SeaDataNet

PAN-EUROPEAN INFRASTRUCTURE
FOR OCEAN & MARINE DATA
MANAGEMENT

1st innovation cycle - implementation

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1st Innovation cycle

- Adopting INSPIRE compliant ISO 19139 based XML schema's for CDI and CSR

- Adopting Common Vocabularies Version 2 (NVS 2.0) in all metadata directories (CDI, CSR, EDMED, EDMERP, EDIOS) and data formats (SeaDataNet ODV, SeaDataNet NetCDF)

- Adopting a more effective transfer of updated and new metadata entries for CDI and CSR by applying OGC CS-W harvesting between central portals and distributed data centres

- Continue to operate without interruption, while the infrastructure is gradually upgraded

Applied approach - metadata:

- INSPIRE compliant ISO19139 XML Schema's formulated for **CDI** and **CSR** incl all supporting documentation on SeaDataNet portal
  - CDI = V10 = Ready
  - CSR = V3 = Almost Ready
  - All supporting ISO XML lists made operational
- **Vocabs client interface** developed for NVS 2.0 (ready – see SDN portal)
- **MIKADO** upgraded for CDI ISO19139 (ready V3.2 – see SDN portal) and next for CSR ISO19139 (well underway V3.3)
- MIKADO V3.2+ includes migration to NVS2.0 for all directories
- MIKADO V3.2+ can **read** both V1 and new V2 XML and **writes** only V2

Applied approach – metadata (cont.):

- All **Central Directories** are extended with a V2 import next to the existing V1 import to be able to handle both V1 and V2 XML into each central database
  - The databases of the Central Directories for CDI and CSR are adapted for the ISO19139 Schema's
  - Other directories are only migrated to NVS2.0
- All Central Directories produce V2 export XML (where applicable)
- All Central Directories migrate their interfaces to V2 for search and print
- **Online CMS** of CSR is adapted for the ISO19139 Schema
- **Online CMS** of EDMERP is adapted for V2 (NVS2.0)

Applied approach – data :

- **SeaDataNet NetCDF (CF) Format** defined and documented for profiles, timeseries and trajectories (conform ODV content)

- **NEMO** upgraded (V1.5.2 – see SDN portal) to generate ODV, MedAtlas and new SDN NetCDF (CF) files with NVS2.0

- Development of **Java tool** to convert existing MedAtlas V1 and ODV V1 to V2 files (using NVS2.0) for data centres to upgrade their existing local pre-processed data files

- Upgrading of **Download Manager** to generate V2 files from local databases. This requires also mapping adjustment by local data centres, but can be made gradually by having DM also reformating V1 generated files on the fly to V2 files
    - 1st: use of NVS2.0
    - 2nd: SDN ODV **and** SDN NetCDF (CF) from databases

- **ODV and DIVA** will be extended with V2 import next to the existing V1 import to be able to handle both file versions

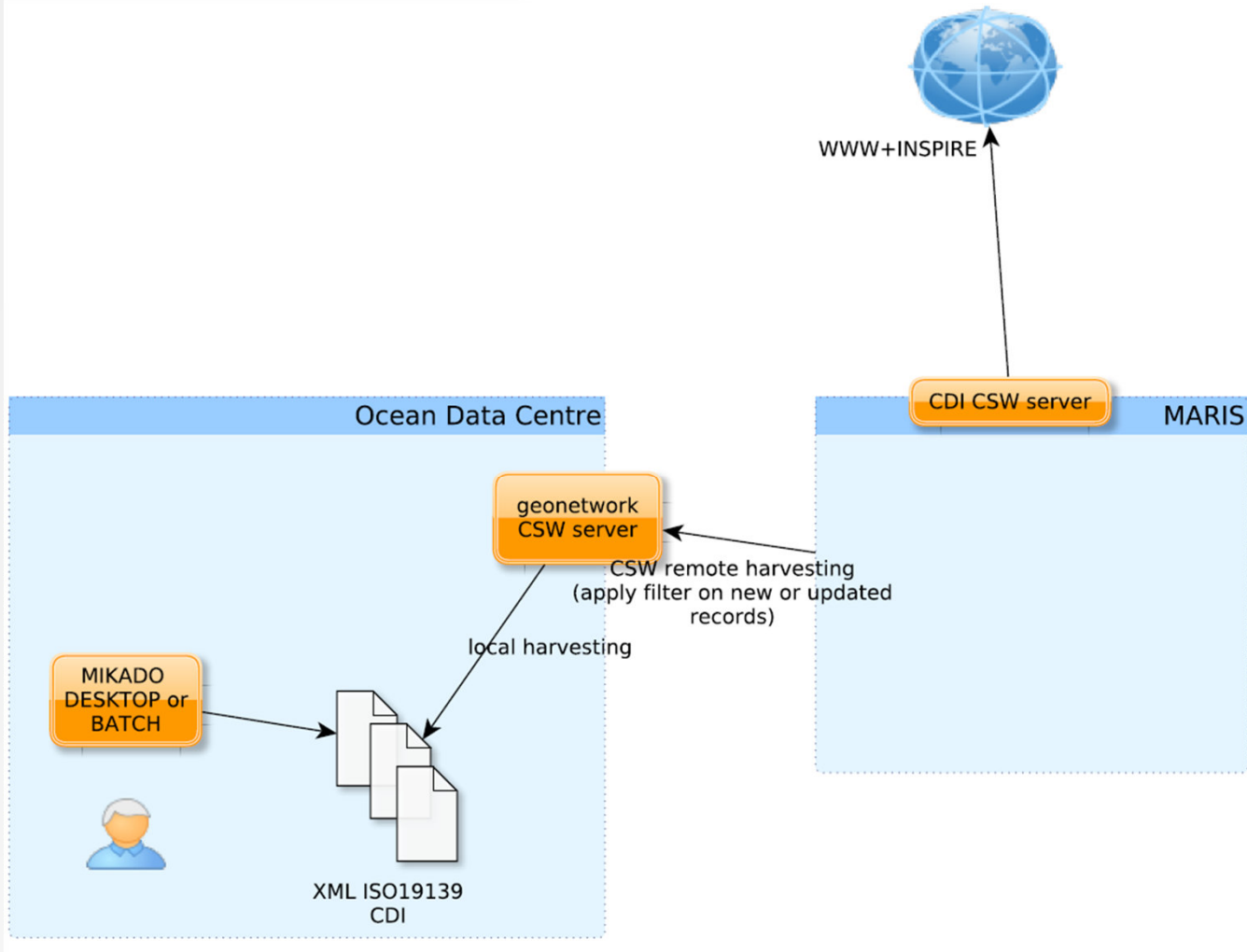# Applied approach (cont.):

- CS-W functionality will be added to Central Directories for CDI and CSR

- CS-W functionality will be added to MIKADO for CDI and CSR, but installation at data centres will be done gradually, establishing mix of harvesting + sending

- Start with **pilot** IFREMER (local data centre) and BSH (CSR central) and MARIS (CDI central)

- Pilot ready mid November 2013 => gradual expansion to other data centres

Applied approach – CS-W harvesting (cont.):

Targets:

- Whole system technically on V2 and ISO19139 (CDI, CSR) by October 2013, with Central Directories also contentwise on V2

- SDN Data centres to adopt the new tools NOW (MIKADO, NEMO and DM) to upgrade in October – November gradually their local metadata XML and data sets (ODV) to V2

- Encouraging non-SDN data centres (e.g. via EMODNet) to deliver in V2 and gradually upgrading their local metadata and data to V2: from January 2014 onwards

- Later extension with NetCDF support from databases with DM

- Great progress for REVIEW (12 December 2013)

Deliverables:

- Software (MIKADO and NEMO) latest versions incl manuals available at SeaDataNet portal

- Software (Download Manager) latest version incl manual available at SeaDataNet Extranet

- Vocabs NVS2.0 accessable via Client Interface at SeaDataNet portal

- Format (ODV, NetCDF) documentation available at SeaDataNet portal

- Revised set of instructions for installation of upgraded services will follow soon

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