

Date

Thursday 19 July 2007

Title of session

Plenary: From Silos to Webs – How do we Make Interoperability a Reality?

Name of presenter/chair

Chair: Stig Jönsson, President, EuroSDR

Presenters: Xavier Lopez, Director, Spatial and Semantic Technologies, Oracle Inc
Anders Lundquist, Head, Land and Geographic Information Division, National Land Survey of Sweden
Clemens Portele, Managing Director, Interactive Instruments GmbH

Rapporteurs

Yvette Ragozins, Land Registry (GB) and John Pepper, UK Hydrographic Office

Presentation title: Advancing Geospatial Interoperability Through IT Architecture & Standards - Xavier Lopez

Focus on:

- Interoperability of systems
- Interoperability of data
- Standards

Market observations:

- Gaining efficiencies through consolidation/ ROI
- Data is a fundamental layer
- Products / services that work on the data
- Fusing of NMA data in a web orientated environment
- GeoWeb moving the focus towards IT Architecture.
- Many customers are simplifying the interface
- Delivery of solutions/ answers show the very different way applications are developed
- Content and technologies from various sources required
- Leverage core IT technology to ensure secure access and / or other vendor tools.

Architecture and Standards

- Openness - control over content reduces with retrieval as the key concern

- No longer desk top platforms; server based processes serving greater volumes of data
- Access – service pushed to the edge. Rely on standards to deliver the content.
- GI data is becoming ‘componentised’
- Scalable architecture is key. You cannot keep adding to traditional type servers.
- Leverage of capabilities through Service Oriented Architecture (SOA).
- Industry standards – KML, Shape, GIF
- Interoperability through OGC standards that brings different industries together (e.g. building industry)
- Decoupling data from software has happened through standards. (on a system to system basis)
- HTML/XML is forcing separation
- Development of open metadata about underlying features in a model defined environment.
- Data will self describe through its own metadata
- Delivery through the semantic web.

The Semantic Web is about extracting underlying semantic metadata to create a holistic metadata. One metadata model should allow holistic queries.

Extraction of schemas and queries will allow creation of reports.

Intelligence and Life Science communities are using this methodology extensively now.

The Federated Ontology: The IEC Common Info Model (CIM) models objects and information exchanges for distribution/ transmission, distribution generation and market knowledge.

Presentation title: Supporting SDI by Restructuring of Core Geodata - Anders Lundquist

- Lantmateriet has islands of information
- Existing systems are no longer fit-for-purpose
- Becoming a public service authority is not easy achieved. The issues of culture within the organisation and probable skills shortages are problematic.
- Lantmateriet has a new role from Govt as ‘a coordinator of geodata’.
- Geodata is the backbone of good e-Governance.
- National Geoportal in Sweden will be launched by end 2007.
- ELIPS is a huge gamble both in terms of cost and ambition; Spend now to achieve benefits later.

Presentation title: Publishing and using content in SDIs - how far are we? Clemens Portele

Data often held many times in silos which are skewed towards a particular output (e.g. product/ service).

Linking of data to remote places is yet to be realised.

<p>Web Mapping Services (WMS) using and linking such information is considered quite a simple proposition</p> <p>Web Feature Services (WFS); much more information is required in order to understand the way the information is structured.</p> <p>ISO19115 Metadata standard is not enough on its own. We need much more information to be able to find and interrogate the data (e.g. through feature registers).</p>	
Questions	Answers
<p>Fraser Taylor (Canada): I think NMA should join OGC to gain benefits from their work. What about the human side of achieving interoperability in respect of bureaucracies, ontology's, semantics of Agencies. Until this is done, the technical side of interoperability will remain unresolved.</p>	<p>Clemens Portele: Technical challenges are there and solvable. Organisational change takes much time and will be a greater challenge. OGC is helping people to meet and discuss issues to achieve a common approach to the challenge.</p> <p>Xavier Lopez: The technology and people issues are intertwined. INSPIRE is bringing people to the table. There must be something in this for people before they take it seriously, we need to articulate the benefits to people.</p>
<p>Ingrid Vanden Berghe (Belgium): The main problem is that information is power and we do not want to let this go. We need to act as a servant rather as a dominant player in the marketplace.</p>	<p>Anders Lundquist: The Swedish SDI is not owned by the NMA; we cannot be big brother</p>
<p>Why do we need have all the standards, technical issues and other deep level thoughts to make interoperability work?</p>	<p>Clemens Portele: People do not really have to see what is happening; that needs to be invisible. The question is who needs to be involved? The information needs to be exposed, that is the NMA responsibility alongside other data holders.</p>
<p>Andy Coote (ESRI): Politicians need to hear the message to ensure we get the necessary buy in and support.</p>	

--	--