



# Towards the Digital Earth

A virtual tour on HUNAGI blog posts published since ISDE-6

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Secretary-general, HUNAGI



ISDE7 The Knowledge Society. Hosted by WALIS, Perth, Australia,  
23-25 August, 2011

# Towards the Digital Earth

A virtual tour on HUNAGI blog posts  
published since ISDE-6

- Introduction of HUNAGI
- HUNAGI blogs
- HUNAGI actions since ISDE6
- HUNAGI blog posts relevant in the DE context
- Some Hungarian achievements
- Conclusions



Content



# HUNAGI

Flashback

Features

Mission goals

Milestones



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# HUNAGI flashback

- Establishment

1994 by learned societies

- Drivers on European Level

European level: Bangemann report, J.Delors's White Book, DG IT  
DG Industry, EUROGI Establishment

- Drivers on National Level

Impact of the Central European GIS/LIS Conferences 1993-1996  
Multidisciplinary needs to adopt the European model (EUROGI)  
in line with the preparation of EU accession

- Relevance today

1994: Growth, Employment, Competitiveness

2011: Additional challenges: Sustainability, Financial crisis and a  
need for more R+D/Innovation



## Flashback

Features

Mission goals

Milestones



# HUNAGI features

- Non-profit, interdisciplinary, umbrella civil organisation
- Members from Government, Academia, Private Sector and NGOs
- Members: 88 institutions and organisations (2011)

Flashback

Features

Mission goals

Milestones

Members of HUNAGI			
ACADEMIA	GOVERNMENT	PRIVATE SECTOR	NON-GOVERNMENTAL
<b>1994</b> 12 Faculty of Geoinformatics, University of West-Hungary	<b>1995</b> 11 Hungarian Space Research Office	<b>2001</b> 34 Bonaventura GIS Market Analysis and Publishing Ltd. <a href="http://www.terinformatika-online.hu">www.terinformatika-online.hu</a>	<b>1994</b> 1 gita Hungary Geospatial Information & Technology Association
<b>1996</b> 14 ATC Agriinformatics and Applied Mathematics Dept, University of Debrecen	<b>1996</b> 15 Mapping Service of the Hungarian Defence Forces	<b>36</b> DigiTerra GEOinformatics System House Ltd <a href="http://www.digiterra.hu">www.digiterra.hu</a>	<b>3</b> Hungarian Society of Surveying, Mapping and Remote Sensing
<b>1997</b> 23 Dept of Physical Geography, József Attila Univ. of Sciences	<b>1997</b> 16 Geological Institute of Hungary (MÁFI)	<b>38</b> GeoX Ltd <a href="http://www.geox.hu">www.geox.hu</a>	<b>1998</b> Hungarian Federation of Agroinformatics (MAGISZ)
<b>1999</b> 25 Institute for Environmental and Landscape Management, Szent István University, Gödöllő	<b>17</b> Institute of Geodesy, Cartography and Remote Sensing (FÖMI) incl. 8 subscribed projects (INSPIRE, LandCover, LPIS, PIR, GNSS, Int'l Relations, MADOP Digital Land Offices, VINGIS)	<b>39</b> Térkép (HISZI-MAP) Ltd. <a href="http://www.hiszi-map.hu">www.hiszi-map.hu</a>	<b>2003</b> 82 UN FAO SEUR, Budapest
<b>2000</b> 26 Chair of Landscape Planning and Regional Development, Budapest Corvinus University	<b>18</b> GRID Budapest	<b>44</b> National Cadastral Programme Non- profit Co. <a href="http://www.nkp-kht.hu">www.nkp-kht.hu</a>	<b>2010</b> 159 CASCADOSS Hungary, Budapest
<b>27</b> Research Institute of Soil Sciences and Agrochemistry of	<b>1998</b> 24 Regional Development and Town Planning PNC (VÁTI)	<b>2002</b> 52 Congress Ltd <a href="http://www.congress.hu">www.congress.hu</a>	<b>LOCAL GOVERNMENT DIVISION</b>
		<b>54</b> ESRI Hungary Ltd <a href="http://www.esrihu.hu">www.esrihu.hu</a>	<b>2005</b> 115 Szombathely
		<b>56</b> Geodézia Ltd	<b>2007</b> 135 Zalaegerszeg



# HUNAGI

## mission goals

Flashback

Features

**Mission goals**

Milestones

- To promote and facilitate the availability, access and usability of spatial data
- To raise awareness, disseminate information related to INSPIRE, PSI, standards, opensource, best practices and innovative solutions

To reach these goals, special emphasis is given to the establishment of horizontal networking among disciplines and sectors

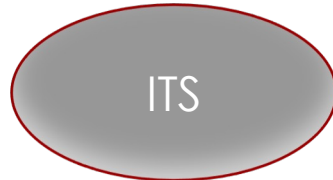


# HUNAGI

## horizontal networking

Flashback

Intelligent  
Transportation  
Systems



Hung.Soc  
Surveying, Mapping  
Remote Sensing

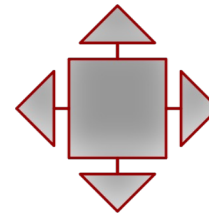


Hung Fed  
Agroinformatics



Features

Hung.Soc. Inventory,  
Logistics Purchase



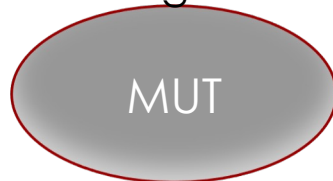
Hung Fed  
eContent Industry



**Mission goals**

Milestones

Hung. Urbanistical  
Knowledge Centre



Hung CASCADOSS  
Ass. on Opensource



Hung.Space  
Research Cluster



# HUNAGI

## horizontal networking



Hung Standardisation Board  
Working Committee on GIS (828)

Flashback



Hungarian Space Research  
Council, Ministry of National Development

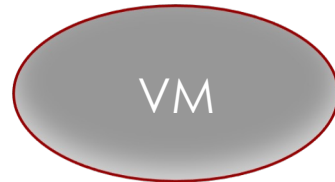
Nature

**Mission goals**



Ministry of Foreign Affairs

Milestones



Ministry of Rural  
Development



Geoinformatic Subcommittee  
Hungarian Academy of Sciences





# HUNAGI

## milestones in international relations

Flashback

- Bridging International links with EU GI actors  
GIS/LIS 1993-1996



Nature

- Joining **EUROGI** activities in 1994  
Membership in 1996, ExCom seat between 1998-2010



Mission goals

- Joining **GSDI** activities in 1996  
Participation all of the World Conferences, GSDI6 in Budapest, Seats in Advisory Board, Board of Directors since 1998, Active in Legal & SocioEcon Committee and Consultancy

### Milestones

- Upgrade in 2002  
Acknowledged as Public Benefit Civil Organisation



- Joining **ISDE** activities in 2003



# HUNAGI blogs

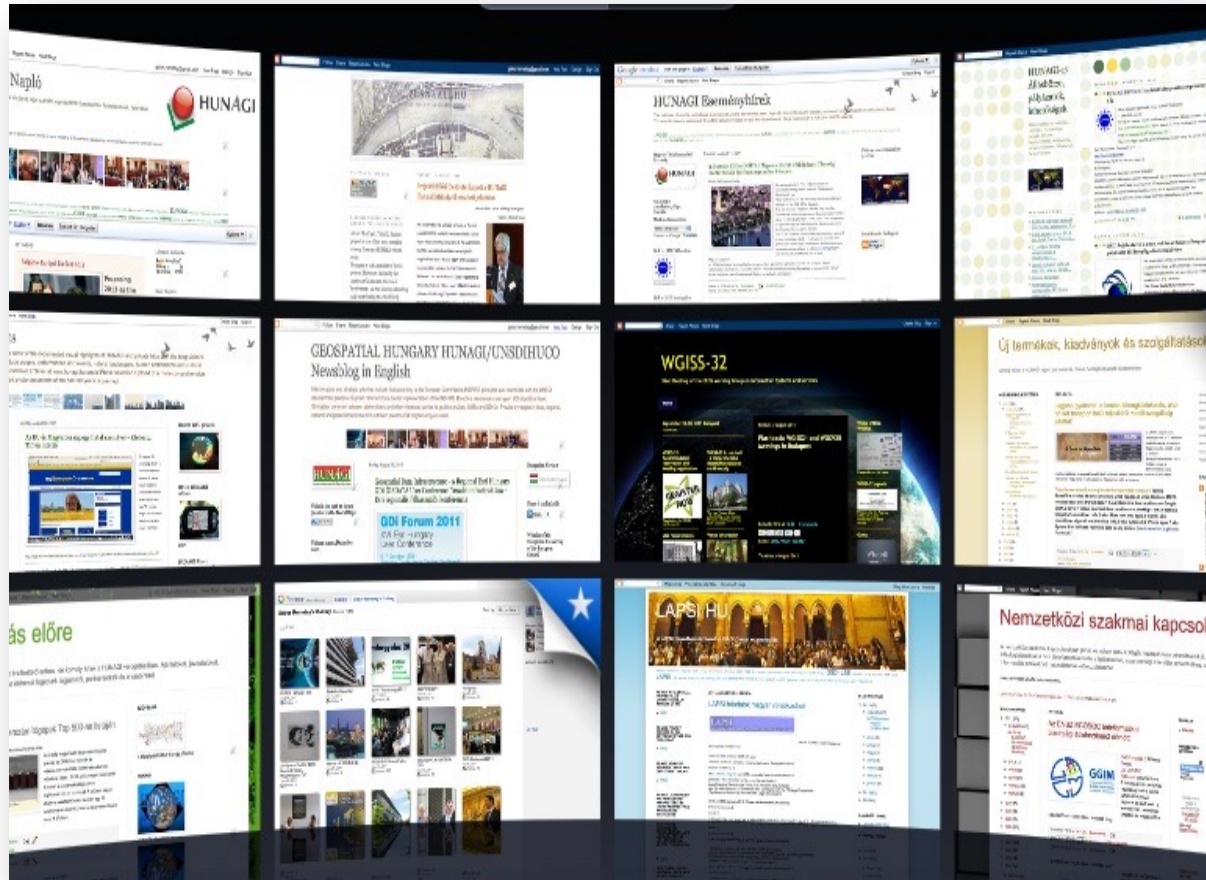
HUNAGI Napló

Blog in English

Calendar blog

Project-related  
blogs

HUNAGI visuals  
Resource



Advantage: easy to edit and publish even in mobile environment.  
Feedback capability, RSS, Infoharing using Twitter, Facebook etc.

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# HUNAGI blogs

Themes cover the SDI strategy proposal elaborated by an intersectoral committee mandated by the former Ministry of Informatics and Communication in 2004

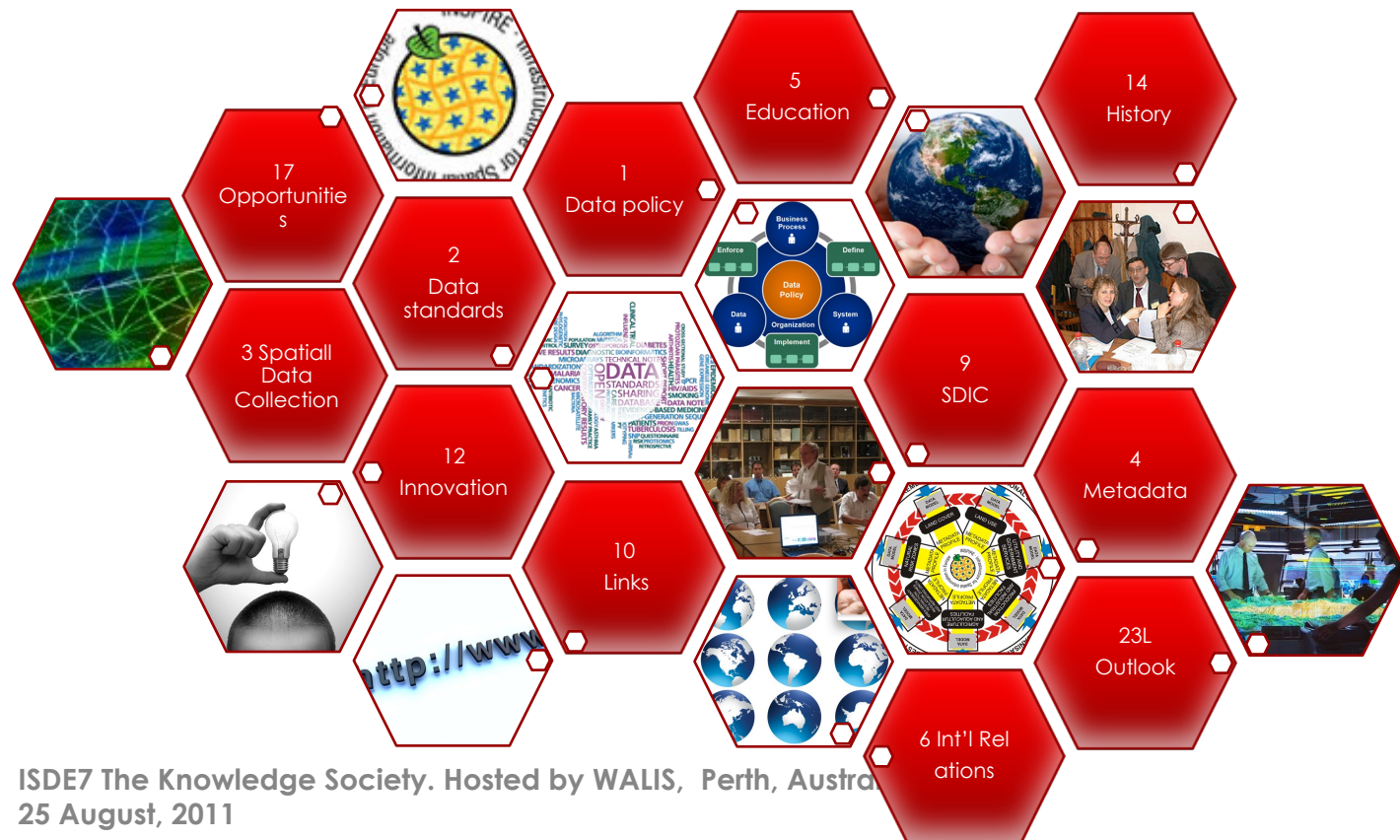
HUNAGI Napló

Blog in english

Calendar blog

Project-related Blogs

HUNAGI visuals Resource



# HUNAGI Napló

<http://hunagi8.blogspot.com/>

Started in April 2006

## HUNAGI Napló

Blog in english

Calendar blog

Project-related  
Blogs

HUNAGI visuals  
Resource

The screenshot shows the HUNAGI Napló blog interface. At the top left, the title "HUNAGI Napló" is displayed in a serif font. Below it, a subtitle reads: "A magyarországi térinformatikai közösség tagjai számára vagy részéről közérdeklődést feltételező hírek, felhívások." To the right of the title is the HUNAGI logo, which consists of a red sphere on a green base next to the word "HUNAGI" in a bold, sans-serif font. Below the title and subtitle is a horizontal strip of nine small thumbnail images showing various scenes from conferences or meetings. On the left side of the main content area, there is a sidebar with the text "Magyar Térinformatikai Társaság (HUNAGI) honlapja (hamarosan elérhető)" and a small HUNAGI logo. Below this is a "Gépi fordítás" section with a "Select Language" dropdown menu. The main content area features a post dated "2011-08-19" with the title "Polgárok Európai Éve lesz 2013" and a sub-headline "Proposing 2013 as the 'European Year of Citizens'". The post includes a large photo of a group of diverse young people smiling. To the right of the main post is a "Látogatói statisztika" section showing "ShinyStat" analytics for the day (18 p.v.) and total views (137058). Below that is a "Saját bloglista" section with a small HUNAGI logo and a thumbnail of the same group photo, with text indicating the 20th anniversary of the establishment of the European Union.



# HUNAGI Napló

<http://hunagi8.blogspot.com/>

Last entry: August 21 2011  
947 posts since ISDE6

## HUNAGI Napló

Blog in English

Calendar blog

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blogs

HUNAGI visuals  
Resource

## HUNAGI Napló

A magyarországi térinformatikai közösség tagjai számára vagy részéről közérdeklődést feltételező hírek, felhívások.



Magyar Térinformatikai  
Társaság (HUNAGI) honlapja  
(hamarosan elérhető)



Klikk a bannerre



Gépi fordítás (English - angol,  
Italian - olasz, German -  
német)

Machine translation

Select Language

Powered by Google Translate

2011-08-21

**EUROGI támogatja a HUNAGI ISDE8 pályázatát. A levélváltást másolatban a HUNAGI is megkapta.**



Perthi Konferencia és Kiállítási Központ, a kedden kezdődő 7. Digitális Föld Szimpózium színhelye. Hétfőn a nemzetközi szervezet végrehajtó bizottsága tart ülést. A HUNAGI pályázati anyaghoz tegnap támogató levelet küldött a pekingi titkárságra az EUROGI enőke, melyet nem csak visszaigazoltak, de ha nyeménk, a támogatás részlít az EUROGI elnöke és az ISDE főtikára a decemberi Abu Dhabiban rendezendő



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# HUNAGI blog in English

Established on 23 October 2006  
Number of posts since ISDE6: 239

2006-2007 <http://hunagi.blogspot.com>  
2008 <http://hunagi56.blogspot.com>  
2009- <http://unsdihu.blogspot.com>

HUNAGI Napló

**Blog in English**

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Resource



## GEOSPATIAL HUNGARY HUNAGI/UNSDIHUCO Newsblog in English

Mission goals and strategic priorities include: Act according to the European Commission INSPIRE principles and coordinate with the UNSDI development process. Support national/cross-border implementation of the INSPIRE Directive. Awareness raising on SDI at political level. Strengthen cohesion between stakeholders and other interested parties ie. public services, SMEs and SDICs. Provide synergies in local, regional, national and global dimensions with outreach towards EU neighbouring countries



[View My Gallery](#)



Visits in the past 24 hours  
(located on the WorldMap)



Visitors since 5 December  
2010

22,913 Visits  
1 Recent Hit



Perth, Western Australia



Friday, August 19, 2011

Geospatial Data Infrastructure - A Regional Esri Hungary  
GDi GISDATA User Conference Téradat infrastruktúra -  
Esri regionális felhasználói konferencia

**GDi Forum 2011**

XVI. Esri Hungary  
User Conference

6-7 October 2011  
Boscolo Conference Centre, Budapest



Dear GDi users, partners and professional colleagues,

Hungarian Version



Share it on LinkedIn



Website of the  
Hungarian Presidency  
of the European  
Council



To visit please click on  
the logo

Local time in  
Budapest

# HUNAGI calendar blog

News on forthcoming events  
(also distributed by e-Newsletter for 450 addressees)

<http://hunagi19.blogspot.com>

Started on 13 January 2007, 293 posts since ISDE6  
23 k visitors in the last 8 months

Links are provided to EUROGI, GSDI, ISDE, GEO, ISPRS,  
FIG, ICA and OGC calendars as well

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**HUNAGI Eseményhírek**

This calendar of events, workshops, conferences, public assemblies, open days etc are continuously updated, enhanced and developed on participatory basis. Your contributions is welcomed. Ez a blog szívesen fogad olvasói hozzászólásokat. Hívja részletekért a +36 30 415 8276 számot.

AGEO Cascares 2.0 Cascares CODE CME Disaster Risk e-Government ESDI-Net ESPON East Magyarország EUROGI FIG FLA/ICT QDI Forum GIS-education Gisday GSDI ICT INSPIRE INTERGEO 2011 ISDE KU Leuven LIS MYTIT OGC Open Geodata Open Government Data Plan4all SDI SSI spatial planning

Magyar Térinformatikai Társaság

Thursday, August 11, 2011

**3. Horvát SDI és INSPIRE Nap és a Horvát Térképészeti Társaság Konferenciája Splitben szeptember közepén.**

Forrás: Split utazási iroda

Ma esti postánkból. Prof. Mijenko Lapaine, szervezőbizottsági elnök a Horvát Térképészeti Társaságtól írja:  
"Dear participant of the Workshop for Building Network Related to the SEE SDI in Szeged,  
The 3rd Croatian NSDI and INSPIRE Day and 7th Conference on Cartography and Geoinformation will take place in Split, September, 14-16, 2011. The conference is organised by the State Geodetic Administration and the Croatian Cartographic Society.  
Due to the fact that spatial data are especially important in your everyday activity, I invite you to consider your participation at the Split conference. All information and registration are available at <http://www.kartografija.hr>  
I am looking forward to see you in Split,

Mijenko Lapaine"  
Az SDI jelentősége a nyugat-balkáni országokban generálhat igényt a hazai kis- és közepes méretű vállalkozások számára is. Tagszervezetünk, a Cascares Magyarországi Egyesület, a szegedi SDI műhely házigazdája már jelentős kapcsolati tőkével rendelkezik a térségben.

Visitors since December 5, 2010  
22,016 Visits  
9 Recent Hits  
Szent István Sörgyári  
Perth, Western Australia  
Local time in Budapest  
Power Blogger  
12  
9  
Westerly  
11:30 AM



# HUNAGI project-related blogs

This is not a blog  
Hungarian version  
of the EU project  
website

ESDINetplus Hungarian version  
Best practices in subnational SDIs  
and self-evaluation methodology  
<http://www.esdinetplus.eu/hu>

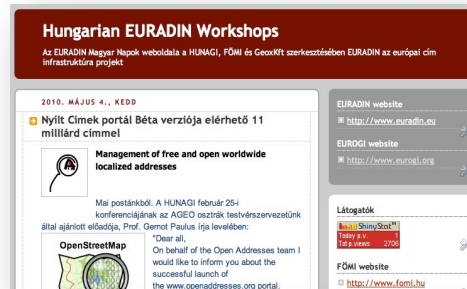
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EURADIN project blog  
European Address Harmonisation  
<http://euradinhu.blogspot.com>

Plan4all project blog  
Digital Spatial Planning  
<http://plan4allhu.blogspot.com>

LAPS I project blog  
Legal aspects of PSI  
<http://lapsihu.blogspot.com>





# HUNAGI visuals resource

## HUNAGIALBUMS

<http://picsaweb.google.com/hunagialbums>

Started in January 2008

Number of albums so far: 219 including ISDE events

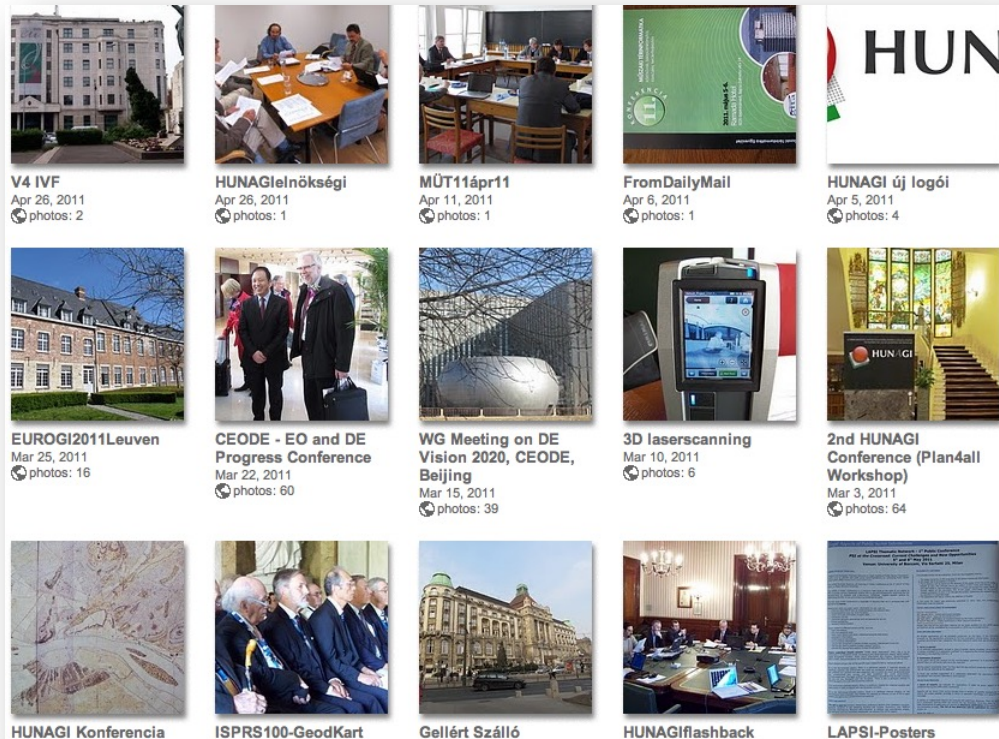
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Resource**



Photographic coverage incl. ISDE events ice 3<sup>rd</sup> ISDE Symposium



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# HUNAGI

## actions since ISDE6 (1/4)

### **Informing the Community about**

- the *GEO membership of ISDE*
- a *study on megatrends* entitled “Informatics everywhere” published by the National Council of Communication and Informatics (NHIT)
- *Europe and the Digital Earth – brainstorming* arranged by DG JRC SDI Unit
- the *closing meeting of Int’l Year on Planet Earth*, a global, networked action of the geoscience community and UNESCO (ISDE reported)
- *Joint Meeting of the Hung Space Research Council and the Scientific Council on Space Research* (ISDE reported)

# HUNAGI

## actions since ISDE6 (2/4)

- *1<sup>st</sup> HUNAGI Conference on Open Data and FOSS*
- Participating the *HUMBOLDT* workshop (data harmonisation for use in INSPIRE and GMES)
- Participating the eSDI-NET+ project *SDI self evaluation* brainstorming Dissemination of the EU address project
- Participating the CEOS WGISS at UN SPIDER Bonn with poster on VINGIS project of FÖMI
- *Partnership with Governmental Agencies (MoND, MoRD, MoFA, State Audit Office)*
- *INSPIRE SDIC*, Presentation at Geodetic and Geoinformatics Comm of NatAcadSciences
- Participation of the ISDE Summit in Nessebar BG
- Participation of the INSPIRE 2010 Conference

# HUNAGI

## actions since ISDE6 (3/4)

### Informing the Community about

- Digital Agenda of the European Union
- Contribution to Space Strategy, Digital Hungary Strategy
- 2nd HUNAGI Conference on Digital Spatial Planning - a dissemination action for the EU Plan4all project
- Participating the Digital Earth Vision 2020 Workshop
- Participation of the LAPSI project workshops and conference. Arranging paper in IJDE
- Contributing to videobroadcasted ESDIN workshop
- Future Emerging Technologies,



# HUNAGI

## actions since ISDE6 (4/4)

### Informing the Community about

- EU Common Strategic Framework on Res + Innovation,
- Internet of Things conference
- Open Governmental Data in Europe/Hungary,
- InfoSo Parliament,
- 2<sup>nd</sup> Geospatial Summit
- Participation of SDI in SEEC Workshop of CME  
Delegated representation of EUROGI
- Participation of PCC Conference and Plenary hosted  
by Hung. Surveying, Mapping and Cadastral Authority

### Ahead:

- Hosting CEOS WGISS-32  
in Budapest in September



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25 August, 2011





Disseminated blog post themes  
relevant in the DE context  
besides INSPIRE, GMES, SEIS...

**Digital Agenda for Europe**

2010-2020

<http://Ec.europa.eu/digital-agenda>

**eGov Plan for Europe**

2011-2015

[www.fomi.hu/hunagi/pdf/2004/European-eGovernment-Plan.pdf](http://www.fomi.hu/hunagi/pdf/2004/European-eGovernment-Plan.pdf)

# EU: Flagship Emerging ICT technologies

 2011.hu



<http://www.fet11.eu/about/fet-flagships>

- FuturICT - The FuturICT Knowledge Accelerator and Crisis-Relief System: Unleashing the Power of Information for a Sustainable Future
- Graphene - Graphene Science and technology for ICT and beyond
- Guardian Angels - Guardian Angels for a Smarter Planet
- HBP - The Human Brain Project
- ITFoM - IT Future of Medicine: a revolution in healthcare
- RoboCom - Robot Companions for Citizens



Neelie Kroes © European Union, 2011



# IoT conference in Budapest

## IoT-A Internet of Things Initiative

- Links of things
- Web of things
- Connected objects
- Real world internet 4D

[www.iot-i.eu](http://www.iot-i.eu)

## IoT-A Internet of Things Architecture

- Smart Home
- Intelligent Transport System
- Productive business environment
- Efficient logistics and retail
- Safe health monitoring
- [www.iot-a.eu](http://www.iot-a.eu)

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Europe and the  
Internet of Things:  
Leading the Way Forward

IoT 2011 Conference

16<sup>th</sup> May, 2011, Budapest, Hungary >>





# Digital spatial Planning



Dissemination  
EUROGI-  
HungGovernment



- Plan4all

[www.plan4all.eu](http://www.plan4all.eu)

- Fraunhofer-BRGM

Deep-City3D: Surface and subsurface  
City development in 3D

[www.deepcity3d.eu](http://www.deepcity3d.eu)



# Advanced planning environment



INSPIRE conference 2011  
EDINBURGH • 27 June - 1 July

Diginext expert Jesse Himmelstein

Innovative Stereo, 4D, interactive  
multiuser environment  
V-City Builder, V-City Server,  
V-City Explorer and V-City Table

Interface to visualize and navigate  
eg. Massive urban environments

<http://vcity.diginext.fr>



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3D reconstruction, storage, and online exploitation of large and highly detailed urban areas

### The V-City Builder

Based on Procedural's CityEngine system enhanced with Katholieke Universiteit Leuven's algorithms, the Builder automatically reconstructs large-scale 3D urban environments with high quality from input cadastral data, BLM's aerial oblique images and ground pictures.

**Innovation**

- Automatic texturing, occluder removal and inpainting
- Architectural element identification and rules extraction
- Procedural remodelling, compression and semantic retagging



### The V-City Server

Developed by both CNR and CRS4, this module is in charge of transforming large scale representations of urban environments into good quality low-bitrate multiresolution representations suitable for streaming and rendering. It automatically optimizes, compresses and stores the geographical and architectural data published by the Builder and streams them in realtime over a network connection.



**Innovation**

- Blockmaps, a new compression method specially designed to provide a high quality but low-bitrate representation of 3D urban environments
- Blockmaps, a building block approach for a multiresolution streaming and rendering of whole cityscapes.



### The V-City Explorer

The V-City Explorer is the next-generation globe viewer based on DIGINEXT's future VirtualGeo3 system offering unprecedented rendering capabilities. It can display massive and extremely detailed urban environments, seamlessly integrated into their 3D landscape. Thanks to the BlockMap technology, the V-City Explorer can navigate through massive cities, complete with picture-perfect facades and architectural details, at breakneck speeds.

**Innovation**

- Multiscale geographic rendering, from global scale to indoors, with AAA video game rendering quality (shadows, SSAD, vegetation, animations...)
- Blockmap technology
- Multi-view stereoscopic rendering
- Multi-projection support
- Standard compliant (INSPIRE, CityGML, Collada, KML...)
- Fully configurable for tailored needs with its SDK and scripting language



### The V-City Table

The Map Table is a revolutionary multitouch, multiuser, stereoscopic device developed by Immersion. It allows both the 3D visualization and interaction with the geospatial environment displayed by the Explorer.

Two technologies, namely immersive 3D visualization and multitouch tactile surfaces, have been brought together for the first time to create this amazing device.

**Innovation**

- Multi-touch with proximity sensing
- Multi-users
- Multi-view stereoscopic rendering



<http://vcity.diginext.fr>






# Social Networks

- Twitter
- Facebook (720 M)
- LinkedIn

## Your Network of Trusted Professionals

You are at the center of your network. Your connections can introduce you to 3,275,500+ professionals — here's how your network breaks down:

<b>1</b>  <b>Your Connections</b> Your trusted friends and colleagues	<b>593</b>
<b>2</b>  <b>Two degrees away</b> Friends of friends; each connected to one of your connections	<b>48,200+</b>
<b>3</b>  <b>Three degrees away</b> Reach these users through a friend and one of their friends	<b>3,226,700+</b>
<b>Total users you can contact through an Introduction</b>	<b>3,275,500+</b>

29,041 new people in your network since August 16

 Your industry: Civic & Social Organization

**Fastest growing industries in your network:**

1. Research
2. Information Technology and Services
3. Nonprofit Organization Management



# Professional, knowledge raising networks

- **Geographic Information Knowledge Network of GSDI**  
<http://giknet.org>

To share and maintain personal professional profile as guide to the global geographic specialist and professional communities

To share company or agency

Deliver documents that you or your company have created to a long-term open archive for the geospatial community

- **European Spatial Data Infrastructure Network of EUROGI**  
<http://www.eurogi.org/esdinetplus>

To share information on subnational best practice SDIs in a openly accessible database maintained by EUROGI with self evaluation capability



## eSDI-NET+

Network for promotion of cross border dialogue and exchange of best practices on Spatial Data Infrastructures (SDI's) throughout Europe

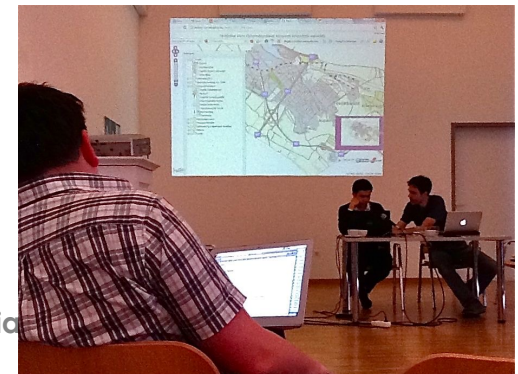
# The legal aspects of PSI and re-use (LAPSI)

<http://www.lapsi-project.eu/>

- Working Group 01: Intellectual Property and Competition Law aspects of PSI;
- Working Group 02: Privacy Aspects of PSI between Private and Public law;
- Working Group 03: Selected Implementation and Deployment Issues;
- Working Group 04: Licensing of PSI: PSI-holders' Perspectives, Re-users' Perspectives and Redress Mechanisms;
- Working Group 05: PSI and Cultural Content;
- Working Group 06: Constitutional, Human Rights and Environmental Perspectives.



Prof.M.Ricolfi



# GSDI L&SE

## Toward a global licensing framework

### Aims and Activities

- **The Committee explores the legal and economic frameworks** in which spatial data infrastructures are developed
- **Encourages dialogue** with regard to varying public policy and legal approaches
- **Explores models, approaches, and experiences** that may enhance cooperation among nations in sharing spatial data and spatial technologies.

# GSDI L&SE

## Toward a global licensing framework

### Contact points

Bastiaan van Loenen  
Delft University of  
Technology  
[b.vanloenen@tudelft.nl](mailto:b.vanloenen@tudelft.nl)  
Chair,  
Economic and legal issues

Katleen Janssen  
ICRI – K.U.Leuven  
[katleen.janssen@law.kuleuven.be](mailto:katleen.janssen@law.kuleuven.be)  
Co-chair, Legal issues

Pakorn Apaphanat  
GISTDA  
[pakorn@gistda.or.th](mailto:pakorn@gistda.or.th)  
Co-chair  
Social issues

Roger Longhorn  
Chair, GSDI Outreach&Commun.  
Moderator, L&SE list



Technology and legislation



Charta to be signed by acors  
<http://www.3dok.org/>



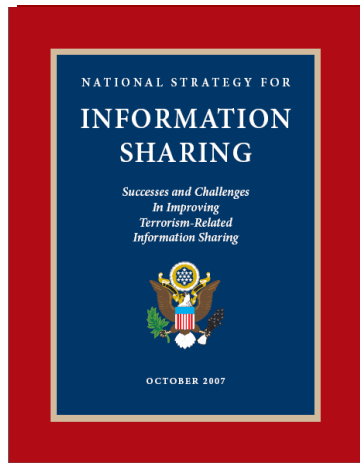
# The Gourley's approach

## Methodologies, Megatrends, Technical Trends

Understanding how IT works (current and cutting edge),  
Understanding Megatrends, Understanding the Key drivers,  
Assessment of future IT, (e.g. Gartner, Rand Reports), Drawing up  
conclusion

## Future of InfoTech

Source: Bob Gourley, 2007  
<http://ctoivision.com>  
[bob@crucialpointllc.com](mailto:bob@crucialpointllc.com)



[http://www.whitehouse.gov/nsc/information\\_sharing/NSIS\\_book.pdf](http://www.whitehouse.gov/nsc/information_sharing/NSIS_book.pdf)





# Some Hungarian achievements (1/8)

- Involving the *citizens and VGI* <http://www.vadonleso.hu>

Nature protection: observation of protected species

  
**vadonleső**

Keresés:

**HÍREK**  
**RÓLUNK**  
**CÉLJAINK**  
**FAJOK**  
**ÖNKÉNTESEK**  
**LINKEK**  
**KAPCSOLAT**

TÁMOGATÓK:  
  


**Reflektorfényben a leánykőkörcsin**  
[2011-03-08] - Ebben az évben a reflektorfénybe került a leánykőkörcsin, nem csak azért mert Év Vadvirágának választották meg, hanem azért is, mert a Nemzeti Biod...

*Önkéntesekkel a természetért*

Bármely állattal, vagy növényvel találkozol is a természetben az alábbiak közül, kérjük a megfelelő képre kattintva rögtön megfigyelésed!

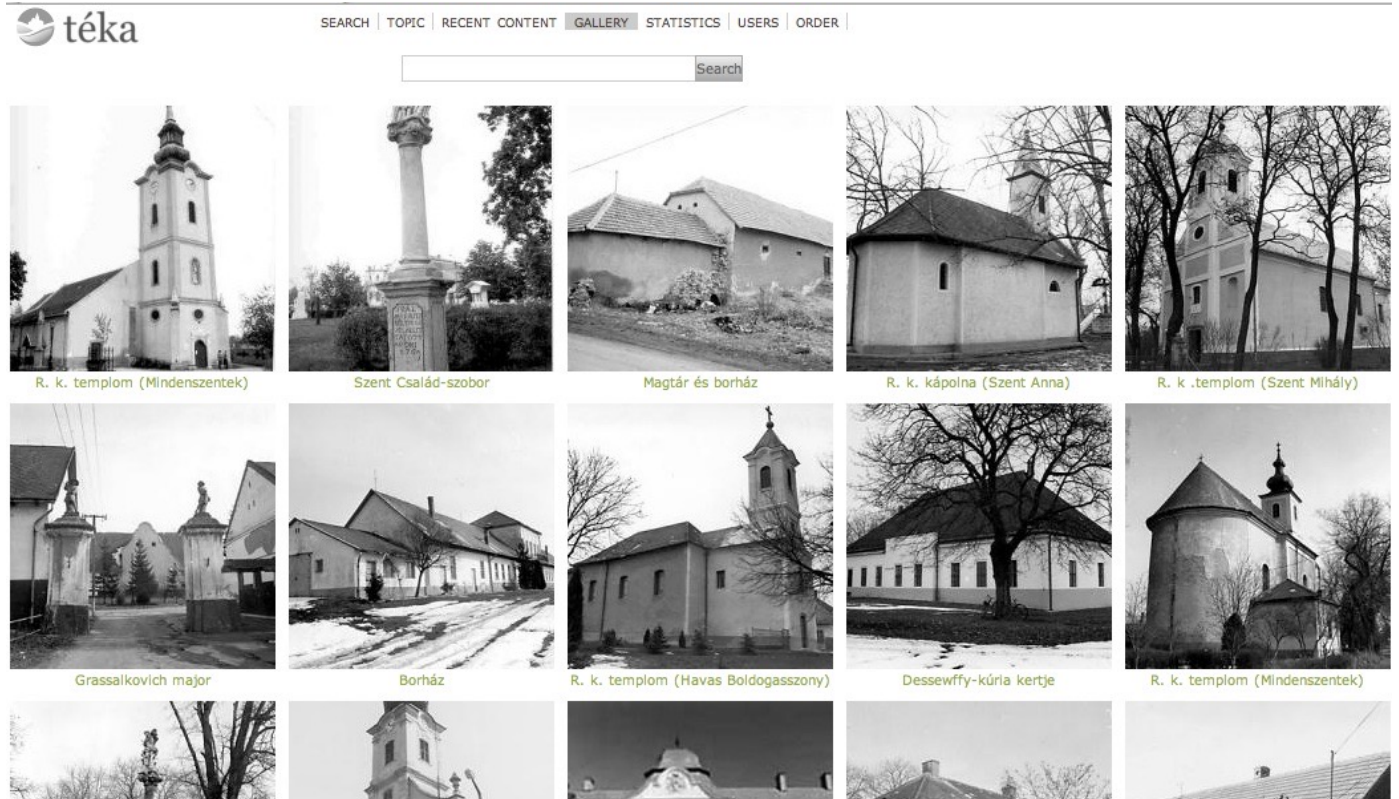
**EMLŐSÖK**  


**KÉTÉLTŰEK ÉS HÜLLŐK**  


**VADONLESŐ FAJLISTA**  


# Some Hungarian achievements (2/8)

- Preserving cultural and natural heritages [www.tajertektar.hu](http://www.tajertektar.hu)



<http://projekt.tajertektar.hu>

# Some Hungarian achievements (3/8)

- Emergency and Disaster Information System
- Sewere Weather Forecasting on District level
- Water Emergency Info System

## National Association of Radio Distress-Signalling and Infocommunications

<http://www.rsoe.hu/index.php?lang=en>

<http://hisz.rsoe.hu/alertmap/index2.php>



<http://www.vizugy.hu/>



ISDE7 The Knowledge Society. Hosted by WALIS, Perth, Australia, 23-25 August, 2011

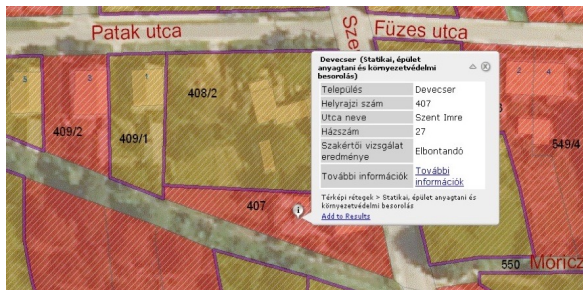
[www.met.hu/idojaras/veszelyjelzes/](http://www.met.hu/idojaras/veszelyjelzes/)

# Some Hungarian achievements (4/8)

- SDI and GIS in disaster response. FÖMI and VÁTI talks at the PCC and 2<sup>nd</sup> Geospatial Intelligence Workshops respectively



Source: FÖMI



Source: VÁTI

© Gábor Bakó – INTERSPECT Ltd.

# Some Hungarian achievements (5/8)

- Ultra-hi (1.8 cm) resolution aerial imagery [www.interspect.hu](http://www.interspect.hu) presented at Space Workshop

Actual field resolution: 1.8 cm/pixel



Actual field resolution: 3.2 cm/pixel



Actual field resolution: 1.8 cm/pixel



Credit: Gábor Bakó, Interspect

<http://zoomy.zoobudapest.com/>

# Some Hungarian achievements (6/8)



2010-08-10

## János-hegyi 71.3 milliárd pixeles panorámakép

Illusztráció: A 360World hazai cég panorámaképe megjeleníthető és nagyítható akár egy noteszgépen is. Alsó képen egy közbenső nagyításban a margitszigeti víztorony látható.  
Forrás: <http://www.70-billion-pixels-budapest.com/> Képegyőképek: HUNAGI, 2010



71.3 Gigabyte size preprocessed panorama imagery on Budapest (6000 images have been taken by two of 24 Mpixel cameras)  
40 days, 300 hrs proc, 2TB data storage, 2M files

Information: Zsolt Mihályfi [www.360world.hu](http://www.360world.hu)

The final product is zoomable on ordinary PC :

<http://www.70-billion-pixels-budapest.com/>

How the imageries were taken:

<http://vimeo.com/13702685>



# Some Hungarian achievements (7/8)

Leonar3Do

Inventor: Dániel Rátai



**Leonar3Do - The World's First Full Virtual Reality Product**  
Nine international and several national awards, acknowledgements



**Seaborg SIYSS Award -  
Phoenix, Arizona**

(Attendance at the Nobel Prize Ceremony)



**The Tech Award -  
San Jose, California**

(Award from Silicon Valley)



**International Entrepreneurship Award -  
New York**

(Award from Wall Street Stock Exchange)

Source:

[www.Leonar3Do.com](http://www.Leonar3Do.com)

[www.youtube.com/watch?v=OoVqKc](http://www.youtube.com/watch?v=OoVqKc)

- expand PCs into a total 3D work environment
- to make virtual reality available for everyday use as a new, interactive potential for creativity



# Some Hungarian achievements (8/8)



## The photographic 4D interactive atlas of anatomy

Interactive, 4D anatomy atlas of head and neck using about 10,000 images A 4D visualisation and learning tool



- Video: <http://www.4danatomy.com/content/product-vision>
- Source: <http://www.4danatomy.com/>
- More information on the development and applicability:

<http://www.4danatomy.com/content/4d-anatomy-llc-announces-research-partnership-program>







Thank you!