



# Introduction to the EUGENIUS ASSOCIATION and to the Eugenius H2020 project

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Presentation to GTEO. September 2016



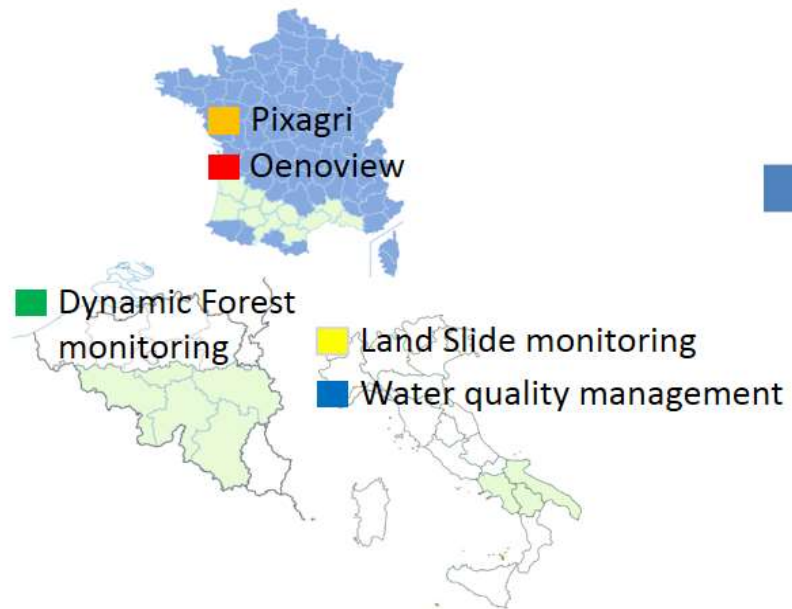
## What is EUGENIUS association?

EUGENIUS is a new non profit association gathering European SMEs involved in the Earth Observation applications for **natural resources and territory management**.

EUGENIUS association aims at:

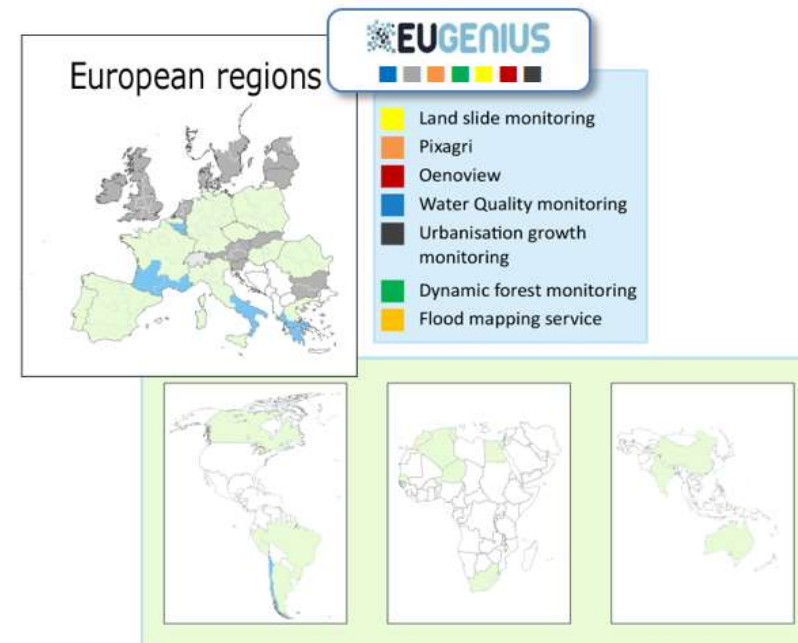
- Developing EO applications services in European regions where these SMEs are located by using:
  - Copernicus data and core services,
  - Cooperative processing and archiving « IT platforms »,
  - Adding value « applicative tools and expertises » owned by these SMEs.
- Increasing thus the potential market of each SME by expanding its commercial footprint thanks to the local presence of other partners already established in other regions.
- Sharing the know-how, competences and tools of these SMEs to propose an extended portfolio of products and services to regional stakeholders ( institutional and commercial ones)

**Local Business**  
Limited product/service offer

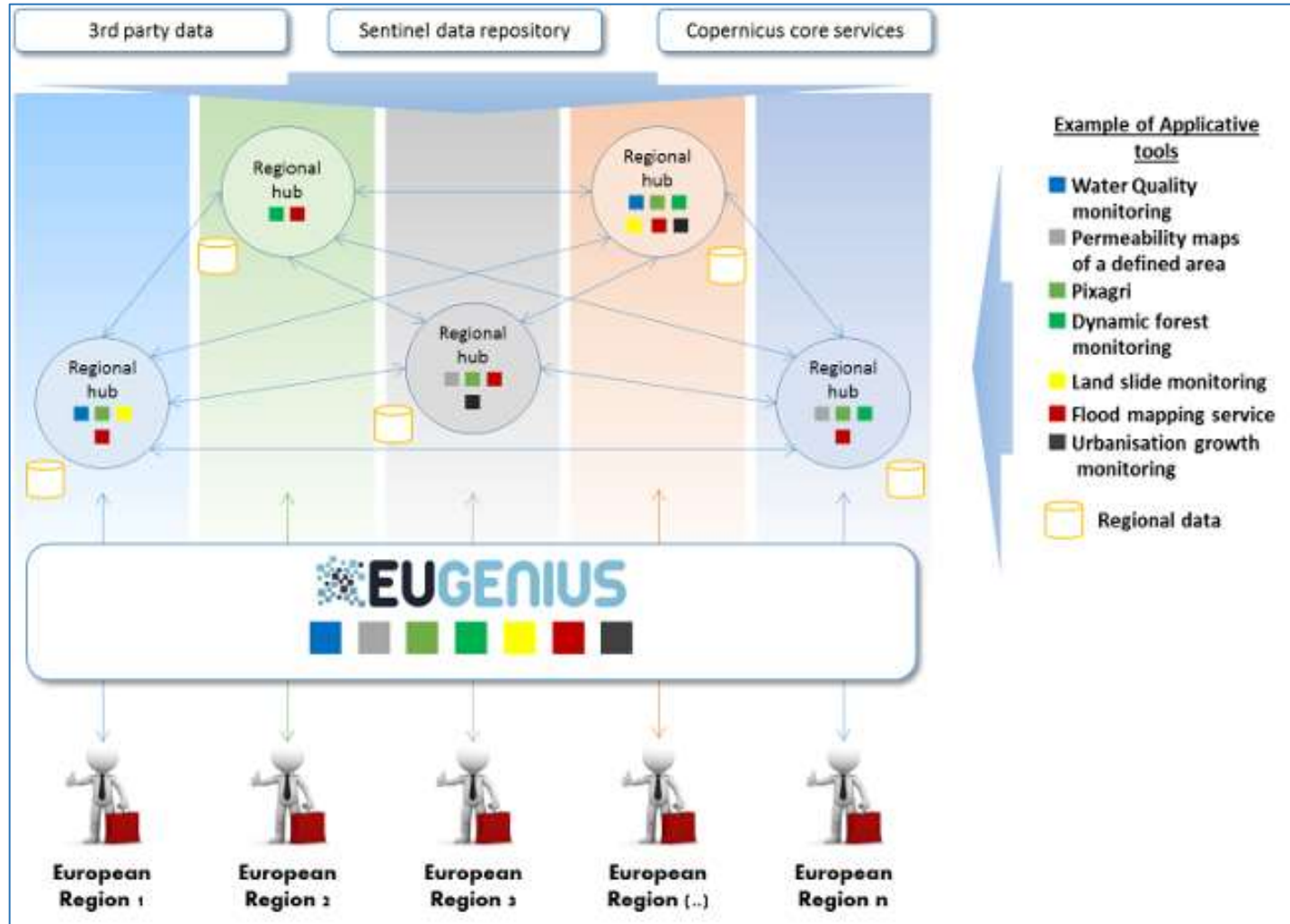


Before Eugenius

**European regions Business**  
Expanded offer

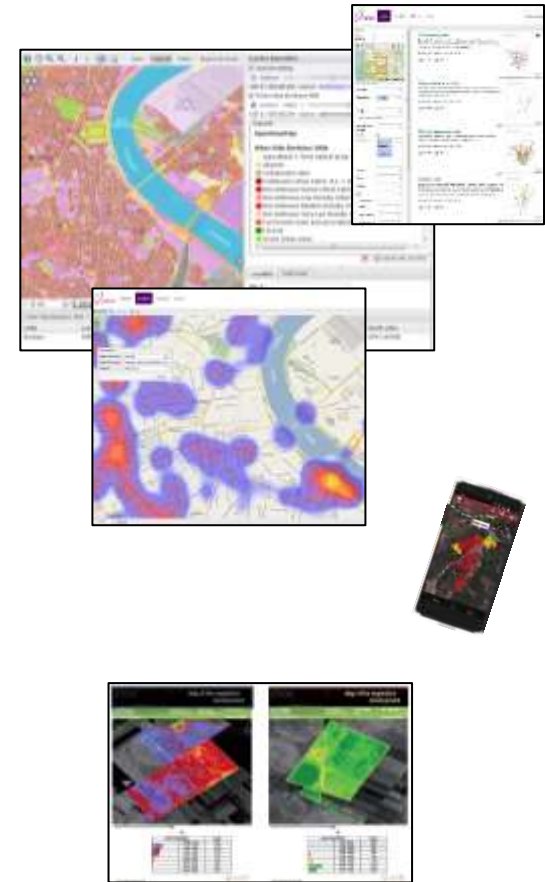


After Eugenius



### Example of Applicative tools

- Water Quality monitoring
- Permeability maps of a defined area
- Pixagri
- Dynamic forest monitoring
- Land slide monitoring
- Flood mapping service
- Urbanisation growth monitoring
- Regional data





## Who are the EUGENIUS members?

EUGENIUS stands for « **E**uropean **G**roup of **E**nterprise for a **N**etwork of **I**nformation **U**sing **S**pace », and gathers today **9 founders located in 8 different European Regions:**

- TerraNIS (Occitania), Sertit ( Grand Est), and I Sea (Aquitaine) in France,
- Planetek ( Apulia, Italy)
- Spacebel ( Wallonia, Belgium),
- Geoville ( Austria),
- Geomer ( Baden Wurtemberg, Germany),
- TerraSpatium ( Athenes, Greece)
- Cap High Tech, for the business model and commercial agreements.

The **Eugenius catalogue** includes today a set of **14 « applicative tools »** allowing to deliver products in 5 domains ( Urbanization, Agriculture, Water, Forestry, Risks and Emergency) where European Regions are key stakeholders.



**And the association is fully open to other « Regional Partners » and other « Applicative tools » owners...**

■ **“Landslide monitoring”**, brought by Planetek, which allows the monitoring of infrastructure instabilities and terrain displacements (landslides, subsidence, etc.) based on the Persistent Scatterers technique.

■ **“Pixagri”**, proposed by TerraNIS, allowing to monitor agriculture fields and to provide agronomic decision support for improved field operations.

■ **“Oenoview”**, proposed by TerraNIS, allowing to monitor vines and to provide harvest decision support for improved field operations.

■ **“SpotThema”**: proposed by TerraNIS, SPOT Thema is a land use database at the scale of cities for professionals in the land-use. This service is offered in 8, 29 and 46 classes. It is made from image interpretation SPOT 1 to 6 or equivalent, with a resolution from 2.5 to 20m.

### ■ **“Water Quality Monitoring”**,

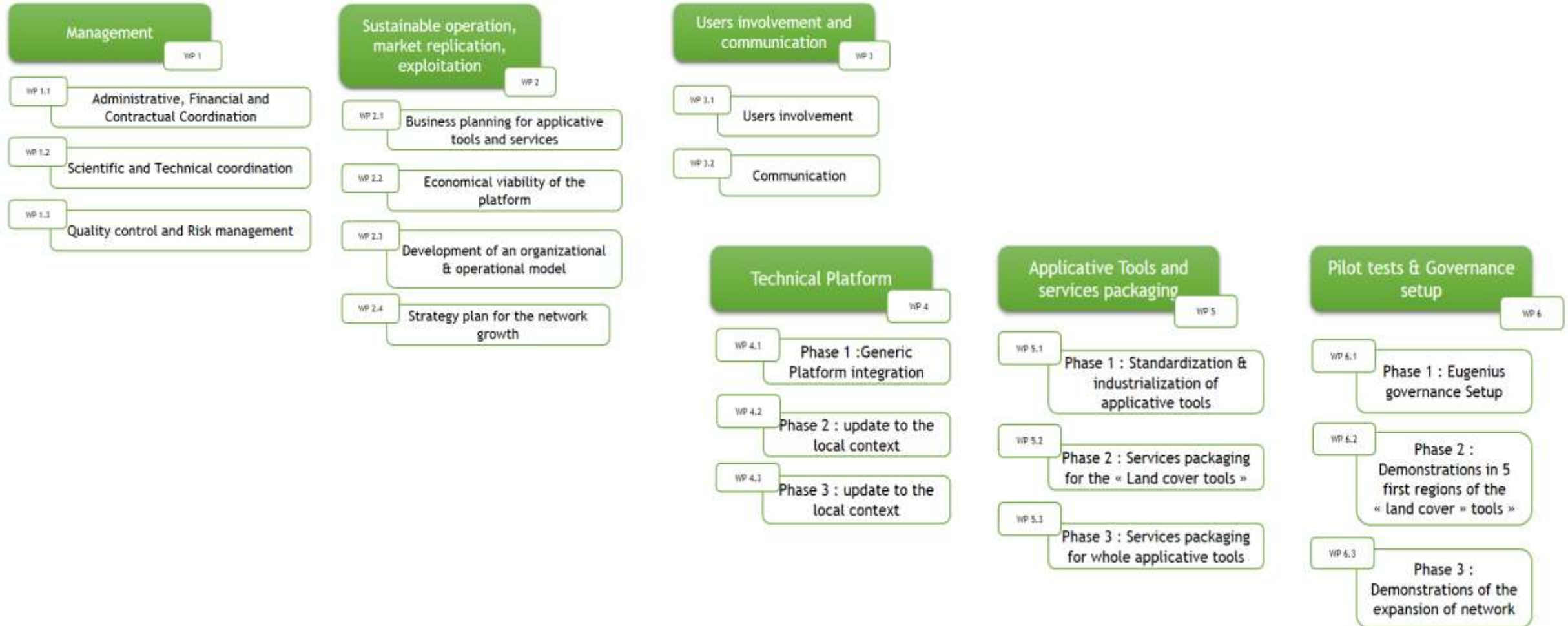
- presented by Planetek, provides information about ecological status of the coastal environment through a series of physical parameters.
- i-Sea is able to produce automatically and in near real-time exhaustive and accurate surface turbidity maps

■ **“Urbanisation growth monitoring”**, proposed by Sertit, is a local service dedicated to urban and land spatial planning, and to support the development of a territory in compliance with ecological and sustainability considerations or directives.

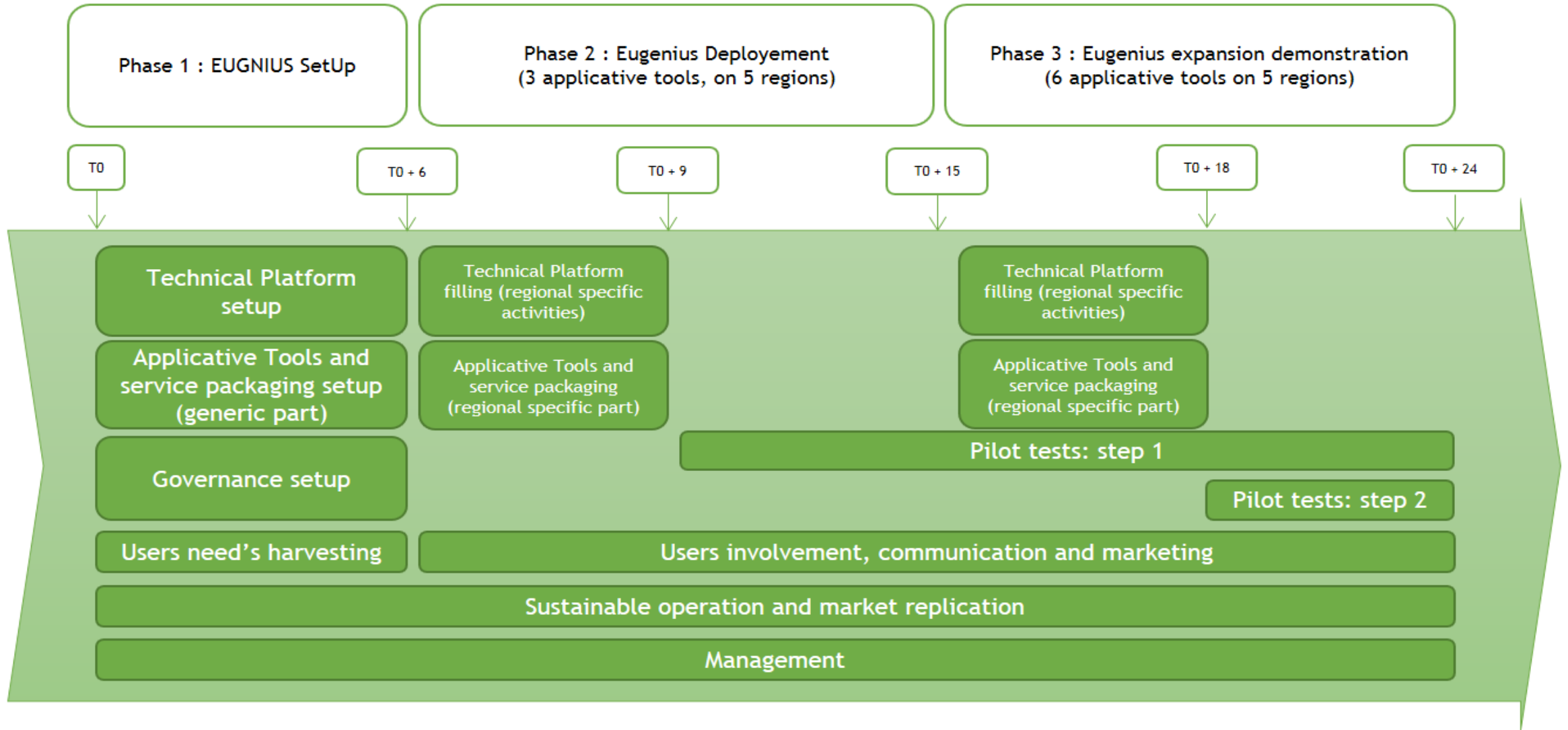


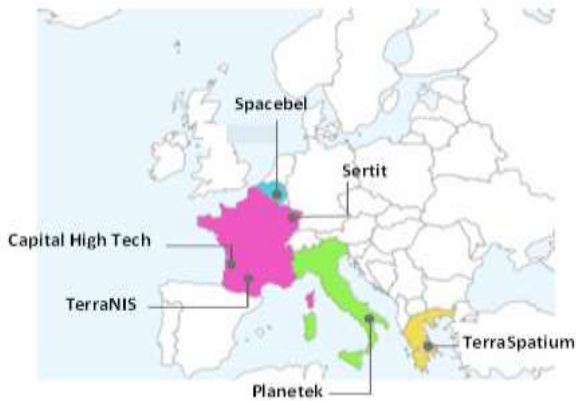
- **“Dynamic forest monitoring”**, developed by Spacebel, which supports different kinds of services dealing with forestry domain: forest area size measurement, sustainable forest management, detection of illegal deforestation....
- **“Flood mapping service”**, proposed by Sertit which allows flood, water / wetlands, environmental, Land Planning management by collecting and delivering geo-information and maps related to on-going or historical flooding events.
- **“Permeability mapping”** operated by Terra Spatium for border control or habitats monitoring.
- **“Border Monitoring”** operated by Terra Spatium The service is applicable both for landscape and land border permeability mapping. The vulnerable areas are identified through intelligence and are monitored using regular satellite.
- **CoastLine** : i-Sea uses its own semi-automated processing tool for coastline detection. It exploits textural information extracted from very high resolution (submetric) images to derive the precise positioning of geomorphological indicators (waterline, dune foot, vegetation limit, ...).
- **Detailed Land Information Service** operated by GeoVille, for providing a cost-efficient, satellite based alternative for very detailed geospatial information of the status and development of land cover and land use to public authorities and the private sector.
- **Biodiversity**: operated by I-sea, the produced maps, combined with the necessary thematic expertise, enable to build up management plans and monitor the level of conservation of coastal environments.
- **NearShore Bathymetry** : operated by I-Sea : This service consists either in the production of a single bathymetric data without in-situ information or in a batch production of multiple data at time intervals specified by the customer to perform time series analysis. The spatial bathymetry service is based on two distinct and complementary approaches: Water transparency and extraction of wave properties

H2020 EO1 call : Eugenius project

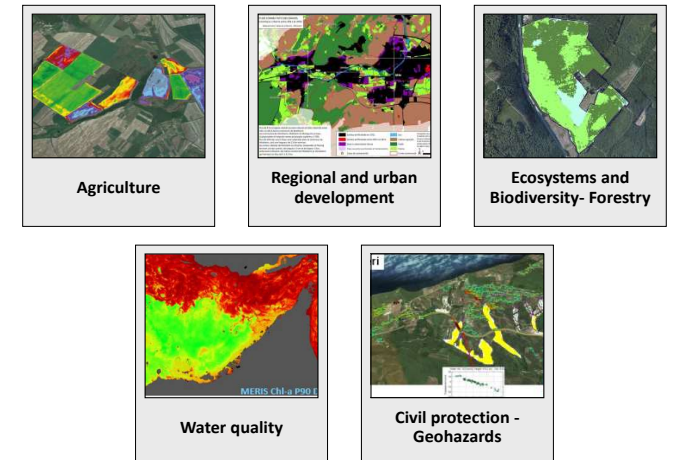








1. To develop a **viable market based on EO services** for different thematic domains linked to territories management (Urbanization, Agriculture, Forestry, etc.) in various European regions
2. To build up a **network of replicable and generic processing and archiving platforms** to ensure regular access to the Copernicus data and core services results, and able to support collaborative actions among them
3. To push for making **applicative tools able to generate “industrialized” end products**
4. To demonstrate the **economical sustainability of the EUGENIUS concept**
5. **To ensure active involvement of users** in all phases of the project and appropriate communication actions for disseminating the results



# EO Régions!

**Sénégal**

**Wallonie**

EO Regional  
Welcome to the EO Regional website!

Accéder aux services

Accueil

À propos

Contact

Rechercher

Facebook

Twitter

LinkedIn

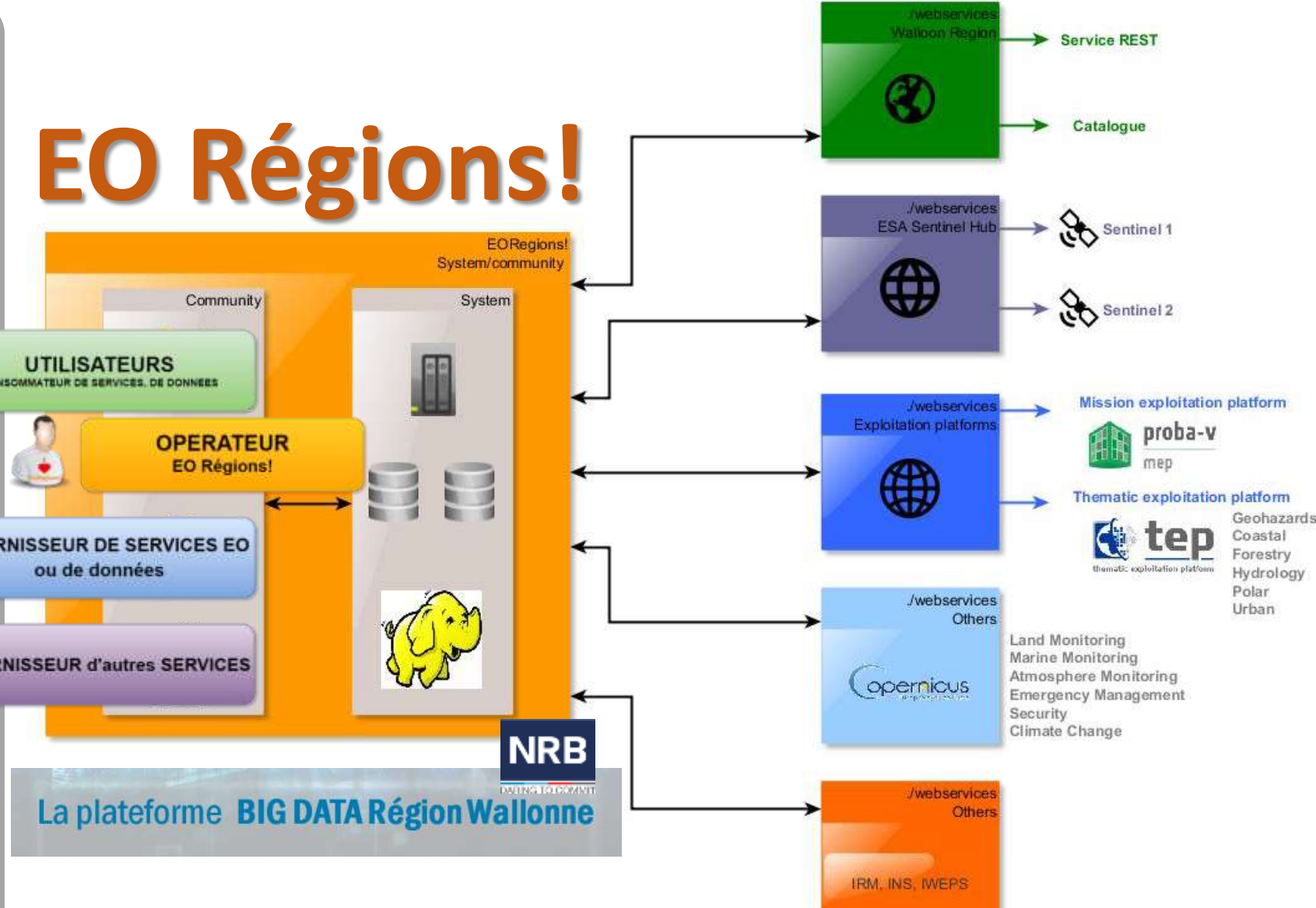
YouTube

Instagram

**EUGENIUS**

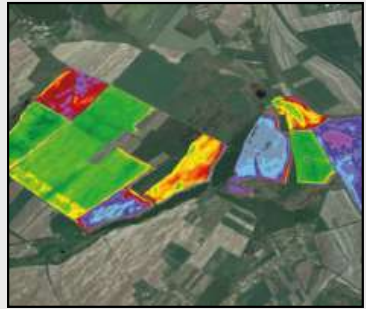
**FAB SPACE 2.0**

DREAM IT    MAKE IT    SHARE IT

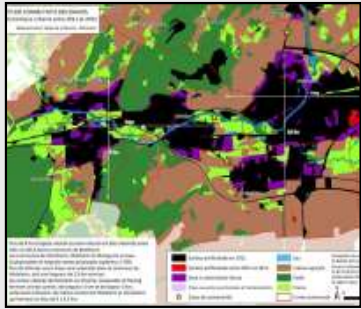




# Merci pour votre attention Questions ?



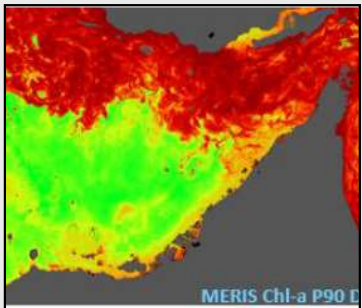
**Agriculture**



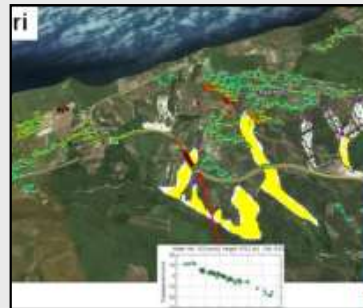
**Regional and urban  
development**



**Ecosystems and  
Biodiversity- Forestry**



**Water quality**



**Civil protection -  
Geohazards**

