL CONTENTS HARMONIZATION

Inga BERZINA – Zemgale Planning region (LV)
Peteris BRUNS – Baltic Open Solution Centre (LV)
Otakar CERBA, Radek FIALA, Jan JEZEK, Karel JANECKA, Karel JEDLICKA, Tomas MILDORF – University of West Bohemia in Pilsen (CZ)

ABSTRACT

Keywords: *spatial planning, data, models, harmonization, region, land cover, Plan4all, SDI-EDU*

Contents:

Spatial planning could be defined as a set of policies (*including planning and controlling activities*) on the distribution of resources and facilities across urbanized areas. One of the conditions of successful spatial planning activities and decisions is an accessibility of high-quality spatial data sets. Experts and institutes participating on spatial planning and similar activities (*like urban or regional planning*) have two options:

- To buy or to collect spatial data – such data has to be managed and updated by using own resources or an outsourcing.
- To re-use existing shared spatial data sets.

The main problem of the second solution is the incompatibility of spatial data provided by different sources. The incompatibility (or heterogeneity) consists of different scales, granularity, terminology, data models, data formats, portrayal rules etc. These categories represent the aspects of spatial data harmonization – the process of elimination of heterogeneities of two or more spatial data sets.

As an illustration of pros and cons of spatial data harmonization there were selected two spatial data sets – "land cover model of the Plan4all project" using the CORINE land cover nomenclature (*as an example of widely dispersed and used European land cover and land use data*) and spatial data provided and administered by Zemgale region (Latvia). Still in Latvia is used non standardized data model for planning data but model definition is in process - each spatial plan is with unique data structure, symbology and structural detail.

Zemgale planning region (*one of the 5 regions of Latvia*) already started to harmonize in region existing planning data to one common data model, currently is static and generalized to be usable in rural and urban areas.

The harmonization of Zemgale spatial data to the structure developed in the Plan4all project according to INSPIRE principles will be explained using ***four different GIT tools:***

ESRI-ArcGIS, HALE (*Humboldt Alignment Editor*), Open Studio (*including Spatial Data Integrator*), and PostgreSQL database solution (*using SQL queries*).

Authors

Ing. et Mgr. Otakar Cerba; Ing. Radek Fiala; Ing. Jan Jezek, Ph.D.; Ing. Karel Janecka, Ph.D.; Ing. Karel Jedlicka, Ph.D.; Ing. Tomas Mildorf;
Peteris Bruns & Mgr.oec. Phd Inga Berzina

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Contact

Zemgale Planning region
Katolu iela 2b, Jelgava, Latvia LV3001
phone: +37-1-63027549 & fax : +37-1- 63084949
[Email: Inga.Berzina@zpr.gov.lv]

SUMMARY

ZEMGALE SPATIAL PLANNING DATA MODELING

Spatial planning could be defined as a set of policies (*including planning and controlling activities*) on the distribution of resources and facilities across urbanized areas. One of the conditions of successful spatial planning activities and decisions is the ***accessibility of high-quality spatial data sets***. Experts and institutes participating on spatial planning and similar activities (*like urban or regional planning*) have two choices:

- To buy or collect spatial data – such data has to be managed, updated by using own resources or an outsourcing.
- To re-use existing shared spatial data sets.

The main problem of the second solution is the incompatibility of spatial data provided by different sources. The incompatibility (*or heterogeneity*) consists in *different scales, granularity, terminology, data models, data formats, portrayal rules* etc. These categories represent the aspects of spatial data harmonization – the process of ***elimination of heterogeneities*** of two or more spatial data sets.

As an illustration of "*pros and cons*" of spatial data harmonization there were selected two spatial data sets – "***land cover model*** *of project PLAN4ALL*" using the CORINE land cover nomenclature (*as an example of widely dispersed and used Europenan land cover and land use data*) and spatial data provided and administered by ***Zemgale region*** (Latvia).

Latvia is still using non standardized data model for planning data but a new model definition is in process - each spatial plan has its unique data *structure, symbology and structural details*. Zemgale planning region already started to harmonize existing regional planning data to ***one common data model***, which is currently ***static and generalized*** to be usable for rural and urban areas.

The harmonization of Zemgale spatial data to the structure developed in the **PLAN4ALL** project was composed of the following steps:

- ***Comparison of source and target data models*** – it will be explained in more detail during presentation
- ***Creation of concrete harmonization steps*** – transformation of reference systems and mapping of attributes (*classes of land cover classification systems*)
- ***Implementation of designed solution*** based on the geoinformation technologies (GIT).

We tried to develope an open, universal and platform independent solution. Therefore, the above mentioned procedure was successfully implemented based on ***four different GIT tools:***

- **ESRI ArcGIS** as an example of commercial GIS (*Geographic Information System*),
- **HALE** (HUMBOLDT Alignment Editor) – an open source application that allows to interactively design transformations on a conceptual schema level (*developed in the HUMBOLDT project*),
- **Open Studio and Spatial Data Integrator** – an open source solution for data integration with the extension for processing spatial data (*developed by Talend*),
- **Solution based on PostgreSQL database** and **SQL queries** (*Structured Query Language*).

The following list shows the purposes of development as examples:

- ***Education of spatial planners*** in the framework of **SDI-EDU** project
- ***Checking of correctness*** of the **PLAN4ALL** data models
- ***Testing of the* HUMBOLDT *project results*** (*harmonization procedures, HUMBOLDT Scenario Urban Planning and HALE Editor*)
- ***Comparison of harmonization*** software tools
- ***Optimization of harmonization procedures*** including particular steps

EXPERIENCE FROM CROSS-THEMATICAL CONTENTS HARMONIZATION

(INGA BERZINA)

Zemgale is one of the five regions, situated in the Latvian central area to the south of Riga. The region is located ***along the Latvian - Lithuanian border*** and ***adjacent to the Latgale, Vidzeme, Riga and Kurzeme planning regions.*** Zemgale covers 16.6% of the total territory of Latvia with 12.5% of the total population.

Zemgale Planning Region (ZPR) is a public body / legal entity which role is to undertake planning of the development of the region and to ensure a link between the region's development priorities and industry development plans at the national level as well as promote cooperation and coordination among the municipalities and other public bodies in the region. ZPR consists of 22 local governments, the decision making body is Development Council and an executive body - Planning Region Administration. **According to the Development Planning law the planning regions' competence is:**

- ***to provide*** regional and local planning documents of mutual ***consistency and coherence*** with hierarchically higher development planning documents and planning documents regulating system of laws and regulations –
- ***to administer and supervise*** the planning of regional development planning documents and the elaboration and their implementation.

The initial work on Zemgale geo-portal started with the Norway Grant Project "***Capacity Building of Zemgale Region for Strengthening the economical Activities and Cooperation with Norwegian institutions***", whose aim was to enhance the balanced and sustainable socio-economical development of Zemgale region while preserving its specific territorial characteristics. Within in the project the ***innovative approach*** for previously not formulated issues – *processes, classifications, data* – for the first time in Latvia there have been worked out ***methodological guidelines for the comprehensive territorial development planning*** document format on regional and local governments' planning levels:

- ***defining*** the minimal (compulsory) and advisable requirements for the development planning documents
- ***monitoring*** their contents, drafting process, approval and implementation.

Proposals for development of the database of territorial plans and the joint land use type (zoning) classification have been worked out. Based on ESRI technologies the ***Zemgale Geoportal*** [http://gisdb.zpr.gov.lv/gis] has been developed with a unified central database for industrial territories enabling and providing decentralized data input at local level.

Since 2009 the Zemgale Planning Region is one of the partners in the ***e*Content*Plus*** project network **PLAN4ALL**, which is focused on the ***harmonization of spatial planning data*** based on the existing "***best practices***" in other EU regions and municipalities and results of current research projects.

The Zemgale Planning Region, in order to fulfil the project aims, has introduced the Geoportal system solution for spatial data infrastructures developed by the ***Czech Centre for Science and Society*** (CCSS). The ZPR Geoportal is enabling ***interoperability*** of the two CCSS & ZPR servers.

The harmonization of Zemgale spatial data into the structure developed in the **PLAN4ALL** project for Land Cover and Land Use has been composed of the following steps:

- ***Comparison of source and target data models***
- ***Creation of concrete harmonization steps:***
  - transformation of reference systems and
  - mapping of attributes (classes of land cover classification systems)
- ***Transformation of attributes and values:***
  - comparison of enumerations of the source and target data (for Land Use)
- ***Implementation of the designed solution*** to the geoinformation technologies (GIT).

The project activities are based on *data* and *metadata descriptions* as well as on **implementation** of *Web Map Service* (*WMS*) and *Web Feature Service (WFS):*

Land Use:

- **WMS:**

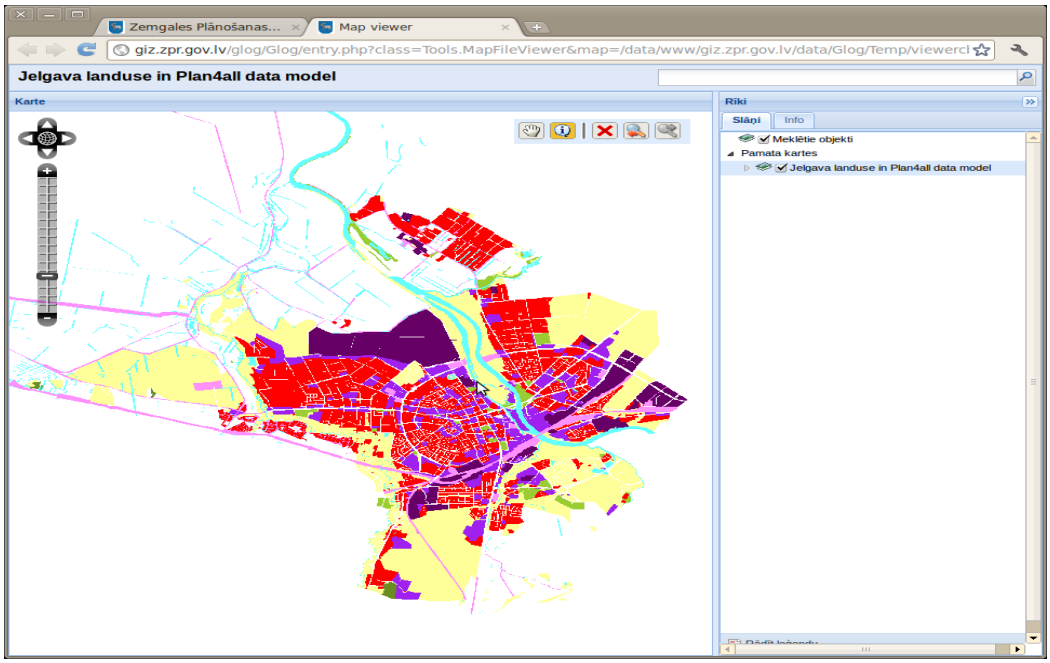
http://giz.zpr.gov.lv/glog/Glog/entry.php?class=Mapman.MapmanWms&mapProject=mapproject7&instance=&SERVICE=WMS&REQUEST=GetCapabilities

- **WFS:**

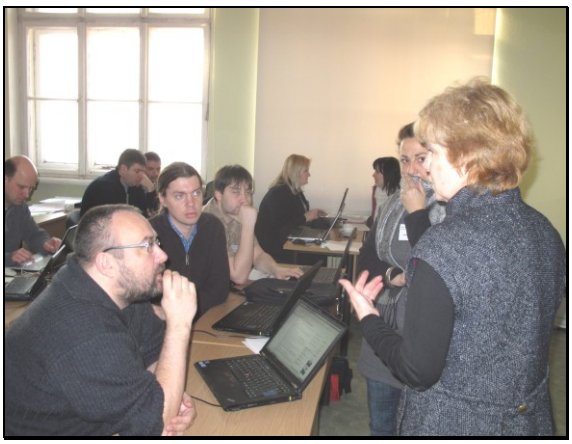
http://giz.zpr.gov.lv/glog/Glog/entry.php?class=Mapman.MapmanWfs&VERSION=1.0.0&mapProject=mapproject7&instance=&SERVICE=WFS&REQUEST=GetCapabilities

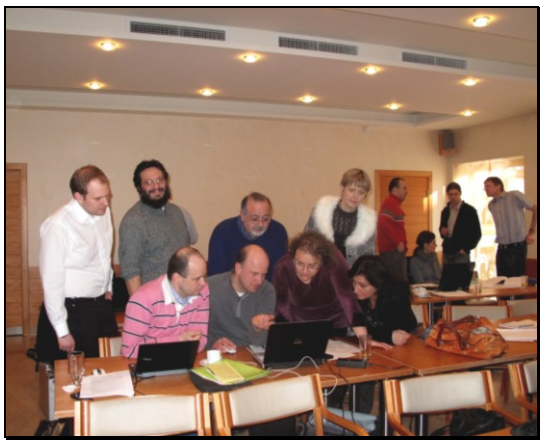
Map Viewer:
http://giz.zpr.gov.lv/glog/Glog/entry.php?class=Tools.MapFileViewer&map=/data/www/giz.zpr.gov.lv/data/Glog/Temp/viewercb4dcf8dd64c5060b7f255cd8fc7b899.map&language=lav&useToolsPanel=true&useLayerSwitcher=true&showTopPanel=true&showMapTitle=true&useDataObjects=true

Meta data publications:
http://giz.zpr.gov.lv/catalogue/?anytext=&type=&menuId=menu0



Harmonized Land Use data of Jelgava City





Harmonization workshop (Riga & Jelgava, February 2011)

THE "BIZBIZ" TOOL AS AN ONLINE PLATFORM FOR CROSS-BORDER EDUCATION IN SDI-EDU PROJECT

Raitis BERZINS & ICMS-Team
University of Latvia – IMCS – Riga (LV)

ABSTRACT

Keywords: *bizbiz, e-learning, inspire, meta-data, modelling, sdi-edu, video lectures*

Contents:

The "BizBiz" tool is an ***opensource*** web browser based e-conference, collaboration and learning tool which supports *slide shows, web page demonstration, synchronous pre-recorded video display, chat and lecturers live* narration using web camera provided ***video and audio.***

It is part of the SDI-EDU platform for vocational e-learning which is designed and implemented as a virtual database based on ***social network principles of the GeoPortal4everybody*** and ***principle of web services*** using Unified Resource Management (URM). The SDI-EDU project aims to knowledge transfer of former experiences gained from different EU research projects like HUMBOLDT and NATURNET+REDIME (NNR) dealing with education on SDI for spatial planning towards sustainable urban & regional planners in ***European (border) Regions and Municipalities.***

In the second year of the project various improvements to "BizBiz" tool has been made ranging from ***multilingual content*** support to ***integration with social networks*** and ***mapping services***.

Modelling of the BizBiz" system in different ***usage scenarios*** and ***load conditions*** has been carried out and predictions of its behavior has been made.

The "BizBiz" learning database now consists of ***~50 presentations*** about SDI related subjects in **6** european languages to be usable with "BizBiz" tool support.

The "BizBiz" tool has been developed in the Institute of Mathematics and Computer Science (IMCS) and is used in EU projects like ***NaturNetplus*** and ***SDI-EDU*** to support learning processes about the use of Geographic Information Systems and implementation of the INSPIRE-Directive.

Authors

Mgr. comp. Raitis **Bērziņš** & MSc. Andris **Dzerve** & Dr. math. Māris **Alberts**

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Internet **[http://sdi-edu.zcu.cz/wiki/Main_Page]**

Raitis Bērziņš: *GIS education using online video lectures – The OpenSource "BizBiz"-Project.* In: *Proceedings of GI2010-Symposium*, Dresden: 2010, p. 26
[http://www.epsiplatform.eu/content/download/55172/760157/version/1/file/GI2010-Symposium-BERZINS+%28BizBiz%29.pdf]

Janecka K., Berzins R., Charvat K., Dzerve A.: *The "GeoPortal4everybody & BizBiz" tools as a modern technological framework for vocational e-learning.* In: *Proceedings of ELDE Conference*, Sofia: 2011, p. 215

Contact

Institute of Mathematics and Computer Science, University of Latvia
Department of Realtime Systems
Raina bulvaris 29, Riga, LV-1459 Latvia
Tel: +371 67226997 & Fax: +371 67820153
Email: [alberts(at)latnet.lv]

THE BICYCLE ROUTE OF "ST. JAMES" WAY IN LOWER SILESIA PROJECT

Jan BLACHOWSKI & Przemysław MALCZEWSKI
Dolnoslaskie Voivodeship Marshal's Office, Spatial Planning Regional Bureau Wroclaw (PL)

ABSTRACT

Keywords: *St. Jacob's Way, Via Regia Plus, bicycle trails, GPS navigation*

Contents:

The Way of St. James (Camino de Santiago) is an European network of pilgrimage routes leading to the shrine of Sanitago de Compostela in NW Spain, which is the resting place of St. James the Apostle. A beacon for all travellers is a white or yellow scallop shell a symbol of St. James.

The Lower Silesian part of the network, in Poland, consists of four trails: the ***Via Regia*** extending from Brzeg in the East, through Wroclaw, Legnica and Luban to Zgorzelec in the West, the ***Lower Silesian Way*** extending NE from Luban on the Via Regia towards Gdansk, ***Via Cervimontana*** running from Jelenia Gora in the Sudety Mts. and joining Via Regia in Luban and ***Sleza Way*** extending from Mt. Sleza south of Wroclaw and joining Via Regia in Sroda Slaska. Within the frames of the ***project Via Regia Plus*** carried out under the Programme for Central Europe of the European Territorial Cooperation (ETC) work has been done to analyse and propose the course of St James Way for bicycle use.

In the results of field work, which included cycling on over 550km of trails, four bicycle routes accessible for a casual cyclist have been proposed.

Results of this work have been presented during final conference in Wroclaw in December 2010. Information on the project can be found at the internet link cited in references.

Authors

Dr. Magdalena BELOF, Dr. Jan BLACHOWSKI, Przemysław MALCZEWSKI

Reference

Outline of a cycle route "The Way of St. James, in Lower Silesia"
[http://www.wbu.wroc.pl/3.3.1./?lang=en]

Contact

Regional Bureau of Spatial Planning, Dolnoslaskie Voivodeship Marshal's Office
ul. Swidnicka 12-16, 50-068 Wroclaw, Poland,
phone: 0048 71 343 79 46
fax : 0048 71 344 52 45

Email: [jblachowski@poczta.wbu.wroc.pl] + [pmalczewski@poczta.wbu.wroc.pl]

SUMMARY

The Way of St. James (Camino de Santiago) is an European network of pilgrimage routes leading to the shrine of Sanitago de Compostela in NW Spain, which is the resting place of St. James the Apostle. A beacon for all travellers is a white or yellow scallop shell a symbol of St. James.

The Lower Silesian part of the network, in Poland, consists of four trails: the ***Via Regia*** extending from Brzeg in the East, through Wroclaw, Legnica and Luban to Zgorzelec in the West, the ***Lower Silesian Way*** extending NE from Luban on the Via Regia towards Gdansk, ***Via Cervimontana*** running from Jelenia Gora in the Sudety Mts. and joining Via Regia in Luban and ***Sleza Way*** extending from Mt. Sleza south of Wroclaw and joining Via Regia in Sroda Slaska. Within the frames of the ***project Via Regia Plus*** carried out under the Programme for Central Europe of the European Territorial Cooperation (ETC) work has been done to analyse and propose the course of St James Way for bicycle use.

The following tasks have been carried out:

- The first one concerned development of GIS database and map of the existing pilgrimage routes based on available guides and descriptions of the trails.
- Then the project has been discussed during a workshop with public participation of NGO's, representatives of local administration, cycling associations, friends of the St Jacob Way and other.
- The next step concerned field inventorying of all the routes with the use of satellite GPS positioning and field GIS mapping using database structure designed to collect data on the course of the bicycle route, position of cultural and nature attractions along the way, type and state of the trail surface, difficulty of the trail and condition of trail marking.
- In addition an extensive photo data base has been created.

In the results of field work, which included cycling on over 550km of trails, four bicycle routes accessible for a casual cyclist have been proposed. These are mostly consistent with the walking St Jacob's Way trails. Each route has been divided into single day sections (approx. 50km in length) for which detailed descriptions have been prepared.

These include: technical specification, length, difficulty, climb/descent and overall suitability. On this basis a mini-guide for each section has been produced, which also contain description of the main attractions along the route and its graphical profile showing elevation changes. ***All the routes are presented in the form of an interactive map*** on a web page where the guides can be downloaded as PDF files and cyclists equipped with GPS receivers are able to download files with route trails and waypoints in GPS data exchange format (gpx). These can then be used, after importing into GPS units, for satellite navigation.

Results of this work have been presented during final conference in Wroclaw in December 2010. Information on the project can be found at the internet link cited in references.

THE REGIONAL SDI NODE IN SPATIAL PLANNING FOR THE FUNCTIONAL AREA OF WROCLAW – WWIIP

SUPPORT FOR MANAGEMENT PROCESSES IN LAND USE POLICY

Jan BLACHOWSKI & Przemysław MALCZEWSKI
Dolnoslaskie Voivodeship Marshal's Office, Spatial Planning Regional Bureau Wroclaw (PL)

ABSTRACT + POSTER

Keywords: *Regional SDI Node, Via Regia Plus, Inspire, Spatial planning*

Contents:

PROJECT "VIA REGIA PLUS" INFO

The Project VIA REGIA PLUS (*Sustainable Mobility and Regional Cooperation along the Pan-European Transport Corridor III*) carried out under the Programme for Central Europe of the European Territorial Cooperation (*ETC*) covers the area along the Pan-European Transport Corridor III (*Berlin / Dresden - Wroclaw - Lviv - Kiev*).

Wroclaw City - as a leading partner along with 14 partners from ***Poland, Germany, Slovakia and Ukraine,*** have focused on issues in the following areas:

- transport accessibility - railway and road systems,
- development in metropolitan areas and urban regions,
- tourism.

The Regional Bureau of Spatial Planning in Wroclaw has implemented the following tasks:

- ***Outline of a cycle route*** "*The Way of St. James, in Lower Silesia*" (work package WP5 - 5.3.3.).
- ***Analysis regarding the outline of a road route*** integrating the southern areas of Lower Silesia with the North – South nodes (work package WP3 - 3.3.1.).
- Works on Integrated Area Allocations System for for the Metropolitan Area (WP4 work package - 4.2.4.).

More information about the project can be found at:

[http://www.viaregiaplus.eu] and [http://www.wbu.wroc.pl]

CENTRAL EUROPE — COOPERATING FOR SUCCESS. | EUROPEAN UNION EUROPEAN REGIONAL DEVELOPMENT FUND | VIA REGIA plus

WOJEWÓDZKI WĘZEŁ INFRASTRUKTURY INFORMACJI PRZESTRZENNEJ DLA OBSZARU FUNKCJONALNEGO WROCŁAWIA W ZAKRESIE PLANOWANIA PRZESTRZENNEGO – WWIIP

REGIONAL NODE FOR THE SPATIAL DATA INFRUSTRUCTURE IN THE FIELD OF SPATIAL PLANNING FOR THE FUNCTIONAL AREA OF WROCLAW - WWIIP

WSPARCIE PROCESÓW ZARZĄDZANIA W ZAKRESIE POLITYKI PRZESTRZENNEJ
SUPPORT FOR MANAGEMENT PROCESSES IN LAND USE POLICY

Wojewódzkie Biuro Urbanistyczne, realizując cele projektu Via Regia plus, koordynuje tworzenie wojewódzkiej infrastruktury informacji przestrzennej w zakresie planowania przestrzennego, stanowiącej węzeł łączący poziom administracji regionalnej i lokalnej.

CELE:
-Monitoring przestrzenny
-Integracja / Interoperacyjność
-Harmonizacja / Standardy zapisu planistycznego
-Ocena polityki przestrzennej
-Standaryzacja publikacji dokumentów planistycznych

ODBIORCY:
Ogólny dostęp do zintegrowanej informacji planistycznej skierowany jest do kreatorów i użytkowników przestrzeni.

DANE PRZESTRZENNE:
WWIIP, poprzez zastosowaną funkcjonalność, jest nastawiony na integrowanie wielu źródeł danych przestrzennych wykorzystywanych w planowaniu przestrzennym.

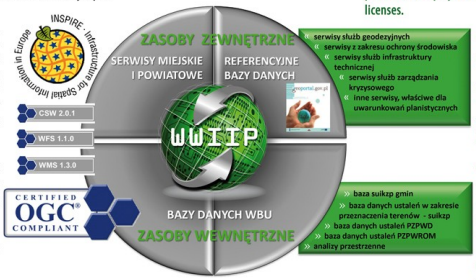
IDEE ROZWOJU - rozwój narzędzi geoinformatycznych
Całość systemu jest oparta wyłącznie na rozwiązaniach wolnego oprogramowania, zapewnia zgodność ze standardami ISO i OGC, spełniając wymogi dyrektywy INSPIRE i Ustawy IIP.

Ideą projektu jest rozszerzenie współpracy w zakresie rozwoju geoinformacji z administracją publiczną i uczelniami wyższym oraz udostepnianie całości powstałego rozwiązania na zasadach licencji open source.

Projekt VIA REGIA PLUS (Sustainable Mobility and Regional Cooperation along the Pan-European Transport Corridor III) realizowany w ramach Programu dla obszaru Europy Środkowej Europejskiej Współpracy Terytorialnej (EWT) objął swym zasięgiem obszar wzdłuż III Paneuropejskiego Korytarza Transportowego (Berlin/Drezno – Wrocław – Lwów – Kijów).

Miasto Wrocław – jako partner wiodący wraz z 14 partnerami z Polski, Niemiec, Słowacji i Ukrainy skoncentrowali się na realizacji zagadnień z zakresu:
-dostępności komunikacyjnej - kolejowej i kołowej,
-rozwoju obszarów metropolitalnych i regionów miejskich,
-turystyki.

W ramach projektu Wojewódzkie Biuro Urbanistyczne we Wrocławiu zrealizowało następujące działania:
1. Wyznaczenie szlaku rowerowego: „Droga św. Jakuba na Dolnym Śląsku" (pakiet roboczy WP5 – 5.3.3.).
2. Analiza dotycząca wyznaczenia drogowej trasy integrującej południowe obszary województwa dolnośląskiego wraz z powiązaniami Północ - Południe (pakiet roboczy WP3 – 3.3.1.).
3. Działania w zakresie Zintegrowanego Systemu Przeznaczeń Terenów dla Obszaru Metropolitalnego (pakiet roboczy WP4 – 4.2.4.).
Więcej informacji o projekcie znajduje się na stronach internetowych:
www.viaregiaplus.eu oraz **www.wbu.wroc.pl**



Lokalizacja portalu WWIIP
www.wbu.wroc.pl

Location of the WWIIP Portal
www.wbu.wroc.pl

The Regional Bureau of Spatial Planning in Wroclaw, by pursuing the objectives of the Via Regia Plus project, coordinates the creation and development of the regional node of spatial data infrastructure in the field of spatial planning, which links local and regional levels of administration.

OBJECTIVES:
-Spatial Monitoring
-Integration / Interoperability
-Harmonization / spatial planning standards
-Evaluation of Spatial Policy
-Standardization of the planning documents publication

CONSUMERS:
General access to the integrated planning information is addressed to the decision makers and the space' consumers.

SPATIAL DATA:
WWIIP, due to its functionality, is focused on the integration of multiple sources of spatial data utilized in planning.

IDEA - GIS tools development
The entire system, based exclusively on free software solutions. It ensures compliance with ISO and OGC standards and fulfils requirements of the INSPIRE directive and IIP Act.

The idea of the project is to strengthen cooperation between public administration and universities in the area of as well as offer the final product of the project to the wider public on the principles of open source licenses.

The Project VIA REGIA PLUS (Sustainable Mobility and Regional Cooperation along the Pan-European Transport Corridor III) carried out under the Programme for Central Europe of the European Territorial Cooperation (ETC) covers the area along the Pan-European Transport Corridor III (Berlin / Dresden - Wroclaw - Lviv - Kiev).

Wroclaw City - as a leading partner along with 14 partners from Poland, Germany, Slovakia and Ukraine, have focused on issues in the following areas:
-transport accessibility - railway and road systems,
-development in metropolitan areas and urban regions,
-tourism.

Regional Bureau of Spatial Planning in Wroclaw has implemented the following tasks:
1. Outline of a cycle route "The Way of St. James, in Lower Silesia " (w o r k package WP5 - 5.3.3.).
2. Analysis regarding the outline of a road route integrating the southern areas of Lower Silesia with the North – South nodes (work package WP3 - 3.3.1.).
3. Works on Integrated Area Allocations System for for the Metropolitan Area (WP4 work package - 4.2.4.).

More information about the project can be found at:
www.viaregiaplus.eu and **www.wbu.wroc.pl**

www.viaregiaplus.eu

SUMMARY

WWIIP – WHAT FOR?

The Regional Bureau of Spatial Planning in Wroclaw, by pursuing the objectives of the ***Via Regia Plus project***, coordinates the creation and development of the ***regional node of spatial data infrastructure*** in the field of spatial planning, which links ***local and regional levels*** of administration - **WWIIP**.

OBJECTIVES:

- Spatial Monitoring,
- Integration / Interoperability,
- Harmonization / spatial planning standards Evaluation of Spatial Policy,
- Standardization of the planning documents publication.

ACCESS POINT:

General access to the ***integrated planning information*** is addressed to the decision makers and the space' consumers.

WWIIP – ARCHITECTURE AND FUNCTIONALITY

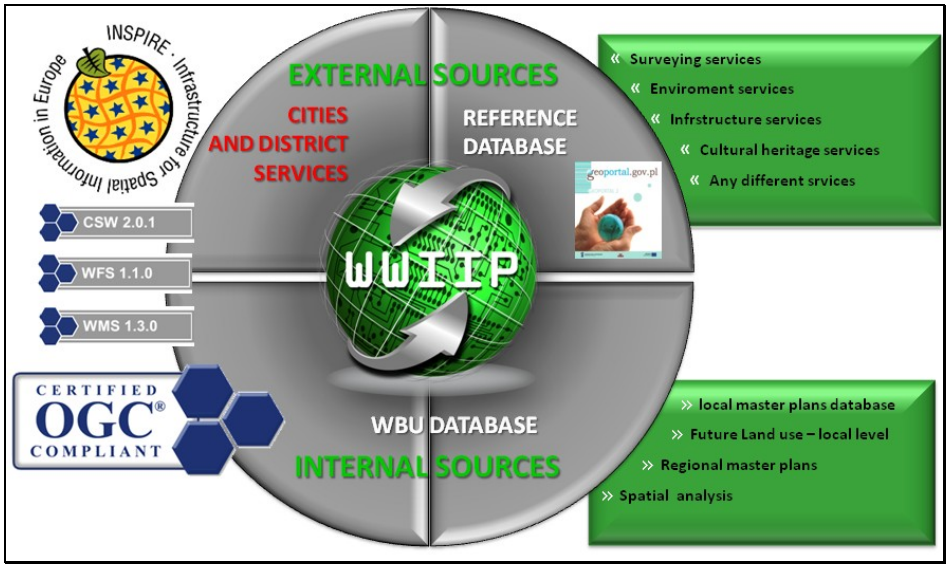
WWIIP - OPEN IDEA

The entire system, based exclusively on ***free software*** solutions. It ensures compliance with ISO and OGC standards and fulfils requirements of the INSPIRE directive and IIP Act.

FUNCTIONALITY

WWIIP, due to its functionality, is focused on the ***integration of multiple sources of spatial data*** utilized in planning, by services (WMS, WFS)

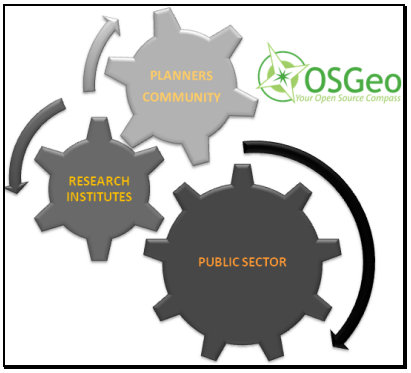
DATA CIRCULATION SCHEME



WWIIP - GIS TOOLS DEVELOPMENT

The idea of the project is to strengthen ***cooperation between public administration and universities*** in the area of as well as offer the final product of the project to the wider public on the principles of open source licenses. All project products has GNU GPL v3 license.

DEVELOPING SCHEME



Authors

Magdalena Belof, Jan Blachowski, Przemysław Malczewski

Reference

Outline of a cycle route "The Way of St. James, in Lower Silesia"
http://www.wbu.wroc.pl/4.2.4/

Contact

Regional Bureau of Spatial Planning, Dolnoslaskie Voivodeship Marshal's Office
ul. Swidnicka 12-16, 50-068 Wroclaw, Poland,
phone: 0048 71 343 79 46
fax : 0048 71 344 52 45

Email:

[jblachowski@poczta.wbu.wroc.pl] + [pmalczewski@poczta.wbu.wroc.pl]

HS-LAYERS AND PYWPS COMPONENTS FOR SPATIAL DATA NETWORKING INFRASTRUCTURE

Jachym CEPICKY & Karel CHARVAT
Help Service Remote Sensing – Benesov (CZ)

ABSTRACT

Keywords: *INSPIRE, Geoportal, View Services, Processing Services*

Contents:

HSLayers combines capabilities of ExtJS and OpenLayers and several helping scripts to establish truly Web GIS applications. The development started in 2007. In 2009, after 2 years of development, it was released under conditions of ***GNU General Public License 3.*** HSLayers features are coming up from OpenLayers.

HSLayers additional functions: Dynamic adding of OGC (*Open Geospatial Consortium*) services into map - clients for WMS and WFS, Portrayal of independent data sources on the client side. Map composition is composed on the basis of requests to various servers.

It is thus not necessary to install a map server, saving of map composition according to WMC (*Web Map Context*) OGC specification on user computer for repeated future use or for sharing between users, Extension of compute functions based on WPS (*Web Processing Service*) OGC service according to user needs, Multilingual environment, Map requests to various types of data stored on various servers, with automatic processing of results, Work with micro-formats, Search on the map, Connection of the application with catalogue client (*OGC CSW*) in the geoportal, which enables display of the searched service from catalogue directly on the map, Edit function by snapping to chosen layers, Possibilities for advanced configuration of user requests, Advanced measuring of length and surfaces, Print of map compositions with possible of large print outs (*up to A0 format*), and finally, user configuration of print settings

The important new issue is support for Web Map Context (WMC). Web Map Context (WMC) describes how to save a map view comprised of many different layers from different Web Map Servers. This mechanism is valuable for efficiently communicating across shift transitions.

PyWPSW is an implementation of the Web Processing Service of the Open Geospatial Consortium in Python. With PyWPS, it is possible to provide functionalities of geographic information systems and other space-related software via Internet.

The main advantage of PyWPS is, that it has been written with native support for **GRASS-GIS.** Access to GRASS modules via web interface should be as easy as possible. **Currently PyWPS is used also with other platforms.**

Authors

JACHYM CEPICKY & KAREL CHARVAT,
HSRS (Help Service Remote Sensing)

References

[http://www.bnhelp.cz]
[http://dev.bnhelp.cz/trac/hslayers] + [http://pywps.wald.intevation.org]

Contact

Help Service Remote Sensing
Vnoučkova 614, 25601 Benešov, +420 317 724 620
tel. +420 604 617 327 | mob. +420 317 724 620

Email: [bnhelp@bnhelp.cz]

HABITATS - CROSS BORDER DATA HARMONIZATION OF PROTECTED AREAS FOR TOURISM PURPOSES

Karel CHARVAT & Jachym CEPICKY – Help Service Remote Sensing – Benesov (CZ)
Premysl VOHNOUT – Czech Centre for Science and Society – Praha (CZ)

ABSTRACT

Keywords: *Habitats, Biotops, Sea regions, Data Harmonisation INSPIRE, Geoportal, Tourism, Social Validation, Social Networks.*

Abstract:

The HABITATS extends user-centric, co-design approaches into the arena of standards design and adoption processes, considering standards initiatives such as **INSPIRE**, **OGC**, **UNSDI** to be significant social, economic and institutional innovations. The elements of approach are maintained, applying the model at all levels from the global scale of the to the local and regional policies that frame many **HABITATS** validation pilots. Community building activities follow a ***Web 2.0 approach*** to capture the knowledge in active user communities with a strong interest in contributing to the standards development process.

The main paradigm for HABITATS is not "*What we would like to build*" or "*How we would like to build*", but it is "***Why?***" (***we need to build INSPIRE architecture, we need to harmonise data***). Only answering on such question could help and really attract local stakeholders to the implementation of **INSPIRE**. Only, if we are able answer on such questions, we can see ***real profit from INSPIRE for local and regional players.*** One application from economical segment, which was recognised by **HABITATS** and which can profit from environmental data harmonization could be ***tourism.***

Harmonized data could make easier sharing local environmental data in tourist systems. There exists set of tasks recognised by **HABITATS** like choice of most promising ***tourism routes*** – *including water sports and diving, according to the season and habitat diversity of the area*, ***users*** – *tourism agencies, holders of local guest houses* and ***hotels***, **local municipalities**.

As the coastal region encompasses also protected areas (*Natura 2000*) with limited allowed actions the ***knowledge on location of habitats and their value*** is essential for all types of economical activities. Any stakeholder involved in mentioned processes should be aware of the habitats' status in the respective area. Besides, the same ***knowledge is necessary*** for the authorities as ministries, environmental boards and coastal municipalities as the economical activities should be overseen and regulated to ensure sustainable management of the natural resources. So the first group of target communities, although diverse, is strongly nationally based.

Taking into account the cross-border nature of any marine processes the data on habitat situation is relevant also for the countries sharing the ***Baltic Sea area.*** This could also bring direct profit to ICT application developers. Having standardised services could extended applications among regions.

Authors

Karel CHARVAT & Jachym CEPICKY – HSRS (Help Service Remote Sensing)
Premysl VOHNOUT – CCSS (Czech Centre for Science and Society)

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[http://www.habitats.cz] + [http://www.inspiredhabitats.eu] + [http://inspiredhabitats.ning.com]

Contact

Help Service Remote Sensing
Vnoučkova 614, 25601 Benešov, +420 317 724 620
tel. +420 604 617 327 | mob. +420 317 724 620

Email: [bnhelp@bnhelp.cz]

ENVIROGRIDS TOWARDS "BLACKSEA" CACHMENT REGIONS – CROSS-BORDER SDI FOR WATER AND LAND MANAGEMENT

Karel CHARVAT & Premysl VOHNOUT
Czech Centre for Science and Society – Praha (CZ)

ABSTRACT

Keywords: *GEOSS, INSPIRE, Black See, Catchment, Uniform Resource Management, Metadata, OGC, Catalogue, Web Map Setrvices, Web Map Context, Web Feature Servicies, GRID Computing, Content Management System.*

Abstract:

The enviroGRIDS project is contributing to the ***Global Earth Observation System of Systems (GEOSS)*** by promoting the use of web-based services to share and process large amounts of key environmental information in the Black Sea catchment. The main aim of the project is to assess water resources in the past, the present and the future, according to different development scenarios.

The objective is also to develop datasets that are compatible with the European INSPIRE Directive on spatial data sharing across Europe. The data and metadata gathered and produced on the Black Sea catchment are distributed through the ***enviroGRIDS geoportal.*** The challenge is to convince and help regional data holders to make their data and metadata available to a larger audience in order to improve our capacity to assess the sustainability and vulnerability of the environment.

EnviroGrids focuses on building the capacity of scientific community to assemble such a system in the ***Black Sea Catchment*** and one of the goals of this project is the development of a web platform for knowledge dissemination that will also enable citizens' active and collaborative participation in environmental resources management, with emphasis on fresh-water resources through ***integrated River Basin Management.***

The EnviroGrids portal was initially presented as Uniform Resource Management (URM), Current concept include not only basic URM tools, but also interaction with Social Media. The current Geoportal has to offer services supporting the creation of a ***spatial data sharing system*** with possibility to publish data for any user having access to Web. The system is based on open formats and is open for interaction with other SDI platforms. It could be used in education, but also could be a solution for researchers, voluntary initiatives and data providers, and supports also GEOSS principles.

The EnviroGrids portal is a new integrated solution being designed as a combination of previous technologies – Uniform Resource Management, Geohosting and new technological development of a visualization client based on HSLayers - OpenLayers+ExtJS mapping framework.

The URM Geoportal is not the one integrated solution, but ***a set of modules and services,*** which are able to communicate through interoperable services (OGC, W3C). The solution is modular and could be easily modified for different purposes The URM models currently integrate different tools, which support sharing of knowledge. The Geoportal contains common ***metadata*** and ***catalogue, data sharing and visualization functionalities.***

Authors

Karel CHARVAT & Premysl VOHNOUT
CCSS (Czech Centre for Science and Society) – Praha (CZ)

References

[http://www.envirogrids.cz] + [http://www.envirogrids.net]

Contact

Czech Centre for Science and Society
Radlicka 28; 150 00 Praha 5
tel. +420 604 617 327 | mob. +420 604 617 327

Email: [ccss@ccss.cz]

SDI - THE PYRAMID OR SPIDER NETWORK

Karel CHARVAT & Premysl VOHNOUT
Czech Centre for Science and Society – Praha (CZ)

ABSTRACT

Keywords: *GEOSS, INSPIRE, GMESS, SDI, Social Media, Voluntary initiatives, Cross-border applications.*

Abstract:

Global SDI building is usually described like the pyramid building. Current experiences demonstrate, that for practical usage is more efficient the "***spider net infrastructure***", where different local or global levels are able to share data directly. As examples could be mentioned ***cross border systems***, ***systems of different communities*** across Europe or World, etc.

A 4th way to SDI is the way to shift from the pyramid paradigm, to paradigm of spider net. Connected with our concept is the system of distributed data sources, where every provider could decide about accessibility of his data ***against concept of cloud computing***, where one organisation is managing all information.

The principle of "Geoportal4everybody" (G4E) allows to build a "spidernet" infrastructure supporting interconnection of any two portals and effective exchange of information. This concept is also more related to GEOSS principles.

Our Geoportal solutions support two approaches. It offer possibility of ***publishing*** user derived data on community portal, but also ***sharing*** information using metadata catalogues with other portals. It also offers ***connection*** with public portal and re-use of information on public portals. It supports also easy ***integration*** of such information sources like *OpenStreetMap.* With the development of new desktop solutions, it is possible also connecting the whole infrastructure from desktop solutions. This depends on the ability of desktop systems to implement ***OGC standards*** and also eventual ***catalogue functionality.***

The new functionality of G4E also includes aspects of social network. A social network consists of a finite set or sets of actors and the relation or relations defined on them. The presence of relational information is a critical and defining feature of a social network. The focus of the URM Geoportal project is on social network sites (e.g ***LinkedIn, Facebook, Twitter***) as one of the main dissemination and communication tool. The Geoportal is in principle also a social network offering ***sharing of information (including spatial)*** among its own community and offers support for information exchange as well among thematical communities.

The Geoportal is an entry point for any news (*new developments, problematic topics, progress in the project, etc.*). News are posted by the project partners and will be automatically distributed to a number of selected communities – ***social network sites.***

This approach will allow involving of other communities from one place without having to enter each other community. Users of various social network sites can read entries and comment through their respective communities and don't have to register elsewhere.

GeoPortal4everybody also supports utilization of information from other social networks like ***SlideShare*** or ***YouTube***.

Authors

Karel CHARVAT & Premysl VOHNOUT
CCSS (Czech Centre for Science and Society) – Praha (CZ)

Reference

[http://www.egeoportal4everybody.cz]

Contact

Czech Centre for Science and Society
Radlicka 28; 150 00 Praha 5
tel. +420 604 617 327 | mob. +420 604 617 327
Email: [ccss@ccss.cz]

ARCHITECTURE PERSPECTIVES OF A PAN-EUROPEAN SDI

ESDIN – BEST PRACTICES –

TOWARDS THE EMERGING EUROPEAN LOCATION FRAMEWORK: SPATIAL DATA INFRASTRUCTURES BEYOND SCHEMA HARMONIZATION

Arnulf CHRISTL
METASPATIAL

Keywords: *architecture, best practice, ESDIN, european, framework, harmonization, location, INSPIRE*

Abstract:

The ESDIN consortium has successfully shown how data from European **National Mapping and Cadastral Agencies** (NMCA's) can be harmonized to meet INSPIRE obligations whilst also addressing issues such as ***generalization, quality evaluation, edge-matching and spatial data infrastructure (SDI) access control.*** In doing so, it has laid the foundations for a ***European Location Framework (ELF)*** which will enable cross-border information to be geographically-referenced and allow citizens, businesses and governments to gain maximum benefit from the re-use of existing national datasets.

All software created is available under BSD licenses, making it open in the most permissive way. The ***recommendations and guidelines*** are scale and theme independent and, although they ***focus on aggregation and the update of data*** for INSPIRE Themes in Annex I, they will also be applicable to other themes.

Dieser Beitrag basiert auf den Ergebnissen des EU-Projektes ESDIN. *In Form einer* ***Video****-Demonstration werden*

- ***Erfahrungen*** *aus dem EU-CONTENTplusProjekt ESDIN vermittelt*
- ***Verbindungen*** *zwischen Interessengruppen gefördert*
- ***Arbeiten*** *zur Umsetzung von INSPIRE verdeutlicht bzw. für die eigenen Bedürfnisse in Wert gesetzt und*
- ***ESDIN-Projektergebnisse*** *mit einem Online Viewer vorgestellt.*

Author
Arnulf CHRISTL
Technical Coordinator of European Content+ Project ESDIN

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Contact
[http://www.metaspatial.net/contact.html]
Email: [arnulf.christl (at) metaspatial.net]

SUMMARY

ESDIN - Underpinning the European Spatial Data Infrastructure with a Best Practice Network

Implementing INSPIRE

ESDIN found that many of the transformations required for INSPIRE compliance are too complicated to be processed on-the-fly. Using EuroGeographics' experience of creating pan-European datasets, it has developed a specification for a future **ELF** (*European Location Framework*) that also enables a wider community, including NMCAs, to fulfill the INSPIRE requirements.

An automated approach to quality evaluation for all SDI process steps, which will provide ***cost savings*** for data providers and ***quality measures*** for usability evaluation, were also developed. This helps to meet user needs and improve efficiencies in NMCA's and other public institutions. The consortium believes that there is no other quality evaluation methodology that is as comprehensive and cost effective.

For sustainable edge-matching maintenance, it is needed to agree on boundary representations. And so the EuroGeographics' State Boundaries of Europe project is creating a ***Euro-X-Boundary Dataset*** as the basis for the ***edge-matching service*** proposed by ESDIN.

However, building services and harmonizing data is not just a technical process matter – users need to know how data can be acquired as quickly and efficiently as possible using available metadata and services, and, although it is desirable to have ***a harmonized policy for all data providers*** very soon, it is likely that sustained effort in this area is ***required by NMCA's to harmonize all aspects of their policy.***

Proposals for a technical architecture

There are a number of *requirements* that reflect on the architecture:

- ***NMCA's need to deliver consistent data at regular intervals*** for the data source layer
- ***Edge-matching, quality assurance and generalization*** should take place in an intermediary layer – the processing level of ESDIN
- ***Implementation of an update logic by NMCA's*** at the production level will be required to allow for data layers to be up-to-date
- ***Results from edge-matching***, ***naming*** (Unique Identifier) and ***quality control*** must flow back from the intermediary layer to each involved data source layer.

To be able to address these requirements the architecture needs to provide for flexibility. At the same time it is necessary to build an infrastructure which will allow for near ***realtime*** updates, if the involved data producer can provide this. Also, the ***conceptual INSPIRE architecture model*** should serve as a template to implement the solution.

The resulting architecture consists of three different areas, the data ***production***, the intermediary data ***cache*** and the ***client and user level.***

Depending on the users' needs it is possible to retrieve data from different levels of the architecture. Some users might want to ***access the data directly*** from the producer level (1), either because they have individual contracts or because they already have special arrangements in place with the data provider.

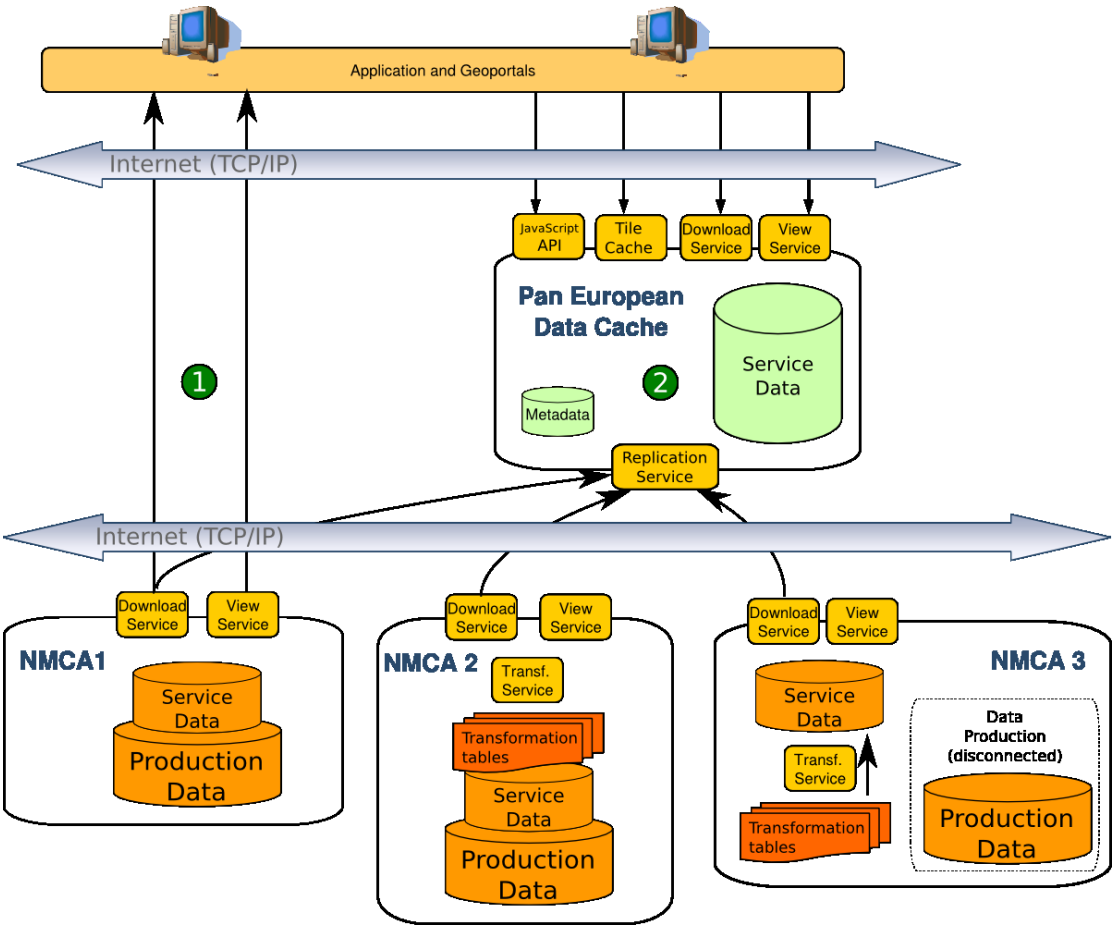

Figure 1: Two levels of data provision and access in an INSPIRE architecture

Other users may need to access pan-European maps and underlying data, they will instead ***access the intermediary data cache*** (2). It contains data which has gone through all the extra processing steps involved in creating a high quality, harmonized homogeneous geographic content.

The data cache allows for another important advantage that also goes beyond the needs of INSPIRE. It will be easy to add new data formats and interfaces. Besides the regular INSPIRE ***View*** (*OCG WMS*) and ***Download Services*** (*OGC WFS*) **ESDIN *has opted for tile caching*** as another way to ***access ready to use*** maps. In many contexts this way of delivering maps is much more responsive and will satisfy the needs of a majority of users while at the same time offering much better ***scalability***.

It will also be possible to implement an API on this central cache and create an Open Linked Data store. This allows to link non-spatial resources, again without the need to set up new components at every data provider site.

The new Open Linked Data approach and the yet unknown effects of the ***Digital Agenda on Public Sector Information*** will require heavy lifting of the involved data.

Addressing new needs will be much more ***economic***, ***consistent*** and also ***faster*** if done at the ***central data cache*** level. The update mechanisms between the central data cache and the data producers can be left untouched when ***adding new formats or even API's to the data at the cache level.***

Technology and Software

ESDIN was implemented to satisfy the needs and requirements of the participating NMCA's. In order to minimize disruption of existing work flows and to best leverage existing skills NMCA's were free to choose whichever software they wanted. The market for INSPIRE ready software is still fairly small, both on the serving and the consuming side.

More than ¾ of all participating NMCA's chose to implement the publication components of the architecture using ***Open Source technology.*** The others either used proprietary software with special compatibility extensions, or implemented the required components themselves.

The Open Source stack used includes the "***deegree***" server components in versions 2 and 3, ***GeoServer*** and ***MapServer.*** Especially the "***deegree***" project has gone to quite some effort to optimize their "***deegree***" version 3 of the software to deliver ***INSPIRE download services*** out of the box.

The client framework was implemented using OpenLayers with additional extensions implemented during the project, especially to be able to use the ***Shibboleth authentication federation*** which was set up to provide ***controlled access*** to the SDI. During the project a lack of ready-to-use software capable of ***visualizing GML 3.2.1*** was observed. The obvious reason is the lack of availability of data in that format. Hopefully this will change in future. As an alternative the ***ESDIN architecture is ready*** to accommodate extension for other formats which can be easily hooked into the central data cache.

The tiling service delivering the EuroGeographics products EuroRegionalMap (ERM) EuroGlobalMap (EGM) and EuroBoundaryMap (EBM) is implemented using "***GeoWebcCache***", ***monitoring***, ***service tracking*** and ***metadata management*** during the project was performed with "***Mapbender***".

The full list of all software used during the project can be found in the ***Technical Architecture document deliverable 5.2.***

The way forward

Feedback from the pricing and licensing workshops, and the user insight work, demonstrated that on-going efforts to advance "***best practice" in harmonizing, accessing and processing*** geographic information are needed and will be well appreciated.

It is now up to individual NMCAs, EuroGeographics and other Stakeholders to progress and fund the creation of data and services to these specifications and therefore ***complement INSPIRE with ELF.***

Names and addresses are at the root of most geographical searches so these INSPIRE themes must be the cornerstone of any proposed ELF.

The experience gained during the ESDIN project will be a helpful asset for building and improving the architecture of the ELF. The ESDIN Consortium encourages European actors ***to employ the methods outlined here*** in their own "best practice" towards INSPIRE compliance and pan-European harmonization. Use the tools that have been created, experience the demonstrations and engage with the emergent network of people and organizations that can be used for building the **ELF**.

The [VIDEO] presentation will give some more insights to the work which has been done in this EUROPEAN SDI NETWORK Project (ESDIN) !

CZECH SOLUTION FOR INSPIRE GEOPORTAL – THE GATEWAY TO NATIONAL SDI

Jitka FAUGNEROVÁ, Jiří KVAPIL, Jiří HRADEC – CENIA – Praha (CZ)
Jaroslav PŠENIČKA – IBM – Praha (CZ)
Štěpán KAFKA – HSRS – Benesov (CZ)

ABSTRACT

Keywords: *Catalogue, Czech Republic, Dataset, Decision making, Directive, editing, Geoportal, INSPIRE, Map viewer, Metadata, Network, monitoring, OGC, Registry, Services, spatial validating, WMS.*

Abstract:

There are two main activities supporting the implementation of the INSPIRE Directive in the Czech Republic. These are coordinating structures forming and National INSPIRE Geoportal building. Both are placing the cornerstone for a successful implementation: coordinating structures from the organizational point of view, and the Geoportal from the technical one to be described.

The development of the Czech National INSPIRE Geoportal has started apart from all the organizational issues. The main driving forces for the Geoportal are of course the requirements of the INSPIRE directive (*to make data and metadata available, to run network services, etc*.), but from the beginning its creators decided to do more, than only provide an access to data guaranteed by the state administration.

The Geoportal is available at [http://geoportal.gov.cz] providing discovery and view services. So far only following portal components are fully functional: ***metadata searching, metadata editing, metadata validator, user registry, map window and monitoring.*** The others are being developed according to the plan. Monitoring indicators can be easily inserted by each data provider without using the complicated Excel template. Map viewer user interface supports OGC WMC. Each user is able to combine services into map compositions, modify predefined ones, store the results on the Geoportal and share them with others.

The National INSPIRE Geoportal of the Czech Republic was launched in January 2011. The number of registered users is increasing day by day, but the overall figures are still not high enough. ***Data providers*** are mostly aware of INSPIRE Directive and know what they are expected to provide, however they are sometimes hesitating to make their data or services available. The ***GIS community*** is already familiar with map services provided by many providers, they are accessing it directly using GIS software. So the most important is to inform the public, that there some INSPIRE Directive exists and explain what profit they can have from it. This is the biggest ***challenge***.

Authors

Jitka FAUGNEROVÁ, Jiří KVAPIL, Jiří HRADEC
CENIA (Czech Environmental Information Agency) – Praha (CZ)
Jaroslav PŠENIČKA – IBM.cz – Praha (CZ)
Štěpán KAFKA – HSRS (Help Service Remote Sensing) – Benesov (CZ)

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[http://www.cenia.cz] + [http://inspire.gov.cz [+ [http://geoportal.gov.cz]

Contact

CENIA, česká informační agentura životního prostředí
Litevská 1174/8; 100 05 Praha 10
tel. +420 267 225 294 | mob. +420 724 549 970

Email: [geoportal@CENIA.cz]

THE RIVER DANUBE AS A CROSS-BORDER DEVELOPMENT DETERMINANT FOR THE CITY OF BRATISLAVA

Juraj FURDÍK, Rostislav ONDRUŠ, Denisa ŠEBOVÁ
Faculty of Architecture, Slovak University of Technology – Bratislava (SK)

ABSTRACT – POSTER

Keywords: *Austria, Hungary, Cross-border, The River Danube, Bratislava, Landuse Planning, Water Flow, Region, Slovakia*

Contents:

Historically, the River Danube protected the territory of Slovakia, and this fact has naturally and politically demonstrated to the possibilities of the City of Bratislava development and to the possibilities of the whole region development.

The intention of this poster presentation is to point out natural and social determinants of the development of Bratislava territory and in the context of the impact on ***the border Slovak, Austrian and Hungarian villages*** (*city districts*).

The poster presents the influence of the Danube water flow and its water system in the evolutional (historical) context, when the voluminous system of the starting point of the Central Europe delta – Danube mouth in the territories of Slovakia, Hungaria and Austria presented autonomical natural and social system in the contact with the capitals of these countries.

The poster presentation is focused on the City of Bratislava and the territory of surrounding villages in contact with the water system of ***Danube river***, with emphasis on the improvement of natural and civilization conditions in the context of sustainable territory development of this border region.

Authors

Ing. arch. Juraj FURDÍK, PhD., Mgr. Rostislav ONDRUŠ, Ing. arch. Denisa ŠEBOVÁ

Reference

[http://www.fa.stuba.sk/generate_page.php?page_id=2358]

Contact

Department of Computer and Multimedia Design, Faculty of Architecture,
Slovak University of Technology – Bratislava
Námestie slobody 19, 812 45 Bratislava, Slovakia
phone: 00421 918 665 034

Email: [furdik@fa.stuba.sk]

URBAN STRUCTURE TRANSFORMATION OF THE PERIPHERAL BORDER DISTRICTS OF CITY BRATISLAVA

Juraj FURDÍK, Ivor MEČIAR, Rostislav ONDRUŠ, Denisa ŠEBOVÁ
Faculty of Architecture, Slovak University of Technology – Bratislava (SK)

ABSTRACT – POSTER

Keywords: *Cross-border, Bratislava – Čunovo, Land-Use Planning*

Contents:

Development of peripheral city districts (*villages*) of Bratislava in the period after 1989 attained the strong dynamism at the ***border areas between Slovak, Hungary and Austria***. One of these city districts is **Čunovo**, which is unique, because its cadastral territory is bordering directly with Hungary and Austria.

This dynamism, caused by several factors, was dominantly influenced by the opening of borders and by the admittance of Slovakia and Hungary as Member states to the single European Union.

The intentions and possibilities of structural transformation of the village, located at the borders with Austria and Hungary is to preserve the suburban character, and as been documented in several urban ***studies and zonal plans of Čunovo border territory.***

The Poster presents in more detail urban study of zone land-use plan of the "Area of the Former Collective Farm in Čunovo" located in a border area.

The intention of this study is a transformation of the functional usage to the zone of housing and manufacturing and non-productive services. Therefore, the main objective of this study was keeping of the sustainable development of the city district by searching for its new architectural and urban image.

Authors

Ing. arch. Juraj FURDÍK, PhD., Ing. arch. Ivor MEČIAR, ArtD.,
Mgr. Rostislav ONDRUŠ, Ing. arch. Denisa ŠEBOVÁ

Reference

[http://www.fa.stuba.sk/generate_page.php?page_id=2358]

Contact

Department of Computer and Multimedia Design, Faculty of Architecture,
Slovak University of Technology – Bratislava
Námestie slobody 19, 812 45 Bratislava, Slovakia
phone: 00421 918 665 034

Email: [furdik@fa.stuba.sk]

CHALLENGES AND OPPORTUNITIES FOR EUROPEAN BORDER REGIONS

Analysis of Cross-border GeoPortals for GI/GIS/GDI & GeoINSPIRE'd Infrastructures of Data, Services and Applications

Frank HOFFMANN
IGN-Vorstandsvorsitzender – (INNOVATION. Grenzüberschreitendes Netzwerk e.V.) – DRESDEN (DE)

ABSTRACT

Keywords:
AEBR, Awareness, Border regions, BOWGIS, Education, ESDI, ETC/4A, EU-Directives, Europe, FP6/7, GDI, Geodata, Geomatics, Geospatial, GI2000, GI2011, GSDI, INSPIRE, Interoperability, INTERREG/4A, NSDI, OpenGIS, Pilot projects, PSI, Regions, SDI, Spatial planning, Strategy seminars, Sustainability, Usability, X-SDI.

Contents:

The GI2000 Initiative, already created and discussed intensively between 1995 and 1999 as a ***vision, mission and conception*** for an integrated **European Spatial Data Infrastructure** (**ESDI**) **process**, defacto was ready for submission just after the 5th EC GI&GIS Workshop in Stresa/Italy in summer **1999**. But, unfortunately, in December 1999 in spite of the urged demission of the European Commission the GI2000 concept was cancelled.

But, the GI2000 concept then was "*re-invented*" again in 2001 and promoted at ***EC GI&GIS workshop 2002 in Dublin*** as the "*new*", but now as the well known ***INSPIRE process,*** officially proposed in 2004, and adopted later on as the ***INSPIRE Directive 2007/2/EC.***

Finally, the INSPIRE ***Data and Service Sharing Guidelines*** of the European Commission, e.g. the legal **REGULATION No 268/2010 as of 29 March 2010** have been published at April 28th 2010.

This Regulation is aiming to introduce **OPEN GEODATA ACCESS** conditions to ***spatial datasets, information services and thematical applications*** *(e.g. for georesource exploring, environmental monitoring and spatial planning)* not only inside of the EC institutions and agencies, but as well for ***regional/cross-border organizations and local/cross-border communities*** in order to give them the opportunity to harmonize and integrate geodatasets and public sector information **(PSI-Directive 2003/98/EC)** supplied from all Member states in an interoperable and syntactically and semantically standardized way for *environmental and spatial planning processes*.

Nevertheless, the geopolitical and technical decision process to implement INSPIRE until year 2019 is moving very slowly not only in the European Member states, but as a follow-up also in Germany, as well in Saxony**.**

But, the main barriers and, as well as important, **challenges** are the ***geodetic transformation, semantic harmonization*** *and* ***cartomatic generalization*** of GEO/ENVIRO/SPATIO data and datasets and their ***integration*** based on interoperable webservices from local via regional into national level to build a homogenous…

- **Infrastructure of Spatial Information across European Border Regions (INSPIRE-X-EBR) !**

Therefore, **this presentation gives an overview** on the very few selected SDI, e.g. only 6-8 still existing ***X-border-Geoportal initiatives***, as well as ***X-SDI/GDI Pilot projects*** dealing with *topometric, topological & thematical* **interoperability, usability** and **sustainability** of public & private sector geodata, webservices and special **PLAN4ALL** applications ***across local, regional and state borders.*** The symposium will inform and make aware the **AEBR** community of nearly **200 European Border Regions** about the potential, chances and challenges ahead when implementing the **PSI & INSPIRE Directives in cross-border regions of Europe.**

Author

Doz. Dr. Frank HOFFMANN, CSc

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EU-FP6-Project-NATURNET [http://www.NATURNET.org]

Contact

IGN - INNOVATION. **G**renzüberschreitendes **N**etzwerk e.V.
c/o IGN-Vorstand, *Martin-Andersen-Nexö-Str. 4*, D-01217 DRESDEN / Saxony / Germany
[http://www.FACEBOOK.com/event.php?eid=163068260403141]
Email [Mailto:Vorstand@IGN-SN.de] + [Mailto:info@GDI-SN.de]

LEONARDO "SDI-EDU" PROJECT AS A FRAMEWORK FOR VOCATIONAL EDUCATION IN EUROPEAN BORDER REGIONS

Karel JANECKA*, Jiri HIESS, Vaclav CADA*, Radek FIALA*, Karel JEDLICKA*, Otakar CERBA*, Jan JEZEK*, Tomas MILDORF***

*University of West Bohemia – Pilsen (CZ) & **CAGI – Prague (CZ)

ABSTRACT

Keywords: *Awareness, BizBiz, contents, Directive, Geoportal, INSPIRE, learning PSI, SDI-EDU, spatial planning, tools, vocational education,*

Contents:

The paper describes the proposed version of teaching content, the universal *syllabus focused on planners* around all Europe. As this came from only several countries in a limited group of experts during the first year of SDI-EDU project, therefore, the ***feedback and comments*** from different regions, countries, from practitioners working in spatial planning, active in regional and urban planning, from officials, and decision makers are welcomed.

The drafted syllabuses will be in next step transformed and developed into practically useable teaching lessons using all the SDI-EDU set of instruments and the teaching contents will be proved and trained in partner countries for ordinary audience in the next part of project.

Getting feedbacks the syllabus could be improved and modified to maximise the synergic effects and get the most efficient learning.

Authors

Karel JANECKA[1],
Jiri HIESS[2], Vaclav CADA[1], Otakar CERBA[1], Radek FIALA[1],
Karel JEDLICKA[1], Jan JEZEK[1], Tomas MILDORF[1]

Reference

[SDI-EDU – Deliverable "Training content selection and adoption"]
[http://portal.sdi-edu.zcu.cz/]

Contact

[1]University of West Bohemia
Univerzitni 22, 30614 Pilsen, Czech Republic
phone: 00420 377 632 673
fax : 00420 377 632 602

Email: [{ kjanecka | cada | cerba | fialar | smrcek | jezekjan | mildorf | }]@kma.zcu.cz

[2]Czech Association for Geoinformation – CAGI
Novotneho lavka 5,
116 68 Prague 1 – Czech Republic
Email: [hiess2@cagi.cz]

SUMMARY

In our focus are both *the national level stakeholders* (*ministries, planning institutes, leading planning ateliers*), and *the regional administrations and urban planners.* To describe the whole portfolio SDI-EDU uses illustrative *use cases* from European, national, regional, and even local scales.

The targeted end users – *specialized, but ordinary public active in planning processes* – have to fully understand the meaning and consequences of **INSPIRE**, of *complex and harmonised spatial information.*

The lectures are based on existing situation and open questions; therefore, ***learning by doing*** is one of key teaching methods.

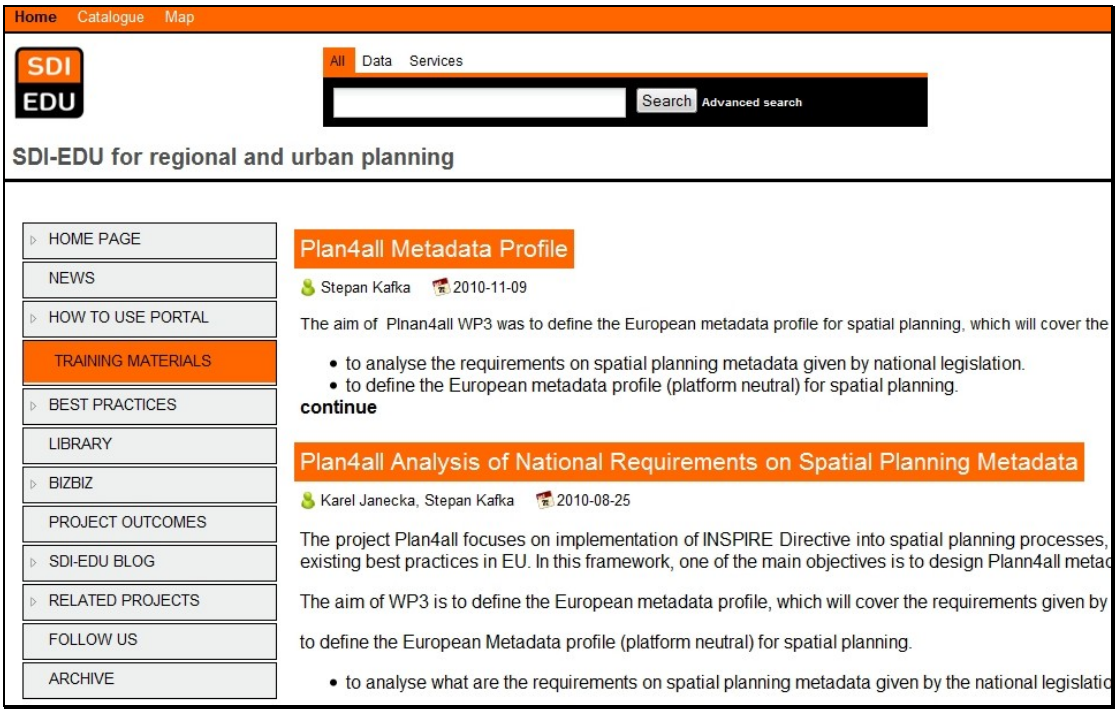

Fig. 1: The training material will be available from the SDI-EDU portal

The contents will be developed even during the rest of project, as this has to be both universal in any country or region, and reflect the hot-topic specifics. Due to the necessary ability to understand the contents should be translated directly into partner languages. It contains also partial chapters unique in given country.

These specifics could be seen as marginal in the European context, but we consider it important for the final success of educational process*: the more will the contents reflect local situation, the more will the audience understand the higher level scale planning problems.* Interiorization of this specific learning contents will cause improving the flexibility and competitiveness at the end.

SDI-EDU team will carefully *evaluate the feedback from upcoming teaching.* The syllabus cannot be fixed forever of course, this deliverable doesn´t solve teaching the planning disciplines, it adds a value to new structural and working principles invoked by the ***INSPIRE and PSI re-use directives,*** and allowed by modern advanced web geoinformation technologies.

Additional analysis after WP1 (*Analysis of User Requirements*) conclusions was made as preparatory and feedback process of WP3 (*Curriculum Preparing*). To be short and not to repeat, these aspects were considered ***to prepare the learning context specifically for the planning sector:***

- Technological challenges and operational techniques appropriate to planning
- Recommended illustrative cases for implementation into teaching content and lessons
- Feedback mechanism to indicate, mine and prove the expectations of planners
- Exploring and measuring the knowledge (and its weakness) during the learning process
- National and regional specifics
- Review of relations and inputs to/from other projects, test beds, sources, events
- Basic starting core themes of SDI-EDU curriculum
- INSPIRE principles, challenges and advantages for planning tasks
- Good practice illustrative cases
- Networking architecture and services for planning
- IPR in complex planning SDI
- Necessary technological conditions to implement INSPIRE into planning
- Practical typology of exercises:
- Discovery, search – first quick orientation, overview
- View, show, get geoinformation – user of planning information
- Get geodata, download, pre-defined analyses – producer of planning information
- Geodata provider – geopublishing, geoportals
- Creative stand-alone analyst, decision maker, evaluator, examiner
- Requests on teaching tools and environment, the teaching experience
- Improving recommendations from feedback reactions of testers and practitioners

For designing these learning contents we used several progressive concepts. INSPIRE principles as one of the best developing and sustainable system of rules and techniques, with one big advantage: This EU Directive was already transposed into legal systems of EU members, and must be implemented. ***Annexes II and III of INSPIRE Directive*** include groups of geoinformation solved in planning, many geodatasets are already prepared, done, exist, but ***not always accessible*** to routine planners, in some and not for them appropriate form.

Finally, we established the educational curriculum logically divided into 17 particular learning contents topics:

SDI-EDU Learning topics:
1) Spatial Data Infrastructure (SDI) – the importance, awareness, its role in planning processes
2) INSPIRE directive and implementing mechanisms (IR ...)
3) National INSPIRE transposition
4) INSPIRE development and innovations in European projects (Plan4All, SDI-EDU) – what exactly: tools, techniques, special applicative user and administrative GI knowledge, user skills
5) INSPIRE impacts in national context generally, in given country
6) INSPIRE implementation into the national environment (larger than SDI with respect to planning practice and rules)
7) Legal rules, acts, normative, methodological institutes and processes in given country
8) Metainformation catalogues in / for spatial planning – generally, illustrative learning cases
9) Spatial data – INSPIRE approach for spatial planning – generally, with respect to learning cases base on good practice understandable to the audience
10) Software tools directly useable for spatial planners – SDI-EDU teaching environment in accord to existing LMSs
11) What to do with the existing spatial data in planning to be INSPIRE compliant? And what to do to be useable for upcoming tasks and SP objectives in EU in given country?
12) How to find, evaluate, select, and use the existing heterogeneous spatial data and metadata? (First orientation for users)
13) How to create new spatial planning metainformation to be INSPIRE compliant?
14) How to manage and improve the already existing metadata to be INSPIRE compliant?
15) How to create new spatial planning data to be INSPIRE compliant?
16) What does a geodata harmonisation mean? How to realise it in Spatial Planning?
17) Special case based on hot-topics in given country – to get the interests of our key target groups (designing, planning, negotiation, and construction of e.g. new highways, supermarkets, solar or wind power stations)

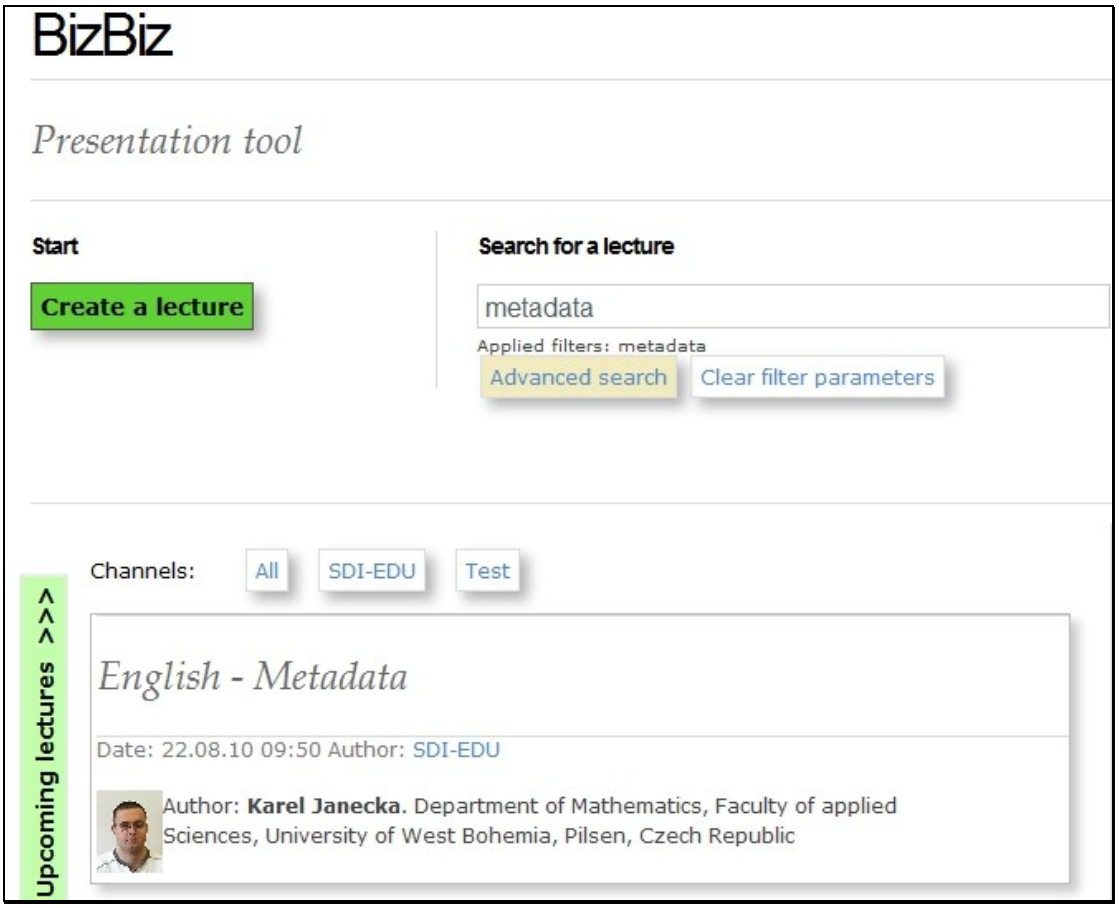

Fig. 1: All courses will be available on "*BizBiz*" as an external component of the SDI-EDU portal

The key SDI-EDU value consists in flexible and quick complex *teaching methodology* and *information technology* allowing authors to create and modify the teaching context. The end users can access the lessons planned remotely, with no special technical equipment.

- **The project team is working on learning material nowadays.**
- **The tools have been already developed.**

The GI2011-X-border-SDI/GDI-Symposium in Bad Schandau (SAX) # Decin (CZE) will be used not only for presentation the SDI-EDU, for promoting its goals and ideas, but also for live expert discussion. The participants of GI2011 are welcomed to visit the project webpage, to comment and prove the SDI-EDU solution.

SHARING METADATA ACROSS EUROPE

EXPERIENCES FROM "ONEGEOLOGY", "HABITATS" AND "PLAN4ALL" EUROPEAN RESEARCH NETWORKS

Stepan KAFKA – Help Service Remote Sensing – Benesov (CZ)
Karel CHARVAT – Czech Centre for Science and Society– Praha (CZ)

ABSTRACT

Keywords: *Metadata, Catalogues, Metadata profiles, User communities*

Abstract:

MICKA is a complex system for metadata management used for building Spatial Data Infrastructure (SDI) and geoportal solutions. It contains ***tools for editing and management*** of metadata for spatial information, web services and other sources (documents, web sites, etc.). It includes online metadata search engine , portrayal of spatial information and download of spatial data to local computer.

MICKA is compatible with obligatory standards for European SDI building (INSPIRE). Therefore it is ready to be connected with other nodes of prepared network of metadata catalogues (*its compatibility with pilot European geoportal is continuously tested*). Initially, **MICKA** was developed as monolithic system, but currently **MICKA** is a modular system divided into simple components, which could be used independently.

Currently exist the following independent MICKA components:

- ***INSPIRE metadata profile client*** for editing and validation of INSPIRE metadata
- ***Import module*** for importing metadata from existing services like WMS, WCS and their editing and validation against INSPIRE profile
- ***Editing module*** for existing metadata
- ***Light discovery catalogue client,*** which could be parameterized and included into different applications
- ***Full discovery catalogue,*** supporting multi catalogue search
- ***Full MICKA for Metadata administration,*** used only by the administrator
- ***Harvesting of metadata***

MICKA is a multilingual solution, currently ***translated into eighteen European languages*** and it is used not only on local, regional and national level, but very often is used as well by different European communities like *geologist, spatial planners and others*. These communities usually define their own metadata profiles. As good example could be mentioned projects **ONEGEOLOGY, PLAN4ALL** and **HABITATS**.

In **ONEGEOLOGY MICKA** is the central metadata catalogue describing ***geological data*** assets held by national Geological surveys in Europe. Through the catalogue geological data and services are discoverable across Europe. One from main objective of **PLAN4ALL** project was to define an overall ***spatial planning metadata profile*** applicable for spatial plan as a whole. The **PLAN4ALL** metadata profile includes not only spatial data, but also non-spatial data, relations among data sets and also time dimension. Also the **HABITATS** project defines an own metadata profile as extension to the INSPIRE profile. The **HABITATS** ***profile*** could be tested and validated on the **HABITATS** ***reference laboratory.***

Authors

Dr. Stepan KAFKA & Dr. Karel CHARVAT
HSRS (Help Service Remote Sensing) – Benesov (CZ)

References

[http://one.geology.cz] + [http://www.plan4all.eu] + [http://www.habitats.cz]

Contact

Help Service Remote Sensing
Vnoučkova 614, 25601 Benešov, +420 317 724 620
tel. +420 604 617 327 | mob. +420 317 724 620
Email: [bnhelp@bnhelp.cz]

TESTING OF SDI COMPONENTS – A FUNDAMENTAL INTEROPERABILITY ELEMENT WITHIN INSPIRE AND NATIONAL SDI's

Tomáš KLIMENT*, Martin TUCHYŇA, Marcel KLIMENT*****
* Italian National Research Council, the Institute of Ecosystem Study (IT)
**Slovak Environmental Agency – SEA, Banská Bystrica (SK)
***Slovak University of Agriculture – SPU, Nitra (SK)

ABSTRACT

Keywords: *geospatial metadata, geospatial services, INSPIRE regulations, testing methodology, testing tools, testing reporting*

Contents:

Before any Spatial Data Infrastructure (SDI) is implemented, relevant ***testing procedures*** should take place to ensure full compliancy of all SDI components against the standards setting up the SDI framework being deployed. Testing procedures ***executed across various domains*** on national level can be the challenge and this contribution comes with one example.

The INSPIRE framework defines five components: *metadata, network services, spatial data, data sharing and monitoring and reporting.*

Metadata provides descriptive information about all existing resources within SDI for the purpose of their discovery, evaluation and consumption. Metadata is served by **discovery service** to the end user.

Spatial data, metadata and related network services for their discovery, portrayal, acquisition, transformation and processing are ***fundamental*** components of any SDI in general. Spatial data is being used for further ***processing*** within an individual business process related to the user needs. Spatial data is visualized by **view service**, accessible by **download service,** processed by **transformation** and other **processing services.**

This contribution stresses the necessity of testing the above mentioned components and provides ***user scenarios of cooperation*** between the public and academic sector organisations. Current status and "***best practices***" within legally mandated organizations (LMO) show that such cooperation is more then necessary in order to gain ***required interoperability level*** on national and European level as well.

Authors

Dipl.-Ing. Tomáš KLIMENT &
Dipl.-Ing. Martin Tuchyňa, PhD & Dipl.-Ing. Marcel Kliment, PhD

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Contact

Italian National Research Council, the Institute of Ecosystem Study
Largo Tonolli 50, 28922 Verbania Pallanza, Italy,
cell phone: 0039 389 4955 954
Email: [tomas.kliment@gmail.com]

BRINGING ECO-BIOLOGICAL METADATA TO THE INSPIRE META INFORMATION WORLD

Tomáš KLIMENT & Alessandro OGGIONI
Italian National Research Council – CNR (IT)

Keywords: *EnvEurope project, EML- Ecological Metadata Language, INSPIRE metadata profile, Metadata crosswalk between EML and INSPIRE,*

Abstract:

The EnvEurope project proposes a design for environmental high quality monitoring and long-term research sites and the exemplary establishment of common parameter sets to be collected across the largest site-based network of ***Long-Term Ecosystem Research (LTER)*** in Europe, in ***3 different types of environment*** (*Lacustrine, Marin and Terrestrial*).

The aim of EnvEurope data management working group is to provide a framework which allows to share the data within the project and to provide a ***use case for INSPIRE/SEIS.*** Important part of data sharing is data discovery and evaluation by its description. Hence, EnvEurope community metadata profile on the dataset level using **EML** (***Ecological Metadata Language***) **specification** is being developed.

EML is based on prior work done by Ecological society in United States (US) and has been developed by ecologists for ecologic discipline. It is mainly used in the US LTER sites, and many other sites in the world (Japan, Israel, etc.). As the project community is geographically connected with Europe ***an INSPIRE form*** of this community metadata profile has to be taken into account to promote interoperability for any other community in Europe.

This paper describes basic information about the construction of ***cross-walk*** between EML metadata specification and INSPIRE metadata profile. Furthermore provide pilot implementation of such cross-walk ***using XSLT technology***. Moreover, open questions and issues related mainly to the EML metadata collection using available tools are defined for the future research work

The EnvEurope metadata profile for dataset level implementation aims on the one hand to support a framework, where interoperable way of long term ***ecological and biological data exchange across Europe*** and even outside of EU should be achieved. On the other hand the activity related to dataset level metadata within the INSPIRE Thematic Working Group for Biogeographical regions, Habitats and Biotopes and Species Distribution (TWG HB-BR-SD) is directly supported as well.

Authors

Dipl.-Ing. Tomáš Kliment & Alessandro Oggioni, Ph.D.

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Contact

Italian National Research Council, the Institute of Ecosystem Study
Largo Tonolli 50, 28922 Verbania Pallanza, Italy,
cell phone: 0039 389 4955 954
Email: [tomas.kliment@gmail.com]

NOTHING – BUT A WASTE OF TIME AND MONEY?
SPECIFICITIES OF CROSS-BORDER COOPERATION IN THE GERMAN-POLISH-CZECH BORDER TRIANGLE

Robert KNIPPSCHILD
Dresden University of Technology, Chair of Spatial Planning (DE)

ABSTRACT

Keywords: *Cross-border cooperation, German-Polish-Czech border triangle, regional development.*

Contents:

Preconditions for cross-border cooperation are better than ever before. The German-Polish-Border region has faced a rapid process of integration over the last twenty years.

Anyhow cross-border cooperation in the field of regional development and planning in this region is stagnating.

- Why is that?

Cross-border cooperation here is characterised by specificities that require attention within the different phases of cooperation: *political legitimation, funding, process management, evaluation.*

The paper will highlight evidence from an evaluation of cross-border cooperation in the ***German-Polish-Czech border triangle*** and will draw ***conclusions*** on future cooperation in this region, and on ***requirements*** on future cohesion policy.

Author

Dr. Robert KNIPPSCHILD

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Contact

Dresden University of Technology, Chair of Spatial Planning (DE)
phone: 0049 463335143
fax : 0049 46337745

Email: [Robert.Knippschild@mailbox.tu-dresden.de

COST & BENEFIT FACTORS OF REGIONAL SDI INFRASTRUCTURES
OF WESTERN, CENTRAL AND EASTERN PART OF EUROPE

***Robert Lach & **Slawomir Anusz**
*Secretary of National Contact Point of PLAN4ALL Project, IGPIM – Warsaw (PL)
** Vice-director of Institute of Spatial Economy & Housing, IGPIM – Warsaw (PL)

ABSTRACT

Keywords: *Cross-border, Co-operation, Cost & Benefit Analysis of SDIs, interoperability of spatial planning documents, state and regional/local levels cooperation, standardization of spatial planning documetns, co-operative agreements between local and regional governments, National Spatial Planning Concept 2030, National Strategy of Regional Development, Regional Operational Programmes, digital spatial content, European Urban Atlas, GMES Pre-operational and (2011-13) and operational (2014-2020) periods.*

Contents:

Achievements of Advanced Regions of Europe in building and operating their SDI's have been described in two technical reports of SDI Unit of DG JRC, entitled : ***Socio-Economic Impact of Spatial Data Infrastructure of Catalonia*** (Craglia, Almirall, 2008) and ***Advanced Regional Spatial Data Infrastructures in Europe*** (Craglia, Campagna, 2009).

Since the Government of Ukraine asked for some comparative data on impact of *National and Regional SDI's across European Union,* while preparing to approve its Law on National Geospatial Data Infrastructure and preparing National Program of NGDI Implementation, ***data from 27 EU Member States were assembled and compared,*** while talking on

- level of development of Information Society in Europe (i2010 report),
- digital cadastres implementation,
- mortgage markets description (European Mortgage Federation)
- and influence of cadastre, mortgage and SDIs on the development of economies of the countries of Europe.

Comparison and dependance, by prof. Hernando DeSoto was found between development of cadastral, mortgage systems, intellectual property and real estate rights protection – and the overall GDP/capita of particular countries.

Having some basic data on national levels (*data from National Mapping Agencies, ARSDI Report, regional governments and central governments*) a ***study of several regions in Poland*** was made**, *including basic statistical, financial, organizational and legal information.*** Some comparative tables were fulfilled for *Western, Central and Eastern Regions of Europe*. Conclusions were drawn on the basis of external data on eventuality of coming of second wave of the **World Financial Crisis.**

Author

Robert LACH & Slawomir ANUSZ

Reference

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Contact

NCP of PLAN4ALL, Institute of Spatial Economy and Housing (IGPIM)
ul. Targowa 45 03-728 Warszawa, Poland,
phone: 0048 509 791 682
Email: [robertlach@igpim.pl]

GIS-SOFTWARE ACROSS AGRI APPLICATIONS AND INTEGRATION OF BING MAPS

Walter H. MAYER
PROGIS Software GmbH, Villach / Austria

ABSTRACT

Keywords: *Geographic Information Systems, GIS-Developer component, GIS based integrated rural area management applications, AGRI-ICT, cross-border cooperation, data visualisation*

Contents:

PROGIS is an Austria based GIS-Software developer and specialist for applications for *rural area management – agriculture, forestry, environment and risk-management.*

PROGIS in 2010 closed a worldwide cooperation with ***Microsoft BING.*** Since then, ***Bing Maps*** are embedded into the complete range of PROGIS technologies and can be used at click bases (*for sure also other images can be processed by PROGIS systems*). In 2010 MS started to fly on new, Europe and US to generate ***ortho-images with 30 cm resolution.*** The Western EU region is supposed to be finished in June **2012**.

For rural-area management tasks, PROGIS agreed with Microsoft the following special deal: Bing Maps in 30 cm resolution embedded into PROGIS technology can be used by all rural-area players for a special flat rate price for the next 4 years and may be shared amongst them.

A triple advantage – an extremely cheap flat rate for Bing Maps - divided with different users gives a negligible price for images - embedded into an easy to use, easy to learn, powerful and cost efficient GIS software **WinGIS®** and the complete range of applications across agri- and other thematical sectors.

Why are Maps important?

- **Current, accurate and complete maps and geodata** are quintessential for most, if not all, **agro-forest-environment-risk** projects.
- **Public and Private Organizations** (GO/NGO) need geodata for project definition, problem and risk assessment, project approval,
- **Farmers and farmers organizations** need geodata for project planning and project execution,
- **Chain partners** need geodata for status and progress tracking, project monitoring and supervision (incl. fraud detection)
- **Application and database developers** need geodata for visualizing their data.

Why is PROGIS-ICT-technology important?

- **GIS WinGIS® – AXWinGIS® for processing BING maps** - to build up base maps of farms and regions - to develop own applications with the development component – to visualize data.
- **AGRO-applications** "*AGROffice-DokuPlant and FORESTOffice*" for planning, processing, documentation and control of all activities within agriculture & forestry and advisory services support.
- **Rural-Logistics** "*mobGIS*" for organizing and optimizing logistic processes of large farms - and small holder cooperatives (group needs - advisors)
- **Precision farming** "*GIS-ISO-module, ISOBUS-communication*" to benefit from sensor networks, to optimize machine usage, to manage the environment and risks – ***also cross-border!***

Author

Dipl.-Ing. Walter H. Mayer

Reference

[http://www.progis.com/de/]
[http://www.progis.com/de/?id=gis\MS_Bing_Maps.html]

Contact

PROGIS Software GmbH, Postgasse 6, A-9500 Villach
phone: +43 4242 26332, fax : +43 4242 26332 7
Email: [mayer@progis.com]

SUMMARY

GIS-Software Across Agro Applications and Integration of Bing Maps
(How to strengthen farmer businesses or agriculture and forestry in general)

Benefits for farmers supported by technologies and accompanying measures:

It is often mentioned that technology can support large farms or even smallholder farmers. Yes, it can, but we have to accept that technology alone is not able to do the support. Technology needs accompanying measures. We also have to understand that technology suddenly allows to plan, measure, verify etc. precisely what we do in the nature – with positive and negative results.

Farmers are producing in general food for 10 billion people in the near future, have in parallel to provide biomass for energy production without competing with the food production and we have to understand that –particular in times of climate change and increasing natural risks - farming is in parallel reducing natural risks if land is managed correctly. All these facts have to be taken into consideration - and managed.

Further we understand more and more the integrated system of our nature that has no borders, which means that mismanagement in one region or country can influence the situation in other regions/countries. That further means that all nations have to cooperate better in managing their land – and the main managers of the land are and will be the farmers.

Smallholders are responsible for the environmental caretaking even at a higher percentage and have thus to be compensated for their work. Managing farmers or smallholders was and will stay a deep political process, but there is an urgent need for much deeper integration and cooperation that goes far beyond state borders.

BING plus PROGIS ICT and weather-data, the AGRO-ICT backbone

Public AND private stakeholders will be users and both will benefit from it. Only with the setup of integrative AND cooperative models, the benefits for private stakeholders (smallholders, large farms and forests), for public stakeholders (government, extension services, etc.) and for ppp structures will be optimized. More, suddenly we will be able to manage our nature for the benefits of private stakeholders as well as for the needed social services coming from the nature, not automatically – they must be planned, they must be controlled and we have to pay for them, and it must be worked hard to reach the targets.

Smallholder management supported by technology needs accompanying measures like

- the enabling of the setup of **smallholder cooperatives**,
- a public or even better private, but public supported **farm advisory** system,
- an **insurance** system that backs up smallholders for worst case scenarios,
- a **banking** system that is able to support also smallholders.
- **landowner titles,** easy registered, for single smallholders or for groups (coop owners).

Taking into consideration the need for all these measures for farmers or smallholders, the base of all will be to have an ortho-image with, depending on region, 30-50cm resolution for agriculture or 50cm to 1(2) m resolution for forestry. The orthoimage must be available for ALL chain partners. In detail we can plan, measure, verify, document and control:

- WinGIS® and Bing Maps give precise ownership info.
- WinGIS® and Bing Maps allow easy/fast cadastre setu
- WinGIS® and Bing Maps give precise size of fields/forests
- WinGIS® and Bing Maps give the exact location of fields and forests for logistics use

- DokuPlant® and Bing Maps allow precise farm-management (+advise) incl. local expert data integration for planning & documentation
- DokuPlant® and Bing Maps allow nutrient- and carbon-balancing (regions & countries)
- DokuPlant® and Bing Maps allow the use as subsidy tool
- DokuPlant® + FORESTOffice and Bing Maps allow all necessary calculations
- DokuPlant® + FORESTOffice and Bing Maps allow traceability and sustainability (§§)
- DokuPlant® + ForestOffice and Bing Maps allow providing business-plans for banks
- DokuPlant® + ForestOffice and Bing Maps give information for insurance companies
- DokuPlant® + FORESTOffice and Bing Maps for advisors are tools for regional analysis
- FORESTOffice and Bing Maps can calculate forest inventories
- Logistic, mobGIS and Bing Maps allow detailed logistic planning for complete regions
- Logistic, mobGIS & Bing Maps serve farmers-foresters AND partners with mobCOM
- WinGIS® integrates meteorological data for Precise Farming (PF)
- Meteodata allow pesticide optimization - PF in the best method, but needs data
- Machine interfaces (IsoBUS) allow Precise Farming
- FOMUMIIS, is an upgraded WinGIS® for environmental caretaking - risk management
- FOMUMIIS will generate hundred-thousands of new jobs and new values for farmers
- Trust Centres (cloud) allow the integration of countrywide agriculture - forestry – environmental – information, will enable the buildup of risk systems for food security
- Z-GIS and Bing Maps give a tool for land consolidation

All the above mentioned is possible only in combination with accompanying measures. It will support smallholders and their families will in parallel fight against poverty and malnutrition, will support rural development, and reduce risks for rural areas & for smallholders.

Accompanying measures
supporting smallholders sustainably are listed up once more:

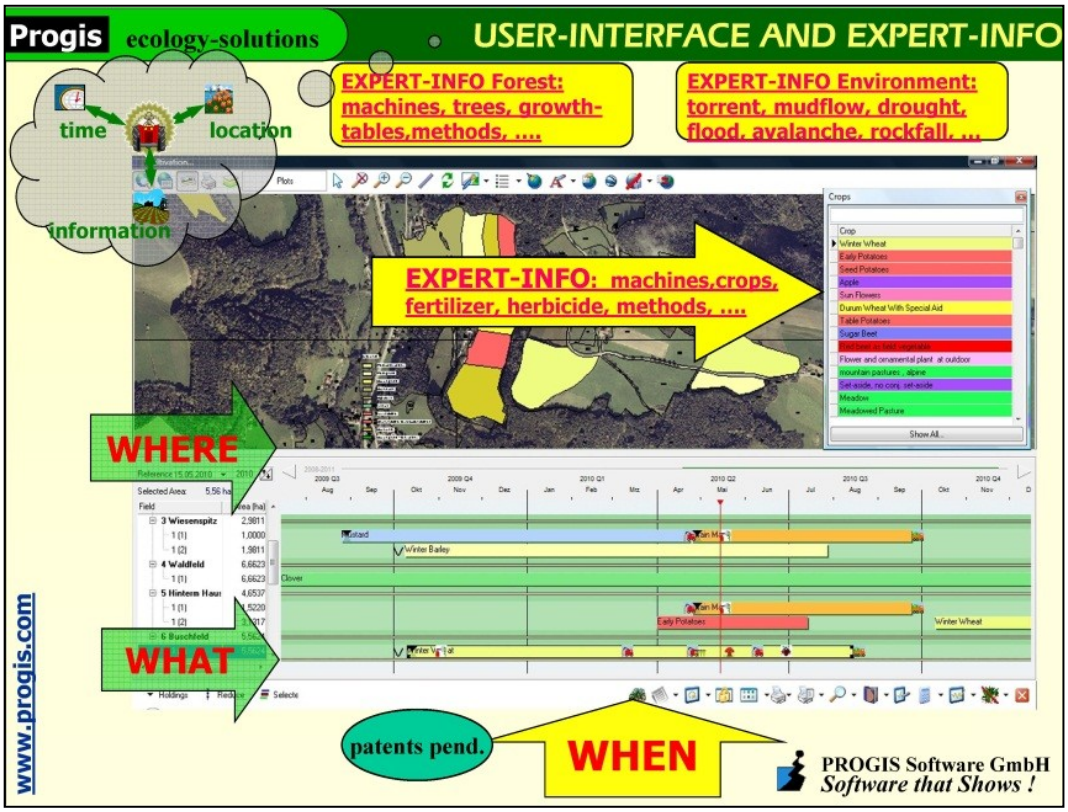
- Initiatives for local **farmer cooperatives** and the setup of
- **Advisory services** (public and private)
- **Bank and insurance services** for smallholder-farmers
- Regional **smallholder support offices**: Recommendations acc. practical experience are:
  - *1 expert for 300-500 farms ~ one expert for 3.000 - 5.000 people*
  - *1 office keeps (10)25 experts and 1 general manager for 7.500 - 12.500 farms = 75.000 - 125.000 people*
  - *1 expert team supporting advisors and allowing fast know how transfer to smallholders in cooperation with national and international science.*

Such models as mentioned above will be able:

- to **increase the output of a 1 ha field** due to optimized pest control, fertilization, logistics etc. from **at least 10,-- €/ha and year to € 35,-- or more per ha and year**; on the **forest side it will at least 5,-- to 15,-- €/ha and per year**
- due to better cooperation, better calculation and closer links to markets, **better prices** will be realized: We can calculate **20,-- /ha/a**
- For **Austria** (1,4 Mio ha arable land, 2 Mio ha pastures, 3,9 Mio ha forests), I calculated **200 Mio€ per year** = 27,--€/y/ha. A 4%-rate is equal to a perpetual value of 675,-- €/ha.
- Beside this monetary, min. the same in **ecological values** is given, a total of 1.350,-- €/ha.
- **Sub-Saharan Africa** has 141 Mio ha arable land, 725 Mio pastures and permanent crops and 559 Mio of forest area, in total **agro-forest area of 1425 Mio ha**! I do not calculate!
- Altogether such systems will document the work of smallholder farmers for the society!

All will become possible when:

- orthoimages are available, are updated in a frequency of around 5 years;
- a backbone solution is installed to give public AND private users access to data (orthoimages, vector-information (like cadaster, soil maps, geological maps etc.)
- AND agriculture and forest and environment base-data (like machines and their costs, fertilizers, pesticides + chemical contents, carbon models, cultivation methods etc.) are embedded to be able to run on top the mentioned applications
- A fast ROI of such applications incl. base data is guaranteed but needs the fast setup throughout complete countries to ensure low prices as well as the implementation of mentioned accompanying measures (cooperatives, advisory services, agro-banks and agro-insurance companies, smallholder support offices).
    - If we want to serve smallholders and our nature we have to act fast!
    - We work for food for 10 billion people + sustainable bioenergy + environmental caretaking – with the help of 2,5 bio farmers, mainly smallholders - worldwide!



Microsoft CERTIFIED Partner

PROGIS Software
GmbH, Postgasse 6, 9500 Villach,
Tel. +43 (0) 4242-26332, Fax +43-(0)4242-263327,
email: office@progis.com Internet: http://www.progis.com

SPATIAL PLANNING IN EUROPE – A CHALLENGE OR A PIECE OF CAKE?

Karel JANECKA, Tomas MILDORF, Vaclav CADA, Karel JEDLICKA, Otakar CERBA, Jan JEZEK, Radek FIALA
University of West Bohemia – Department of Mathematics, Section of Geomatics (CZ)

ABSTRACT

Keywords: SDI, *best practices, harmonisation, interoperability, INSPIRE, spatial planning*

Contents:

The European project Plan4all is co-funded by the Community programme ***e*Content*plus***. The main aim of the project is to harmonise spatial planning data and related metadata according to the ***INSPIRE principles***.

The Plan4all project should contribute to the standardisation in the field of spatial data from a spatial planning point of view. Its activities and results are ***becoming a reference*** material for the INSPIRE initiative; especially for data specifications.

Plan4all is focused on the following **7** ***spatial data themes as outlined in Annex II and III of the INSPIRE Directive***:

- *Land cover*
- *Land use*
- *Utility and Government services*
- *Production and industrial facilities*
- *Agricultural and aquaculture facilities*
- *Area management/restriction/regulation zones and reporting units*
- *Natural risk zones*

The Plan4all project has finalised **standards** that are in line with the INSPIRE Directive. These standards include European ***spatial planning metadata profile, data models*** *for the above mentioned spatial data themes and* ***networking architecture***.

- **This contribution should provide a general overview of these components.**

We can consider that solving partial problems of ***spatial planning data harmonisation*** can be a piece of cake. When you try to connect these pieces together, it becomes ***a real challenge.***

Please, visit the Plan4all geoportal to get more information about the ***implementation of the Plan4all solution in pilot regions.***

Authors

Tomas MILDORF,
Karel JANECKA, Vaclav CADA, Karel JEDLICKA, Otakar CERBA, Jan JEZEK, Radek FIALA

Reference

[http://www.plan4all.eu]

Contact

University of West Bohemia
Univerzitni 22, 30614 Pilsen, Czech Republic
phone: 00420 377 632 673
fax : 00420 377 632 602

Email: [{ kjanecka | mildorf | cada | smrcek | cerba | jezekjan | fialar }@kma.zcu.cz]

SUMMARY

Human activity is a term that is very often declined in conjunction with social, political, economic and environmental issues. ***Spatial planning*** is one of the most important areas that strongly influence these issues on all levels. ***Sustainable planning*** addresses the environment where people live and work, the location of social and economic activities, the way in which the resources we possess are exploited, etc. Spatial planning acts in bottom-up and top-down directions between all levels of government. National, regional and local authorities face important challenges in the development of territorial frameworks and concepts every day.

Spatial planning refers to the methods used by the public sector to influence the distribution of people and activities in spaces of various scales. There are several ***definitions*** of spatial planning. One of them is mentioned in the ***European Regional/Spatial Planning Charter (1983)*** that was adopted by the European Conference of Ministers responsible for Regional Planning (CEMAT): *Regional/spatial planning gives geographical expression to the economic, social, cultural and ecological policies of society. It is at the same time a scientific discipline, an administrative technique and a policy developed as an interdisciplinary and comprehensive approach directed towards a balanced regional development and the physical organisation of space according to an overall strategy.*

There **are many challenges for spatial planning in Europe** - from heterogeneity of data to differences of planning legislations in the European countries. Infrastructure for Spatial Information in the European Community (INSPIRE) can significantly contribute to support ***spatial planning processes***, especially in transboundary contexts. It should help to enhance exchange of strategic data, to improve the use of ***impact assessment*** and evaluation of plans and provisions in spatial planning with ***transparency and shared methodology***.

Interoperability and harmonisation - two terms that are essential for the integration of spatial planning information:

Interoperability means the possibility for spatial datasets to be combined, and for services to interact, without repetitive manual intervention, in such a way that the result is coherent and the added value of the datasets and services is enhanced. [1]

Data harmonisation - providing access to spatial data through network services in a representation that allows for combining it with other harmonised data in a coherent way by using a common set of data product specifications. [2]

In other words, interoperability means that each country maintains their own infrastructure but adopts a framework that enables existing datasets to be linked up from one country to another. Interoperability may be achieved by either changing (*harmonizing*) and storing existing datasets or transforming them via services for publication in the INSPIRE infrastructure.

The results of the PLAN4ALL project show the heterogeneity, fragmentation and complexity of spatial planning in Europe. The Plan4all project is in the last phase of its lifetime and using the draft INSPIRE data models will show the feasibility of data harmonisation. **PLAN4ALL project** will take part in the INSPIRE testing of several spatial data themes from ***Annex II and III of the INSPIRE Directive.***

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DEVELOPMENT OF A DECISION SUPPORT SYSTEM FOR TRANSBOUNDARY LAKE *"CONSTANCE"* WITH THE GENESIS PROJECT FRAMEWORK

Stefan MIRBACH & Ulrich LANG
Ingenieurgesellschaft Prof. Kobus und Partner GmbH, Stuttgart (DE)

ABSTRACT

Keywords: *Cross-border, Lake Constance, Decision support system, FP7, GENESIS Project*

Contents:

Lake Constance is a transboundary lake shared between ***Germany, Switzerland and Austria*** and the important drinking water reservoir. More than ***4 Mio inhabitants*** are supplied by the clean lake water without considerable treatment. In recent years a comprehensive information system called ***BodenseeOnline*** was developed in a cooperative research project. ***BodenseeOnline*** provides a wide range of historical as well as up-to-date data, which can be accessed via a web interface:

- **daily updated measurement** data on meteorological and hydrological parameters all around the lake,
- **data from weather forecasts** for the next 78 hours,
- **three dimensional distribution** of hydrophysical and biogeochemical parameters simulated by numerical models.
- **The models are updated daily** and driven with actual data as well as data from weather forecasts, which allow a prognosis for the next 78 hours.

To enhance the ability of *BodenseeOnline* to serve as a decision support system, the ***GENESIS Project framework*** is used. Relying on standards and in strong synergy with the major European or global ***harmonization initiatives*** (e.g. **INSPIRE**), this framework is based on a ***thematic-neutral collaborative framework***, made of web services, portal components and toolkits, which can be customized and deployed for two thematic fields of ***water and air quality***.

This paper presents the integration of the data from BodenseeOnline ***to*** GENESIS ***and the set-up of a decision support service using*** GENESIS***. In case of an accident with hazardous substances in Lake Constance, this*** decision support service ***can be used by local authorities like water suppliers for obtaining a comprehensive evaluation and analysis of the current and*** predicted meteorological, hydrological and hydrodynamic conditions**.**

Authors

Stefan MIRBACH & Dr. Ulrich LANG

References

FP7-Project GENeric European Sustainable Information Space for environment
[http://www.genesis-fp7.eu/]
Cooperative Research Project BodenseeOnline
[http://www.bodenseeonline.de]

Contact

Ingenieurgesellschaft Prof. Kobus und Partner GmbH
Wilhelmstraße 11,
70182 Stuttgart, Germany
phone: 0049 711 237 1936 00
fax : 0049 711 237 1936 01
Email: [mirbach@kobus-partner.com]

Christian Alegre
GENESIS project coordinator :
THALES Aleniaspace, 100 Boulevard du Midi,
FR-06156 CANNES La Bocca Cedex
Phone: 0033 492 923 202
Email: [christian.alegre@thalesaleniaspace.com]

SUMMARY

The Lake "*Constance*" is a transboundary lake shared between Germany, Switzerland and Austria and an important drinking water reservoir as well. More than 4 Mio inhabitants are supplied by the clean lake water without considerable treatment. Therefore there is a serious interest in preserving the lake's current status of high water quality. At the same time the lake is under substantial pressure by a multitude of potential contamination sources including:

- quite industrialized areas and intensive use of agriculture around the lake,
- industrial use of lake water (heating and cooling)
- traffic routes including air traffic.

To handle the potential risks a comprehensive information system called ***"BodenseeOnline"*** was developed in recent years in a cooperative research project. The aim of this project was to install a decision support system for the ***assessment of hydrodynamics and water quality*** in Lake "*Constance*". ***BodenseeOnline*** provides a wide range of historical, as well as up-to-date data, which is stored in a database and can be accessed and visualized via a web interface:

- daily updated measurement data on meteorological and hydrological parameters all around the lake from different national data owners,
- data from weather forecasts for the next 78 hours,
- three dimensional distribution of hydrophysical and biogeochemical parameters simulated by numerical models.
- The models are updated daily and driven with actual data as well as data from weather forecasts, which allow a prognosis for the next 78 hours.

While "*BodenseeOnline*" collects measurement data and runs lake models to simulate hydrodynamic and water quality processes, no interpretation of the data is undertaken. Furthermore "*BodenseeOnline*" provides only general information, a compilation and visualization of data regarding case specific requirements is not yet performed.

To enhance the ability of "*BodenseeOnline*" to serve as a decision support system, the framework provided by the ***GENESIS Project*** is used. This project has been launched in September 2008 with 29 partners involved and a duration of three years. The core of the solution provided by **GENESIS** is a "***thematic-neutral information system set-up framework***". It can be easily customized for various thematic fields and deployed in many contexts (*Regional, European*). In fact the GENESIS solution is ***validated by six pilots***, including the herein presented, addressing a wide range of thematic blocks like ***air quality, water quality or environmental impacts on health.***

The solution relies on public open standards (*W3C, CEN, ISO, OGC, OASIS*) and is developed in strong synergy with the major European or global harmonization initiatives like GEOSS and INSPIRE.

It includes:

- ***A generic portal plus a "portal factory",*** allowing to customize the portal to address new complex applications,
- ***A set of generic services*** covering most recurrent parts of an environment monitoring and management process. Typical generic services include:
    - Data access services,
    - Catalogue services,
    - Viewing (or portrayal services),
    - Geo-information Processing services

- ***A workflow management component*** allowing to chain services and to automate recurrent (e.g daily) complex tasks,
- ***A Toolbox facilitating the connection*** of legacy systems and a development environment for custom Web Processing Services (WPS).

The GENESIS framework is used to set up a decision support service in case of an accident with hazardous substances in Lake "*Constance*". The aim is to provide new tools for decision support to local authorities like water suppliers and disaster management authorities. Besides, the service is used to ***evaluate the IT tools of GENESIS.***

In case of an accident with hazardous substances in Lake "*Constance*", the decision support service delivers up-to-date data and an analysis of the current situation including:

- ***Measured wind conditions*** from wind measurement stations around the lake
- ***Forecasted wind conditions***,
- ***Vertical temperature profiles*** from numerical models and an index characterizing the stratification of the water column,
- ***Flow path computations*** using spill models to simulate the movement of a spill (forecast and hindcast).

The main task is the connection of the data from the legacy system "***BodenseeOnline***" to the GENESIS framework. This is done by using the ***catalogue services*** provided by GENESIS:

- ***ebRIM catalogue, CIM profile*** for storing metadata of water velocity field data and
- ***temperature profile data,***
- ***Sensor Observation Service (SOS)*** for storing data from wind measurement stations around the lake and pre-processed data like stratification indices.

The data from "***BodenseeOnline***" database is daily harvested into these catalogue services automatically as a rolling archive, i.e. data older than two weeks will be deleted automatically.

The decision support service can be invoked ***using*** the portal, which provides an ordering page for the end user for entering spill accident information and ***accessing*** current lake data using the ***Geodata Visualization Service*** (GVS).

The GVS is the cartographic map interface within the portal. It enables the end user to select points or areas of interest and display layers from remote services like Web Map Services (WMS), Web Feature Services (WFS), Web Coverage Services (WCS) and the SOS. For the implementation of the WMS, WFS and WCS a customized version of the open-source software GeoServer with extended functionalities like netCDF support and management of time dimension requests is used. A screenshot of the ordering page is displayed in

Fig. 1**.**

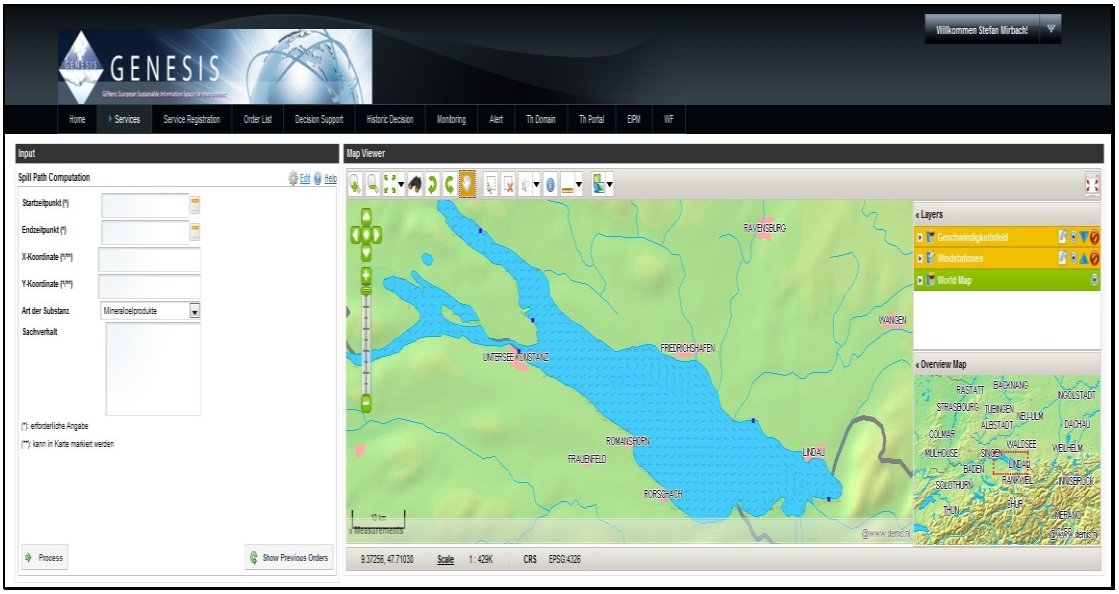

Fig. 1: User ordering page of the decision support service on the GENESIS portal

When the user invokes the service, in a first step a ***catalogue search*** is executed to check if the data for the user given timeframe is available. If yes, a custom Web Processing Service (WPS) is executed, performing the actual processing of data and computations of the spill's flow path. This WPS is built by using the GENESIS toolbox, which provides a development environment for creating custom WPS using shell scripts, etc.

The results of the WPS are again displayed using the GVS. Additionally, based on the results a recommended decision for further proceedings is presented. The end user enters accepts the decision or chooses another decision, which determines the dissemination of the results, which are summarized in a report, to local authorities.

The capability of the developed services will be tested by a hindcast of an oil accident in March 2009 with international oil alarm around the entire lake due to an oil spill of 8 km length and several 10 m width in the eastern part of Lake Constance.

The presented application of the GENESIS framework extends the already existing information system "BodenseeOnline" in offering a comprehensive analysis and processing of available data with a case specific background in mind. This comprehensive and timesaving approach can be a valuable component of a crisis management for end users like water suppliers and disaster management authorities from all three countries around the lake.

The presented decision support service is just one example for an application using the GENESIS framework. As mentioned above, the framework is thematic-neutral and can be used for wide range of fields. This is ***demonstrated by the six pilots,*** which have a high variety of environmental contexts involving several geographical ***scales***, several kinds of ***actors*** and very different ***organizational models.***

CROSS-BORDER DATA HARMONISATION IN PRACTICE – EXEMPLIFIED BY SAXON ATKIS AND CZECH ZABAGED DATA

Sylvia ROEHNERT, Claudia GEDRANGE & Marco NEUBERT
Leibniz Institute of Ecological and Regional Development, Dresden (DE)

ABSTRACT

Keywords: *ATKIS, cross-border, data harmonization, spatial base data, ZABAGED*

Contents:

Cross-border planning and information need homogeneous ***cross-border data*** bases. Spatial base data as collected and provided by the respective land surveying offices offer a good basis but refer only to the related national territory. Furthermore, they feature different geographic projections, data formats and models, geometry (*e.g. of the national boundary*), languages, and meanings of the contents.

The objective of this project is to develop methods which allow the land surveying offices to adapt their data to be seamlessly compatible along the national boundary (***geometric homogenization***) and comparable regarding their contents (***semantic harmonization***).

As a result methods will be developed which allow the ***cross-border harmonization*** of spatial base data within a Geographical Information System (GIS). The implementation is realized exemplary using vector data of the German ATKIS Basis DLM (*Authoritative Topographic Cartographic Information System, Digital Basis Landscape Model*) and the Czech ZABAGED data (*Fundamental Base of Geographic Data/Základní báze geografických dat*). Both serve as the mostly used spatial base data on either side of the border.

The project is realized in cooperation with the land surveying offices of Saxony (Staatsbetrieb Geobasisinformation und Vermessung Sachsen, GeoSN) and the Czech Republic (*Land Surveying Office/Zeměměřický úřad, ZÚ*). It is funded by the European Union (*Ziel 3/Cil 3 programme to support the cross-border co-operation between the Free State of Saxony and the Czech Republic 2007-2013*) and the Free State of Saxony.

The presentation will introduce the project and show the current state including first results as well as practical outcomes regarding cross-border data harmonization.

Authors

Dipl.-Geogr. Sylvia Röhnert & Dipl.-Geogr. Claudia Gedrange & Dr. Marco Neubert

Reference

Project Website [http://geodat.ioer.info/]

Contact

Leibniz Institute of Ecological and Regional Development (IOER)
Weberplatz 1, 01217 Dresden, Germany
phone: +49 (0) 351 4679-274
fax: +49 (0) 351 4679-212

Email

[s.roehnert[at]ioer.de | c.gedrange[at]ioer.de | m.neubert[at]ioer.de]

SUMMARY

In a Europe of disappearing borders and especially in border regions itself a growing ***demand on harmonized cross-border geodata*** is denoted. Harmonized geodata facilitates cross-border spatial planning and information exchange. It enables to take into account the situation on both sides of a border in equal measure. In addition the needs for such data are stimulated by the INSPIRE directive of the European Union to establish an Infrastructure for Spatial Information in European Community.

The presented project „***Cross-border harmonisation of spatial base data between the Free State of Saxony and the Czech Republic***“ aims to integrate data across the border. It is ***funded by the Ziel3/Cíl3-progamme of the EU*** which intends to develop cross-border cooperations in the saxon-bohemian border region and the Free State of Saxony as well.

The project is realised by three cooperation partners. The Leibniz Institute of Ecological and Regional Development (IÖR) as Lead Partner is responsible for scientific research and organisational steering. The cooperation with the land surveying offices of Saxony (*Staatsbetrieb Geobasisinformation und Vermessung Sachsen, GeoSN*) and the Czech Republic (*Land Surveying Office/Zeměměřický úřad, ZÚ*) enables easy access and adjustments to the required data, as well as expert knowledge about data models.

The harmonization is realised for the official spatial base data in Germany and the Czech Republic. These data is applicable for a wide range of possible usage options. On the one hand it is vector data of the German **ATKIS Basis DLM** (*Authoritative Topographic Cartographic Information System, Digital Basis Landscape Model*) in the new AAA model. On the other hand it is the Czech **ZABAGED** data (*Fundamental Base of Geographic Data/Základní báze geografických dat*). Both data sets are provided and actualized by the responsible land surveying offices.

Due to some similarities, concerning e.g. the acquisition scale and purpose, this spatial base data sets offer a good basis for cross-border usage.

In contrast, differences existing in geometry (see Fig. 1), projection, language, denotation and data model require data harmonization. Thus, the **objective** of this project is the ***geometric and semantic harmonization***.

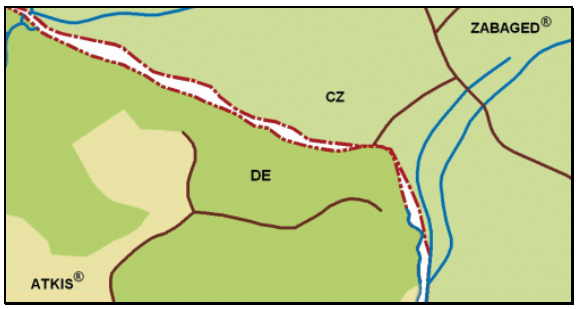

Fig. 1 – Initial situation in the Saxon-Bohemian border region, [http://geodat.ioer.info]

The **geometric homogenisation** presupposes:

- the use of a consistent coordinate reference system,
- the integration of a common border geometry and
- the edge matching of cross-border objects.

The **semantic harmonisation** implies:

- the creation of bi-lingual object type catalogues, as well as
- the definition of matching functions and categories for comparing data models.

As a first step on the way to geometrically homogeneous data an agreement about a consistent **coordinate reference system** was nessesary. Orignially saxon ATKIS data is available in RD83 with Gauss-Krüger coordinates. ZABAGED data is projected in S-JTSK with Krovak coordinates, which is especially adapted to czech needs [Projektbericht AP 2.1].

Both land surveying offices agreed to use ETRS89 with UTM coordinates. It is the common reference system for Europe, defined by the INSPIRE directive specification. Furthermore the transformation rules were adapted.

Both geodata sets currently use an inaccurate border geometry. Thus, the surveying offices came to the agreement to use the actual valid level of common border geometry (*resulting from common border measurements*).

In addition to that a set of ***relevant cross-border objects*** and especially ***connecting points*** for edge matching were defined. Currently the edge matching is in process. As a result the integration of a **common border geometry and the connected cross-border objects** in the respective base data will be accomplished within the project.

The semantic harmonisation approach consists of various steps. At first both object type catalogues were translated resulting in bi-lingual object type catalogues. The translated catalogues allowed the conceptual analysis of the data models. This analysis revealed ***complex differences*** regarding classification and detailedness. Due to the fact that the data is official, the data models are not changed. Thus, for harmonization the models are integrated **by alignment** [Kavouras et al. 2008].

To do so, all relevant combinations of object types and attribute values were derived (ATKIS: ca. 1100, ZABAGED: ca. 310). The number of combinations is restricted e.g. by conditions of consistency. For ATKIS only objects were used which are maintained within Saxony (‚*Bestandsdaten*').

Subsequently, matching functions for both matching directions *(ATKIS to ZABAGED and ZABAGED to ATKIS)* were adjusted in a process:

- At first, the cooperation partners prepared proposals.
- In a second step expert meetings supported by a competent interpreter helped to verify matching functions.
- Third, matching categories were discussed and established.

The **quality of matching functions** is evaluated by seven categories [Gedrange 2011]:

- A – bi-unique
- B – superset
- C – overlap
- D – subset
- E – mapping to a superior object
- F – derivation
- G – no mapping

The frequency of the used matching categories is illustrated in **Fig. 2.** It applies to all relevant combinations of object types and attribute values of both catalogues. In addition to this fuzzy matching multiple mappings are often possible (for ATKIS to ZABAGED 20% and for ZABAGED to ATKIS 35% of all combinations). In contrast, to detect the matching quality in data sets itself, further analyses are nessesary.

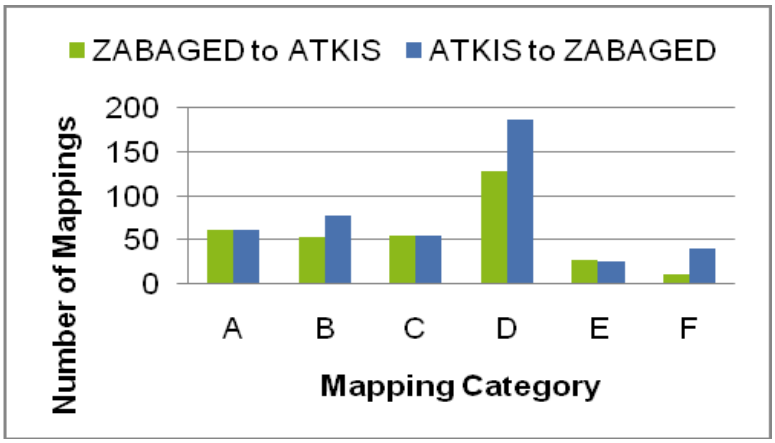

Fig. 2 – Matching functions and categories for both directions, including multiple mappings [Gedrange 2011].

For actual results, please, visit the bi-lingual project homepage at IOER website **[www.geodat.ioer.info]**. Further information about the harmonized base data is provided by the geoportals of the respective land surveying offices.

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CENTROPE MAP AND CENTROPE STATISTICS – CROSS-BORDER GEODATA INFRASTRUCTURE WITH USER-DEFINED THEMATIC MAPS

Manfred SCHRENK*, Clemens BEYER*, Christian EIZINGER*
* CEIT ALANOVA – Central European Institute of Technology, Dept. for Urbanism, Transport, Environment & Information Society, Schwechat (AT)
Walter POZAREK**,
** PGO - Planungsgemeinschaft Ost (East Austrian Planning Association), Vienna (AT)

ABSTRACT

Keywords: *Cross-border, Web Mapping, Data Harmonisation, INSPIRE, Centrope Region*

Contents:

Not long ago the only way to obtain digital geodata from different sources was to collect offline media like CD-ROMs and then match the datasets together on your own PC like a jigsaw puzzle. Nowadays, the situation has significantly improved. Almost each data processing institution is ***providing selected data via internet services*** which makes it easier for the users to retrieve the information wanted. ***However, these services are still mostly isolated*** without connections to neighbouring countries, sometimes even lacking content from neighbouring regions within the own country. Data beyond the administrative border is often not compatible, accessible and understandable making cross-border activities difficult.

CentropeMAP is a cross-border geodata viewer based on the INTERREG project Centrope and was initiated by the East Austrian Planning Organisation together with the adjacent border regions in the ***Czech Republic, Slovakia, and Hungary***. The main focus is on geodata relevant for regional and ***cross-border spatial planning on a scale level of about*** **1:50,000 to 1:200,000**. Geodata is queried from individual servers within the Centrope region and collected with ***cascading web map services*** so that the user can view the result upon a single request. CentropeMAP is an open system able to integrate digital information from different scale levels and different sources. CentropeMAP data itself can also be integrated in external applications via OGC WMS.

CentropeSTATISTICS extends the map portal by a large cross-border statistics database which is also connected to the map server so that not only numbers can be seen, queried and exported, but statistic data can also be visualised as chlorophlethic maps from NUTS 3 down to municipality level (LAU 2). Thus, thematic maps can be generated on the fly through a user-friendly interface with a few clicks only.

CentropeMAP and CentropeSTATISTICS follow the INSPIRE standards for the harmonisation of spatial information in the European Community.

Authors

Dipl.-Ing. Manfred SCHRENK, Dipl.-Ing. Clemens BEYER, Dipl.-Ing. Christian EIZINGER, Dipl.-Ing. Walter POZAREK

Reference

CentropeMAP and CentropeSTATISTICS web portal
[http://www.centropemap.org]

Contact

CEIT ALANOVA gemeinnützige GmbH
Concorde Business Park 2/F, A-2320 Schwechat, Austria
phone: 0043 664 854 43 90
fax: 0043 1 90360-1299
Email: [m.schrenk@ceit.at]

CROSS-BORDER GIS – THE "GEOGRAPHIC INFORMATION SYSTEM OF THE UPPER RHINE" EXAMPLE

B. STERN

GIS Section - SIGRS/GISOR Conseil Général du Haut-Rhin - 68000 COLMAR (FR)

ABSTRACT

Keywords:

Cross-border GIS, Spatial Planning, Thematic Databases, Upper-Rhine-Valley

Contents:

The Geographic Information System of the Upper Rhine (SIGRS) aims at getting a uniform and coherent representation of the territory of the Upper-Rhine. Within its technical part, it produces mappings which deal with many topics (*environment, land-use, statistics, transports, energy, wealth and forecasting*) from a very rich geographic ***French***, ***German*** and ***Swiss*** database, updated as often as possible.

At the same time, it leads many cross-border networks through the organization of meetings, workshops and presentations. It also aims at collaborating with other European structures that are developing similar projects and keeps up with issues raised by the European legislation about geoinformatics (in particular the **European Directive INSPIRE**).

Some topics developed by the SIGRS between 2008 and 2011:
Upper-Rhine demographical evolution, transports, business parks, socio-economical indicators, rail activity…

This paper/poster ***will present some thematic data workflow examples, as well as some mapping results and the SIGRS prospect for better*** cross-border cooperation**.**

Authors

B. STERN – Y.SOULAIMANI

Reference

[http://sigrs-gisor.org]

Contact

Boris STERN
Cellule SIG/GIS Abteilung - SIGRS/GISOR
Conseil Général du Haut-Rhin
Adresse : 100 avenue d'Alsace
BP 20351 - 68006 COLMAR CEDEX
Tel: ++33 / 3 / 89 30 63 91
Fax: ++33 / 3 / 89 21 98 52
Email: [stern@cg68.FR

SUMMARY

Das Geografische Informationssystem des Oberrheins (**GISOR**) beruht auf einer gemeinsamen Arbeit von **Geomatik-und Kartographie-Experten** aus ***Baden-Württemberg***, ***Rheinland-Pfalz***, dem ***Elsass*** und der ***Nordwestschweiz*** zu so unterschiedlichen Themen wie ***Raumplanung, Verkehr, Wirtschaft, Forschung und Innovation oder Energie***.

Dieses besondere Werkzeug zur Raumbeobachtung wird mittlerweile einstimmig für seinen ***operativen Charakter*** wie auch für die ***Qualität und Vielfalt*** seiner Arbeiten geschätzt. Daher trägt es zu einer besseren Kenntnis über den Oberrheinraum, zur Erschließung von Potenzialen und demzufolge zur Erhöhung des lokalen, nationalen und europäischen Bekanntheitsgrades des Oberrheins bei.

Die große Anzahl an Arbeiten, die vom GISOR seit 2004 verfolgt wurden, belegen ***seine Einsatzbereitschaft und das Fachwissen seiner Experten.*** Denn GISOR will nicht nur geographische Daten gemeinsam nutzen und verarbeiten, um die Raumbeobachtung und eine grenzüberschreitende Raumplanung zu ermöglichen, sondern auch eine **«gemeinsame Sprache»** sowie **«gemeinsame Definitionen»** entwickeln, welche die Vergleichbarkeit der verschiedenen nationalen Daten gewährleisten.

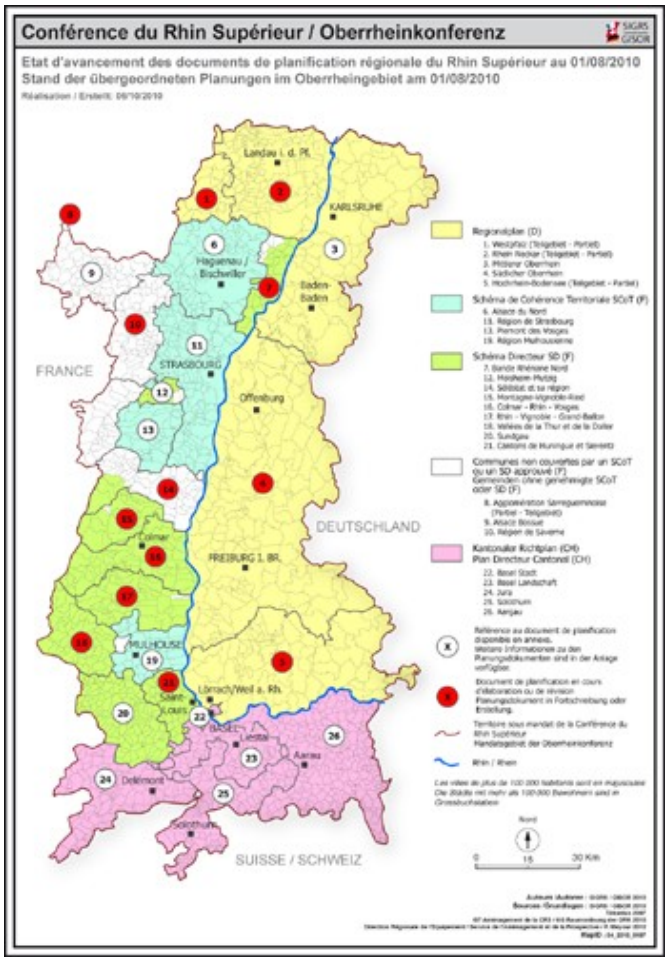
Mit seinen Aktivitäten wirkt **GISOR** aktiv an der Raumplanung im Oberrhein-Raum mit. Seine Arbeiten liefern eine **aussagekräftige kartographische Basis für die politische und administrative Entscheidungsfindung** in diesem grenzüberschreitenden Gebiet.

Da **GISOR** unzählige unterschiedliche und teilweise sehr fachliche Themen bearbeitet, beruht die Erarbeitung der Datenbanken und Karten auf einer **Zusammenführung der Kenntnisse und Erfahrungen der verschiedenen Arbeits- und Expertengruppen der Oberrheinkonferenz (ORK)** und des ***Geomatik- und Kartographie-Wissens*** der Mitglieder des Expertenausschusses GISOR. Diese Arbeitsmethode, die auf einer **umfassenden Vernetzung der Partner** beruht und heute sehr gut funktioniert, gewährleistet die Qualität, den umfassenden Charakter und die Aktualität der verteilt vorliegenden Informationen und illustriert dabei die guten Koordinationsbeziehungen zwischen dem Expertenausschuss GISOR und ihren unzähligen tri-nationalen Partnern.

Seminar über GeoDatenInfrastrukturen (Mai 2009)

Als Beispiele:

- die **Karte über die Planungsdokumente** (*ein jährlich zu aktualisierendes Dokument*) in Zusammenarbeit mit der Arbeitsgruppe «***Raumordnung***»,
- die **Karte mit den Übernachtungszahlen von Touristen** in Zusammenarbeit mit der Expertengruppe «***Tourismus***»,
- die **Karte mit der Bevölkerungsdichte** als Ergebnis einer Zusammenarbeit mit der Arbeitsgruppe «***Raumplanung***» und der Expertengruppe «***Statistik***» genannt werden.



Stand der übergeordneten Planungen im Oberrheingebiet am 01/08/2010

Mit der Zeit, haben sich die Ziele nach und nach vervielfältigt. Heute will GISOR nicht nur im Dienste der Raumbeobachtung und Raumordnung des Oberrheingebietes handeln sondern ein **gemeinsames Bild** dessen bei der Rheinbevölkerung und den nationalen und europäischen Institutionen aufwerten. Somit möchte es zur Schaffung einer **oberrheinischen Identität beitragen** und aktiv an der Dynamik der ***Trinationalen Metropolregion Oberrhein*** teilnehmen.

Um die diese neuen Zielsetzungen zu erreichen, plant GISOR:

1. **Eine bessere Berücksichtigung der europäischen Vorschriften**, inbesondere der INSPIRE-Richtlinie, durch die ***Entwicklung geomatischer und kartographischer Instrumente***, die sich an die europäische Richtlinie INSPIRE halten. Das impliziert eine verbesserte **Interoperabilität und Kompatibilität der GISOR-Daten** sowie gemeinsam unter den Partnern entwickelte Methodologien.

2. **Die Verstärkung der Positionierung von GISOR auf lokaler, nationaler und europäischer Ebene** durch die Einrichtung eines umfangreichen ***Akteure-Netzwerkes.*** GISOR wird gemeinsame ***Veranstaltungen*** organisieren und ***Werkzeuge*** zur Weiterentwicklung des Netzwerkes erstellen (*wie zum Beispiel thematische Handbücher zu effektiven Methoden und ein zweisprachiges technisches Glossar*).

3. **Eine Förderung der GISOR-Aneignung von den Bürgern** durch die Veröffentlichung lizenzfreier Kartographien, die von jedem Bürger benutzt werden könnten. GISOR wird auch eine auf die oberrheinische Bevölkerung abzielende ***Öffentlichkeitsarbeit*** leisten, um so bei der Bevölkerung bekannter zu werden.

GISOR-Vorstellung in Brüssel (Oktober 2010).

GISOR hat zwischenzeitlich auch seinen Nutzen bei **Zukunftsanalysen** bewiesen und gehört mittlerweile zum Kern der Strategie der **Trinationalen Metropolregion des Oberrheins**, die die Kenntnis unseres Grenzgebietes verbessern soll, damit es sowohl auf nationaler als auch auf **europäischer Ebene** besser beworben werden kann.

Anfangs war **GISOR ein technisches Instrument** für die Arbeitsgruppen und Expertenausschüsse der Oberrheinkonferenz.

Heute soll es der **breiten Öffentlichkeit** zugänglich gemacht werden und auf unterschiedlichen Ebenen zum Einsatz kommen (*Veröffentlichungen, internationales Marketing, Schul- und Universitätsbereich, Vereinsleben …*).

Zudem soll das derzeitige Partnernetz auf europäische Beteiligte und Kooperationen ausgeweitet werden.

Mehr Informationen unter: [http://ww.sigrs-gisor.org]

GENERAL CHARACTERISTICS AND CHALLENGES FOR A SUCCESSFUL CROSS-BORDER COOPERATION

Anne THEVENET
Deputy Director of the Euro-Institut (Kehl/Strasbourg)

ABSTRACT

Keywords: *Cross-border, cooperation, intercultural, training, territorial cohesion*

Contents:

Cross-Border cooperation should be simple…The European Union - with the internal market, the free movement of persons, goods, services and capital -, the Schengen Agreement, the knowledge of the English language make it easier to exchange and to cooperate with neighbour States.

The border does not exist anymore… but it is only the buildings at the borders and the systematic controls that disappeared. ***The differences between the systems stayed.*** And people who want to or have to cooperate with their neighbours must work with ***Others*** and this is not always as easy as ones may think.

This presentation will therefore first of all focus on the different dimensions of the border. On this basis I'll underline what happens when two "***systems***" try to work together. It will then be interesting to draw attention to the typical cultural differences for individuals.

When we are able to identify all these potential differences, we can better understand what the ***reality of cross-border cooperation*** is. The presentation will highlight some situations we can come across in the cross-border cooperation. Those examples will be related with my experiences at the French-German border.

The last part of the presentation will emphasize what we try to do in order to simplify cross-border cooperation and what can be done to ***help the project coordinators and partners*** to better work together. Thus, the importance of continuing education, of counselling, of a neutral platform for exchange will be stressed.

The presentation will conclude with some recommendations for successful cross-border cooperation.

Author

Anne THEVENET

References

[http://www.euroinstitut.org]

Contact

Euro-Institut
Rehfusplatz 11, Postfach 1945, D-77694 Kehl
phone: 0049 7851 7407 28
fax : 0049 7851 7407 33
Email: [thevenet@euroinstitut.org]

SUMMARY

Cross-Border cooperation should be simple… The European Union - *with the internal market, the free movement of persons, goods, services and capital* - the Schengen Agreement, and the knowledge of the English language make it easier to exchange and to cooperate with neighbouring States.

The border does not exist anymore… but it is only the buildings at the borders and the systematic controls that disappeared. *The differences between the systems stayed.* And people who want to or have to cooperate with their neighbours must work with *Others* and this is not always as easy as ones may think.

This presentation will therefore first of all focus on the different dimensions of the border. Indeed we can differentiate:

- ***political borders*** (*a State is ending at the border, after the border, there his "nothing"*),
- ***economic borders*** (*GDP difference, economic fabric, concurrence, etc.*),
- ***legal borders*** (*the applicable law is completely different -sometimes incompatible- on each side of the border*)
- ***administrative borders*** (*the administrative levels, the competence distribution are not the same*),
- ***language borders*** (*in most cases the language is not the same on the different sides of the border, English is often a 3rd language and is not always the better way to overcome the difficulties*),
- ***natural borders*** (*mountains, rivers, etc.*),
- ***cultural borders*** (*way of thinking and working can be completely different*),
- ***mental borders*** (*personal history, prejudices*),
- ***etc.***

On this basis the presentation will underline what happens when two "systems" try to work together and mostly the appearance of a sub-system "cross-border cooperation" with its own rules of functioning.

It will then be interesting to draw attention to the typical ***cultural differences*** for individuals, for example:

- ***time management*** (*polychromatic/monochromatic*),
- ***hierarchical distance*** (*long/short*),
- ***discussion culture*** (*disagreement/consensus*),
- ***stile of communication*** (*implicit/explicit*),
- ***etc.***

When we are able to identify all these potential differences, we can better understand what the ***reality of cross-border cooperation*** is. The presentation will highlight some situations we can come across in the cross-border cooperation. Those examples will be related with my experiences at the French-German border:

- ***Communication:*** *What does "concept" mean?*
- ***The exact counterpart:*** *Meeting between a French and a German Town Mayor*
- ***The importance of being open-minded and flexible:*** *The right partner for the right project*
- ***Time management and cultural aspect:*** *Story of a first Project Meeting*

The last part of the presentation will emphasize what we try to do in order to simplify cross-border cooperation and what can be done to help the project coordinators and partners to better work together.

In this respect the different cross-border structures in the Upper Rhine Region will be presented and more concretely:

- ***The Infobest Network*** (*information and counselling for citizens, mainly commuters*)
- ***Euro-Info-Consumers*** (*information, counselling and mediation for consumers – EU wide*)
- ***The Upper Rhine Conference*** (*institutional cooperation instrument*)
- ***The Euro-Institut*** (*training, consulting and support in cross-border cooperation*) - the importance of continuing education, of counselling, of a neutral platform for exchange will be stressed. (Fig.1 and 2)

- **Finally, the governance model of the Trinational Metropolitain Upper-Rhine**, which has been officially approved by the State level in December 2010, will be described with the help of fig. 3 and 4.

- **The presentation will conclude with some recommendations for successful cross-border cooperation.**

Euro Institut

Fig.1: A training session at the Euro-Institut

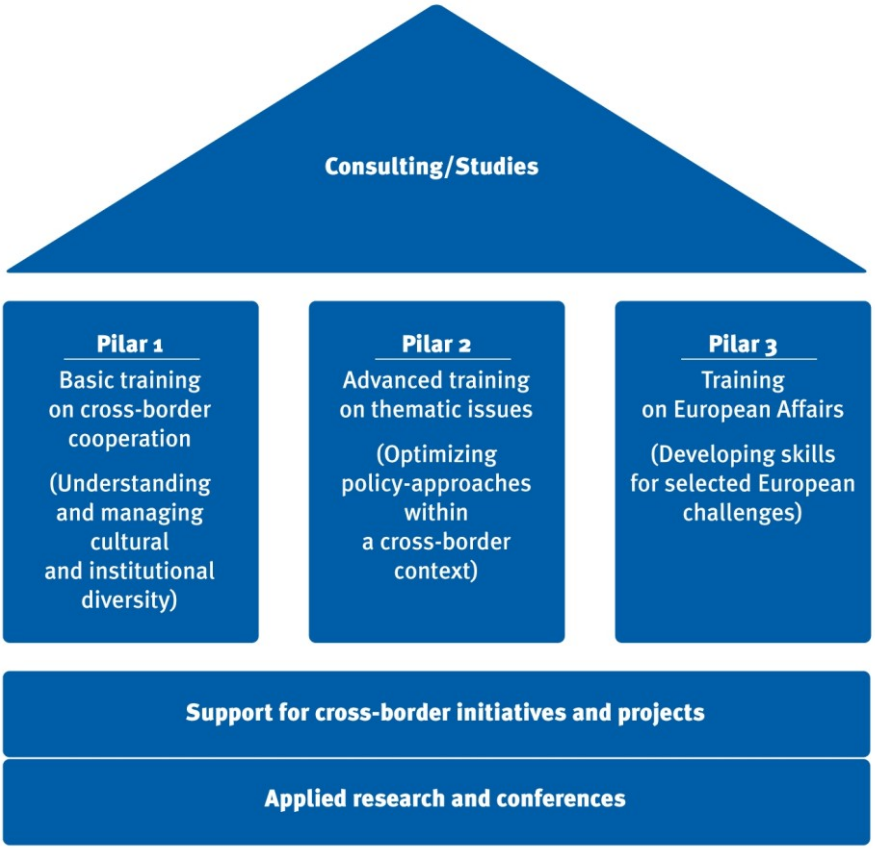


Fig.2: The training offers of the Euro-Institut

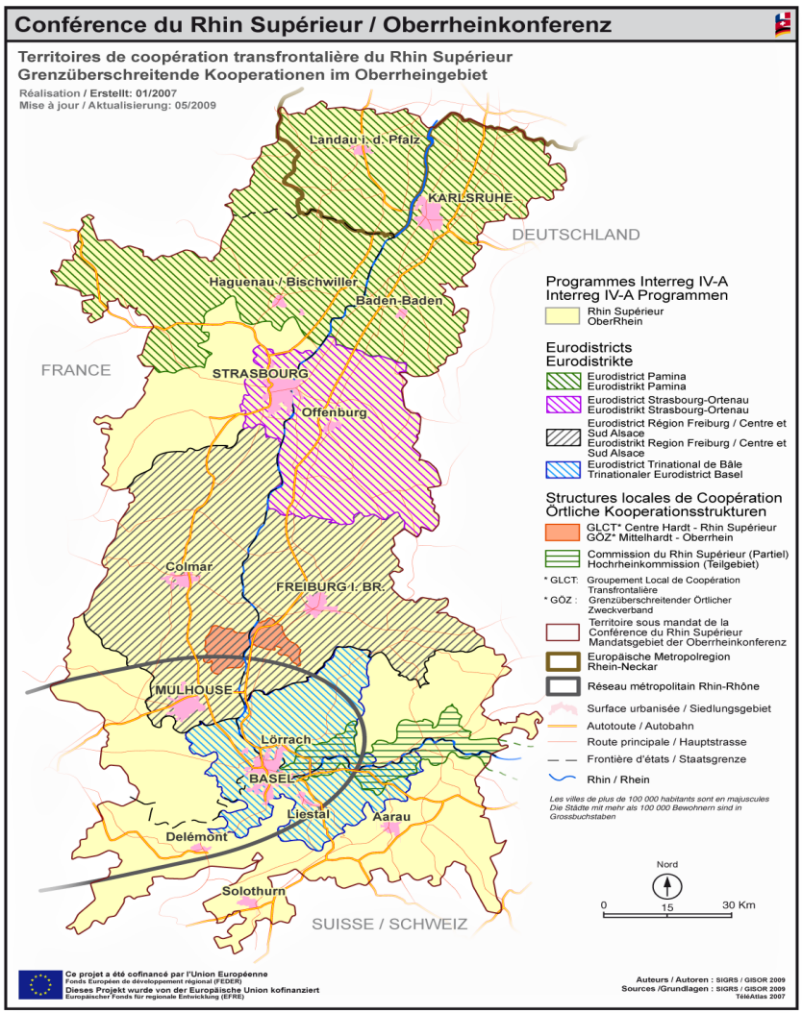


Fig. 3:
The Upper Rhine region and its cooperation areas

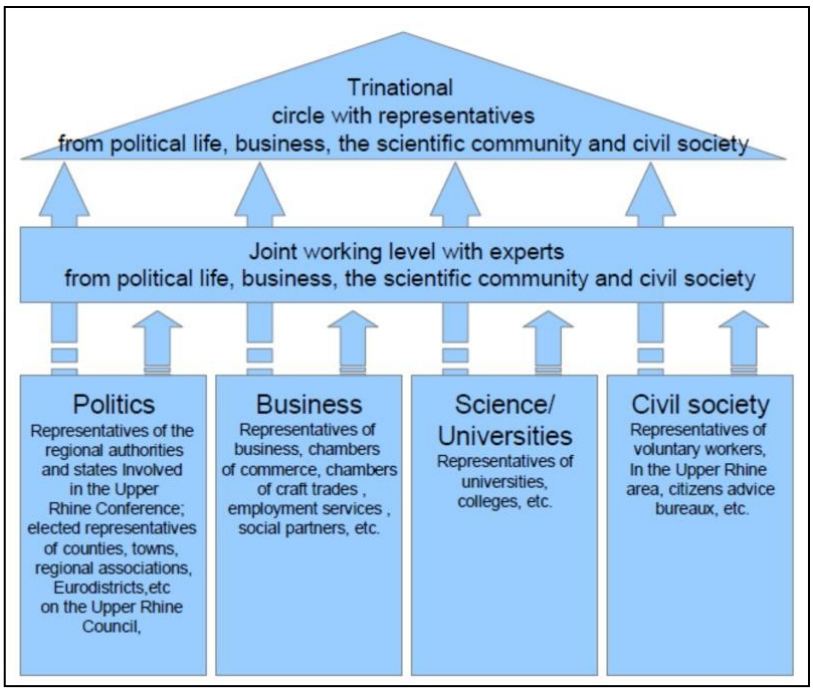


Fig. 4:
The governance model of the Trinational Metropolitain Region

GEOPORTAL FOR EVERYBODY (G4E)

OPENSOURCE TOOLS SUPPORTING BORDER REGIONS

Premysl VOHNOUT
Czech Center for Sciences & Society (CCSS, Praha – CZ)

Keywords: *INSPIRE, geoportal, OGC standards, metadata*

Abstract:

Geoportal is always an application which is developed for one scenario using *mostly proprietary, but* ***closed source technology***. These technologies are always very expensive because of ***licensing*** and lot of ***implementation*** work needed to be done.

Geoportal4everybody conception is trying to solve the problems using mainly ***open source technology*** and providing a package of connected ***applications***. These applications provides all requirements defined by **INSPIRE**.

Geoportal4everybody is an open and standardized interface that enables ***search, portrayal, evaluation, sharing, analyse and reuse*** of spatial and non-spatial data. G4E-Portal is a solution based on ***interoperable standards*** (OGC, W3C, OASIS, and ISO). **G4E** is interconnected to other resources through the Internet.

Features:

- Independent components
- Composition according to user requirements
- Based on SOA
- Possibility to integrate with other resources
- Maximum emphasis on
- Open Source
- Open Standards
- Extension to non-GIS community
- Open Search
- Administration of other (non-spatial) data sources

Components:

- MicKA
- Catalogue client (CSW 2.0.2)
- Map Viewer
- SimpleCMS
- Spatial and non-spatial data management

Author
Dipl.Ing. Premysl Vohnout

Contact
Czech centre for Science and Society
Radlicka 28, Prague

Email: [vohnout@ccss.cz]

Inter-Regional
GI2011-X-border-SDI/GDI-Symposium

ACTUAL PRESS INFORMATION

(ATTACHMENTS)

Bad Schandau
23. Mai 2011

Decin
24. Mai 2011

IMPRIMATUR TO PRINT
20. Mai 2011

POSITION PAPER ON THE DIGITAL AGENDA FOR EUROPE

PRESS INFORMATION

EUROPEAN UMBRELLA ORGANISATION FOR GEOGRAPHIC INFORMATION

EUROGI has submitted its contribution and POSITION PAPER to the EC on-line Public Consultation on electronic identification, authentication and signatures - ICT for Government and Public Services.

Leuven, 15th April 2011

EUROGI is the umbrella organisation for the European geographic information (GI) community. Among its member organisations are the GI organisations representing the majority of the EU member states, as well as national GI organisations from non-EU member European countries and major companies in the GI sector. EUROGI thus represents a community of some 6500 institutional, organisational and individual stakeholders in this field.

As the EUROGI President I would like to use the Commission's call for a public consultation on electronic identification, authentication and signatures, to put forward a brief position paper on the Digital Agenda for Europe in general.

The Agenda states [COM(2010)245] that the ICT sector is responsible for 5% of European GDP, corresponding to a market value of about €660b annually. This market is nurtured by the electronic information content, of which more than half is GI. This proportion is confirmed by many national studies in European countries. On the European level, the latest study, dating unfortunately from the year 2000, provides indicative support for this by stating that out of public sector information worth €68b, about €36b is geographical in nature [Pira intl. ltd.: "*Commercial exploitation of Europe's public sector information*", study for the European Commission, 2000].

The high proportion of digital content in the public sector which is GI will almost certainly reflect the high proportion of GI more generally in digital content. Not only is GI already firmly established in areas like satellite navigation, emergency response, environmental policy making, climate change monitoring and many others, but increasingly it is becoming embedded in social media (eg Twitter), a rapidly growing field. In the future the amount and proportion of GI will no doubt sore to new levels as the number of instruments which record and transmit location information increases rapidly, possibly entering into the billions (RFIDs, mobile phones etc). In fact a veritable explosion of digital content which has a GI component is taking place and will continue to take place.

It is therefore incomprehensible that a Digital Agenda for Europe has been written with no single mention of one of the most ubiquitous and important current and future forms of digital content, namely GI. The more so since the overall context of its emergence is geographic.

Council Conclusions of the 2999th Competitiveness Council of 1 March 2010, that commission the ***Digital Agenda***, list one line below in the same article 9 "***transforming Europe into an eco-efficient economy while baring in mind both the benefits and the costs of this transition***" as another priority. It is clear that for most decisions in this process GI is indispensible.

Furthermore, the Europe 2020 strategy, which is behind the Council conclusion, has sustainable growth as one of three priorities. Together with the Digital Agenda is ***GMES***, having a true geo-information remit, part of another of the seven flagship initiatives of Europe 2020. ***The Digital Agenda makes however no cross-reference to it either.***

The absence of any mention of the spatially-referenced part of ICT impairs the consistency of the Agenda because application fields that it alludes to (*climate change, cultural heritage, eGovernment and eEnvironment, including cross-border services, efficient transport and mobility*) offer suitable contexts where references to GI could well have been placed. Even the actions of the present consultation (*identification and authentication*) which at face value would seem to have little GI content, have an intrinsic ***spatial reference*** because every individual has a physical home or work address.

We believe that without adequate reference to GI in the Digital Agenda there will be significant missed opportunities to grow the European GI business sector and create high value adding jobs. The benefits of full ***recognition and inclusion of GI into a Digital Agenda*** will not be confined to the economic sphere but will have benefits in such diverse areas as promotion of democracy, improvement of everyday convenience and welfare of our citizens, efficient and effective governance, and for the protection and enhancement of the environment.

Thus I would like to urge the European Commission in the interests of sustainable economic, social, governance and environmental development, to give due consideration to GI and the important role it can play, in every revision of the text as well as in related and subordinate documents.

Should there be a need to discuss the issues raised in this letter I and certain of our members would be most willing to meet with Commission staff directly.

Bruce McCormack
EUROGI President

SOURCE: *EUROGI (re-formatted by IGN / FH)*
[http://www.eurogi.org/POOLED/articles/bf_newsart/view.asp?Q=bf_newsart_322849]

References
[http://www.eurogi.org/default.asp]
EUROGI - European Umbrella Organisation for Geographic Information
p/a GEO-Instituut Campus Arenberg, Celestijnenlaan 200 E, bus 2411,
3001 Leuven, BELGIUM

Contact
EUROGI office: Catharina Bamps
Email: [catharina.bamps@eurogi.org]
Office: +32-16-322.946

NIEDERLANDE UND NRW WOLLEN KOOPERATION BEIM KATASTROPHENSCHUTZ AUSBAUEN

BESSERE HILFE FÜR DIE MENSCHEN ÜBER DIE LANDESGRENZEN HINWEG
(BETTER HELP FOR PEOPLE ACROSS THE STATE BORDER)

PRESSEMITTEILUNG
MINISTERIUM FÜR INNERES UND KOMMUNALES
Presseerklärung der Minister Opstelten (NL) und Jäger (NRW)

ABSTRACT

Keywords: *Civil protection, Crisis prevention, Cross-border, Emergency, Euroregion, Ministry of Interior, Netherland, Nord-Rhine-Westfalia, Risk protection, Security.*

Contents:

Nordrhein-Westfalen und die Niederlande wollen bei der Bewältigung von ***Katastrophen*** verstärkt zusammenarbeiten. ***Grenzüberschreitende regionale Kooperationen sowie kurze Kommunikations- und Anforderungswege für den Krisenfall*** sollen verbindlich festgelegt werden. "*Unglücksfälle machen vor Landesgrenzen nicht Halt. Deshalb müssen wir uns gegenseitig effizient und effektiv helfen, wenn der andere einen braucht*", sagte **Innenminister Ralf Jäger** heute (23.03.) auf einem Fachkongress in Aachen an dem der niederländischen **Minister für Sicherheit und Justiz, Ivo Opstelten,** teilnahm.

Nach Ansicht der beiden Minister muss der ***Katastrophenschutz über die Landesgrenzen*** hinweg funktionieren und zielgerichtet vernetzt werden. "*Wenn unsere eigenen Ressourcen nicht reichen, wird uns der Nachbar unterstützen - und umgekehrt*", erklärte **Jäger**. "*Das ist ein Garant für mehr Sicherheit der Menschen über die Grenzen hinweg*", betonte Minister **Opstelten**.

Auch die gemeinsame Vorbeugungsarbeit soll intensiviert werden. "*Je mehr wir über drohende Gefahren wissen, desto zielgerichteter können wir uns auf sie vorbereiten. Dazu gehört, dass wir uns gegenseitig über die bestehenden Risiken und Gefahrenquellen informieren, diese Daten bewerten und gemeinsame Abwehrstrategien entwickeln*", erläuterte **Jäger**.

Der Kongress zum Thema grenzüberschreitender Katastrophenschutz bildet den Schlussstein einer Veranstaltungsreihe, die im vergangenen Jahr begonnen hat. Bereits die Feuerwerkskatastrophe in Enschede hatte deutlich gemacht, wie wichtig die ***grenzüberschreitende Gefahrenabwehr*** ist. Damals waren Großeinheiten aus Deutschland spontan zur Hilfe geeilt.

Die Zusammenarbeit auf regionaler Ebene ist seitdem erweitert und intensiviert worden. Die gegenseitige Unterstützung der Feuerwehren und Rettungsdienste auf örtlicher Ebene über die gemeinsame Grenze hinweg gehört zum gelebten Alltag. **Jäger**: "***Wer am schnellsten am Einsatzort ist, hilft. Die Grenze spielt dabei schon heute keine Rolle. Und das hat sich bewährt***."

Reference

Date: Wed, 23 Mar 2011 12:48:37 +0100
To: 320052219146-0001@t-online.de

Ministerium für Inneres und Kommunales
des Landes Nordrhein-Westfalen
Presse- und Öffentlichkeitsarbeit
40190 Düsseldorf

Contact

Email: [abo@im.nrw.de]
[http://www.im.nrw.de/hom/15.htm]

POLAND IMPLEMENTS ESRI-BASED INSPIRE SOLUTION

27 April 2011, 3:23pm

PRESS INFORMATION

Redlands, California - April 27, 2011 - The Head Office of Geodesy and Cartography in Poland (GUGiK) is implementing an Esri-based solution to support compliance with the European Union's Infrastructure for Spatial Information in Europe (INSPIRE) Directive. The directive sets out a framework and timetable for implementing a pan-European spatial data infrastructure (SDI) to address multinational and multi-agency issues. GUGiK is the central state administration unit responsible for national policy related to geodesy and cartography.

ESRI's ArcGIS technology will be used to create GUGiK's GeoPortal2, a project designed to improve access to government datasets and provide mapping and survey services to other government agencies, citizens, and businesses.

GeoPortal2 includes ESRI's ArcGIS for INSPIRE product as well as software from Esri business partner con terra GmbH. The project is being implemented by ESRI distributor ESRI Polska sp. z o.o.; ESRI partner GISPartner; and the largest IT company in the country, Asseco Poland SA.

GeoPortal2 is scheduled to be completed in November 2012 and will include:

- Geographic names and addresses throughout Poland
- Integrated and unified distribution of spatial data services defined by the INSPIRE Directive
- Streamlined and improved data maintenance
- Digital archive of spatial data for the central registry of data
- Uniform maintenance on all orders of data products and services
- More accurate monitoring of distributed resources

"ESRI Polska is excited by this opportunity and fully committed to working with GUGiK to implement this strategic project successfully," says Lech Nowogrodzki, president, ESRI Polska. "We look forward to making a real difference to the development of Poland's, and Europe's, SDI."

Passed by the member states of the European Union and the European Parliament, INSPIRE's goal is to tie European geospatial information producers and users together into a single community to improve decision making and operations for a productive and sustainable Europe.

For more information about ArcGIS for INSPIRE, visit the link below

SOURCE: *Geo: International*

[http://www.geoconnexion.com/geo_news_article/Poland-Implements-Esri-Based-INSPIRE-Solution/10689]

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[http://www.wallstreet-online.de/nachricht/3141273-poland-implements-esri-based-inspire-solution]

Contact

Email: [mailto:inspire@esri.com]
[http://www.esri.com/software/arcgis/arcgis-for-inspire/index.html]

ePRACTICE.eu-WORKSHOP: ADDRESSING EVOLVING NEEDS FOR CROSS-BORDER eGOVERNMENT SERVICES

Posting Date: 28 April 2011/ Last Edited Date: 3 May 2011 / Country Belgium
Submitted By [ePractice Editorial Team] (EUROPEAN DYNAMICS SA) | Belgium

PRESS INFORMATION

Category: eGovernment
Keywords: *Efficiency & Effectiveness, Benchmarking* | *Services for Businesses* | *Services for Citizens* | *Infrastructure* | *Interoperability* | *Legal Aspects* | *Policy* | *Regional and Local*
Tags: cross-border | egovernment | local national government | services
Submitted by: Eleni Galyfianaki (European Dynamics)
Location: Brussels (Belgium)
Date: 25 May 2011

Basic info

Domain and topic:	eGovernment (High Impact Services with Pan-European Scope; Interoperability; Policy; Regional and Local; Other)
Organiser:	European Dynamics (Private (Contractor on behalf of Public Organisation) Organisation)
Languages:	English
Scope:	Pan-European
Expected participants:	70
Contact email:	Eleni.Galyfianaki@eurodyn.com

Description

Cross-border access to public services of other European administrations by citizens and businesses is one important step closer to a truly united Europe with strengthened ***eGovernment services*** between public administrations in different Member States.

This workshop is proposed to focus on the evolving needs of the European Union towards a more efficient delivery of ICT-facilitated public ***services for citizens and businesses across the EU.*** The target is to widen the scope of use of the electronic means that public administrations have at their disposal outside the ***local, regional or national level.*** A further aim is to facilitate mobility of businesses and citizens i.e. for entrepreneurs to set up and run a ***business anywhere in Europe*** and allowing individuals to study, work, reside, receive health care and retire anywhere in the European Union.

Workshop topics:

This workshop aims to discuss the following key questions:

- Which cross-border services are already in place and which ones are still missing?
- Which of these can be considered as key supporting the eGovernment Action Plan 2010-2015?
- Is there a need for cross-border services and why?
- When and by whom should these services be used?

Existing and future cross-border services:

- Large scale pilots that will present the services they are providing on the basis of the "demand" side and the actual "offer";
- European, national or local pilots, initiatives and ePractice case studies that target the deployment of cross-border public services in eGovernment, eHealth, eEnvironment, eJustice, employment, crime, education or other focus.

User experience:

- Experience of administrations, citizens and businesses with cross-border services;
- Views on the demand for cross-border services and perceived benefits.

Barriers and enablers:

- Current barriers and challenges that do not support a seamless integration and deployment of cross-border services;
- The key enablers and core conditions for the implementation of cross-border services and what is actually needed to be done including interoperability, eSignatures and eIdentification;
- Procedures and legislations in exchange of data and information across Member States.

Additional subjects falling within the umbrella of the workshop's theme in general are also welcome based on potential speaker proposals.

Important deadlines to remember:

- Submission of summaries / presentations:**12 May 2011**
- Speaker participation confirmation: **19 May 2011**
- Submission of final presentations: **20 May 2011**

Registration:

To register for this workshop, please create an ePractice account at http://www.epractice.eu/en/user/register if you are not a current member.

Subsequently, kindly login and once you are in this page click the yellow button that reads "Participate in this event" to activate your registration. ePractice members can simply login and click on the same page as described above.

Submission of summaries/presentation slides:

To be considered for a speaker placement kindly submit a summary of one page and four presentation slides of your intended presentation to events@eurodyn.com. Regarding your summary, please download and complete the "Workshop form for speakers" that may be found in the 'Presentation and documents' section below.

Final presentations should not exceed **7** presentation slides and should be concise and factual. The main point of your presentation is to briefly inform about the project/initiative and encourage participation, questions and overall discussion.

Networking:

This workshop is all about networking. A few selected speakers will set the scene with a **15** minute presentation and the rest of the programme will be dedicated to roundtable discussions and networking purposes.

Contact:

Please, direct all queries to the above events@eurodyn.com. The event coordinator will assist you promptly.

Agenda: TBA
Venue: How to get there

The workshop will take place in European Commission premises, BU25 / S1, in Brussels, Belgium.

Address: Avenue de Beaulieu 25, Brussels, Belgium

SOURCE:

- [http://www.epractice.eu/files/Call for Participation cross-border SC11_v8 _FINAL.doc]

References

- [http://www.epractice.eu/en/events/epractice-workshop-cross-border-services]
- [Original news article - Digital Planning Application (in Dutch)]
- [Digital Planning Application Leaflet (in Dutch)]

Contact

- Email: [mailto:inspire@esri.com]
- [http://www.esri.com/software/arcgis/arcgis-for-inspire/index.html]

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DER LÄRM IN SACHSEN BEKOMMT EINE LANDKARTE

PRESSEMITTEILUNG

SÄCHSISCHE ZEITUNG – ONLINE (DPA)
[WWW.SZ-ONLINE.DE]

Keywords: *2012, Cross-border, Directive, Emergency, EU, Kartierung, kommunaler Lärmschutz, LfULG, Noise check, Noise mapping, Noise protection, Noise prevention, Saxony, Schallschutz, Urban planning.*

Contents:

Dresden (Donnerstag, 5. Mai 2011)**:**

Der Lärm bekommt im Freistaat eine eigene Landkarte. Hupende Autos, holprige Straßen und undichte Fenster fließen ebenso in die Berechnungen ein wie Schallschutzwände und die Zahl der Nachbarn. Um den ***Lärm-Check*** drücken kann sich niemand:

Nach EU-Vorgaben müssen neben Dresden, Leipzig und Chemnitz 245 Gemeinden ihre Geräuschkulisse bis 2012 in Karten darstellen. „*Der Sinn dieser **EU-Richtlinie** ist es, sich einen Überblick über die **Belastung nach einheitlichen Kriterien** zu verschaffen*“, sagte Johannes **Herhold** vom ***Landesamt für Umwelt, Landwirtschaft und Geologie.*** „*Es gibt einen Farbschlüssel. Je blauer der Fleck, desto größer der Lärm.*“

Die Karten werden EU-weit nach denselben Kriterien erstellt. Im Freistaat übernimmt das zuständige Landesamt den Großteil der Gemeinden. Lärmexperte Herhold rechnet für die Gemeinden mit ***Kosten*** von bis zu ***500 Euro pro angefangenem Kilometer.***

Insgesamt werden rund 1650 Kilometer Strecke auf Lärm untersucht. Dresden, Leipzig und Chemnitz noch nicht mitgezählt - die drei größten Städte im Freistaat untersuchen ihren Krach auf eigene Faust. ***Den ersten Lärm-Check gab es bereits 2007.*** Mit einem Messgerät an der Autobahn stehe dabei jedoch niemand, sagte **Herhold**. „*Es wird ein Mittelwert über das ganze Jahr berechnet.*“ Die ***Daten*** kämen unter anderem von den Gemeinden, der Straßenbauverwaltung und von Vermessungsämtern.

Wer in einem besonders blauen Fleck wohnt, muss sich aber nicht mit einer Riesenpackung Ohrstöpseln zufriedengeben. „*Es dreht sich alles um die Bevölkerung*“, sagte **Herhold**. Betroffene Gemeinden sollen einen Plan erstellen, um künftig wieder mehr Ruhe zu haben. „*Es gibt natürlich kein Mittel, mit dem man das Problem auf einen Schlag loswird*“, sagte der Lärmexperte.

Bessere Straßenbeläge, Geschwindigkeitsgrenzen oder Schallschutzfenster könnten jedoch ein Anfang sein. Ob die Sachsen danach ruhiger schlafen, stellt sich spätestens ***in fünf Jahren*** heraus: ***Dann wird neu berechnet.*** (dpa)

QUELLE: DPA (re-formatted by IGN/FH)

References

[http://www.sz-online.de]

[http://www.sz-online.de/nachrichten/artikel.asp?id=2756338]

IS OPEN LOCATION THE NEXT OPEN?

PRESS INFORMATION

V1 Magazine – Promoting Spatial Design for a Sustainable Tomorrow

Written by Matt Ball Friday, 06 May 2011 00:00

[http://www.vector1media.com]

There are a growing number of open movements that include ***open access, open source software, open government, open standards, open data, open courseware, open science,*** **etc.**

The Internet is the catalyst for these movements, with its ability to offer ***transparency***, a ***repository***, and a means to create ***community connections***. With all the pushback on how both Apple and Google have stored personal location data, will open location be the next movement ?

There are existing standards for interoperable linkages between location-based service providers, but what we're talking about here is more of a user-centric movement as backlash to how Apple and Google have treated user locations. Researchers at the ***New York Times*** just launched [Openpaths] that is specifically aimed at ***sharing archived locations from Apple devices*** for research purposes. This commendable effort goes a good way toward gleaning insight on aggregated location data ***without exposing identity***, but it's aimed specifically at sharing of Apple's data before a patch is released to fix the problem. What ***Openpaths*** has started might provide a jumping off point for a means to consistently archive and analyze location outside of, and independent from, your cell phone carrier or smart phone environment.

User Control

Along the lines of other open efforts, the open location movement should be less about the commercial potential and more about possibility. At present we give away our location very freely, seldom realizing its value or the repercussions on how we are profiled. Our locations say a lot about us, and are being mined for all sorts of insight, but the catch at present is that we have little control. The idea of pervasive and consistent ***personal tracking, but with full control*** on when and how we share that information, has some interesting possibilities.

There is value to the insight into human behavior derived from our location. The promise of ***location-based services*** have been around for more than ten years now, and an interesting evolution in that span is that we used to fear the cell phone carriers, but it's now the ***operating system providers and device manufacturers*** that are feared.

Regardless of the power shift, there have always been issues of ***privacy concern*** about ***who*** knows ***where*** I am and ***what*** I'm doing, particularly when there is a recording of my movements. Putting more transparency on who knows this information, and providing ironclad ***opt-out capabilities*** should now be demanded.

Restrictive but Not Restricting

Setting restrictions on location information is a tough road now that we've come to expect development platforms ***with open sharing of location.*** While the days of unregulated access to location may be over, the curtailing of '***clandestine***' tracking is perhaps as simple as providing reports of what is known about movements, and providing a means for users to explore their records. The element of ***transparency*** provides the needed trust that has been lost, and the many benefits of ***enhanced social interaction*** and ***improved navigation*** are likely all the payment that is needed.

There is a growing realization that we are our best sensors, and the use of people for gathering metrics on a wide number of things via ***location-enabled handheld*** devices is gaining ground. The recent [Leafsnap] application that provides a means to determine tree type in exchange for the location where the tree was found is one example of simple permission-based use of location that is point specific and that opens up a whole channel of citizen science. Similar ***commercial exchanges of information*** regarding your interest in particular goods and services along with your location provide a more transparent and equitable exchange than a service provider who knows your profile and is tracking your whereabouts. A move ***toward transaction-based location*** would provide a good degree of insight into location interactions with a more manageable data stream, and a feeling that ***trust*** has been restored.

Owning the Insight

A good deal of the outrage about 'locationgate' has to do with insight that people have about us that we might not realize ourselves. Unleashing control of our interactions, without having access to this information, feels that we're giving control of our lives to outside entities that may even be unknown to us. We should be the owners of this insight or at least privy to the details that others know as well as the repercussions.

Parallels on control of outcome can be drawn to our personal credit score. We're aware on a transaction or monthly basis of how and where we spend our money and extend our credit, even if we might lose sight of the big picture of our debt. Similarly, if we're to be tracked and ***profiled based on our interactions, we should at a minimum know*** what conclusions others are drawing from this information. Ideally, we'll also be able to close off and erase those records against those we don't trust.

The issue of transparent location and tracking is one of fundamental freedom that is fraught with past transgressions of power and control. An ***open location exchange***, with a focus on insight rather than monetary gains, would provide a focus on the promise of technology rather than the leverage of closed devices. ***If we're to make the most of this technology, then the control of location must rest solely in the hands of the individual if society and commerce are to benefit.***

SOURCE (format edited by IGN / FH)**:**
[http://www.vector1media.com/dialog/perspectives/20122-is-open-location-sharing-the-next-open.html]

eSax – E-Government – Aktuell

Internetdienste zur Bereitstellung Sächsischer Geodaten

PRESS INFORMATION

Subject: [eSax] Newsletter des sächsischen E-Government
Date: Tue, 10 May 2011 10:37:34 +0200
From: eSax - E-Government Aktuell [esax@newsletter.sachsen.de]
Reply-To: [esax-admin@newsletter.sachsen.de] ; [esax@newsletter.sachsen.de]
To: [esax@newsletter.sachsen.de]

09.05.2011 - Erster sächsischer Geodienst für INSPIRE bereitgestellt

INSPIRE (Infrastructure for Spatial Information in the European Community) ist eine Initiative der Europäischen Kommission zum Aufbau der europäischen Geodateninfrastruktur. Im Rahmen dieser Initiative sind alle EU-Mitgliedstaaten verpflichtet, für verschiedene Themen digitale Daten mit geografischem Bezug (Geodaten) über das Internet bereitzustellen.

Der nächste Meilenstein beim Aufbau von INSPIRE ist der **9. Mai 2011.** Ab diesem Zeitpunkt müssen die ersten Geodaten über so genannte Darstellungsdienste in einer Anfangsbetriebsfähigkeit im Internet verfügbar sein.

Von dieser Verpflichtung sind neben Behörden des Freistaates Sachsen auch die Landkreise und Kreisfreien Städte sowie teilweise auch weitere Gemeinden im Freistaat Sachsen betroffen. Näheres kann im Internet unter:

[http://www.gdi.sachsen.de] oder **[http://inspire.jrc.ec.europa.eu]** in Erfahrung gebracht werden.

Ansprechpartner für die Umsetzung von INSPIRE im Freistaat Sachsen:

- Staatsbetrieb Geobasisinformation und Vermessung Sachsen
- Referat Koordinierung Geodateninfrastruktur
- Tel. : +49-351 8283 4520
- Mailto: [Koordinierungsstelle.GDI@geosn.sachsen.de]

Aufgrund der europarechtlichen Verpflichtung hat der Staatsbetrieb Geobasisinformation und Vermessung Sachsen ab dem 9. Mai 2011 die ***Anfangs-Betriebsfähigkeit*** von Darstellungsdiensten zu folgenden ***INSPIRE-Datenthemen*** hergestellt:

- **Flurstücke (Katasterparzellen)**
- **Adressen**

Für Interessierte sind beide Internetdienste im **Geoportal « Sachsenatlas »** unter **[http://www.atlas.sachsen.de]** abrufbar.

QUELLE : [eSax] Newsletter des sächsischen E-Government © Sächsische Staatskanzlei

REPORT – WEGE IN DIE CLOUD

K21 – ONLINE – NEWSLETTER
Ausgabe vom Donnerstag, 12. Mai 2011

Subject: Newsletter Kommune21 - Ausgabe 2011-05-12
Date: Thu, 12 May 2011 13:04:57 +0200
From: "news@kommune21.de" news@kommune21.de
To: 320052219146-0001 @ t-online.de

Liebe Abonnentinnen und Abonnenten, der Frage, ob ***Cloud Computing ein attraktives IT-Dienstleistungsmodell*** fuer die oeffentliche Verwaltung ist oder ein Sicherheitsrisiko darstellt, ist das ***Kommune21-Forum*** vergangene Woche auf der Messe **DiKOM Süd** nachgegangen.

Welche Mindestanforderungen an die Informationssicherheit beim Cloud Computing bestehen, ist in dem Eckpunktepapier des ***Bundesamtes fuer Sicherheit in der Informationstechnik (BSI)*** nachzulesen, das jetzt in finaler Fassung veroeffentlicht wurde. Mehr erfahren Sie in unserem aktuellen Newsletter.

Mit freundlichen Gruessen aus Tuebingen
Ihre news@kommune21-Redaktion

Keywords: *Bundesamtes fuer Sicherheit in der Informationstechnik (BSI), Cloud Computing, Datenschutz, E-Government, Informationstechnik, Internet, kommunal, Kommune21, Kommunikation, Newsletter, Online-Services, Strategie.*

Contents:

REPORT: Wege in die Cloud

Ist Cloud Computing ein attraktives IT-Dienstleistungsmodell fuer die oeffentliche Verwaltung oder ein Sicherheitsrisiko? Auf dem Forum Kommune21 der Messe DiKOM Sued beantworteten die Referenten diese Frage aus verschiedenen Blickwinkeln.
http://www.kommune21.de/meldung_11976

Meldungen / News

1. E-Government-Strategie: Plan zur Umsetzung

Mitte Oktober will der IT-Planungsrat die Umsetzungsplanung fuer die Nationale E-Government-Strategie beschliessen.
http://www.kommune21.de/meldung_12013

2. NRW: Datenschutzmaengel beim RIS-Einsatz

Kommunen in Nordrhein-Westfalen halten beim Einsatz von Ratsinformationssystemen (RIS) nicht immer alle datenschutzrechtlichen Vorgaben ein. Dies geht aus dem aktuellen Datenschutz- und Informationsfreiheitsbericht des Landesdatenschutzbeauftragten Ulrich Lepper hervor.
http://www.kommune21.de/meldung_12009

3. Cloud Computing: BSI-Empfehlungen in finaler Version

Das Bundesamt fuer Sicherheit in der Informationstechnik (BSI) hat die finale Fassung des Eckpunktepapiers zu Mindestanforderungen an die Informationssicherheit beim Cloud Computing veroeffentlicht.
http://www.kommune21.de/meldung_11999

4. Bayern: Breitband braucht das Land

Zur Bedeutung des Breitband-Ausbaus fuer den laendlichen Raum hat sich Bayern-CIO Franz Josef Pschierer auf einer Veranstaltung geaeussert. Er verwies auf beispielgebende Projekte und kuendigte eine Online-Beteiligung der Traeger oeffentlicher Belange bei Bebauungsplanverfahren an.
http://www.kommune21.de/meldung_11996

5. Muenster: Umfrage zu Online-Services

Die Muensteraner Buerger wollen kuenftig verstaerkt elektronisch mit der Stadt kommunizieren. Dies ist das Ergebnis einer Umfrage zu staedtischen Dienstleistungen im Internet.
http://www.kommune21.de/meldung_11992

6. KDRS: Kommunikation per E-Postbrief

Die Kommunale Datenverarbeitung Region Stuttgart (KDRS) setzt ab sofort den E-Postbrief ein und bietet Kommunalverwaltungen somit die Moeglichkeit ihre Kommunikation elektronisch abzuwickeln und dennoch alle Kunden zu erreichen.
http://www.kommune21.de/meldung_11993

7. Augsburg: Terminvereinbarungen online

Die Stadt Augsburg bietet einen neuen Service an: Termine fuer die Buergerbueros koennen jetzt online reserviert werden. Dabei werden die Buerger auch informiert, welche Unterlagen fuer den Besuch im Rathaus mitzubringen sind.
http://www.kommune21.de/meldung_11983

8. KDVZ Rhein-Erft-Rur: Doppik-Umstieg Teil 2

Das Unternehmen Infoma und die Kommunale Datenverarbeitungszentrale (KDVZ) Rhein-Erft-Rur haben nach den Staedten Bergheim und Dueren im vergangenen Jahr nun die Doppik-zu-Doppik-Umstellung fuer neun weitere Mitgliedskommunen realisiert.
http://www.kommune21.de/meldung_11975

9. Bayern: E-Government-Loewe gefunden
Die Preise im Rahmen des Wettbewerbs Bayerischer E-Government-Loewe gehen in diesem Jahr an die Oberste Baubehoerde fuer ihre Vergabeplattform, das Landratsamt Muehldorf fuer die Loesung Fuehrerschein Online sowie das Umweltministerium fuer den Energie-Atlas Bayern. *http://www.kommune21.de/meldung_11973*

Termine mit ausfuehrlichen Informationen finden Sie unter http://www.kommune21.de/termine

11.-25. Mai 2011, verschiedene Orte: Hausmesse „Forum 2011“
12. Mai 2011, Osnabrueck: Integriertes E-Government in Niedersachsen
17.-18. Mai 2011, Dresden: Intergraph-Forum
18. Mai 2011, Darmstadt: GDI im kommunalen Umfeld. Welchen Nutzen kann ich daraus ziehen?
23.-24. Mai 2011, Bad Schandau / Decin: 11. Sächsisches GIS-Forum
24.-26. Mai 2011, Unterschleissheim: ESRI. Die deutschsprachige GIS-Konferenz
25.-26. Mai 2011, Nuernberg: e_procure & supply
26. Mai 2011, Koblenz: 5. egovday
27.-28. Mai 2011, Muelheim an der Ruhr: Kommune gemeinsam gestalten. Beteiligungs- und Kooperationsprozesse zwischen Buergern, Wirtschaft und Kommune initiieren und realisieren
6.-7. Juni 2011, Berlin: DuD 2011. 13. Konferenz zu Datenschutz und Datensicherheit

References

„news@kommune21.de“ ist ein kostenloser Newsletter

Abonnement: *Schreiben Sie uns einfach eine e-Mail an mailto: mit Ihrer e-Mail-Adresse und dem Betreff 'subscribe' (abonnieren) bzw. 'unsubscribe' (abbestellen).*

Contact

Email: [news@kommune21.de]
K21 media AG
Olgastrasse 8
72074 Tübingen
Tel. 07071.56513-0
Fax. 07071.56513-29
Internet: [http://www.kommune21.de]

ACKNOWLEDGEMENT

THE ORGANIZERS OF GI2011-X-BORDER-SDI/GDI-SYMPOSIUM ARE ACKNOWLEDGING THE SUPPORT GIVEN BY PUBLISHING HOUSE OF K21 MEDIA AG - TÜBINGEN PRESENTING TWO ISSUES OF JOURNAL MOVE – MODERNE VERWALTUNG / MODERN ADMINISTRATION TO THE PARTICIPANTS OF THE GI2011-SYMPOSIUM !
IGN E.V.

SÉMINAIRE DE CLÔTURE DE LA CONVENTION 2008-2011 DU SIGRS

INVITATION

RÉGION MÉTROPOLITAINE TRINATIONALE (RMT) DU RHIN SUPÉRIEUR

Keywords: *Base de données, Communes, Conférence du Rhin Supérieur, Conseil Général du Haut-Rhin, Cross-border, Directive, Europe, Information, INSPIRE, Région Métropolitaine Trinationale (RMT), Systeme, SIGRS, trinationale.*

Contents:

Le groupe d'experts SIGRS organise le 26 mai 2011 un séminaire de clôture de la convention 2008-2011 du "*Système d'Information Géographique du Rhin Supérieur*" (**SIGRS**). Ce séminaire prendra place en salle Europe au Conseil Général du Haut-Rhin à Colmar (France).

La convention d'objectifs et de moyens actuelle du SIGRS, dont le Conseil Général du Haut-Rhin est le chef de file, prendra fin le 30 juin 2011. A cette occasion, le groupe d'experts SIGRS souhaite consacrer une journée aux nombreux travaux menés par cet outil, dédié à l'observation du territoire transfrontalier, depuis sa création par la Conférence du Rhin Supérieur en 1998. Ce faisant, il propose d'aborder ensemble les grandes orientations de travail qu'il s'est fixées pour sa prochaine période de financement.

A cet égard, le SIGRS présente aujourd'hui un bilan très positif :

- **107** cartes transfrontalières accessibles via son site Internet,
- une base de données trinationale régulièrement actualisée,
- un réseau d'acteurs trinationaux entretenant des échanges techniques réguliers dans le cadre de réunions, workshops thématiques ou séminaires organisés par le SIGRS,
- une charte pour l'achat, l'actualisation et la création de données transfrontalières,
- des publications (une brochure, un rapport d'étape, des Newsletters…), etc.

Chacune de ces réalisations ont contribué à faire du SIGRS un outil performant, reconnu et valorisé pour la qualité de ses travaux. Toutefois, les ***obstacles techniques*** (*difficultés dans l'interopérabilité des données issues de trois pays*), juridiques (*trois législations différentes*), ***linguistiques*** (*nécessité de développer un langage technique commun*) inhérents à cet outil transfrontalier persistent et les défis futurs sont encore nombreux.

Face à ces enjeux, comment permettre au SIGRS de capitaliser l'existant tout en répondant de manière innovante et prospective aux nouvelles exigences européennes en particulier celle d'Inspire ? Comment mieux positionner le SIGRS au niveau local, national et européen ? Comment rapprocher cet outil cartographique des citoyens du Rhin Supérieur ?

Tour à tour, lors de ce séminaire, les experts et les cofinanceurs du SIGRS, les représentants politiques et administratifs des trois pays, les Eurodistricts, les communes et intercommunalités de la bande rhénane, des experts de la Commission européenne et des représentants de délégations régionales seront invités à débattre et à échanger autour de ces questions.

- **Voilà le challenge lancé par les experts du SIGRS le 26 mai 2011 !**

Programme:

(La traduction simultanée de l'intégralité du séminaire est assurée par deux traducteurs professionnels)

- Ouverture du séminaire par M. Pierre-Etienne BISCH, Préfet de Région et Président de la CRS, et M. Charles BUTTNER, Président du Conseil Général du Haut-Rhin
- Le rôle des SIG et les enjeux de la directive Inspire en Europe :
  Intervention d'un représentant de la Commission Européenne
- Echange avec la salle
- Présentation du SIGRS: concepts, enjeux et exemples concrets:
  Intervention des cellules SIG et coordination du SIGRS
- Echange avec la salle – Conférence de Presse pour les représentants politiques
- Retours d'expériences par trois utilisateurs du SIGRS:
  Discussion entre experts allemand, français et suisse
- Déjeuner – Buffet (offert par le SIGRS)
- La contribution du SIGRS au développement du Rhin Supérieur:
  Présentations du Président du groupe de travail Aménagement de la Conférence du Rhin Supérieur et d'un représentant du 12ème Congrès Tripartite
- Echange avec la salle
- Perspectives futures du SIGRS dans le contexte de la Région Métropolitaine Trinationale (RMT) du Rhin Supérieur:
  Intervention d'un représentant de la RMT
- Synthese - Clôture - Verre de l'amitié

Flyer d'invitation:

[http://sigrs-gisor.org/Extranet/FileDownload.php?fichier=Invit_Einlad_05_2011.pdf]
[http://sigrs-gisor.org/CDIS2009/Presentations/P1_DE.pdf]

Reference

Date: 13.05.2011

[http://sigrs-gisor.org]

Contact

Groupe d'Experts SIGRS
Conseil Général du Haut-Rhin
100, avenue d'Alsace
BP 20351 - 68006 COLMAR Cedex
Tel : 03.89.30.64.28
Fax: 03.89.21.64.53
Email: soulaimani(at)cg68.fr

Cellule Coordination
Conseil Général du Haut-Rhin
100, avenue d'Alsace
BP 20351 - 68006 COLMAR Cedex
Tel : 03.89.30.64.28
Fax: 03.89.21.64.53
Email: soulaimani(at)cg68.fr

Cellule SIG
Conseil Général du Haut-Rhin
100, avenue d'Alsace
BP 20351 - 68006 COLMAR Cedex
Tel : 03.89.30.63.91
Fax: 03.89.21.64.53
Email: stern(at)cg68.fr

INSPIRE-UMSETZUNG IN SACHSEN

POST – WORKSHOP – INFORMATION

der „gdi.initiative.sachsen“
vom **16.05.2011** zum
„1.Workshop der GDI Sachsen“
am **10. Mai 2011** im
Staatsministerium des Innern

Am 10. Mai 2011 trafen sich auf Einladung des Staatsministeriums des Innern 70 Teilnehmer zum *1. Workshop der GDI Sachsen* in Dresden.

Schwerpunkte waren:

- die Vorstellung des ***Entwurfes des Betriebsmodells*** der GDI Sachsen und des ***Betriebskonzepts Geothemenmanagement***,
- Informationen zum ***Stand der INSPIRE-Umsetzung*** sowie die
- Präsentation von ***Lösungsansätzen für die Aufbereitung*** von Geodaten.

Die Vertreter *von staatlichen und kommunalen geodatenhaltenden Stellen sowie wissenschaftlichen Einrichtungen wurden* über die zum 9. Mai 2011 termingerecht hergestellte Anfangsbetriebsfähigkeit von INSPIRE-Darstellungsdiensten für die Themen **Flurstücke** und **Adressen *informiert.*** Die in einer Livevorführung gezeigte Einbindung dieser Dienste in Geoanwendungen nahmen die Teilnehmer mit großem Interesse zur Kenntnis.

Ein aktueller Aufgabenschwerpunkt bei der Umsetzung der INSPIRE-Richtlinie ***ist die Ermittlung der Geodaten*** der GDI Sachsen ***und der*** für deren Bereitstellung ***verantwortlichen geodatenhaltenden Stellen.*** Auf Basis des in der Veranstaltung vorgestellten Betriebskonzepts ***Geothemenmanagement*** ist bei dieser Ermittlung ein weiteres ***zielgerichtetes Vorgehen mit den betroffenen geodatenhaltenden Stellen*** erforderlich.

Die Ergebnisse des INSPIE-Monitorings 2010 veranschaulichen die zunehmende Wahrnehmung der Aufgaben einer Vielzahl geodatenhaltender Stellen bei der Erfassung und Bereitstellung von ***Metadaten*** entsprechend der INSPIRE-Durchführungsbestimmung.

Die Veranstaltung zeigte, *dass der Freistaat Sachsen* für die Umsetzung der INSPIRE-Richtlinie ***konzeptionell gut aufgestellt*** ist ***und konkrete Lösungsansätze*** zur Erfüllung der Anforderungen der INSPIRE-Richtlinie ***erarbeitet*** wurden.

QUELLE © GeoSN – Staatsbetrieb Geobasisinformation und Vermessung Sachsen,
Referat 42 - Koordinierung Geodateninfrastruktur (*format-edited by IGN / FH*):
[http://www.gdi.sachsen.de/inhalt/info/bericht/110516/110516.html]

INTERGRAPH – HOCHSCHULVERTRIEB – IKGIS

FÖRDERPROGRAMME FÜR LEHRE UND FORSCHUNG

Intergraph U – Global Education Program

Keywords: *Dresden (17.-18. Mai 2011), Education Grant, Hochschulvertrieb, IKGIS, INTERGRAPH-Forum-2011, RRL-Program, Student lizense program,*

Contents:

Intergraph Hochschulvertrieb für Deutschland, Österreich & die Schweiz

Möchten auch Sie die Möglichkeit nutzen, kostengünstig oder sogar kostenfrei mit unseren leistungsstarken GIS-Lösungen zu arbeiten? Dann gehen Sie denselben Weg, wie zahlreiche Hochschulen und Bildungseinrichtungen in Deutschland, Österreich und der Schweiz, die bereits Produkte der GeoMedia- Familie in Forschung und Lehre einsetzen.

Als Weltmarktführer für Geoinformationssysteme möchte Intergraph einen Beitrag zur Qualifizierung des GIS-Nachwuchses leisten und unterstützt Sie deshalb in Forschung und Ausbildung. Zudem erhalten auch Studenten die Möglichkeit kostenfreie 1-Jahres Lizenzen GeoMedia Professional zu erhalten.

Die Folgenden Seiten informieren Sie über das Angebot des Intergraph Hochschulvertriebs.

Förderprogramme für Lehre und Forschung

Studentenförderung (Student License Program)

Universitäten und Forschungsinstitute erhalten kostenfreihe Einjahreslizensen für ihre Studierenden in gewünschter Stückzahl.
SLP - Student License Programm

Forschungsförderung (RRL-Program)

Universitäten/Forschungsinstitute erhalten kostenfrei ein umfangreiches Softwarepaket und zwei Jahre Wartung, wenn die GeoMedia-Technologie in der Forschung eingesetzt wird.
RRL-Programm

Ausbildungsförderung (Education Grant)

Wird die GeoMedia-Technologie in der Lehre eingesetzt, erhalten Universitäten/ Forschungsinstitute kostenfrei ein Campus-Bundle und zwei Jahre Wartung.
Education-Grant

GIS für hydrologische Fragestellungen

"GIS für hydrologische Fragestellungen" ist ein komplett ausgearbeiteter Hochschulkurs (rund 28 Unterrichtsstunden), der interessierten Hochschulen kostenfrei zur Verfügung gestellt wird -
inklusive des Lehrkonzepts, der erforderlichen Daten und eines Education Grants.
GIS für hydrologische Fragestellungen

Ausführliches Informationsmaterial (englisch) zum Intergraph Education Angebot
Weiteres Infomaterial als PDF

INTERGRAPH U
GLOBAL EDUCATION PROGRAM

AUFBAU DER GEODATENINFRASTRUKTUR IM FREISTAAT SACHSEN

Staatsregierung verabschiedet den Bericht zum Aufbau der Geodateninfrastruktur im Freistaat Sachsen für das Jahr 2010

PRESSEINFORMATION

SMI – Sächsisches Staatsministerium des Innern – Landesentwicklung | Infrastruktur – 17.05.2011

Von: medienservice@egov.sachsen.de / **Datum: 17.05.2011 / 14:15**
Betreff: [SMI] Aufbau der Geodateninfrastruktur im Freistaat Sachsen

Die Staatsregierung verabschiedete **am 17. Mai 2011** den Bericht zum Aufbau der Geodateninfrastruktur im Freistaat Sachsen (GDI Sachsen) für den Zeitraum 1. Januar 2010 bis 31. März 2011.

Die GDI Sachsen schafft die technischen und organisatorischen Voraussetzungen für eine kostensparende und anforderungsgerechte Erschließung und Bereitstellung digitaler Geodaten unterschiedlicher Quellen und dient damit der Befriedigung eines stark wachsenden Bedarfs an solchen Daten. Nicht zuletzt der große Erfolg von kommerziellen Internetdiensten, die in Sekundenschnelle Karten mit Informationen für einen konkreten, anlassbezogenen Bedarf (*z. B. Sehenswürdigkeiten, Einkaufs- oder Übernachtungsmöglichkeiten*) anzeigen, verdeutlicht, dass Geodaten aus einer modernen Gesellschaft nicht mehr wegzudenken sind. Mit der GDI Sachsen werden Strukturen aufgebaut, die – *vergleichbar mit kommerziellen Internetdiensten* – stets aktuelle amtliche Geodaten von Behörden und Kommunen am Bildschirm anzeigen und für eine Weiterverarbeitung bereitstellen. Der Freistaat Sachsen verknüpft dabei seine Verpflichtung zur Beteiligung am Aufbau einer Geodateninfrastruktur in der Europäischen Gemeinschaft (INSPIRE) **mit dem landespolitischen Ziel einer modernen, bürgernahen und effizienten Verwaltung.**

Der Bericht stellt den Stand der Umsetzung der Richtlinie 2007/2/EG des Europäischen Parlaments und des Rates zur Schaffung einer **Geodateninfrastruktur in der Europäischen Gemeinschaft (INSPIRE) im Freistaat Sachsen** dar. Er gibt Auskunft darüber, dass der Freistaat Sachsen mit dem am 5. Juni 2010 in Kraft getretenen **Sächsischen Geodateninfrastrukturgesetz** seiner Verpflichtung zur Umsetzung der Richtlinie in Landesrecht nachgekommen ist. Zur europäischen Geodateninfrastruktur trägt der Freistaat Sachsen aktuell bereits mit **191 amtlichen Geodatensätzen** und **57 Internetdiensten** bei. Für Zwecke der Verwaltung und der Wirtschaft stehen insgesamt jedoch schon ca**. 4.000 Geodatensätze** aus den verschiedensten Themengebieten in der GDI Sachsen bereit.

Der Bericht erläutert das Vorgehen zur gemeinsamen Bereitstellung von digitalen Geodaten über das Internet durch die staatlichen und kommunalen Stellen sowie durch sächsische Wirtschaftsunternehmen. In diesem Zusammenhang wird der Freistaat Sachsen das im Rahmen des ***E-Government*** betriebene **Geoportal „Sachsenatlas“** zu einer leistungsfähigen IT-Plattform weiterentwickeln, die **voraussichtlich ab 2012 alle Geodaten des Freistaates Sachsen** mit höchster Qualität über moderne Internetdienste anbietet. Das Konzept für den Aufbau dieser IT-Plattform wurde 2010 von staatlichen und kommunalen Experten mit Unterstützung der TU Dresden und der HTW Dresden, entwickelt.

Mit dem Aufbau der IT-Plattform wollen der Freistaat Sachsen und die sächsischen Kommunen Folgendes erreichen:

- ***sächsische Daten*** für die Geodateninfrastruktur Deutschland und die Geodateninfrastruktur der Europäischen Gemeinschaft ***effizient und wirtschaftlich bereitstellen,***
- ***die umfassende Bereitstellung und Nutzung*** von raumbezogenen Daten durch Verwaltung, Wirtschaft und Bürger *gewährleisten* und
- ***die Zahl der*** bei staatlichen und kommunalen Behörden ***eingesetzten IT-Verfahren*** durch die Nutzung der zentralen IT-Plattform ***reduzieren***.

Rückfragen an Pressesprecher Frank Wend: [mailto:frank.wend@smi.sachsen.de]
[http://www.medienservice.sachsen.de]

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DER WIRTSCHAFTSRAUM
SACHSEN – BÖHMEN – NIEDERSCHLESIEN
POTENZIALE UND HERAUSFORDERUNGEN EINER MAKROREGION IN MITTELEUROPA

POST-Event-PRESSEINFORMATION

MEDIENSERVICE SACHSEN

19.05.2011, 12:31 Uhr

70 Fachleute aus Sachsen, Polen und Tschechien befassten sich am gestrigen Tag im Innenministerium mit dem Thema ***„Der Wirtschaftsraum Sachsen – Böhmen – Niederschlesien:*** *Potenziale und Herausforderungen einer Makroregion in Mitteleuropa*“.

Anlass dieser Veranstaltung war die seit dem 1. Mai 2011 eingesetzte Arbeitnehmerfreizügigkeit, wodurch sich ***neue Herausforderungen für die Regionen*** Sachsen. Böhmen und Niederschlesien ergeben. Alle Teilnehmer waren sich einig, dass die Schaffung einer leistungsfähigen grenzüberschreitenden ***Wirtschaftskooperation in einem gemeinsamen Wirtschaftsraum*** notwendig ist und letztlich allen drei Regionen zugute kommen würde.

Unter anderem ging es darum, auf welche Weise ***grenzüberschreitende und transnationale Projekte*** diesbezüglich wirksame Beiträge zur Fachkräftesicherung und Qualifizierung leisten können. Einzelne positive Ansätze und Projekte zur Stärkung der Innovationsleistung von Unternehmen, zur Vernetzung von Kernbranchen der Regionen und zur Verknüpfung von Bildung und Ausbildung wurden im Rahmen dieser Veranstaltung vorgestellt.

Die sächsische Landesplanung und Landesentwicklung hat dies früh erkannt und in den letzten Jahren vielfältige Anstrengungen unternommen, die ***transnationale und grenzüberschreitende Zusammenarbeit*** zu intensivieren und die planerischen Voraussetzungen und Grundlagen hierfür zu verbessern.

Die verbesserte Anbindungsqualität und Erreichbarkeit von Metropolräumen, Stadtregionen und Städten ist als wichtige Grundlage gerade auch für die wirtschaftliche Entwicklung zu sehen. Insofern ist die ***Projektarbeit*** und enge ***Zusammenarbeit*** über Grenzen hinweg ein wichtiger Baustein für die gesamte Region und alternativlos im weltweiten Wettbewerb der Regionen.

Die Ergebnisse der verschiedenen EU-Projekte haben schließlich gezeigt, dass die Potenziale, was die Einwohnerzahl, das hohe Bildungsniveau der Bevölkerung und die Vielzahl der gut ausgebildeten Arbeitskräfte anbetrifft, für eine positive Entwicklung des Wirtschaftsraumes ***Sachsen – Böhmen – Niederschlesien*** vorhanden sind.

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Inter-Regional GI2011-X-border-SDI/GDI-Symposium

ACKNOWLEDGEMENT

TO SUPPORTING ORGANIZATIONS

Bad Schandau

23. Mai 2011

Decin

24. Mai 2011

IMPRIMATUR TO PRINT

20. Mai 2011

	AEBR – Association of European Border Regions, Gronau Flyers & EBR-Map of AEBR	EU
	ALSAC Region – CG68, Conseil Général du Haut-Rhine, SIG/GIS, Colmar GISOR/SIGRS-Brochure: – Systeme d'Information Geographique du Rhin Superieur	FR
	CCSS – Czech Center of Science and Society, Praha Co-Organizer	CZ
	ESDIN – EU-Programme – eContent + Flyers: ESDIN, OGC and OSGeo	EU
	ESRI Press – Redlands Book: Building European Spatial Data Infrastructures, 2nd Edition 2010	US
	EURO-INSTITUT – Kehl (BW) # Strasbourg (FR) Flyer: Institut für grenzüberschreitende Zusammenarbeit – Fortbildung & Beratung	DE/FR
	EU-Programme "Inter-Regional Collaboration" (2007-2013) **FREE STATE OF SAXONY – Dresden (SN)**	EU/DE
	GEO-SN – Staatsbetrieb Geoinformation und Vermessung (SN) Aufbau der GDI-Sachsen „Weiteres Vorgehen 2011"; Flyer *„gdi.initiative.sachsen"*; GDI-Broschüre „Managementfassung Vorkonzept Zentrale Komponenten"; Metadaten-Flyer; Metadatenhandbuch der GDI-Sachsen.	DE
	IGN – INNOVATION. Grenzüberschreitendes Netzwerk e.V., Dresden (SN) Co-Organizer	DE/CZ
	INTERGRAPH-Hochschulvertrieb, Darmstadt (HE) Flyers: GDI-solutions; GeoMedia-SDI-Professional; GeoMedia-SDI-Portal	DE
	IMCS – University of Latvia – Institute of Mathematics&Computer Science BizBiz open source browser based video conference, collaboration & learning tool	LV
	K21 – media AG, Tübingen (BW) Fachzeitschriften: MOVE – Moderne Verwaltung / Modern Administration	DE
	KOGIS – Swisstopo – Koordination, Geoinformation und Service, Wabern Broschüre: Geoinformation, April 2011 – Mobile Geodaten	CH

	KULK – **Regional Government Liberec, ENVIRO-Department** ATLAS ZIVOTNÍHO ROSTREDÍ LIBERECKÉHO KRAJE, Liberec 2008 – ISBN 978-80-254-2872-6	CZ
	MIR-GLA – **Ministerium für Infrastruktur und Raumordnung, Potsdam (BB)** Wyniki wspolpracy transgranicznej 2008 – DPERON / DP-PLIS	DE
	MOT – Mission Opérationnelle Transfrontalière, Paris The MOT-Guide 8/2011 – " Civil society and cross-border cooperation"	FR
	Nationalpark*Zentrum* "Sächsische Schweiz", Bad Schandau (SN) Nationalparkhaus – Tagungsstätte – Sächsische Landesstiftung „Natur und Umwelt"	DE
	PROGIS SOFTWARE GMBH, **Villach** Flyer Farm- & Landmanagement	AT
	Senatsverwaltung Stadtentwicklung – **Broschürenstelle, Berlin (BE)** Geoinformation 2010 in Berlin – Veränderungen und Herausforderungen	DE
	SIG – **Media GmbH & Co. KG, Köln (NRW)** Business Geomatics – Wirtschaftszeitung, Ausgaben April/Mai 2011	DE
	UWB – **University of West Bohemia, Section Geomatics, Plzen** Co-organizer	CZ
	WFS – **Wirtschaftsförderung Sachsen (SN)** Flyers & Booklets	DE
	ZAMEK – DECIN Tagungsstätte "Schloß/Castle Decin"	CZ

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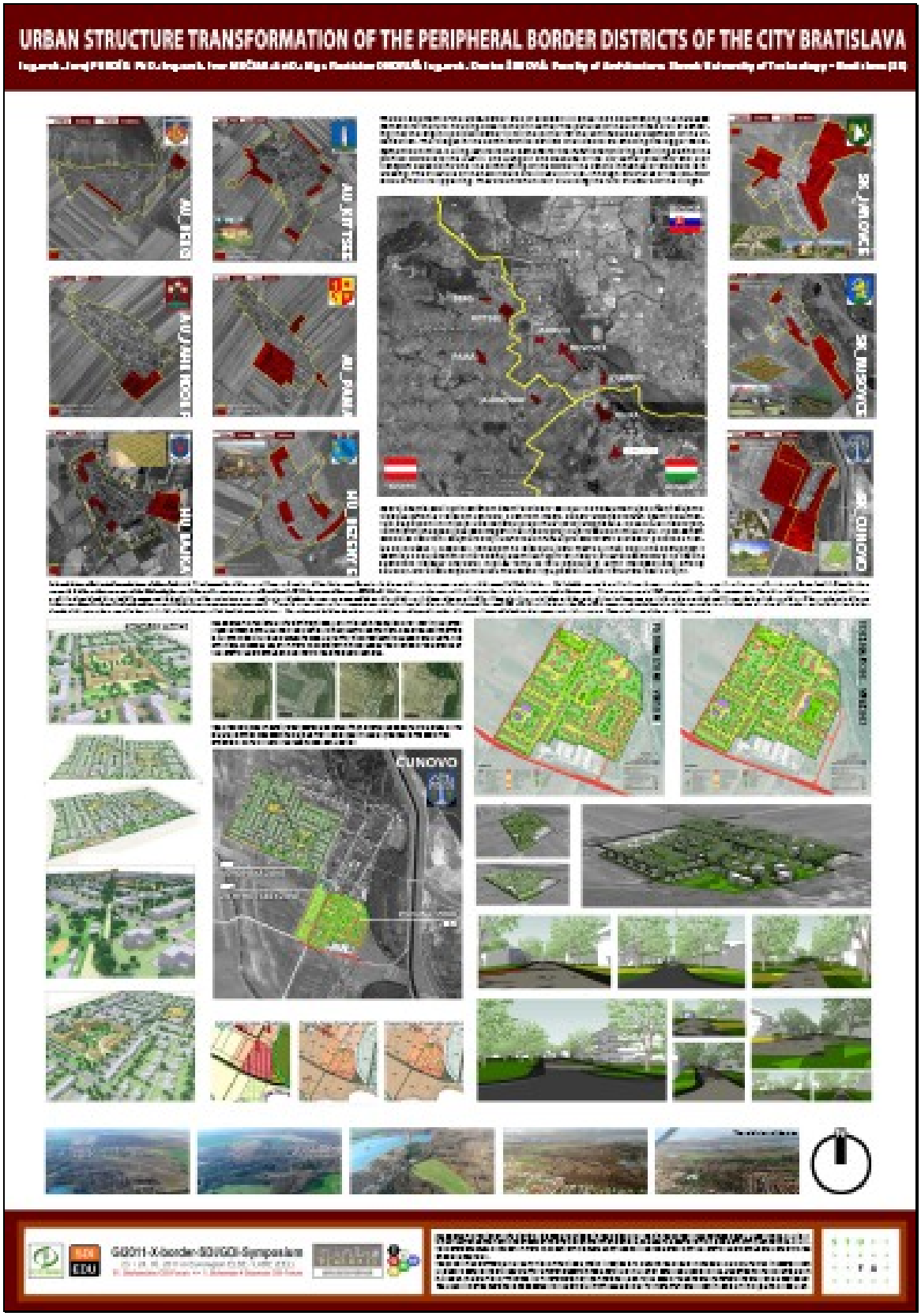
and
the **institutions** hosting GI2011 in **BAD SCHANDAU** (NationalParkCenter) & **DECIN** (Castle)
to make this 1st Bohemian # Saxonian Cross-border GIS-Forum 2011 a success !



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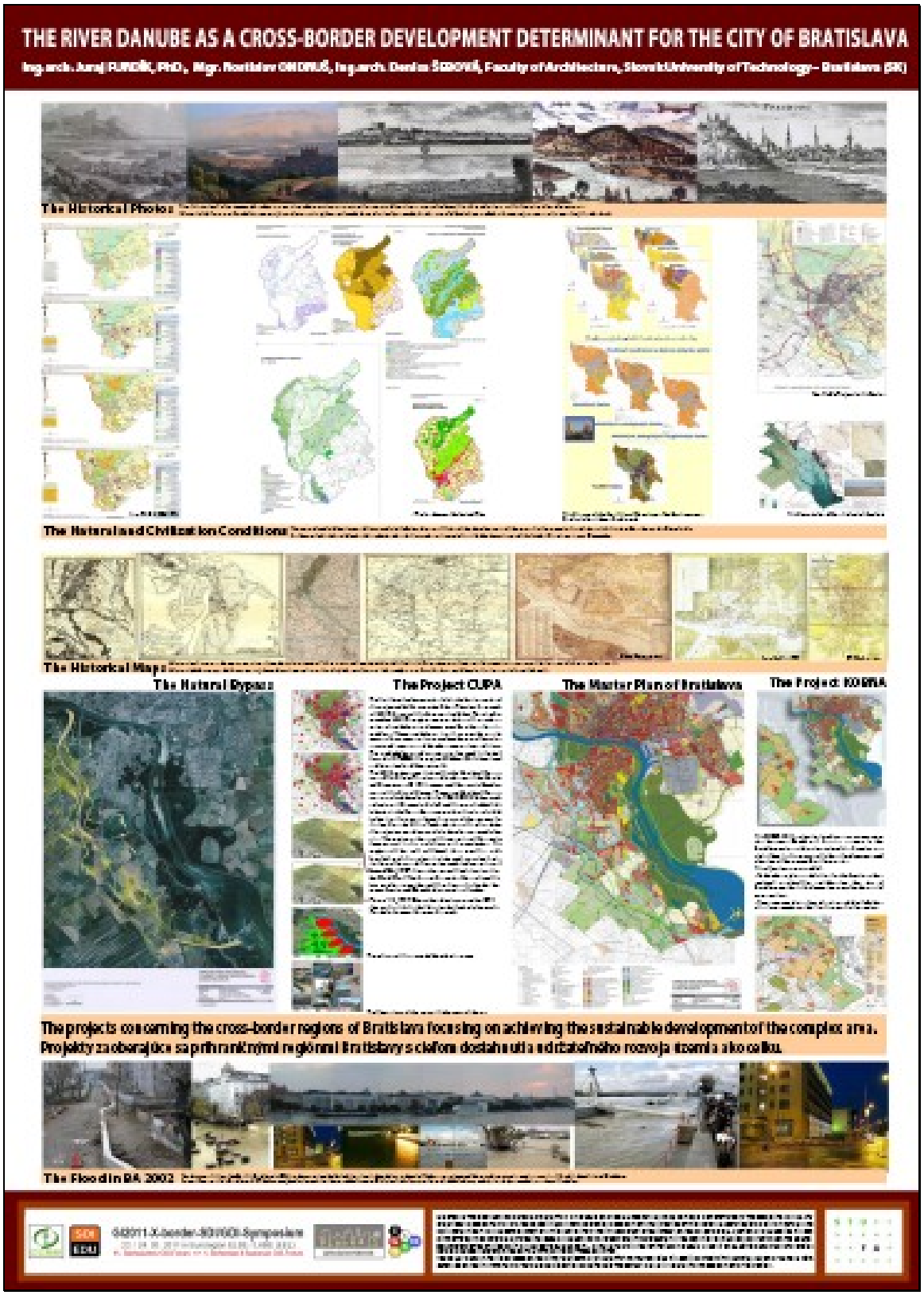

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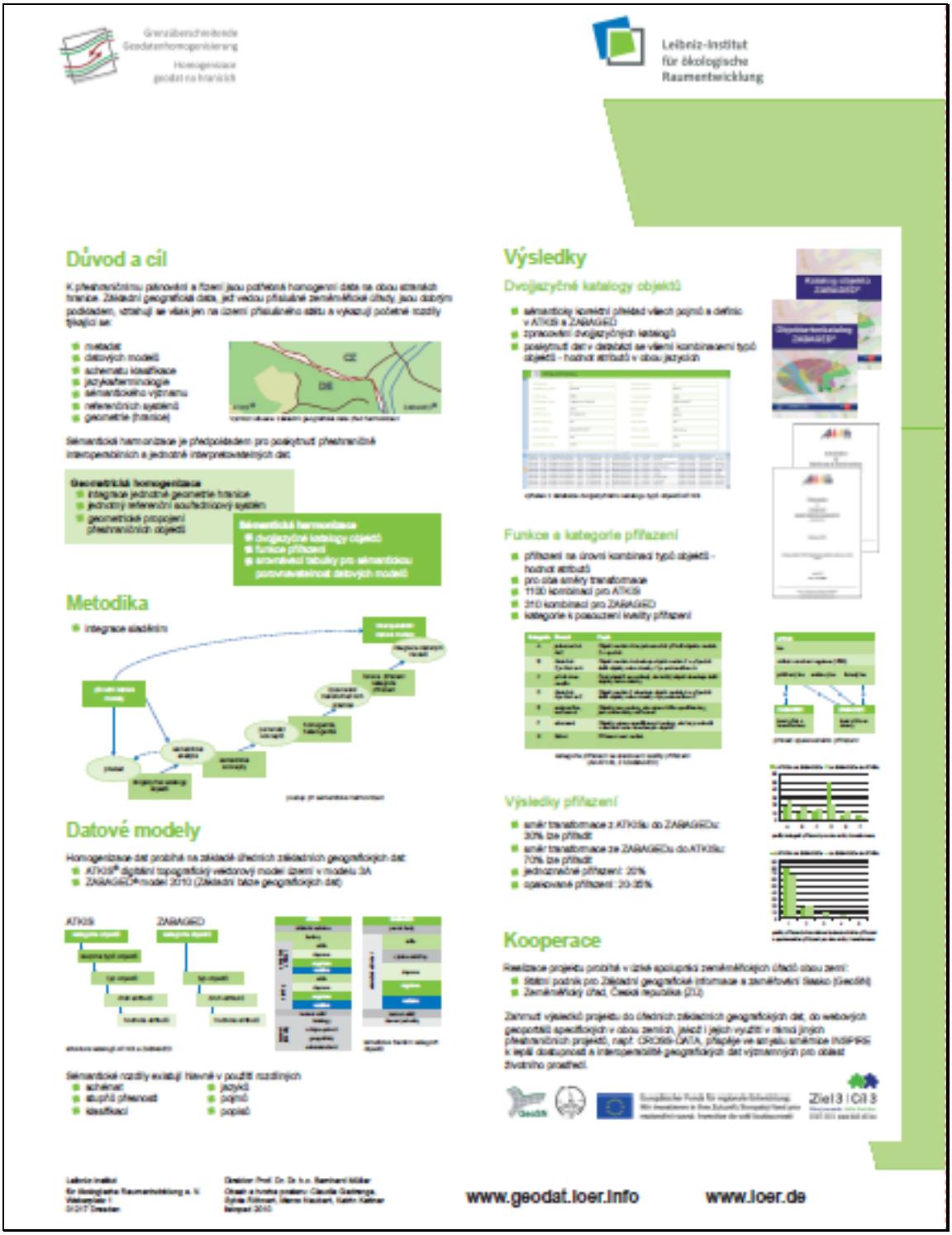

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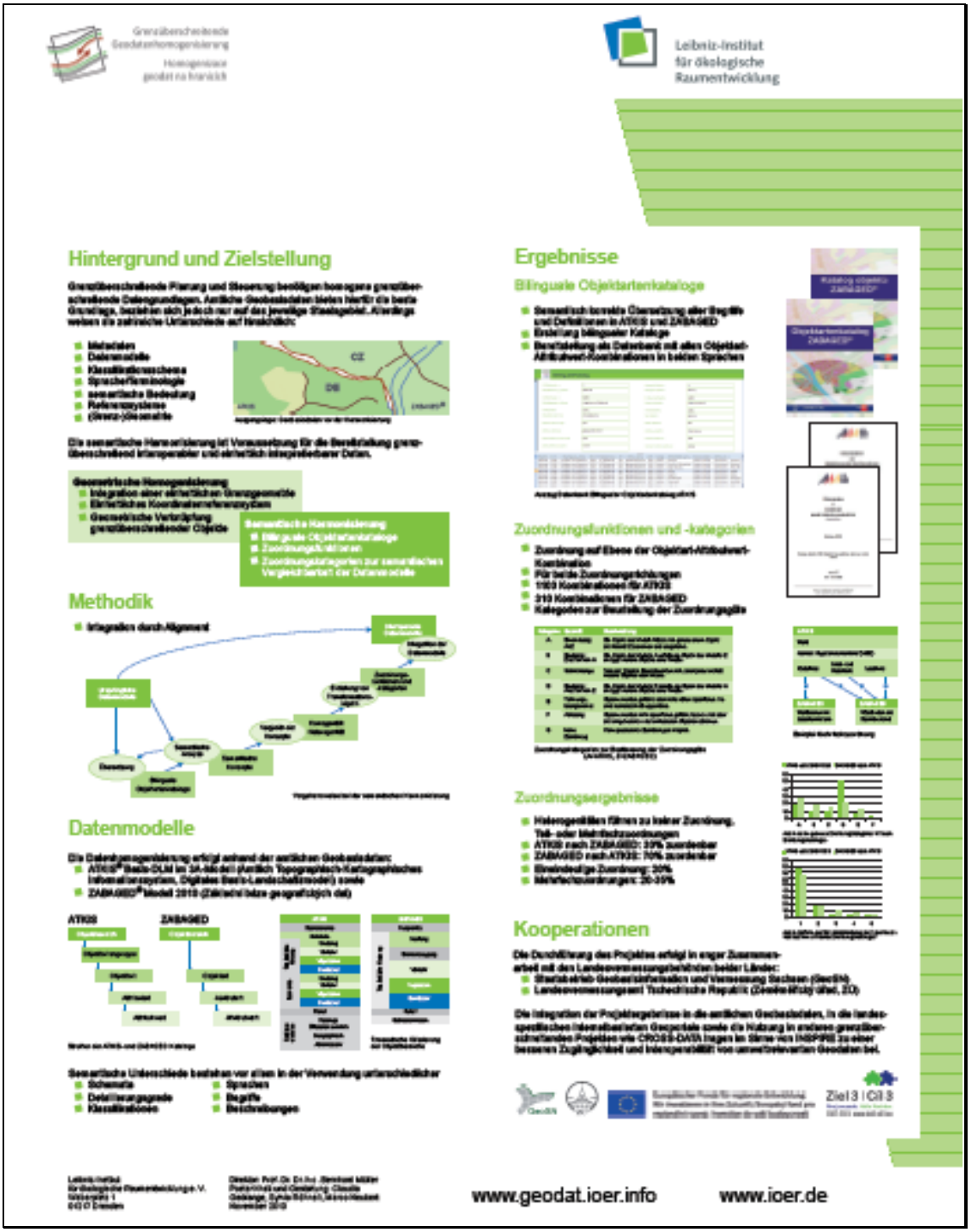

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