

ICT for Public Access to Environmental Information

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Eastern European eGov Days, April 21, 2010, Prague

Legal background of dissemination of Environmental Information

- Directive on **Public Access to Environmental Information** (2003/4/EC)
- **Aarhus Convention** - UNECE Convention on Access to Information, Public Participation in Decision making and Access to Justice in Environmental Matters (1998)
- **Public Participation Directive** (2003/35/EC)
- **Re-use of Public Sector Information Directive** (2003/98/EC)

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Environmental Information

- Air and atmosphere
- Water
- Soil
- Land, landscape and natural sites including wetlands, coastal and marine areas
- Biological diversity
- Substances
- Energy
- Noise
- Radiation
- Waste
- Emissions
- Discharges and other releases affecting environment
-

Interaction among these elements

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Environmental Informatics

- Environmental Informatics Web technology, modelling and simulation
- Environmental Management Risk, Climate Change, Logistics; Eco management
- Ecological planning
- Indicators
- Decision-making support
- Impacts of ICT
- GIS; Remote sensing
- Environmental Information Systems, Monitoring
- Data and information management, metadata, standardisation
- Environmental reporting
- Advanced public information
- Renewable energy
- Biodiversity
-

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Environmental Information for:

| | |
|--|--|
| Policy, Justice | Incl. Legislative, Jurisdiction |
| Public Administration | Incl. Executive |
| Business, Economic Sector | Incl. Industry, Manufacturers, Trade, Agriculture, Forestry... |
| Research, Science, Education, Learning | Incl. Environmental Education |
| General Public | Incl. consumers, NGOs |

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Technical Committee

Environmental Informatics

**Informatics for Environmental Protection,
Sustainable Development and Risk Management**

organized within the Gesellschaft für Informatik (Germany)

Representatives of the board:
 Werner Pillmann International Society for Environmental Protection, IGU/ISEP, Vienna
 Ralf Isenmann Fraunhofer Institute, ISI, Karlsruhe
 Kristina Voigt German Research Center for Environmental Health

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ICT-ensure

ICT-ENSURE
Information and Communication Technologies for
Environmental Sustainability
Research

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Overview

Survey and Analyse

WP1 Project Management

Support for fostering a Single Information Space for the Environment

WP2 System model of ICT tools in application and research areas, relevant for environmental sustainability

WP7 Conceptual detailing of the Single Information Space in Europe for the Environment (SISE)

WP8 Survey of European ICT environmental sustainability research
Phase 2: Screening Research area examples for a SISE

Phase 1 Energy efficiency, climate change, sustainable use of natural resources
Agriculture, landscape and biodiversity, Corporate environmental information systems, Sustainable logistics and production; Environmental health; eLearning; Personalized wireless information services & quality of life; Urban sustainability and Smart buildings; Mobility, Sensor Web for environmental monitoring and control etc.

Survey of national research programmes at least in 6 selected countries

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Results: Member States Responses (2009)

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Austria Germany Slovenia Kyrgyzstan Tajikistan Hungary
France Denmark San Marino Latvia Kazakhstan
Finland Luxembourg Belgium Netherlands Italy Malta Azerbaijan
Greece Czech Republic Switzerland Bulgaria Romania Russian Federation Ukraine Georgia
Lithuania Poland Cyprus Liechtenstein Monaco Croatia Albania Estonia United Kingdom
Slovakia Serbia Bosnia-Herzegovina Uzbekistan
Montenegro Norway Portugal Iceland Andorra Turkey Republic of Moldova

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Timeline of events from 2009 to 2010:

- Paris (UNESCO) Towards eEnvironment
- Prague
- Berlin
- Shanghai
- April 2010
- Mobilizing & Stimulating eGovernment Days
- Workshop Environmental Information Systems
- INFO/ICT Conference
- IEEISA Ottawa
- Köln/Bonn

ICT in Biodiversity and Agriculture

Environmental Informatics and Industrial Environmental Protection

Climate Change Adaptation

Opportunities for SEIS and SISE Integrating Environmental Knowledge in Europe

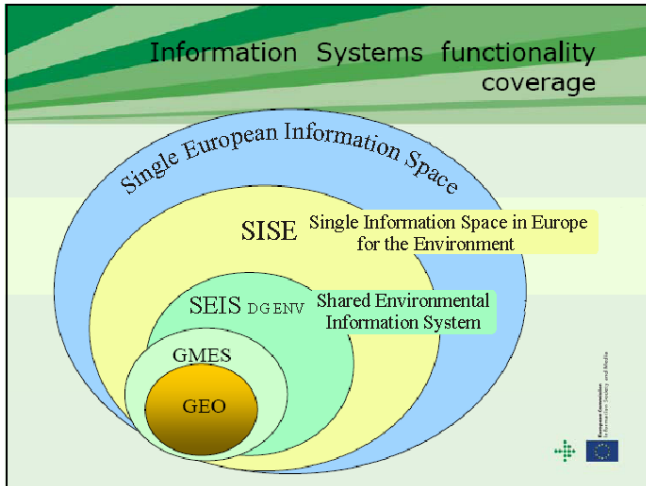
eGovernment Days

2009 2010

Number of Workshop Contributions

Information Management
ICT Networks, Social Web
Database Management
Monitoring Systems
GIS, Location-Based Content
Knowledge Management
Decision Support
Media and Content, incl. eLearning
Web Services, Sensor Arch., SOA
Semantic Technologies
Advanced Systems Architectures
Visualization, Virtual Meetings
Data Processing
Personalisation of Information
Communication Technology

Spatial and Urban Planning
Social aspects in general
Recycling, Waste Management
Transport
Production of Goods and Food
Ecology, Natural Environment
Health / Quality of Life
Production, Energy Generation
Other
Environmental Sustainability (general)
Natural Resources
Climate, Climate Change
Economy (along Product Life-cycle)
Environmental Risk/Disaster Management
Nature, Biodiversity
Environmental Sustainability Concepts

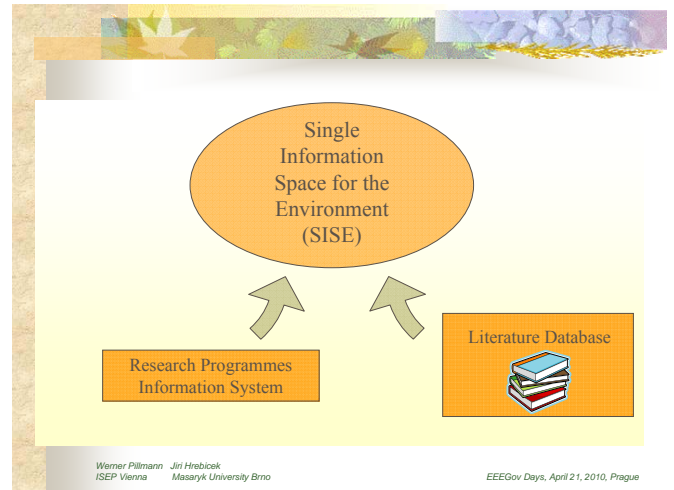
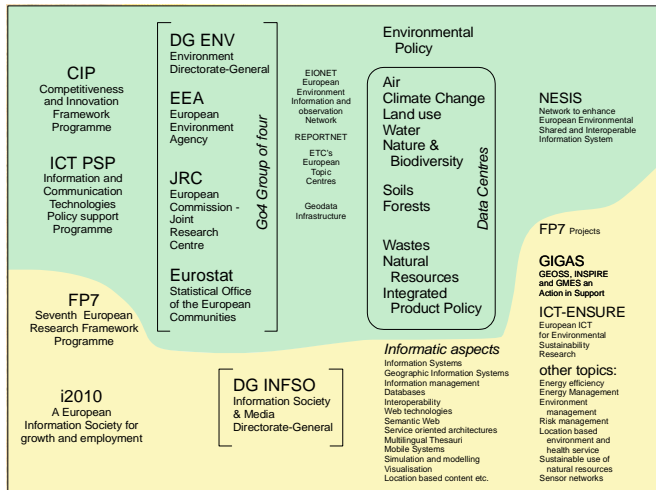


Requirement of active dissemination of
Environmental Information
on a European Level

- Reporting Obligations
- Infrastructure INSPIRE
- SEIS-Shared Environmental Information System
- Single Information Space in Europe for the Environment (SISE)

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Literature Information System:

- First version accessible in the Web at <http://lit.ict-ensure.eu>

Research Programmes Information System

- Accessible at <http://is.ict-ensure.eu>
- Recording of relevant research programmes and projects in progress.

www.ict-ENSURE.eu

Example of Access to Environmental Information in Germany

- PortalU® - the information system for environment, energy and nature.

CONCLUSIONS

ICT-ENSURE provides

- a screening of several initiatives for setting up an environmental information space
- an inventory of examples of existing implementations
- an elaboration on a (rough) concept for an integrated SISE based on analysis of existing national and supranational ICT solutions.

Thank you for your attention

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