



# Copernicus Integrated Ground Segment

*2<sup>nd</sup> Earth Observation Polish Forum*

*Agnieszka Lukaszczyk  
European Commission*

*Warsaw, 3 July 2016*

Follow us on:

 Copernicus EU

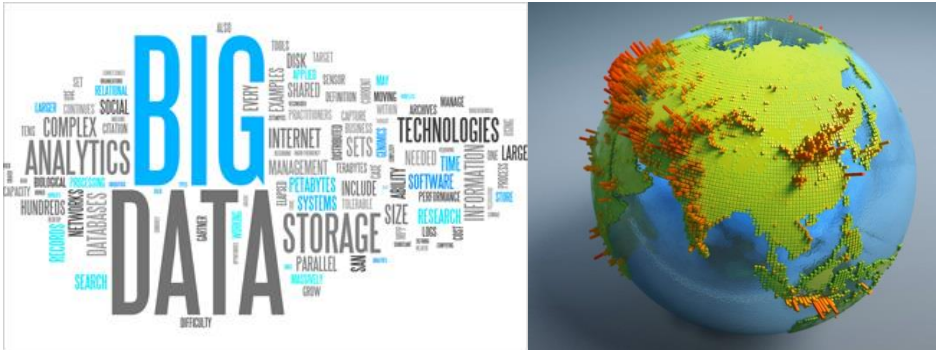
 CopernicusEU

 [www.copernicus.eu](http://www.copernicus.eu)

Space

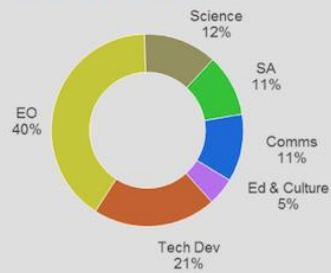


 **Copernicus**  
Europe's eyes on Earth

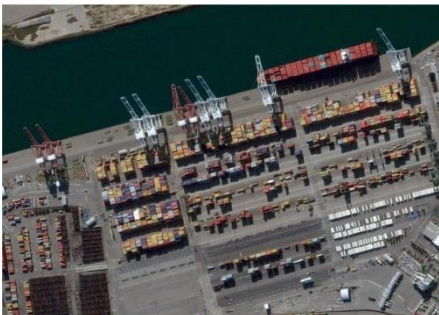


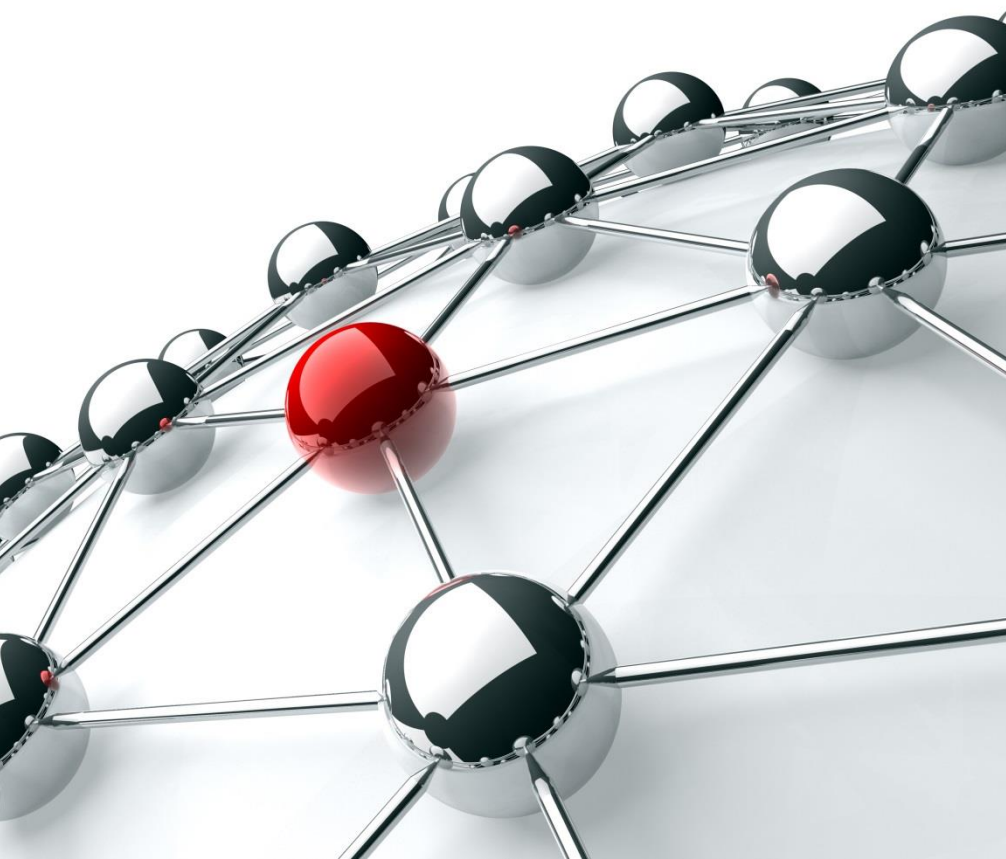
- ★ Copernicus – full, free, open & continuity (Landsat...)
- ★ New applications built on/using Earth Observation information
- ★ The Digital Revolution – Big Data, Cloud, IoT
- ★ Commoditisation of Earth Observation data
- ★ Commercial initiatives (not only) in US – private capital
- ★ New and flexible value chains
- ★ International competition

Global Satellite\* Launches, 2015-2024

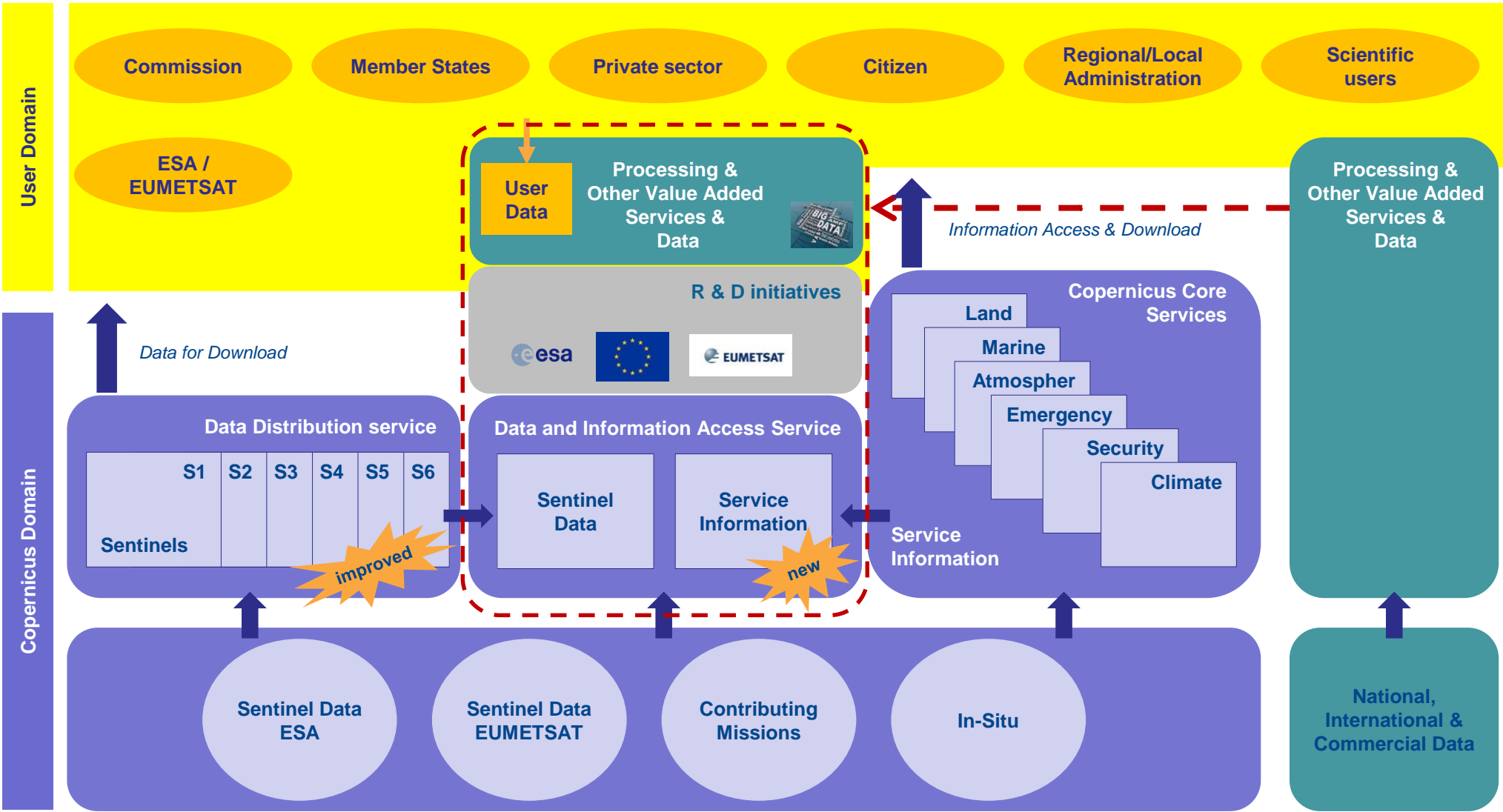


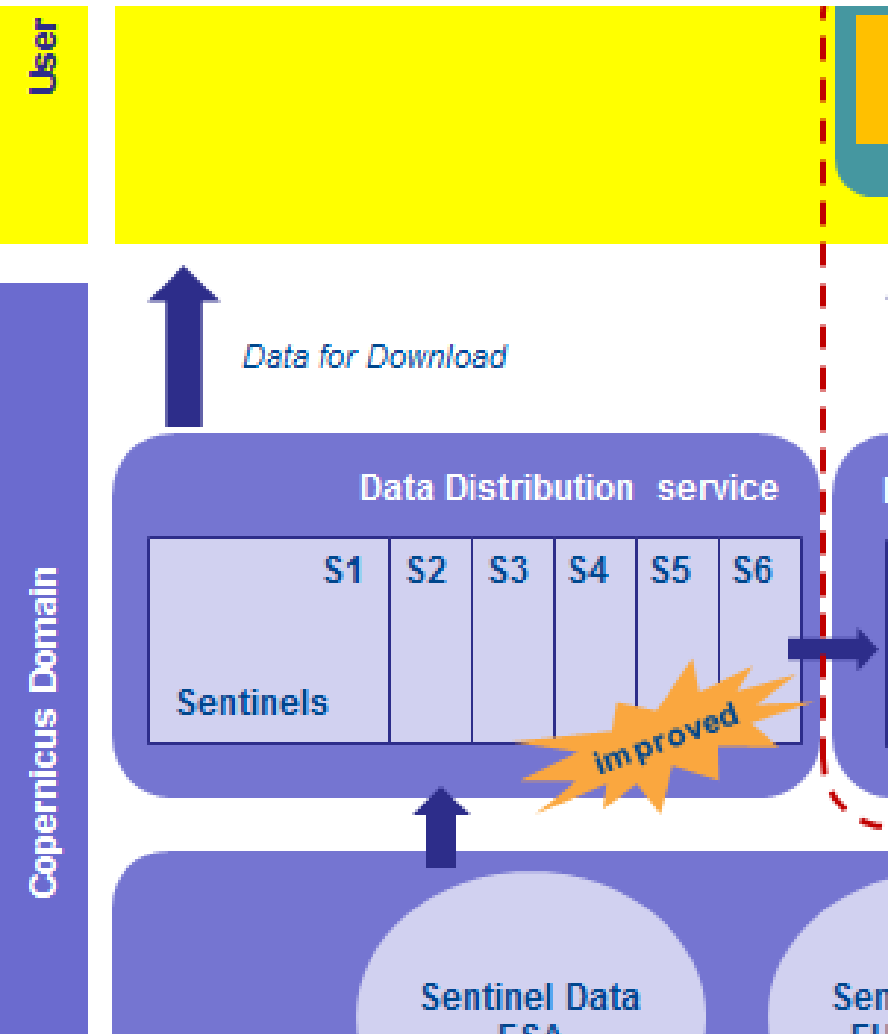
\*1-100 kg  
Source : NSR



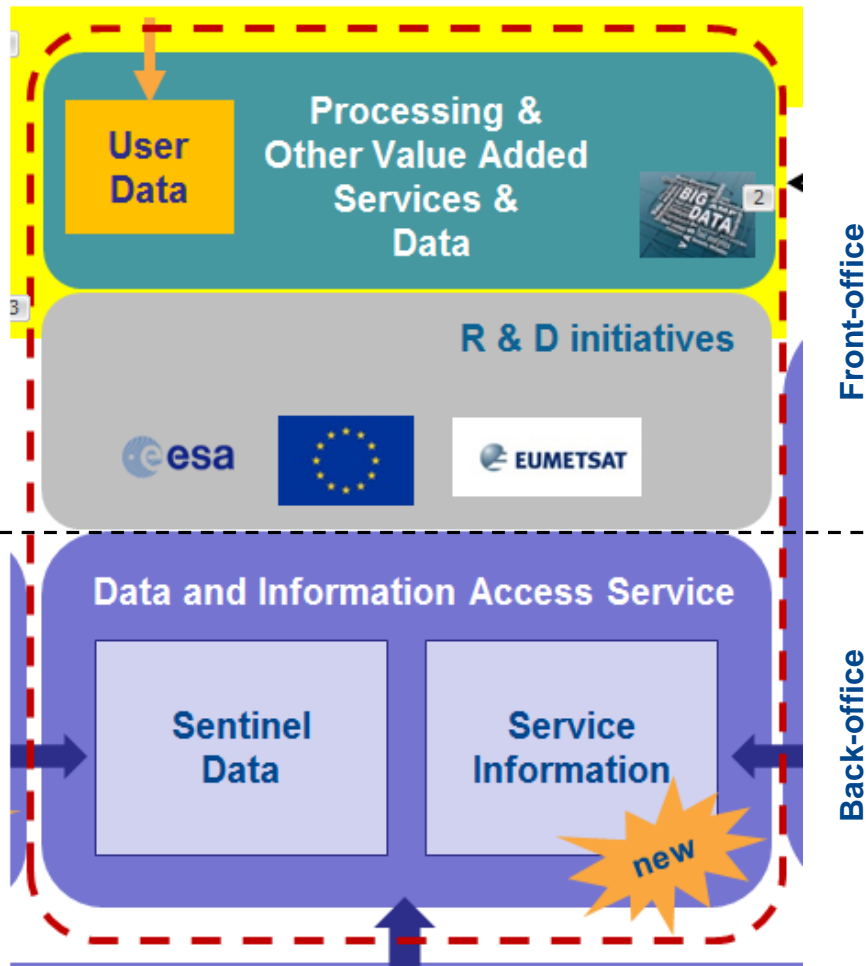


- ★ **Copernicus represents data challenges**
  - ★ Huge and rapidly growing data volumes
  - ★ Variety of information sources
  - ★ Developing user communities and -needs
- ★ **Ready access to this information is fundamental**
- ★ **Data access needs improving**
- ★ **Opportunities offered by ICT**
- ★ **National initiatives launched**
- ★ **Copernicus will benefit from coordination and support**
- ★ **Equitable treatment of MS**
- ★ **Internal market – EO supported**

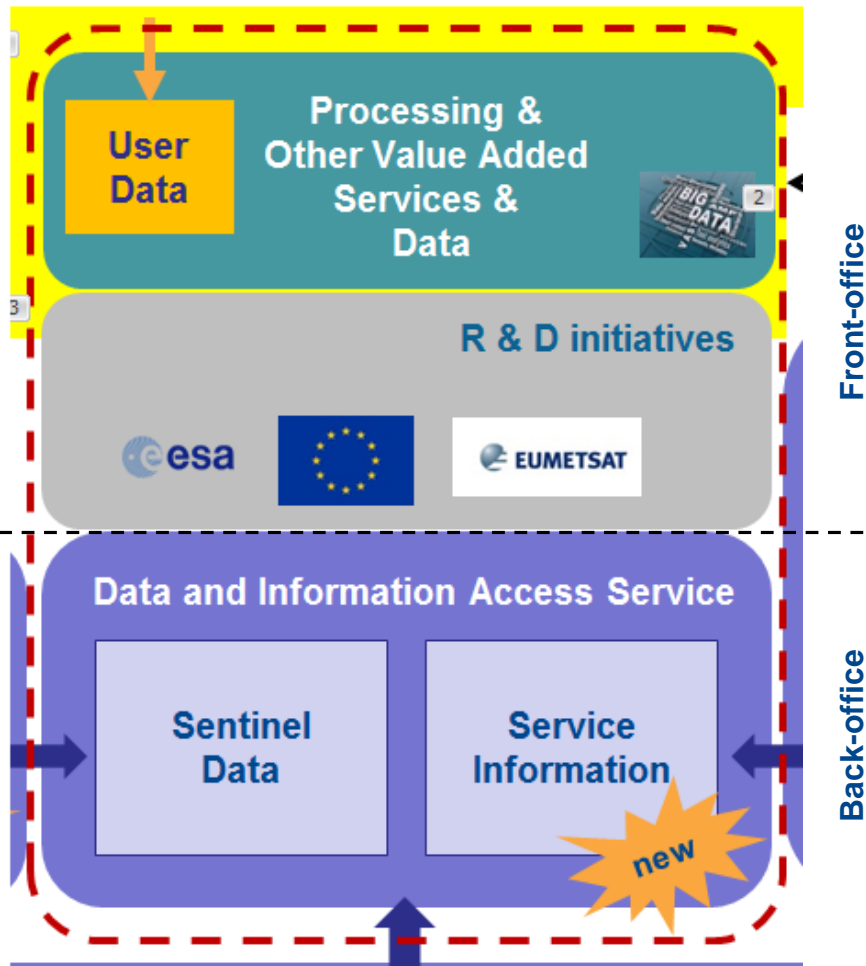




- ★ **Robust and performant distribution system overall – ESA & EUMETSAT**
- ★ **Full compliance with existing (delegation) agreements**
- ★ **Definition and monitoring of operational target performances:**
  - ★ **Timeliness**
  - ★ **Availability**
  - ★ **Continuity risk**
  - ★ **Integrity of data distributed**
- ★ **Regular reporting and annual review of targets by User Forum**
- ★ **Targets Copernicus Catalogue standard**



- ★ **A service approach**
- ★ **Offers access to Copernicus data and information**
- ★ **Cost mutualisation**
- ★ **Possibility for additional data**
- ★ **Combining European supply & demand to provide critical mass**
- ★ **Non-exclusive**



- ★ **Functional scope (to be refined)**
  - ★ Discovery
  - ★ Retrieval
  - ★ Visualisation
  - ★ API to support user initiatives
- ★ **Additional offerings – free or paid for (open business models)**
  - ★ Processing
  - ★ Access to other data
  - ★ Tools
  - ★ Market places
  - ★ ....
- ★ **Open & non-discriminatory**
- ★ **Competitive, open to industrial initiatives**



- ★ **Addresses the needs of European EO users for effective access to Copernicus data and information**
  - ★ **Distribution and/or access**
  - ★ **Risk management & managed transitions**
- ★ **Leverages on Copernicus 'critical mass' to facilitate offering other data alongside Copernicus – provides confidence in continuity and transparency**
  - ★ **Copernicus initial anchor customer**
- ★ **Supports implementation of public policies**
- ★ **Provide equitable access to Member States and Participating States**
  - ★ **Leveraging commercial services**

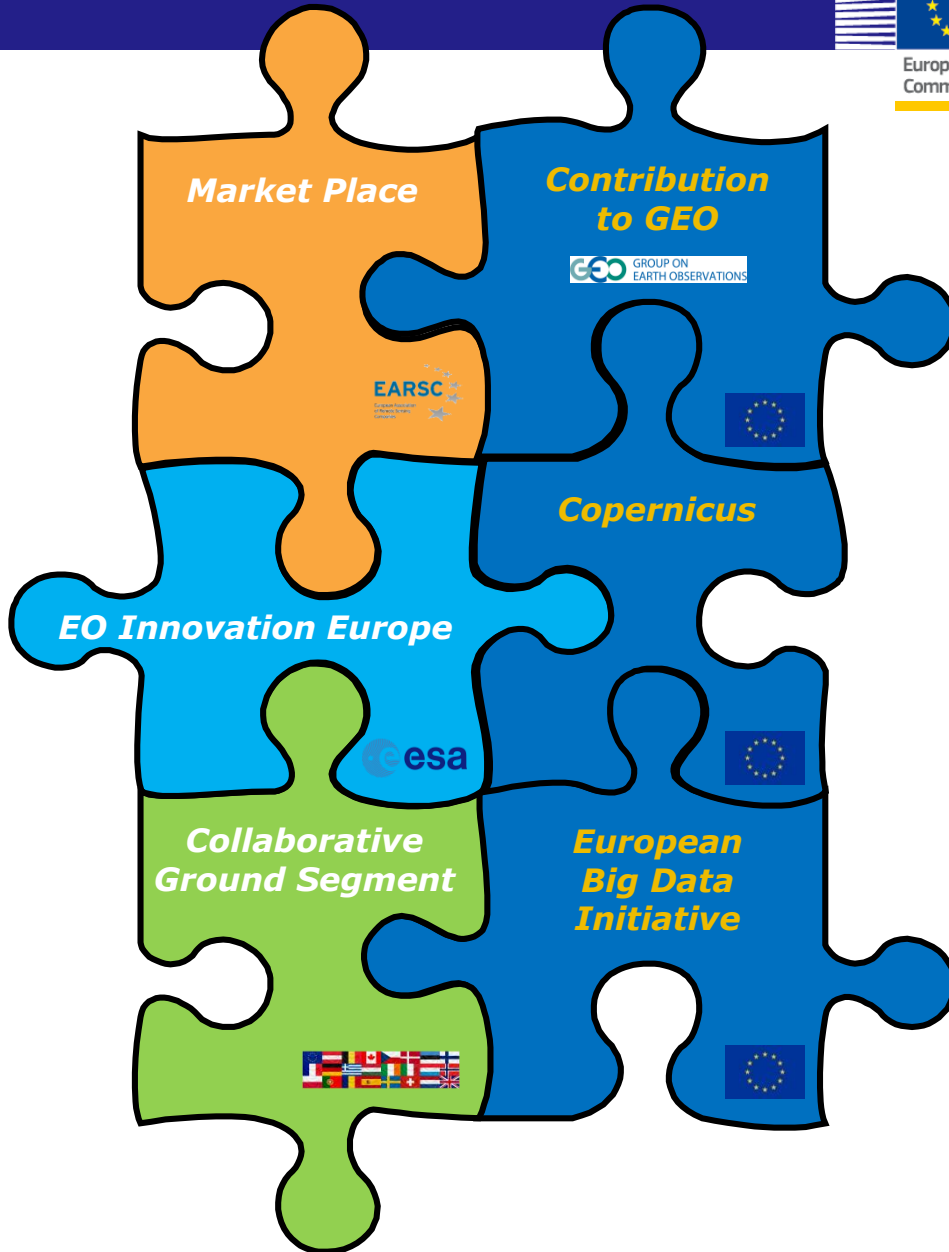




- ★ **Creating an enabling European eco-system for EO data**
- ★ **Support the emergence of EO market places and a thriving downstream sector**
  - ★ **Flexibility and financial incentives**
- ★ **Avoid unnecessary duplications**
  - ★ **'Mutualisation' of common needs**
- ★ **Allows other actors – including Member States – to focus on value-added aspects**



- ★ **Functional/operational specifications – define exact scope**
- ★ **Procurement specifications by implementing entities**
- ★ **Management & governance aspects for procurement and operational phases**
- ★ **Regulatory aspects and principles:**
  - ★ **Open to all**
  - ★ **Non-discriminatory**
  - ★ **Competitive**
  - ★ **...**
- ★ **Transition considerations for national collaborative initiatives**
- ★ **Coordination**



- ★ **The Copernicus data and information access initiative will build on and enrich other efforts within and outside the Commission.**
- ★ **We will step up our coordination effort to target alignment of objectives and mutual support amongst actors.**

## A formal partnership with the objective to ensure aligned programming and complementary funding

- **The Commission will primarily focus on:**
  - **Operational distribution & access to Copernicus data and information complemented by adequate computing resources.**
  - **Governance & regulatory matters**
  - **Developing user uptake, stimulus measures**
  - **Development of capacity through initiatives on EO, Digital Agenda & R&D (H2020)**
- **ESA will conduct R&D activities to support (future) operational activities primarily focusing on the development and prototyping of world-leading**
  - **EO data tool components**
  - **data analytics and community layers**
- **In addition, ESA will ensure that access to ESA and National/International EO data is fully integrated/interoperable with Copernicus and that Copernicus forms the core of the 'enabling element' in the EO Innovation Europe context**



- **Common objectives**
  - **Create an internationally competitive EO ecosystem & industry in Europe by building on Copernicus**
  - **Enabling broad scientific and commercial exploitation of EO data**
  - **Stimulating innovation with EO data and information**
  - **Maximising impact of European EO assets and preserving European independence**



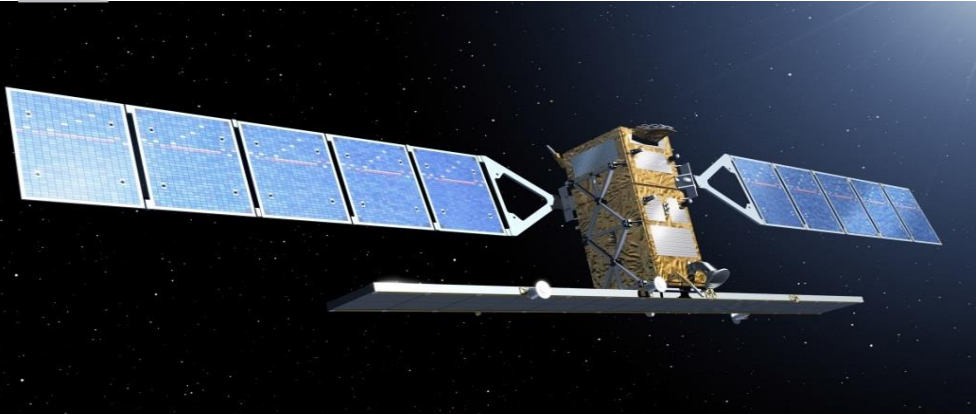
- ★ **JRC**
  - ★ **The Commission will call on JRC support for the technical oversight of the implementation phase**
- ★ **EUMETSAT (ECMWF & Mercator)**
  - ★ **Possible strategic partnership similar to the one with ESA**
  - ★ **Objective: programmatic alignment and complementarity of initiatives and funding**
- ★ **EE in charge of Copernicus services**
  - ★ **Put in place adequate arrangements to ensure availability of Copernicus service information via data & information access services**
- ★ **Other Commission services**
- ★ **European EO industry**



- ★ **17 June**
  - ★ **Update of the documentation as necessary to support Committee meeting on 1 July**
  - ★ **Workplan and arrangements for**
    - ★ **technical/operational specs**
    - ★ **Legal considerations**
    - ★ **....**
  - ★ **Confirmation of ESA & EUMETSAT roles**
- ★ **1 July**
  - ★ **Committee deliberations**
- ★ **As from July to October/November**
  - ★ **Finalisation of work plans and implementation**
- ★ **November**
  - ★ **Task Force meeting**



**Thank you for  
your  
attention!**



**Copernicus**  
16  
Europe's eyes on Earth

Space

Follow us on:

Copernicus EU

CopernicusEU

[www.copernicus.eu](http://www.copernicus.eu)