INSPIRE in Member States: obligation or opportunity?

Integration of location in e-Gov processes

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Outline

• INSPIRE in the Member States: where are we?
• INSPIRE as an obligation or an opportunity?
• Uptake of INSPIRE in work processes
• The (changed) role of NMCAs
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INSPIRE in the Member States

86,222 spatial data sets
1,313 data series
44,108 network services
INSPIRE in the Member States

• And we know there is even more ...
INSPIRE in the Member States

- Public access and sharing are improving ...
  - Simplified procedures and harmonized licenses
  - More stakeholder groups become part of the SDIs

E.g. Large Scale Database Flanders became free open data
INSPIRE in the Member States

• Indirect impacts of INSPIRE become visible
  o INSPIRE as a way of working
    • E.g. Renewed interest in spatial data modelling <> ad hoc modelling
  o INSPIRE cooperation across borders and sectors
    • Bi- and multilateral projects (e.g. The Nordic INSPIRE network)
  o INSPIRE starts supporting new applications
    • Public works, emergency, environment, health ...
  o INSPIRE is inspiring others
    • Other communities (e.g. Transport – ITS)
    • Other countries (Balkan, China, Latin-America)
INSPIRE in the Member States

- In summary:
  - Much is already available ... 
  - ... more is to be done ...
    - E.g. transforming datasets into INSPIRE conformant data sets
    - E.g. Improving access (view and download)
  - ... work is clearly in progress
INSPIRE in the Member States

- But what with the usage?
  - Major mechanism to use the infrastructure
    - Search-Find-Bind

- That is good, but is it enough?
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INSPIRE: obligation or opportunity?

• For sure, INSPIRE is a legal obligation
  - INSPIRE components should be conform the rules
    • If not, the infrastructure will not work in a cross-border and cross-sector context

• But INSPIRE is also an opportunity
  - If stakeholders do go beyond the legal obligations
    • E.g. The development of view services with harmonized portrayal beyond the IR
INSPIRE: obligation or opportunity?

- In order to make INSPIRE an opportunity, it should become more useful
  - Going beyond the Search-Find-Bind paradigm
  - Embedding INSPIRE components in Governmental work processes
    - E.g. At certain point the most successful Spanish View Service was a WMTS showing the cadastral parcels
    - It was embedded in many applications in governmental business processes (> 150 million annual requests) but could not be found in the catalogue at that time!
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INSPIRE in work processes

• What are work processes?
  o They consist usually of many G2G, G2B and G2C interactions
  o They involve many organisations and individuals
  o They often involve multiple levels of authority
  o They are more and more cross-border
  o They increasingly connect to other processes in other sectors
INSPIRE in work processes

- **Examples of work processes**
  - Obtaining a building permit
  - Maintaining an address register
  - Declaring set-aside land under the CAP
  - Assessing the impact of a planned TEN-T project on a region and on the environment
  - Moving to another place and changing a citizen's address
  - Delineating flood areas to provide “space for water”
  - Choosing a location for a new industrial plant
INSPIRE in work processes

- Example of the use of INSPIRE components in a process
  - Locating events such as public works, demonstrations ...
  - Very successful but ... integration with the overall process should be improved
- E.g. Companies carrying out works should be guided on using the app at the right moments in the process
INSPIRE in work processes

- Sub-optimal use of location information and INSPIRE
  - Example: Monitoring Animal Transport
    - Related to the Health and Consumer Protection Policy Domain
    - Animal Health and Animal Welfare
      - on the farm
      - during transport
      - at time of slaughter or killing
    - Regulation (EC) No 1/2005 on the protection of animals during transport

- TRACES system
INSPIRE in work processes

- Monitoring transport can become very complex
  - Travel time is estimated, reality can be different
  - Extending travel time can change the route
    - 8 hours and 19/24/29 hours thresholds
  - Other events can influence the route plan
    - E.g. Outbreak animal disease
    - Still a separate system

Location information and INSPIRE services could help supporting the process.
INSPIRE in work processes

LI = location information

Animal Disease Notification Process
INSPIRE in work processes

- Location information is currently used (TRACES) at the moment of defining the consignment
  - Transporter
  - European Commission (control)
  - Checks on vehicles via satellite, use of GPS (being implemented)

- Location information could also be used at several other points in the process
  - By border control / customs
  - By veterinarian bodies
  - By staging point managers (~ animal hotels)
  - By ADNS managers

- Currently no INSPIRE services used
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The (changed) role of NMCA

- NMCA play a key-role in implementing INSPIRE
  - Many of the themes are the responsibility of the NMCA
    - Prepare INSPIRE conformant datasets and network services
    - Prepare and maintain metadata for data and services
  - This role is going further
    - Providing the good example: be the first and provide reference implementations
    - Help resolving the cross-border challenge
    - Key expertise in high quality portrayal for WMS/WMTS
  - ELF is an important asset from that perspective
The (changed) role of NMCA

• NMCA should think and go beyond INSPIRE
  o Not only matching the minimum requirements
    • Extending data models to match specific community requirements
    • Many (user) views on the same data
    • Simplify sharing and re-use arrangements
  o Think from the user communities perspectives
The (changed) role of NMCA

• NMCA as geo-brokers
  o Supporting and coordinating role towards other stakeholders
    • Data transformation – organisations are struggling!
    • Central role in conformity checking
    • Transfer of know-how
  o This requires new business models
The (changed) role of NMCA

• Better integrate with e-Government
  o Understanding the requirements from different user communities
    • Be involved in user requirements analysis
    • Help to develop specific (web-)applications
  o Example of merging GI and e-Government
    • AGIV and CORVE (Flanders)
The (changed) role of NMCA

- Follow a dynamic and innovative approach
  - Several mechanisms are available
    - Involvement in European projects (H2020, ICT-PSP, ...)
    - Setting-up an innovative ICT eco-system: including testbeds, experiments
    - Follow and be involved in the standardisation process

OGC®
Making location count.

ISO
ISO/TC 211

isa
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W3C®
The sandbox approach

KU LEUVEN
SPATIAL APPLICATIONS DIVISION
Thank you!
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