

HUNAGI - THE SPATIAL DATA INTEREST COMMUNITY IN HUNGARY

INTERDISCIPLINARY PARTNERSHIP BASED IMPLEMENTATION OF SDI THE CASE OF HUNGARY

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CONTEXT APPLICATION INFRASTRUCTURE
SPATIAL DATA INFRASTRUCTURE

THE INTEREST COMMUNITY

Source: The Digital Earth Concept

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CONTENT

THE SPATIAL DATA INTEREST COMMUNITY IN HUNGARY

MISSION & OBJECTIVES
KEY ROLES
ACTIONS
STRUCTURE
MEMBERSHIP
PARTNERSHIP
ORGANISATION
COMMUNICATION

DIGITAL RESOURCES & SPATIAL DATA INFRASTRUCTURE

NSDI CORE DATA AS OF 1997
ADOPTION OF THE INSPIRE: TAKING A CLOSER LOOK
STRATEGY

CONCLUSIONS

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THE SPATIAL DATA INTEREST COMMUNITY IN HUNGARY

ESTABLISHMENT OF THE HUNGARIAN GI COMMUNITY (1994)

Goals: improving coordination, co-operation, networking, exchange of information and knowledge transfer.

HUNAGI FEATURES:
INTERDISCIPLINARITY
INTERSECTORITY
INTERNET BASED NETWORKING
LINKING STAKEHOLDERS AND OTHER PLAYERS
HEAVY INTERNATIONAL BRIDGING

ACADEMIA
NGOs
PRIVATE
PUBLIC

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MISSION GOALS AND OBJECTIVES

KEY ROLES
ACTIONS
STRUCTURE
MEMBERSHIP
PARTNERSHIP
COMMUNICATION

- ★ **SERVING AND REPRESENTING THE GI COMMUNITY**
- ★ **TO STRENGTHEN THE INSTITUTIONAL LINKS BETWEEN THE MULTIDISCIPLINARY GI COMMUNITIES IN HUNGARY AND IN ABROAD**
- ★ **TO PROVIDE PLATFORM AND EXPERT FORUM BY MULTIAGENCY AND PUBLIC-PRIVATE PARTNERSHIP FACILITATING THE NATIONAL SPATIAL DATA INFRASTRUCTURE DEVELOPMENT**
- ★ **TO PROMOTE THE ACCESS AND USE OF GI**
- ★ **TO IMPROVE COORDINATION, CO-OPERATION, NETWORKING, KNOWLEDGE TRANSFER AND EXCHANGE OF INFORMATION IN EUROPEAN AND GLOBAL LEVEL**

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MISSION GOALS & OBJECTIVES

KEY ROLES
ACTIONS
STRUCTURE
MEMBERSHIP
PARTNERSHIP
COMMUNICATION

KEY ROLES PLAYED BY HUNAGI :

- GI POLICY CONTRIBUTOR (SDI STRATEGY)
- KNOWLEDGE AND INFORMATION SUPPLIER
- PUBLIC RELATIONS, AWARENES RAISING AND PROMOTION OF GI
- PROGRAM ASSISTANCE AND SUPPORT
- POLITICAL INTERFACE, LOBBYIST
- MEDIATOR, NEGOTIATOR
- PROMOTER OF STANDARDS, CERTIFICATION
- FACILITATOR IN EDUCATION AND TRAINING
- AUTHORIZED COORDINATOR (UNSDI)

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MISSION GOALS & OBJECTIVES
KEY ROLES
ACTIONS (1)
STRUCTURE
MEMBERSHIP
PARTNERSHIP
COMMUNICATION

HUNAGI INVOLVEMENT IN EUROPEAN PROJECTS

COMPARATIVE STUDIES ON NGAs, ESM, CORNE, WERA, ASDS, TAMA, TALC
CORPNE2000 OLLO, LIME, FENET, EUGRES, SDILA Web-GIS, Panel-GIS,
Nehar-GIS, GIME, GSDM

Year	Topic	EU/NA/GI participation	Bulgarian project
1994	Leipzig	General Board Meeting	Observing, taking part in discussion
1994	Leipzig	General Board Meeting	Decided as member, taking part in discussion
1994	Leipzig	General Board Meeting	Full member status, taking part in discussion
1997	Leipzig	General Board Meeting	Taking part in discussion
1998	Leipzig	General Board Meeting	Taking part in discussion, elected into the EUC
1999	Leipzig	Assembly and Members' Day	Taking part in discussion
2000	Leipzig	Assembly and Members' Day	Member in Hungary, field mapping
2001	Leipzig	Assembly and Members' Day	Participation in the GSDI 4 preparation
2002	Leipzig	Assembly and Members' Day	Participation in the GSDI 4 preparation
2003	Brussels	Assembly and Members' Day	Paper on the Web-based series of the Central European Land Knowledge Center
2004	Brussels	Assembly and Members' Day	Introduction of the Permanent Committee on Culture in the European Union

SEATIN EUROGI ExCom 1998 2005, 1st Cadastral Workshop in the EU 2001, GSDI 6 Conference 2002, European Survey on Cadastral GIS 2002-2004, EUROGI WAG on International Affairs 2006

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MISSION GOALS & OBJECTIVES
KEY ROLES
ACTIONS (2)
STRUCTURE
MEMBERSHIP
PARTNERSHIP
COMMUNICATION

HUNAGI INVOLVEMENT IN EUROGI ACTIONS

Year	Topic	EU/NA/GI participation	Bulgarian project
1994	Leipzig	General Board Meeting	Observing, taking part in discussion
1994	Leipzig	General Board Meeting	Decided as member, taking part in discussion
1994	Leipzig	General Board Meeting	Full member status, taking part in discussion
1997	Leipzig	General Board Meeting	Taking part in discussion
1998	Leipzig	General Board Meeting	Taking part in discussion, elected into the EUC
1999	Leipzig	Assembly and Members' Day	Taking part in discussion
2000	Leipzig	Assembly and Members' Day	Member in Hungary, field mapping
2001	Leipzig	Assembly and Members' Day	Participation in the GSDI 4 preparation
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MISSION GOALS & OBJECTIVES
KEY ROLES
ACTIONS (3)
STRUCTURE
MEMBERSHIP
PARTNERSHIP
COMMUNICATION

HUNAGI INVOLVEMENT IN GSDI

Year	Topic	EU/NA/GI participation
1996	Bonn & Stuttgart	Germany, Europe Taking part in the discussion, representing also EUGIS Comm. VII
1997	Chapel Hill	NC, USA, North America Taking part in the discussion
1998	Canberra	Australia Introductory presentation on the Hungarian NSDI
1999	Cambridge	United Kingdom Advisory Committee meeting participation
1999	Cape Town	South Africa EU/NA/GI was represented by its President, staff member of IP00
2000	Cartagena	Colombia, South America Introductory presentation on the reuse of the GSDI 4 Conference
2002	Budapest	Hungary, Europe Presentations include the Crop Monitoring, National Geo-Photogrammetry Program, the Central Land Cover project and activities of HUNAGI
2003	Cambridge	United Kingdom Advisory Committee meeting participation
2004	Bangalore	India, Asia Introduction of the EUROGI Cadastral Survey in Europe
2004	Santiago	Chile 8th World Geoscience Congress
2005	Cairo	Egypt Introduction of P-NGO Partnership
2006	Cambridge/Mass	USA SDI and Cultural Diversity
2006	Annapolis, Md	USA CEOS WGII 22
2006	Santiago	Chile Introduction regional activities

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MISSION GOALS & OBJECTIVES
KEY ROLES
ACTIONS (4)
STRUCTURE
MEMBERSHIP
PARTNERSHIP
COMMUNICATION

FIG
COMMISSION 7 CADASTRE (2006-2010)
COMMISSION 3 SPATIAL INFORMATION MANAGEMENT (2006-2010)
ISPRS
COMMISSION VII RESOURCES AND ENVIRONMENTAL MONITORING (HOSTING 1996-2000)
WG VIII/4 HUMAN SETTLEMENTS AND IMPACT ANALYSIS (HOSTING 2000-2004)
WG IV/1 SPATIAL DATA INFRASTRUCTURE (2004-2008)
ICA EDUCATION
UNECE WPLA (HOSTING WORKSHOPS: 1999, APRIL 2005)
THE WORLD BANK
CENTER OF EXCELLENCE IN PROPERTY RIGHT AND LAND MARKET DEVELOPMENT: CELKCenter
FAO
LAND CONSOLIDATION, UNSDI

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MISSION GOALS & OBJECTIVES
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HUNAGI General Board (representing 113 member institutions)

Permanent Control Committee PCC (3 members elected by the General Board)
President Permanent Presidential Board: 5 members elected by the General Board
Treasurer
Secretary General
Technical assistance

Task 1
Task 2
Members including sustaining members (113)
Invited observers
Students (46)

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MISSION GOALS & OBJECTIVES
KEY ROLES
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HUNAGI, HUNGARY
113 MEMBER INSTITUTIONS
46 STUDENTS
5 COUNTRYWIDE PROJECTS
Liaison to: EUROGI, GSDI, GEMS, GSD, UNISDI
SECRETARIAT AT HAND

STUDENTS
MUNICIPALITIES
ACADEMIA
NGOs
PRIVATE
PUBLIC

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SPATIAL DATA

NSDI CORE DATA AS OF 1997
INSPIRE CORE DATA CATEGORIES
PREPARATION FOR THE ADOPTION OF THE INSPIRE (2)

Annex I Coordinate reference systems Geographical grid systems Geographical names Administrative units Transport networks Hydrography Protected sites	Annex II Elevation Identifiers of properties Cadastral parcels Land cover Orthomimagery	Annex III Statistical units Buildings Soil Geology Land use Human health and safety Government service and environmental monitoring facilities Production and industrial facilities Agricultural and aquaculture facilities	Population distribution – demography Area management/ restriction/regulation zones & reporting units Natural risk zones Atmospheric conditions Meteorological geographical features Oceanographic geographical features Sea regions Bio-geographical regions Habitats and biotopes Species distribution
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 MUNICH, OCTOBER 8-13, 2008
 19

HUNGARY: DATA, PRODUCTS, SERVICES, APPLICATIONS

Geodetic reference networks EUREF and JELN Active GPS Network National Cadastral Programme (full country coverage in vectorised form will be available in 2007) Digitised Land Registry and Internet based service Nationwide Land Cover (with enhanced CORINE nomenclature and 50 m resolution) CORINE Land Cover 2000 (new survey for change analysis and mapping) National Topographic Project National Orthophoto Database (based on the aerial survey flight taken in the year of the countrywide detailed agricultural census) Area frame sampling based European Land Use Database (with enhanced resolution) Administrative Boundary Data Geo-referenced address register Operational crop monitoring & yield estimation EuroGlobalMap, EuroRegioMap Agricultural parcel-based identification and reference system Area-based subsidy control with remote sensing Local SDI: support for vineyard inventory Delineation of Less Favoured Areas Territorial information system Forest information and management system	Nature conservation: GIS support for National Parks Natura 2000 Soil database Meteorological, applications of GIS and RS Climatological modelling, Global Change related assessments Water Management, Hydrology Flood mapping, logwater damage mapping Precision farming Location based services Land administration incl. valuation, land use, land protection, land consolidation Rural development Urban and Regional planning Urban data management and utilities related applications Cross-border applications in transportation and environmental assessments Natural disaster mitigation Hazard and risk assessments Plant health and soil conservation Human settlements and impact analysis Air pollution Management of non-renewable natural resources Advanced documentation of Cultural heritages GIS applications in advanced learning Civil protection and defense COLOR CODE INDICATES RELATION TO BLACK: DIRECT POLICY SUPPORT RED: ANNEX I BLUE: ANNEX II GREEN: ANNEX III
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 MUNICH, OCTOBER 8-13, 2008
 20

CONCLUSIONS

FUTURE OPPORTUNITIES INCLUDE

eTEN, ECONTENTPLUS, INSPIRE, GMES, GALILEO, INFORMATION SOCIETY TECHNOLOGIES (IST)

7TH FRAMEWORK PROGRAMME OF THE EUROPEAN UNION (R+TD)

INTEGRATED USE OF SDI EARTH OBSERVATION AND SATELLITE NAVIGATION TECHNOLOGIES (EG LOCATION BASED SERVICES)

CONTRIBUTION TO GEO TASK IMPLEMENTATION

UNSDI NATIONAL COORDINATION

SOME FORTHCOMING EVENTS PARTICIPATED BY HUNGAGI MEMBERS

eCONTENTPLUS STAKEHOLDER CONSULTATION MEETING DG InfS

UNGIWG, Santiago

GSDI-9, Santiago

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 G. Remetey-Fülöp: Interdisciplinary Partnership Based Implementation of SDI The Case of Hungary
 MUNICH, OCTOBER 8-13, 2008
 21

SUMMING UP ACKNOWLEDGEMENTS REFERENCES

ZSOLT SIKOLYÁ HUNGAGI WWW.HUNGAGI.HU DÉNES SZENDRO WWW.FVM.HU MoARD DEPARTMENT OF GEOINFORMATION SZABOLCS MIHÁLY, PÉTER WINKLER, GÁBOR CSORNAI WWW.FOMI.HU FOMI VIKTOR PUSZTAI WWW.EOGEO.HU EOGEO JÓZSEF ÁDÁM WWW.MTA.HU Hung.Academy of Science	JOAO GEIRINHAS, BRUCE MCCORMACK WWW.EUROGI.ORG EUROGI ALAN R. STEWART WWW.GSDI.ORG GSDI JIANG JIE WWW.ISPRS.ORG ISPRS LÁSZLÓ ZENTAI LAZARUS.ELTE.HU ICA BÉLA MÁRKUS, ANDRÁS OSSKÓ WWW.FIG.NET FIG ALESSANDRO ANNONI INSPIRE_JRC.IT
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 MUNICH, OCTOBER 8-13, 2008
 22

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 MUNICH, OCTOBER 8-13, 2008
 23

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 MUNICH, OCTOBER 8-13, 2008
 24