

TSCOM / iSCRUM

La Jolla (3-7 October 2011)

METADATA

Metadata Standards

FGDC - Content Standard for Digital Geospatial Metadata -> new national (ANSI) standard - The North American Profile (NAP) of ISO 19115: Geographic Information – Metadata

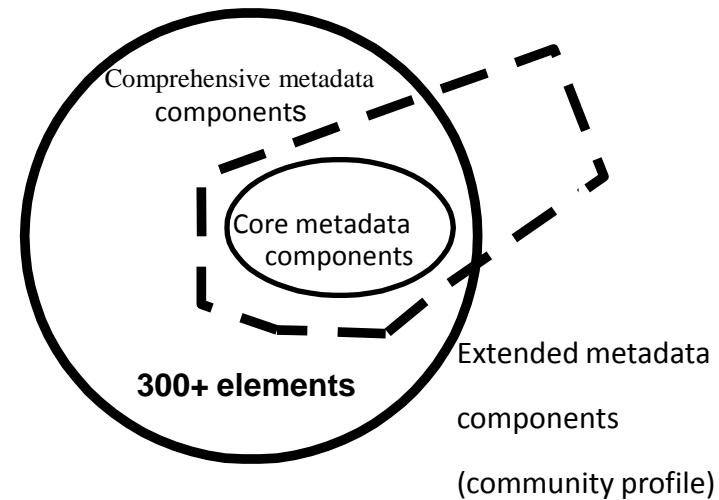
ISO 19115:2003 Metadata (300 + elements)

ISO 19115:2003 Part 2 Extensions for imagery and gridded data.

ISO 19139 + Part 2 Metadata - XML schema implementation.

Community Profiles (restricted elements / extensions for user domain)

INSPIRE
NAP
EMODNET – CDI
WMO
IHO (S-100)
Others



ISO 19119 Geographic information – Services

Pauline's Test SID grid

Web Map Services
Web Feature Services
Web Coverage Services
Web Map Tile Service



Other web map services – e.g. controlled vocabularies (Marine Geosciences – EMODNET/NERC)

MARINE GEOSCIENCE DATA SYSTEM

Web Services

We deliver catalogues, maps, and data through standard programmematic interfaces. We use the GeoServer software platform as our backbone. A variety of OGC-enabled clients are available, both free and commercial, including the User-friendly Desktop Internet GIS (QGIS), GeotoolsApplet, Gafe (Java), Web Map (WMS) and ArcGIS.

- Open Geospatial Consortium (OGC) WMS Services
- Catalog Services
- Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)

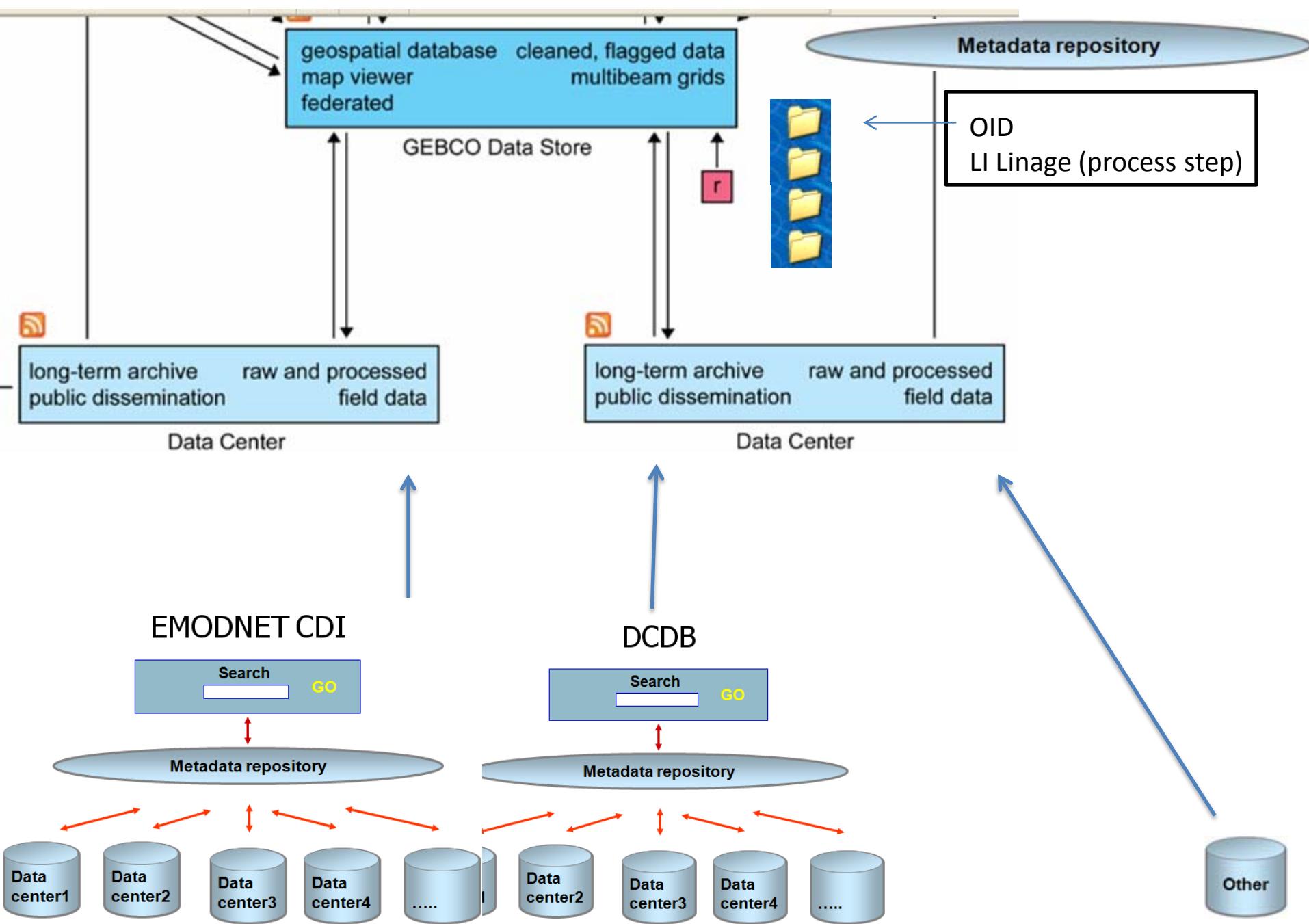
Open Geospatial Consortium (OGC) WxS Services

WxS Services can be used for live access to many of our data holdings.

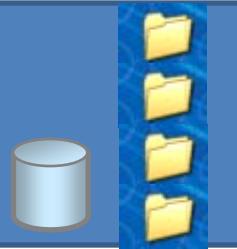
- Our Web Map Service (WMS) allows any OGC-enabled client to create map imagery from our Global Multi-Resolution Topography (GMRT). Use one the following URLs to access these data:
 - Albers:
<http://www.marine-geo.org/geoserver/wms?request=GetCapabilities&service=WMS&version=1.1.1>
 - Marine Mercator (highlights multivariate tracks):
<http://www.marine-geo.org/geoserver/wms?request=GetCapabilities&service=WMS&version=1.1.1>

Available Lists (whatLists)

Definition	Last URL	Modified	Using service	Short name
Terms used at all hierarchical levels in the ICBC global thesaurus for coastal erosion. Terms used to populate drop-down lists in discovery portals.	http://vocab.rndg.nerc.ac.uk/term/00001	2011-09-16T00:00:00+0000	International Coastal Atlas Network Coastal Erosion Global Thesaurus	ICBC Coastal Erosion Global Thesaurus
Terms used at all hierarchical levels in the Oregon CoastalAtlas for coastal erosion terms, datasets and discover.	http://vocab.rndg.nerc.ac.uk/term/00002	2011-09-16T00:00:00+0000	Oregon CoastalAtlas Thesaurus	OCA Coastal Erosion marine terms
Terms used at all hierarchical levels in the Oregon CoastalAtlas for categorisation and discover, but not for layer or dataset ranking.	http://vocab.rndg.nerc.ac.uk/term/00003	2011-09-16T00:00:00+0000	Oregon CoastalAtlas Thesaurus	OCA Coastal Erosion dataset service
Terms that describe groups of GMRT names with common independent variable characteristics.	http://vocab.rndg.nerc.ac.uk/term/00004	2011-09-16T00:00:00+0000	GMRT series	GMRC series Features
Terms used for sea areas from International Hydrographic Bureau Limits of Oceans and Seas (Oceans Publication No. 213, 3rd edition 1953).	http://vocab.rndg.nerc.ac.uk/term/00005	1994-03-07T10:00:00+0000	International Hydrographical Bureau (IHO) sea areas	IHB Sea Areas
Sea area terms added to the GMRT list under海事组织governance until the unassisted hierarchical health-sea area patcher is available	http://vocab.rndg.nerc.ac.uk/term/00006	2011-09-16T00:00:00+0000	海事组织海区	Maritime area
Health-sea area	http://vocab.rndg.nerc.ac.uk/term/00007	2011-09-16T00:00:00+0000	Health-sea area	Health-sea area
Health-sea area	http://vocab.rndg.nerc.ac.uk/term/00008	2011-09-16T00:00:00+0000	Health-sea area	Health-sea area



GEBCO – Data Store



Metadata ???

Bathy data

EMODNET CDI

Search GO

Verification / Validation Process

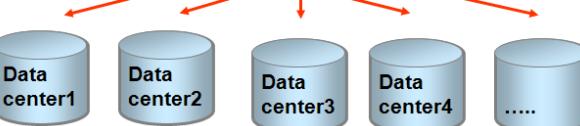
DCDB

Search GO

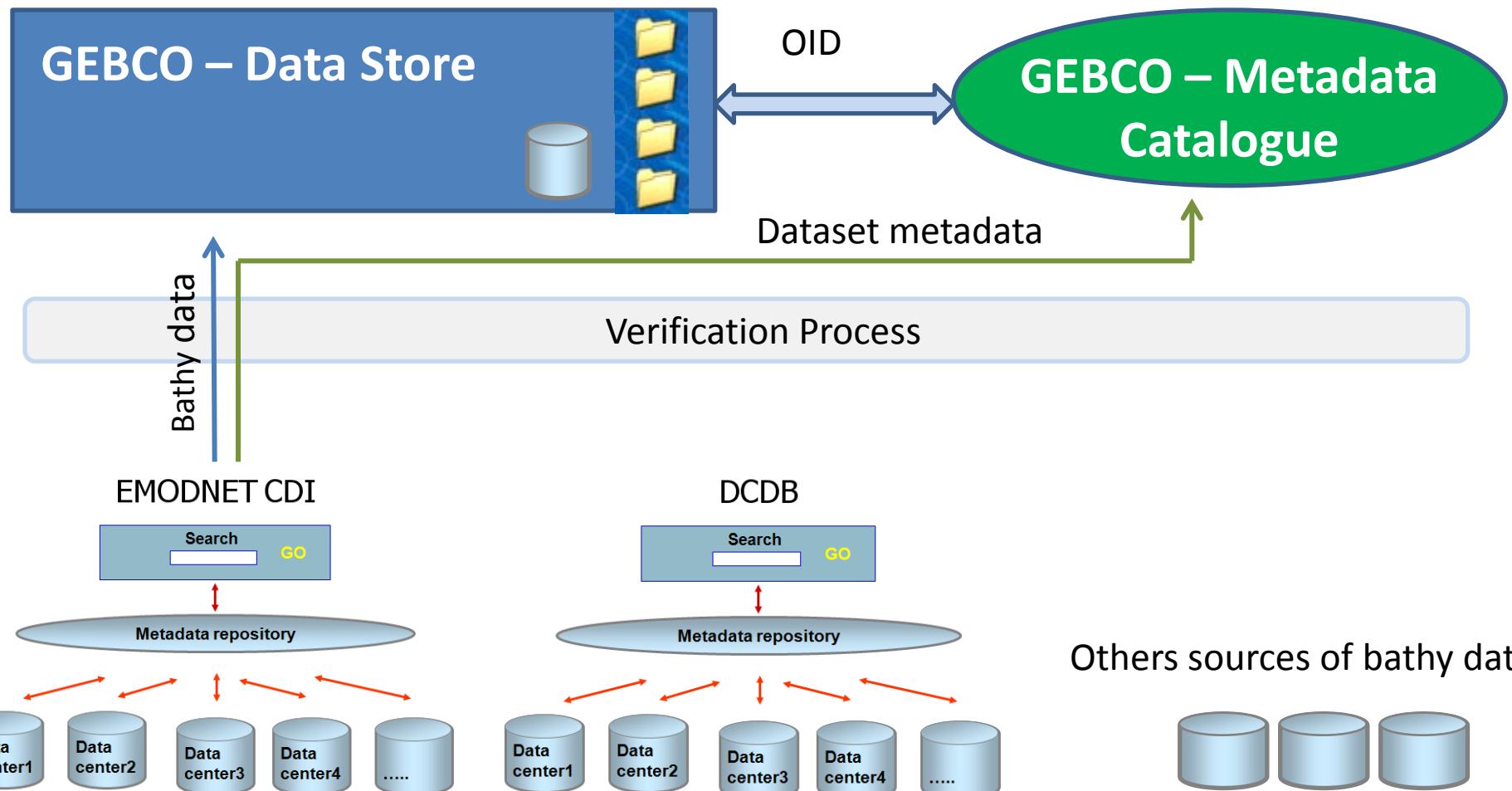
ENC data

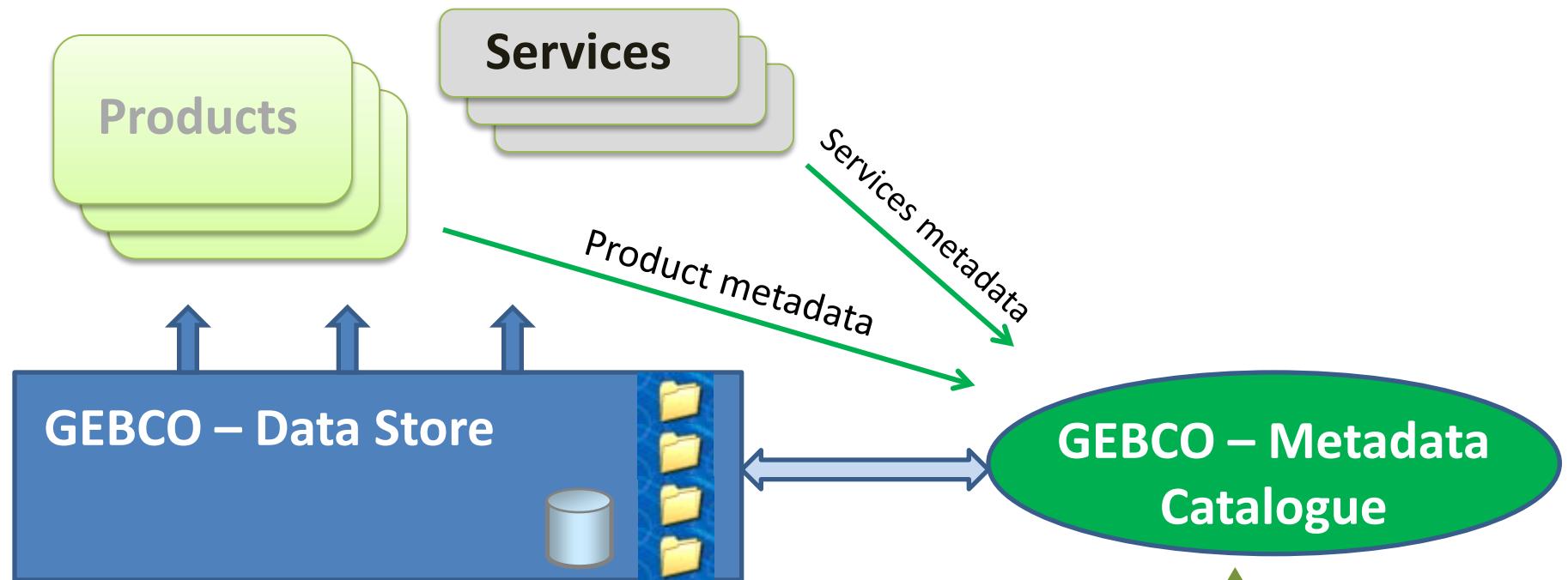
Others sources of bathy data

Metadata repository



Discovery metadata
 Spatial limit
 - bounding polygon
 - bounding box
 Key words (Controlled vocabularies)
Process metadata
 - processing steps





Bathy data

EMODNET CDI

Search GO

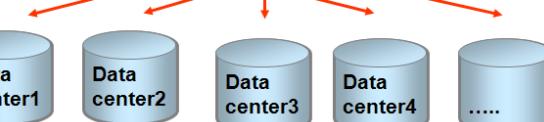
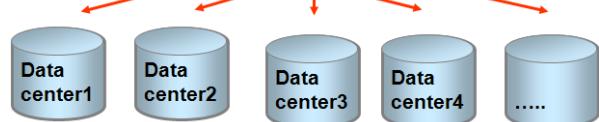
Verification Process

DCDB

Search GO

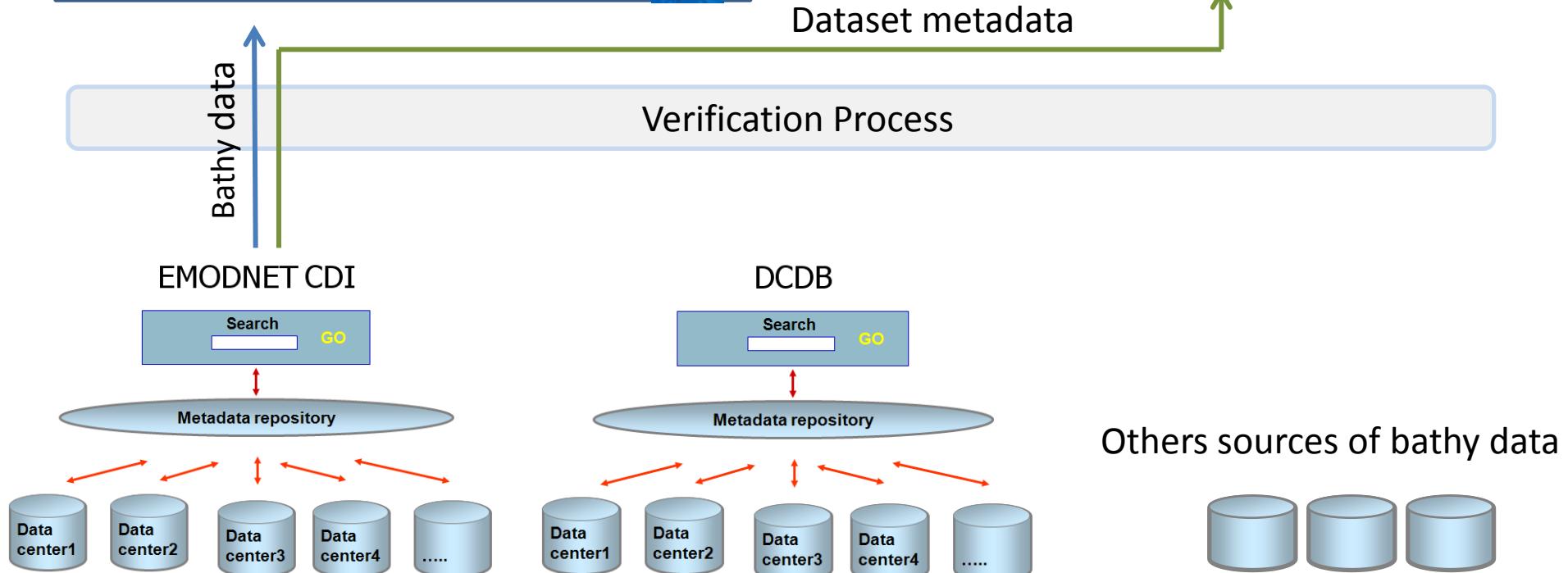
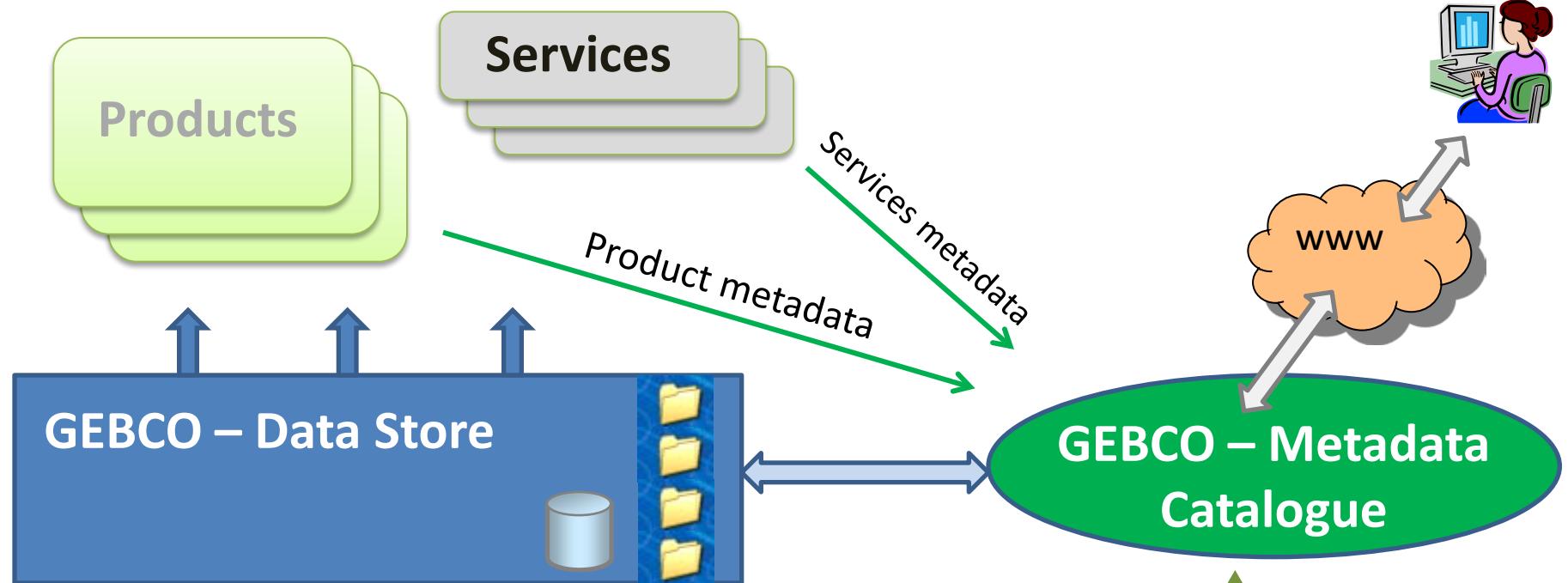
Metadata repository

Metadata repository

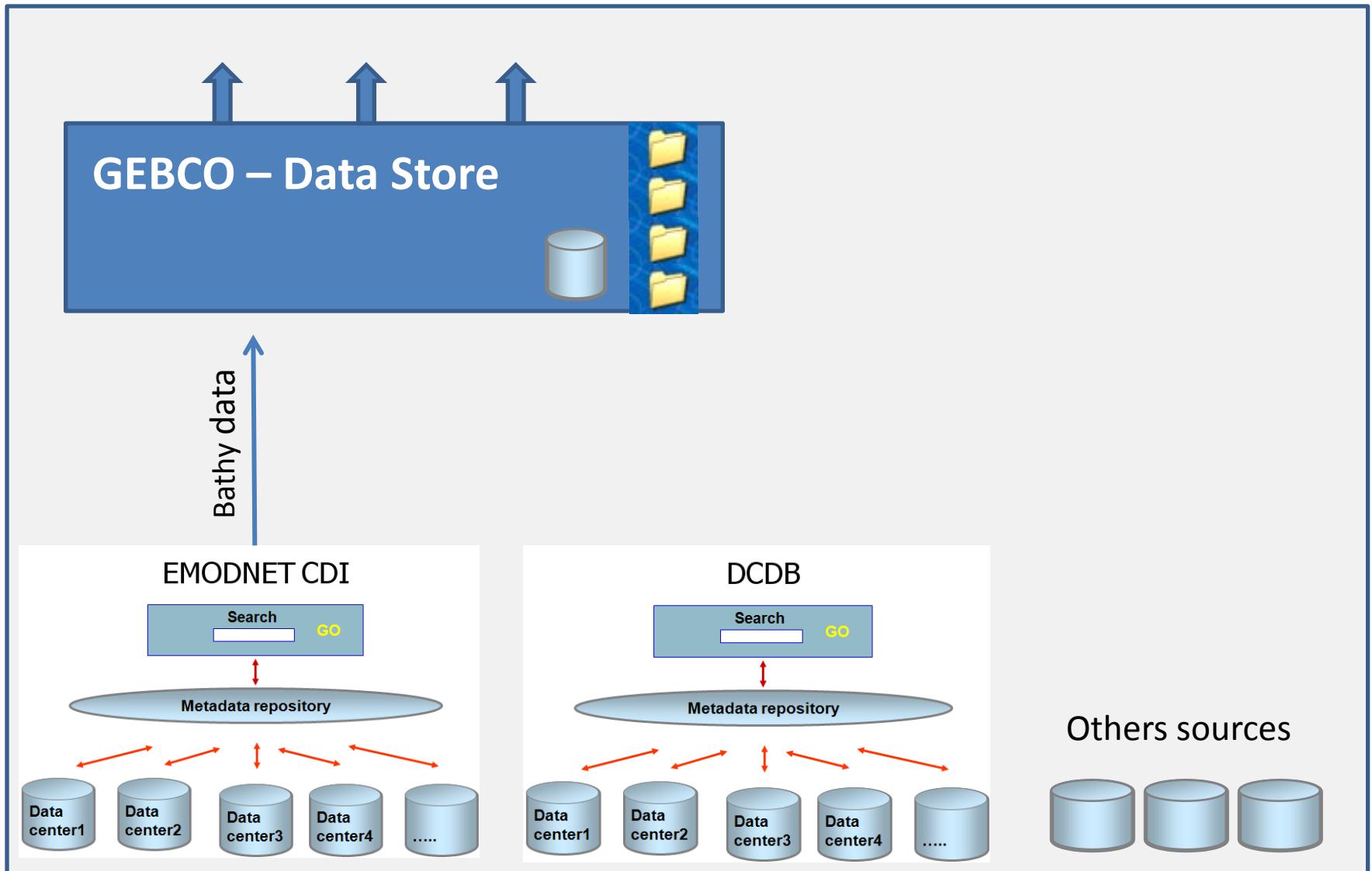


Others sources of bathy data





Governance Model ?



Next steps

Next Steps - investigate

What metadata catalogue applications are available?

What funds will be required for a metadata application ?

How do we get DCDB data and metadata into the GEBCO data store ?

How do we get EMODNET data and metadata into the GEBCO data store ?

Others ... ?

CDI Schema was based upon the ISO 19115 DTD – moving to the ISO 19139 Schema
Common vocabularies in all metadatabases and data formats -> an important
prerequisite for consistency and interoperability.

MIKADO - open source application for generating CDI metadata records.

Several test metadata sets