



geoland Operational Scenario

The geoland task “Operational Scenario” (OS) is a cross-cutting activity. It provides a joint platform for all geoland Observatories & Core Services to develop the geoland scenarios for operational service provision and an implementation road map describing the requirements to achieve this in terms of service infrastructure, space and in-situ infrastructure, and demand & supply-side organisation.

Objectives

The activities within the “Operational Scenario” will work through bottom-up and top-down approaches comprising Service Infrastructure analysis and Operational Service scenario development. The task addresses both technical and non-technical issues of interoperability (including data exchange formats, content standard requirements and process chain interfaces) as well as data policies and economic and organisational elements. The objective is to develop an implementation road-map that shall be the guideline for the implementation of operational geoland services. It builds on existing expertise and infrastructure elements.

Work programme

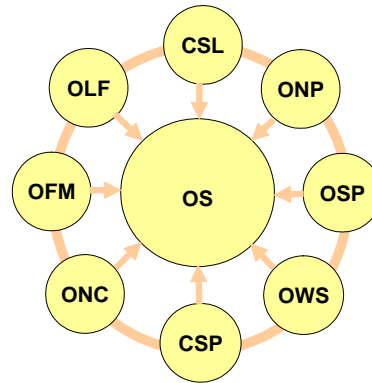
The “Operational Scenario” work comprises the following tasks:

1. Analysis principles & description standards

Harmonisation of OS activities across the Observatories/Core Services – establish common understanding and set-up agreed methods & guidelines.

2. Data policy & procurement

Assessment of data resources & policies of EO and non-EO data with respect to GMES LC&V service requirements; EO coverage scenario analysis considering EO-data availability and sustainability.



Organisation of task “Operational Scenario”

3. Functional Architecture

Development of end-to-end service infrastructure concept considering GMES LC&V service requirements; identification of existing infrastructure elements and current bottlenecks & shortcomings; gap analysis and recommendations for operational implementation.

4. Scenario Development & Implementation road-map

Development of operational scenarios for GMES LC&V services considering functional, organizational & funding aspects.

Links to parallel activities

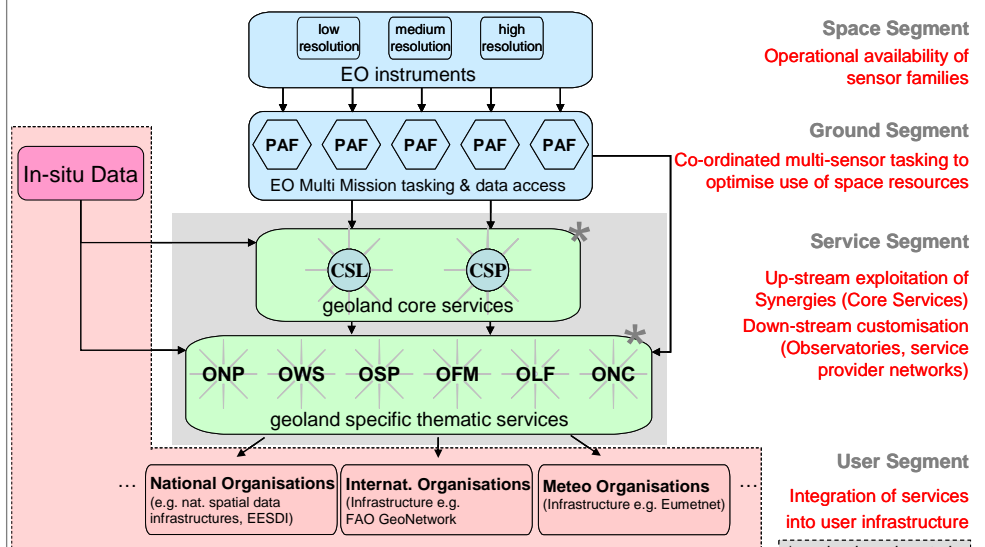
The “Operational Scenario” task is the interface to parallel “infrastructure”-related activities, such as contributions to INSPIRE – taking benefit from a wider consolidation of common content standards (<http://www.ec-gis.org/inspire>);

SSA HALO (FP6) linking of the natural carbon and water fluxes element of the Integrated Projects MERSEA (Ocean), GEMS (Atmosphere) and geoland tasks “Observatory Natural Carbon Fluxes” and “Core Service Biophysical parameters” (http://www.ecmwf.int/research/EU_projects/HALO/index.html);

SSA GOSIS (FP 6) identifying organisational scenarios for GMES;

SSA RISE (FP 6) aiming at the definition of content standards for hydrography & elevation data using the Water Framework Directive needs as an example;

ESA GMES Service Element (GSE) projects (<http://earth.esa.int/gmes/index.html>) and other related projects.



Functional architecture elements analysed – focus on production infrastructure

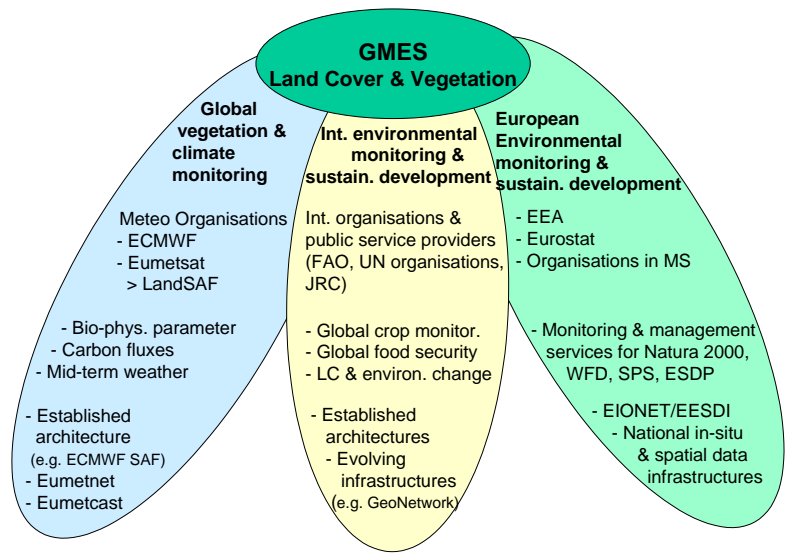


Towards operational GMES Land Cover & Vegetation services

Within the GMES initiative the integrated project **geoland** represents multinational approach addressing land cover and vegetation themes covering a broad range of scales (local to global). Synergetic advances are considered and lead to cost savings sharing common information needs and services.

geoland addresses a portfolio of thematic geo-information products and services supporting the implementation of European and International policies, conventions, and European directives and their national implementation. It is branched into three broad communities of geo-information demand and supply:

(i) **Global vegetation and climate monitoring:** This community is driven by large European and national meteorological institutions (e.g. EUMETSAT, ECMWF), with established geo-information production and distribution architecture. The geoland products of Observatory ONC has got a good opportunity to get implemented in existing processing methods used by ECMWF such improving both the



geo-information communities present in geoland IP

knowledge about natural carbon and water fluxes and the medium-range weather forecast. The core service bio-physical parameters results may be accepted as enlarging the portfolio of EUMETSAT's LandSAF.

(ii) **International environmental and sustainable development organisations:** International Organisations and public agencies (UN, FAO, UNEP) are supporting the definition of the geoland products on crop monitoring and food security, and land cover and forest change. Typically their information provision is based on projects funded by donors, such as the European Commission's EDF (European Development Fund). The information is provided by public research institutions (e.g. JRC), public and - to a lesser degree - by private service providers.

(iii) European environmental and sustainable development:

The principle of subsidiary determines a fragmented situation within Europe across sectoral policies (e.g. agriculture, environment, regional planning) and European to local levels of administrative mandates (monitoring and management usually with regional/local bodies – national organisations setting-up implementation guidelines based on European and national regulations and aggregating the reported information). Future organisation of European co-funding of GMES services in this domain could follow three principles: (1) direct European procurement to cover common European information needs; (2) European co-funding of national-level activities based on commonly agreed programmes; (3) Interreg-type co-funding of regional authorities teaming-up to commonly procure geo-information services meeting European standards and quality guidelines.

For further information, please contact:

Operational Scenario Communications

Infoterra GmbH
Marek Tinz
P: +49 7545 8 4691
F: +49 7545 8 1337
E: marek.tinz@infoterra-global.com

geoland Communications

Infoterra GmbH
Mareike Doepke
P: +49 7545 8 3924
F: + 49 7545 8 1337
E: mareike.doepke@infoterra-global.com
www.gmes-geoland.info

