



Production of High Resolution Layers (HRLs) 2018 within the Copernicus Land Monitoring Service

Major update of EEA 39 countries:
Forest (1-FOR) and Grassland (2-GRA)
Including Changes
@10m resolution

International Team :

GAF, Geoville, SIRS, e-Geos

Framework:

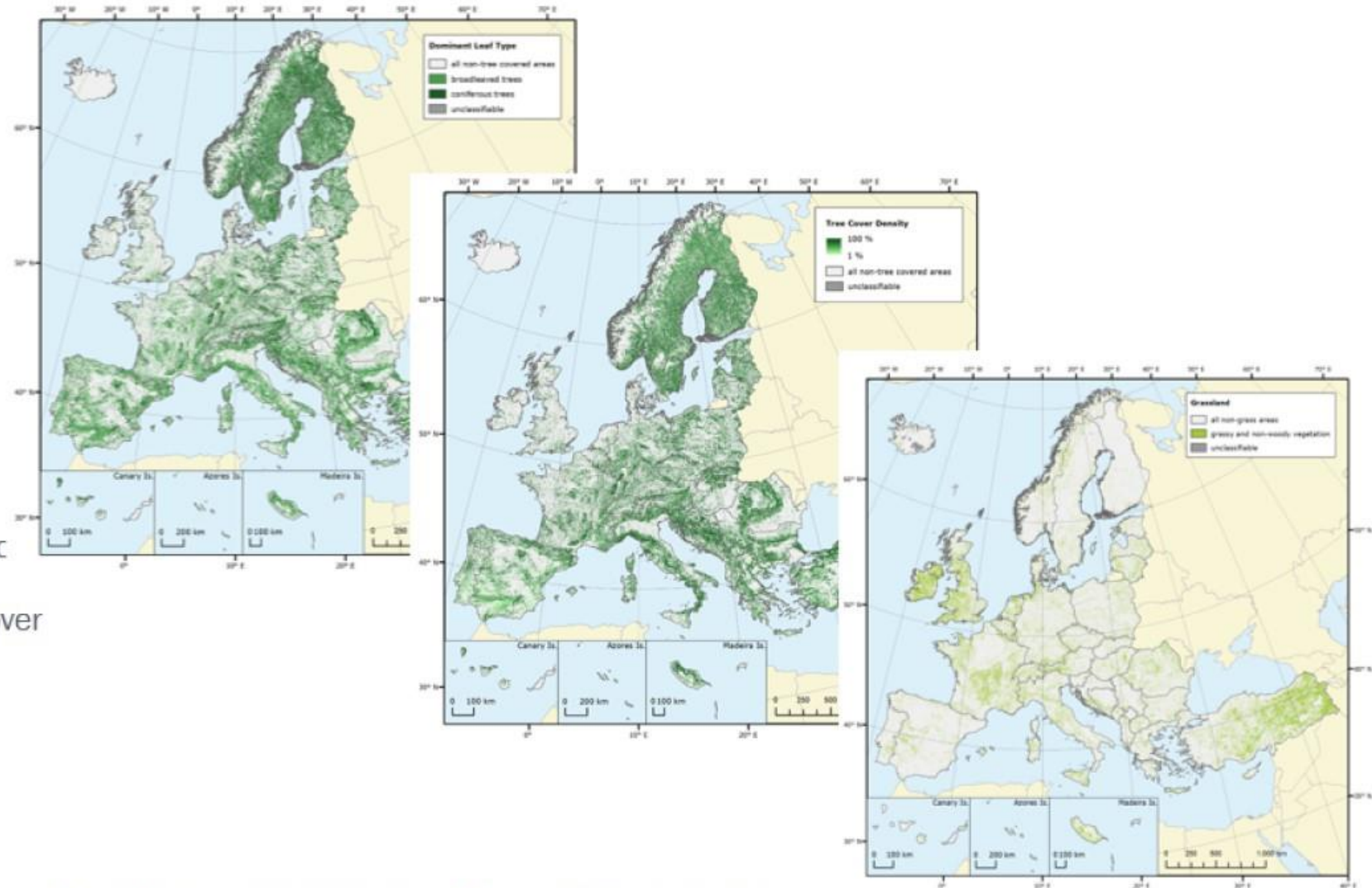
European Environment Agency (EEA) tender N° EEA/IDM/R0/18/009: “Copernicus Land monitoring services – High Resolution land cover characteristics for the 2018 reference year”

European Environment Agency



Time Plan:

December 2018 – May 2020



© European Union, Copernicus Land Monitoring Service 2015, European Environment Agency (EEA).



- Processing of multi-sensor (S-1, S-2) time series for 6 Mio sq.km (approx. 800 TB)
- Micro-service architecture (model building, feature computation, batch classification) for scalable end-to-end processing
- Access to ARD via Datacube service + caching mechanisms for efficient data exploitation
- Process-orchestration via OpenShift and a central database service
- Workflow configuration, GIS integration and iterative model optimization through our GIS frontend CloudMapper
- Operator controlled Machine Learning approach
- Training of models per bio-geographical regions
- Automated Sampling and accuracy Assessment
- Focus on reproducibility and consistency e.g. provision of models and key intermediate products, full workflow documentation

Improved Data

sentinel-1
SENTINEL 2
Land Monitoring Service
CORDA

12.11.2019



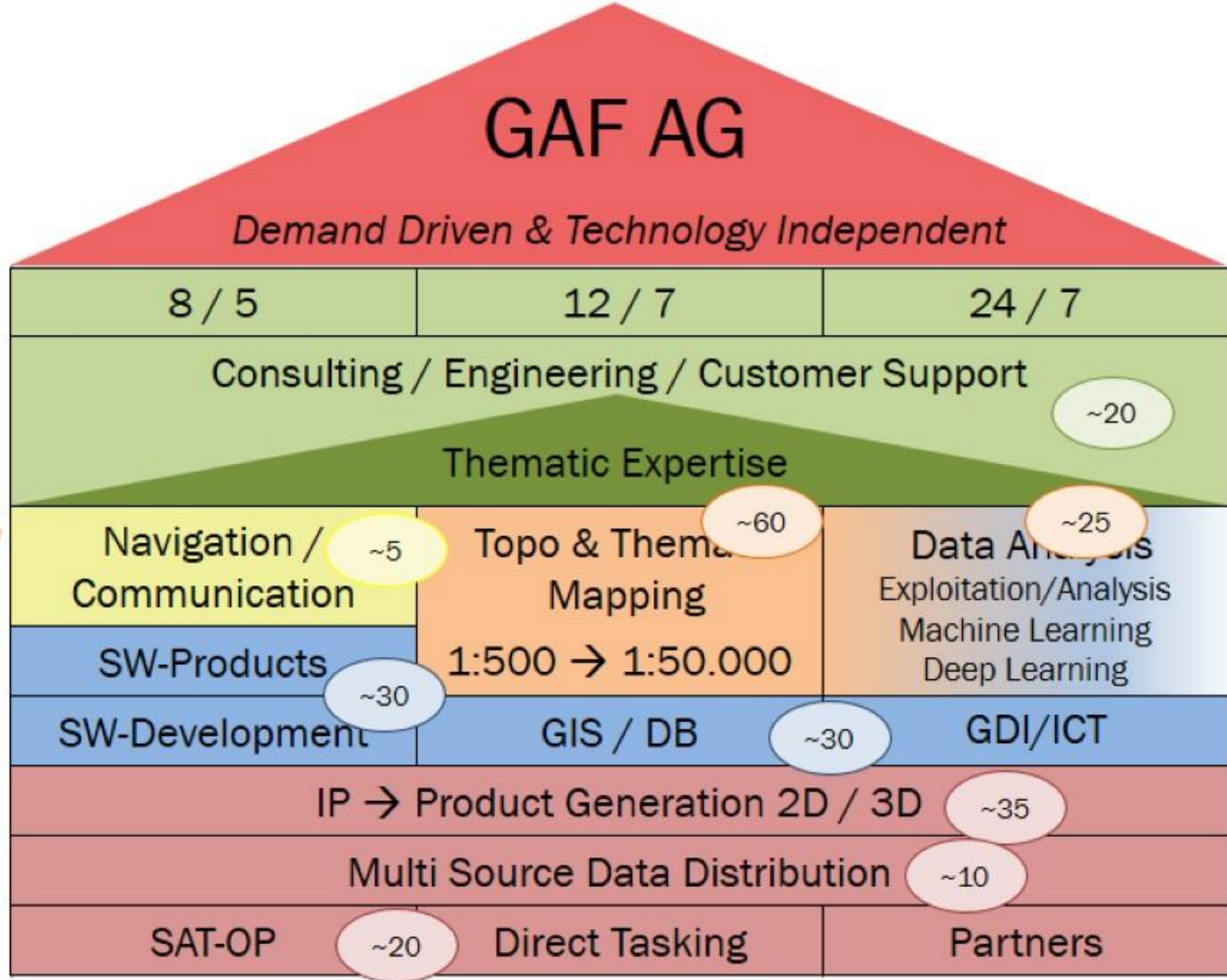
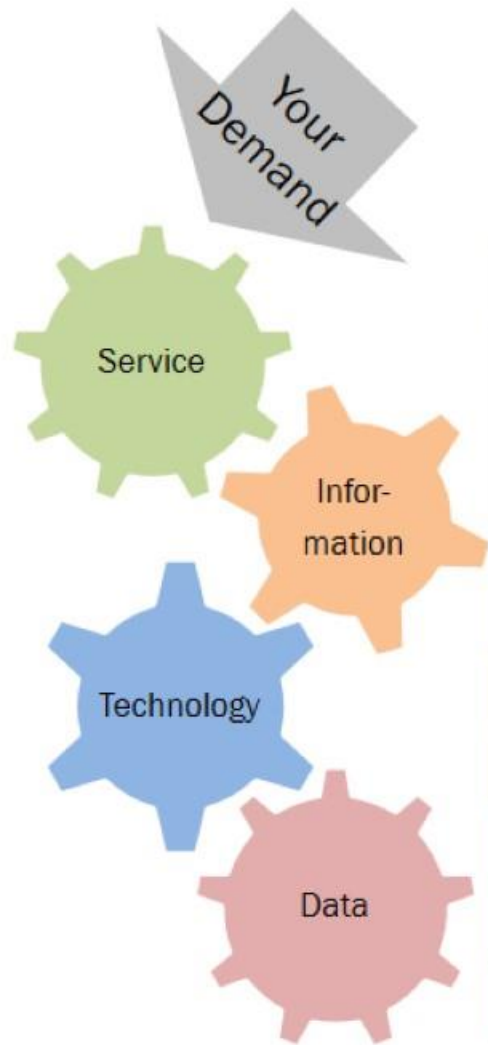
GAF AG

Scalable Computing

mundi WEB SERVICES
PostGIS
docker
OPENSIFT

Accurate Results

FOR min 90% Prec. & Rec.
GRA min. 85% Prec. & Rec.



~235 = Number of Staff

- **Agriculture Sector**
- Border Information
- **Civil Security**
- Coastal Zone/Marine
- **Defense/Military Security**
- **Forestry Policy, Climate Change**
- **Land & Urban Management**
- **Mineral Sector**
- **Nature Resources**
- **Water Management**

