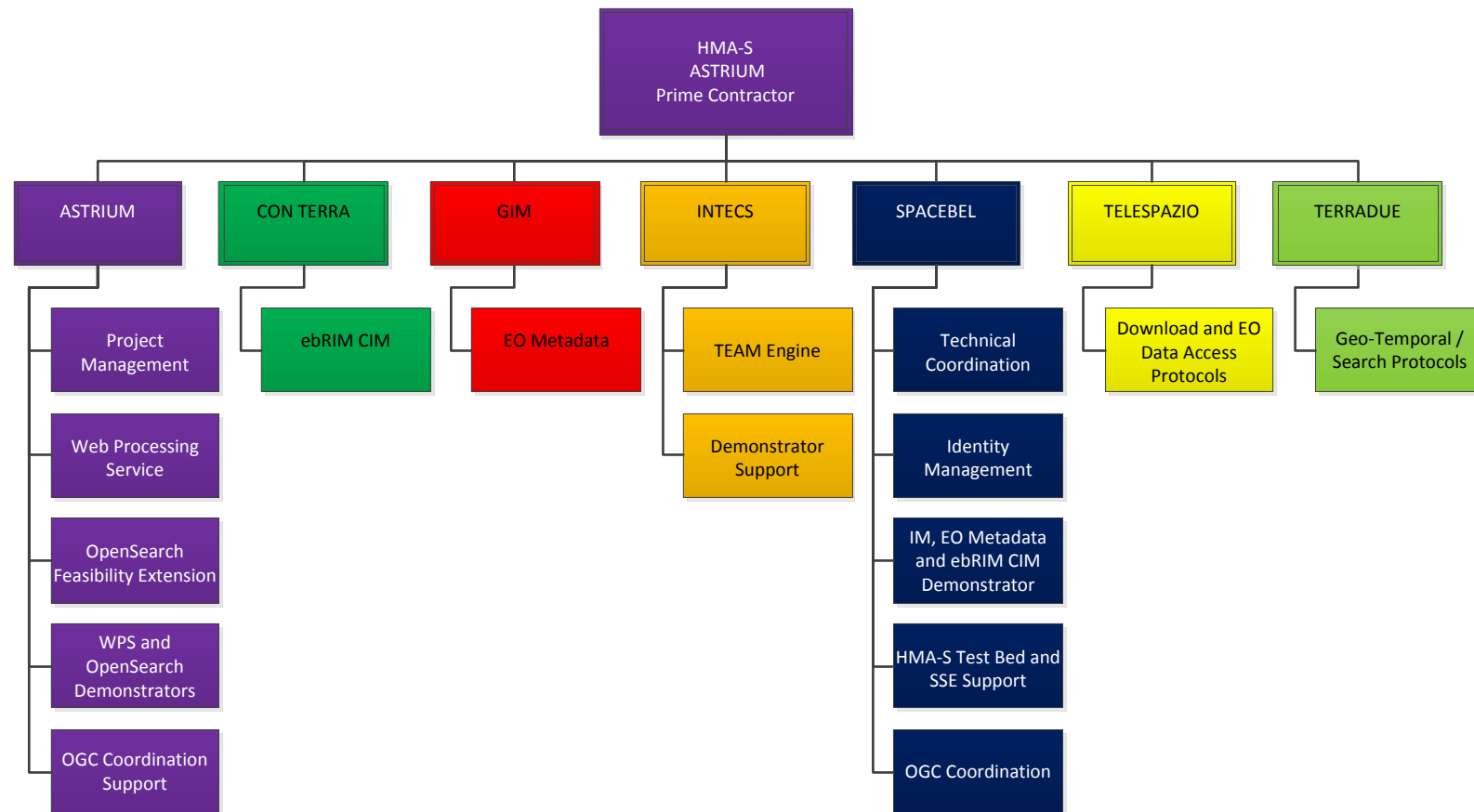


# ***HMA for Science Kickoff Meeting***

KO Meeting  
24 January 2013, ESRIN Frascati

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- Specification Activities
  - Task 2: Identity Management
  
- Demonstrators
  - Task 2: Identity Management
  - **Task 3: EO Metadata**
  - Task 5: Enhancement ebRIM EP
  
- Task 8: HMA-S Testbed
  
- Technical Coordination
  - Task 9: Coordination and harmonisation

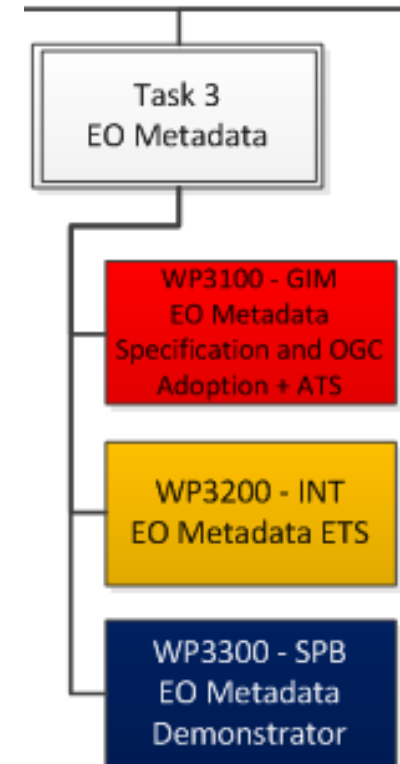


### ➤ Task inputs:

- D3000.1: Updated OGC EO Metadata Profile of O&M
- D4000.1: Opensearch extension for EO with O&M response.

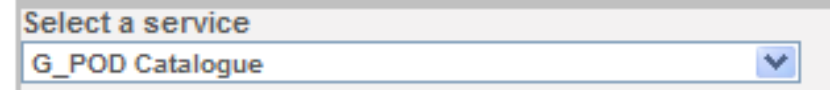
### ➤ Tasks:

- ERGO catalog server: allowing to import and serve O&M metadata (Intecs) via HMA-S OpenSearch (WP8300).
- Catalog client derived from SMAAD catalog clients

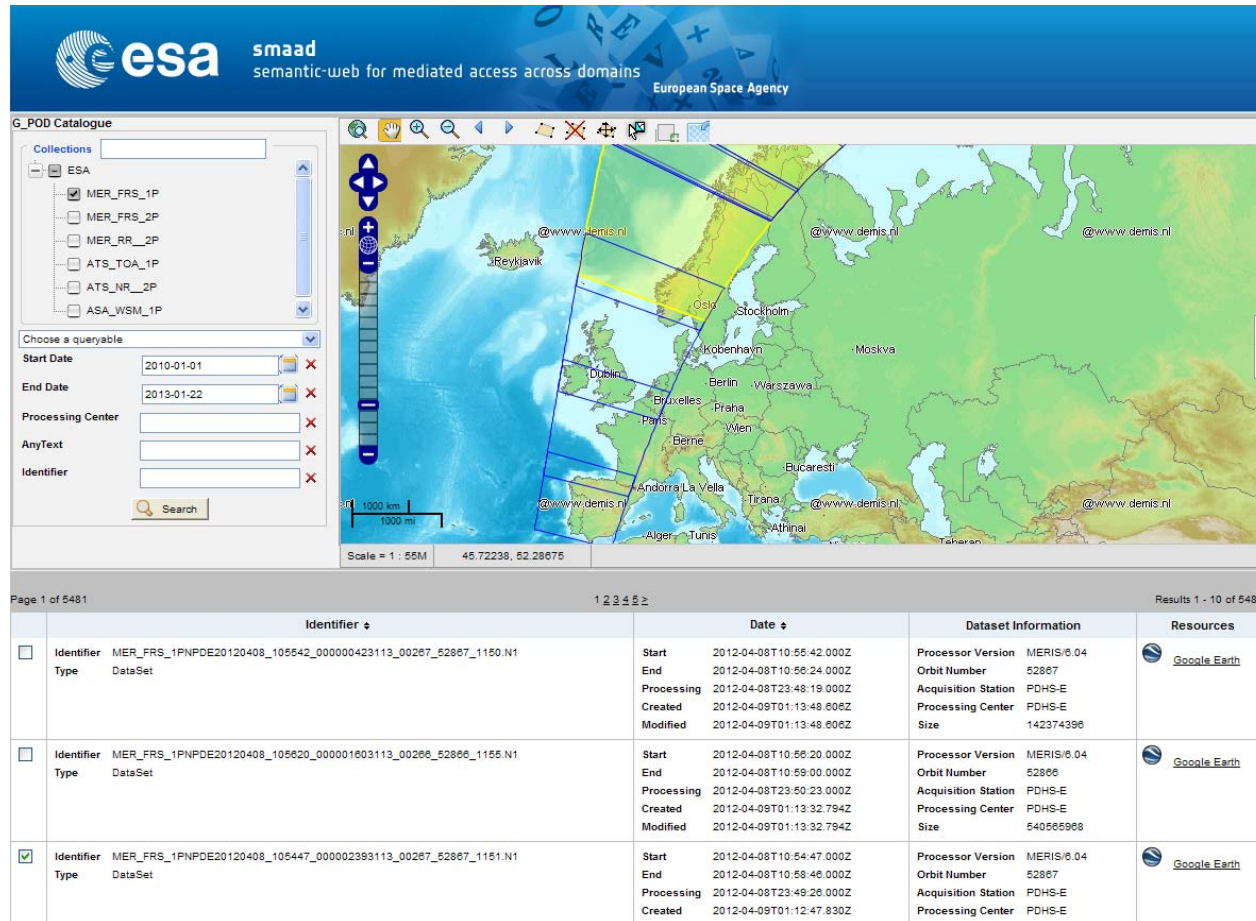


### ➤ Open-source client

- Shares DAIL/SSE source code for Catalog clients (same stylesheets)
- Shares "light" MapViewer with DAIL/SSE (OpenLayers).
- Same source code as Task 5 Catalog client, different configuration files.
- Allows access to multiple catalogues from a list including Task 5
- Advantages:
  - Deploy HMA-S clients on DAIL/SSE Portal with minimal effort.
  - HMA-S client maintained as part of DAIL/SSE.



- Open-source HMA-S Client (prototype) accessing G-POD OpenSearch catalog






The screenshot displays the G-POD Catalogue interface. At the top, it features the ESA logo and the text "smaad semantic-web for mediated access across domains" and "European Space Agency". The interface is divided into several sections:

- Collections:** A tree view showing a folder "ESA" containing several sub-collections: MER\_FRS\_1P (checked), MER\_FRS\_2P, MER\_RR\_2P, ATS\_TOA\_1P, ATS\_NR\_2P, and ASA\_WSM\_1P.
- Choose a queryable:** A dropdown menu set to "All".
- Start Date:** 2010-01-01
- End Date:** 2013-01-22
- Processing Center:** (empty)
- AnyText:** (empty)
- Identifier:** (empty)
- Search:** A search button.

The central part of the interface is a map of Europe with a scale of 1:55M. The map shows various cities and regions, with several "@www.demis.nl" markers. A scale bar indicates 1000 km and 1000 mi.

Below the map, the interface shows "Page 1 of 5481" and "Results 1 - 10 of 54804". A table of search results is displayed with the following columns: Identifier, Date, Dataset Information, and Resources.

Identifier	Date	Dataset Information	Resources
<input type="checkbox"/> Identifier: MER_FRS_1PNPDE20120408_105542_00000423113_00267_52867_1150.N1 Type: DataSet	Start: 2012-04-08T10:55:42.000Z End: 2012-04-08T10:56:24.000Z Processing: 2012-04-08T23:48:19.000Z Created: 2012-04-09T01:13:48.806Z Modified: 2012-04-09T01:13:48.806Z	Processor Version: MERIS/6.04 Orbit Number: 52867 Acquisition Station: PDHS-E Processing Center: PDHS-E Size: 142374396	 <a href="#">Google Earth</a>
<input type="checkbox"/> Identifier: MER_FRS_1PNPDE20120408_105542_000001603113_00266_52866_1155.N1 Type: DataSet	Start: 2012-04-08T10:56:20.000Z End: 2012-04-08T10:59:00.000Z Processing: 2012-04-08T23:50:23.000Z Created: 2012-04-09T01:13:32.794Z Modified: 2012-04-09T01:13:32.794Z	Processor Version: MERIS/6.04 Orbit Number: 52866 Acquisition Station: PDHS-E Processing Center: PDHS-E Size: 540565968	 <a href="#">Google Earth</a>
<input checked="" type="checkbox"/> Identifier: MER_FRS_1PNPDE20120408_105447_000002393113_00267_52867_1151.N1 Type: DataSet	Start: 2012-04-08T10:54:47.000Z End: 2012-04-08T10:58:46.000Z Processing: 2012-04-08T23:49:26.000Z Created: 2012-04-09T01:12:47.830Z	Processor Version: MERIS/6.04 Orbit Number: 52867 Acquisition Station: PDHS-E Processing Center: PDHS-E	 <a href="#">Google Earth</a>

- Open-source client
  - Endpoints configurable by user
  - GUI will be built based on OpenSearch Description document which is accessed at run-time.

```
<service>
  <id>2</id>
  <name>Task 3 Catalogue</name>
  <icd>ogc-09-084-v01</icd>
  <operation name="Search">
    <xsl>Task_3_Catalogue_Search.XSL</xsl>
    <binding>
      <httpget>http://www.spacebel.be/catalogue/task3/description.xml</httpget>
    </binding>
  </operation>
  <aoiRequired>false</aoiRequired>
</service>
```

➤ Technology  
Task 3 and 5 Client

<i>Name</i>	<i>Description</i>	<i>License</i>
Red Hat Enterprise Linux ES	Open Source Operating system	Subscription
Apache Tomcat 6.0.35	Servlet Container	Apache license
JSF Mojarra (v2.0.2)	JSF Reference Implementation	CDDL+GPL
RichFaces (v 3.3.3)	Open source AJAX engine and component library for JSF	LGPL
PrimeFaces (v1.1)	Open source AJAX engine and component library for JSF: used for the collection picker...	Apache license 2
Xalan For Java (v 2.7.1)	XSLT processor for transforming XML documents into HTML, text, or other XML document types	Apache license
Xerces For Java (v 2.9.0)	XML Parser package of the Apache XML based project	Apache license
Log4J (v 1.2.14)	Component that provides logging functions for Java application	Apache license
IO Package (v 2.1)	Component of the Apache Commons	Apache license
BeanUtil Package (v 1.6)	Component of the Apache Commons	Apache license
Collections Package (v 3.1)	Component of the Apache Commons	Apache license
Digester Package (v 1.7)	Component of the Apache Commons	Apache license
Lang Package (v 2.4)	Component of the Apache Commons	Apache license
Logging Package (v 1.0)	Component of the Apache Commons	Apache license
HTTP Package (v 4.1)	Component of the Apache Commons	Apache license
Net Package	Component of the Apache Commons	Apache license
Codec Package (v 1.4)	Component of the Apache Commons	Apache license
Flexjson 1.9.2	JSON Serializer/Deserializer	Apache 2.0
<a href="#">json-simple</a> 1.1	JSON Parser	Apache 2.0
jQuery (v 1.3)	Javascript Framework	MIT license



### ➤ Open-source server

- Update of Buddata Catalog (Intecs) available on <http://rssportal.esa.int/tiki-index.php?page=Open Software>

#### Buddata catalogue

Buddata ebXML Registry/Repository (or ebRR in short) is an open source implementation of the OASIS ebXML Registry and OGC Catalogue Service. Much experience has been drawn from the OMAR ebXML Registry open source project (also known as "freebXML"). Extensions of the OASIS ebXML Registry have been implemented to support geospatial capabilities.

The project has been funded by the European Space Agency (ESA) in support of the cataloguing activity for the Heterogeneous Mission Accessibility - Interoperability program (HMA-I) via the ESA ERGO project.

Buddata ebRR put's a strong focus on its geospatial capabilities and the goal of the project is to include all so-called "ebRIM Profiles" or "extension packages" as defined by the OGC Catalogue Service, but also to support any other ebRIM profiles.

Natively it implements SOAP Web Service interfaces based on the OASIS ebXML RS 3.0 and OGC Catalogue Service specifications. Its main other features are (1) a harvesting component with transformation capabilities to translate XML-based metadata in GML and ISO formats to ebXML RIM (with OGC geospatial extensions) and (2) a Java API to access the ebRR directly from Java code.

- Extended with OpenSearch interface (Task 4 compliant).
- Extended with EO O&M (Task 3 compliant) file import.

## ➤ Outputs:

- D3000.1: Open-source Demonstrator
  - Updated ERGO Catalog server (Intecs)
  - OpenSearch O&M Catalog client (Spacebel)
- D3000.2: Demonstrator TN including
  - Description of native interfaces
  - User Manual

