

BALANCE

The Balance Data Portal

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Sveriges geologiska undersökning
Geological Survey of Sweden

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Introduction

What is a GIS Portal?

- General Background
- Spatial Portal functions

The BALANCE Data Portal

- Key Components
- How to use the Data Portal
- Technical overview

Metadata in the Portal

Prospects for the Future

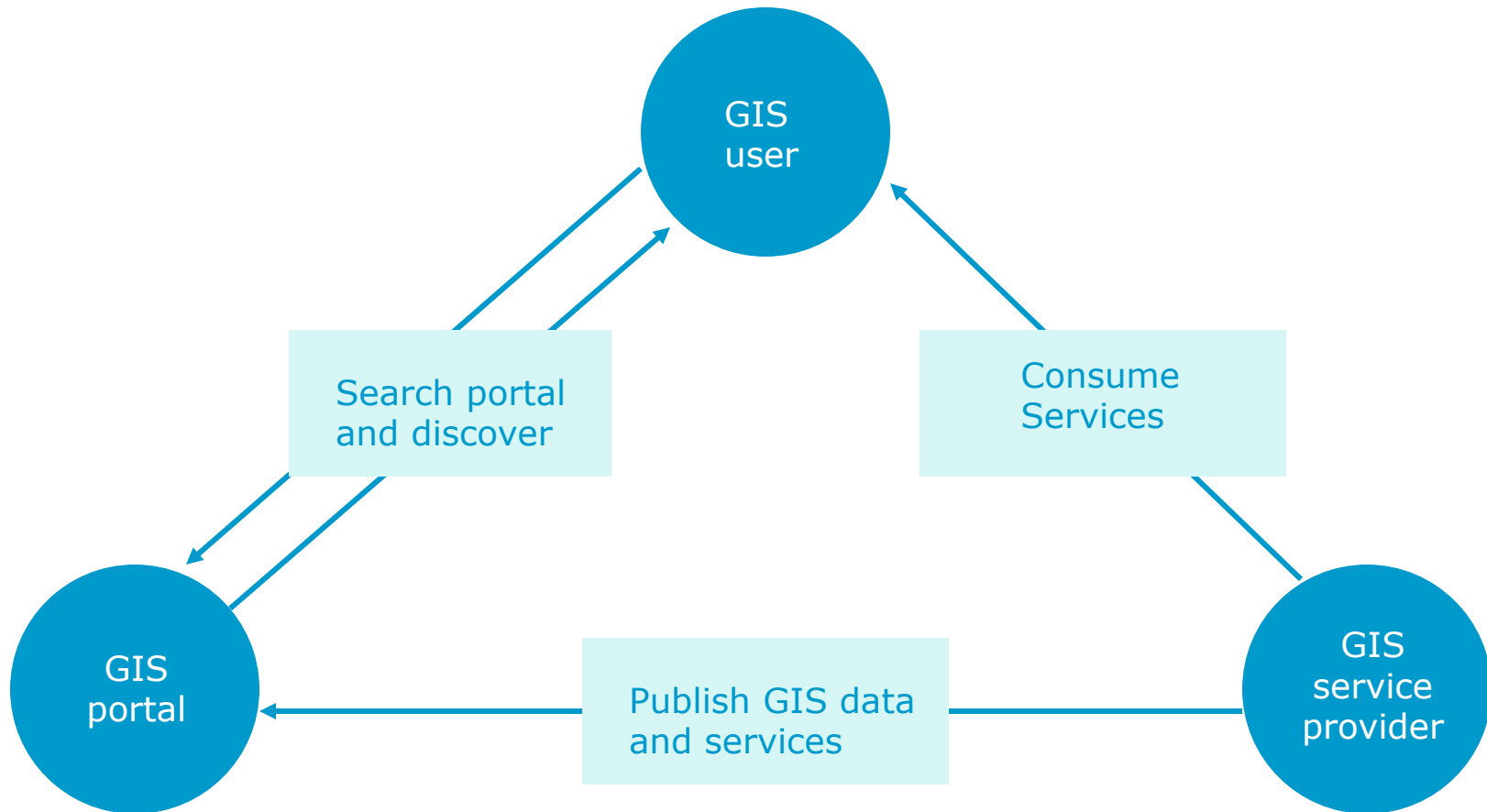
- Emerging Trends
- Key Strategic Issues

Conclusions

The BALANCE Data Portal

Where can I
find data?

What is a GIS Portal? – General Background



What is a GIS Portal? – Spatial Portal functions

SERVICE SEARCH

- Spatial data
- Metadata search
- Structured interface

Portals provide tools to search or find spatial information. The spatial search tools may display a map and allow users to define an area of interest. Other search techniques may allow users to select services by querying metadata.

Other approaches use the design of the portal interface to help users find information.



What is a GIS Portal? – Spatial Portal functions

SERVICE DISCOVERY

- Metadata viewer
- Map viewer
- Link to content provider
- Connect to service
- Download service

Portals provide tools to view, explore and download information services. If users want to use a service the portal links them to the service provider's web site.

Users can access the services both through light web-based clients and from desktop GIS-clients



What is a GIS Portal? – General Background

A GIS portal (or spatial portal) is an example of a service based distributed information network.

The essential part of a portal is the registry of registers.

What is a GIS Portal? - main groups of portals

- International portals
- National portals
- Community portals: Fulfills requirements for specific community requirements.
- Department portals: Covers specific domains (geology, land inventory, etc)
- Regional and local portals: Covers the need for information within specific administrative areas (geographic extent (municipalities, counties, etc)).

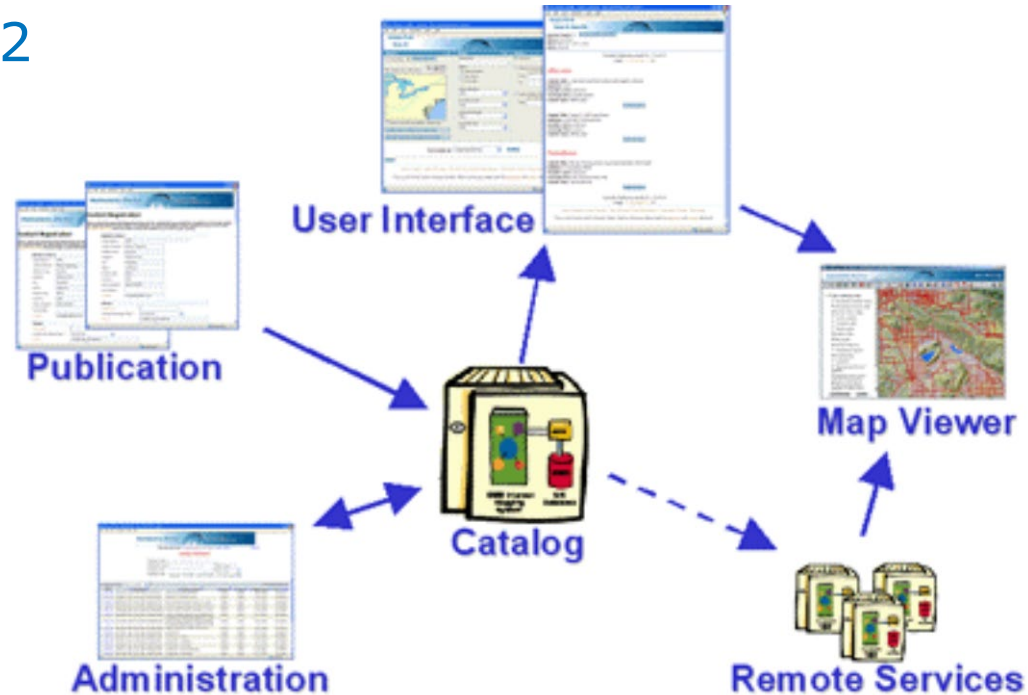
What is a GIS Portal? – Examples

The screenshot displays the geoNorge GIS portal. At the top, it features the 'geoNorge' logo and navigation links like 'Startsiden', 'Kart', 'Tema', 'Nyheter', 'Om Mareano', 'Aktiviteter', 'Bilder', 'Lenker', 'Kontakt', 'Nettstedskart', and 'English'. A search bar is visible on the left. The main content area shows a bathymetric map of the Norwegian coast, with a legend on the right titled 'Bunnsedimenter (kornstørrelse)'. The legend includes categories like 'Slam', 'Sandholdig slam', 'Sand', 'Grusig sand', and 'Sandig grus'. A vertical menu on the left lists various data layers such as 'MAREANO - oversikt', 'Dybde', 'Havbunn og vannmasser', and 'Terrengformer på havbunnen'. The map includes a scale bar (0-25 km) and a small inset map of Europe. The bottom of the page contains copyright information: 'Copyright (C) 2005-2007 MAREANO Kartprojeksjon: WGS84, UTM 33 N'.



The BALANCE Data Portal - Key Components

GIS Portal Toolkit 2



Metadata Catalog

Map Viewer

Portal Framework (publication, administration, search/browse)

The BALANCE Data Portal - Key Components

Metadata Catalog

Metadata on

Live Data and Maps
Downloadable Data
Offline Data
Documents
Applications
Activities
etc..

Support for standards

ISO 19115
ISO draft implementation in XML

The BALANCE Data Portal - Key Components

Roles in the Portal

Administrator	account management, metadata reviewing and approval
Publisher	publish metadata records from their organization
Channel Steward	manage categories used for browsing of metadata records
Public user	browse or search for metadata records, view map services

The BALANCE Data Portal

DEMO

The BALANCE Data Portal - Experiences gained

User Survey	response ratio 9/39 (6 publishers)
Guidelines/Support	OK
Search and Display	OK
Publishing	Upload from ArcCatalog ISO-editor did not work well On-line form cumbersome
Metadata content	Less than expected Limited usability

The BALANCE Data Portal - Experiences gained

Technical Issues

has made publishing more cumbersome, but not a major factor

upgrades may have solved some issues but required migration of catalog and channels, not carried out during project

Success Factors

Requirements on which resources needs to be documented

Portal group of partners (publishers and users) to monitor content and requirements

Critical mass to support overhead of a metadata portal



Prospects for the Future - Emerging Trends

First generation of portals focused on database creation and were mostly led by data producers.

Next generation of portals has both top-down and bottom-up dimensions to meet the demands of multilevel, multistakeholder SDIs

Prospects for the Future - INSPIRE



Prospects for the Future - INSPIRE

INfrastucture for **SP**atial **InfoR**mation in **E**urope

- a Directive of the European Union which will create a spatial data infrastructure for Europe
- Aims to improve the interoperability and integration of spatial information across the EU
- Initially INSPIRE will cover environmental data but other themes, such as agriculture and transport, to be added later.

Prospects for the Future - INSPIRE

INSPIRE Directive Article 11.

Member States shall establish and operate a network of the following services for the spatial data sets and services for which metadata have been created in accordance with this Directive:

(a) discovery services making it possible to search for spatial data sets and services on the basis of the content of the corresponding metadata and to display the content of the metadata;

(b) view services making it possible, as a minimum, to display, navigate, zoom in/out, pan, or overlay viewable spatial data sets and to display legend information and any relevant content of metadata.



Prospects for the Future - INSPIRE

ANNEX III

SPATIAL DATA THEMES REFERRED TO IN ARTICLES 6(B) AND 9(B)

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15. Oceanographic geographical features

16. Sea regions

17. Bio-geographical regions

18. Habitats and biotopes

19. Species distribution

....



Conclusions & perspectives

Key messages

Since put in production the Portal has been running very stable with few disturbances. However, there have been some disturbing problems mainly related to uploading of ISO-formatted metadata.

The experience of the search and display functionality was in general positive, but there was a disappointment with the number of metadata documents published.

The BALANCE Data Portal would probably have benefited from a more formalized cooperation between data producers, data users and Portal administrators



Conclusions & perspectives

Next steps?

The coming infrastructure for spatial information in Europe (INSPIRE) will make it easier to set up regional and/or community portals.

Much more efforts has to be put into organizational and policy issues when running a data portal.

Perspectives

Easier access to spatial environmental information will help to make better decisions

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Thank you for your attention

