## Collaborative Ground Segment

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#### **Outlines**

Legal and programmatic framework

Evolution of the Collaborative Ground Segment





### **Legal Framework of Copernicus**

- Regulation (EU) No 377/2014 establishing the Copernicus Programme (budget 2014-2020: EUR 4.3 billion)
- Delegated Regulation 1159/2013 of 12 July 2013 on access to Data and Information



### **Objectives - Art.23 of the Regulation**

- (a) **promoting the use** and sharing of Copernicus data and Copernicus information;
- (b) strengthening European Earth observation markets, in particular the downstream sector, with a view to enabling growth and job creation;
- (c) contributing to the **sustainability and continuity** of the provision of Copernicus data and Copernicus information;
- (d) supporting the European research, technology and innovation communities.



### **International Dimension**

"The international dimension of Copernicus is of particular relevance in the exchange of data and information, as well as in access to observation infrastructure. Such exchange is more cost-efficient than data-buy schemes and strengthens the global dimension of Copernicus" (Copernicus Regulation Recital 19)

"The Commission shall manage, ..., relationships with third countries and international organisations, ensuring the coordination of Copernicus with activities at national, Union and international levels" (Copernicus Regulation Art. 9(2))



#### **Access to Data and Information**

- Copernicus is a publicly financed programme
- provides free, full and open access to data and information worldwide
- need to distinguish between data policy for
  - SENTINEL data (open),
  - Service information (open),
  - Contributing missions (data policy of the provider)
- Security restrictions may apply



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• Evolution of the Collaborative Ground Segment



# **Evolution of the Collaborative Ground Segment (1)**

 The Commission aims at consolidating and ensuring the sustainability of the Copernicus Programme Activities including the Core Ground Segment of the Space Component.

"Art.23 (c) contributing to the **sustainability and continuity** of the provision of Copernicus data and Copernicus information"

The EU is the owner of the Sentinels.



## Evolution of the Collaborative Ground Segment (2)

The Collaborative Ground Segment should

- contribute to the success of Copernicus,
- strengthen the European Earth observation markets, in particular the downstream sector,
- enable growth and job creation.

"Art.23 (a) **promoting the use** and sharing of Copernicus data and Copernicus information"

"Art.23 (b) strengthening **European Earth observation markets**, in particular the **downstream sector**, with a view to enabling growth and job creation"



## **Evolution of the Collaborative Ground Segment (3)**

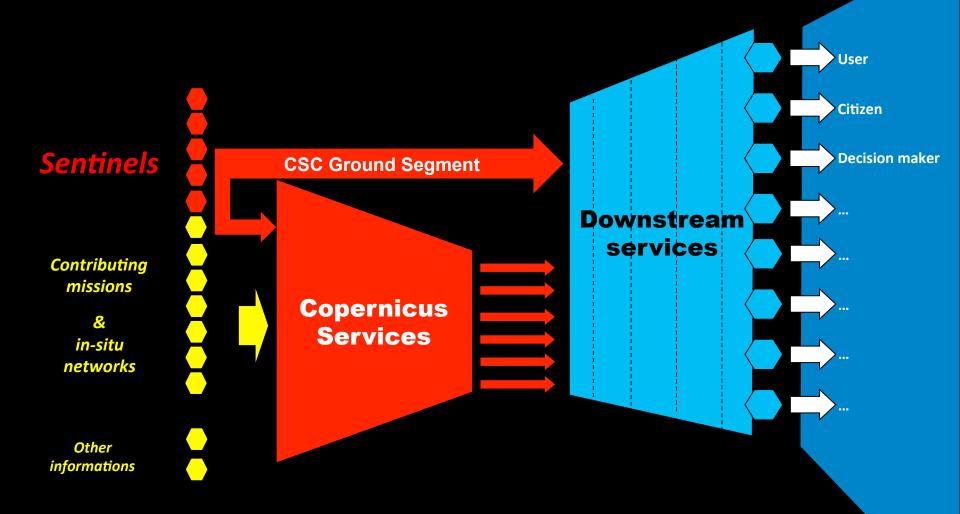
- Commission has overall responsibility for Copernicus, and leads the Governance of the programme, including the space activities and international relations. In this framework,
  - Existing initiatives will be respected,
  - National investments will be preserved,
  - Fair competition and a level playing field among potential competitors will be guaranteed.



## Evolution of the Collaborative Ground Segment (4)

- The Commission wants to encourage the coherence, complementarity, interoperability and cost-effectiveness of the CSC Ground Segment, national Collaborative Ground Segments, and Copernicus Services.
- Voluntary basis.

## An integrated value-added chain



Satellites' conception & Infrastructures

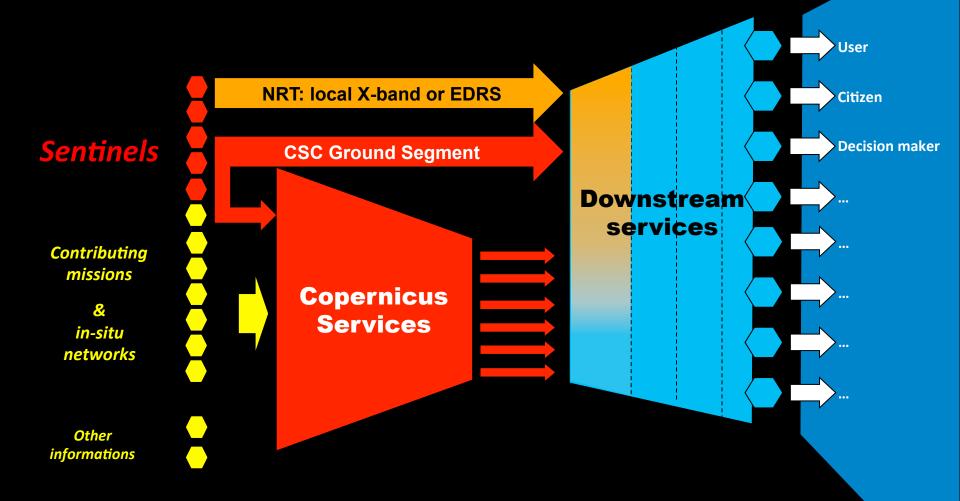
Operations & data processing

CalVal

Advanced processes & Core information

**Value added Products & Services** 

# An integrated value-added chain... ...with collaborative component



Satellites' conception & Infrastructures

Operations & data processing

CalVal

Advanced processes & Core information

**Value added Products & Services** 



### The Way Forward (1)

- New Task Force on Copernicus Ground Segment:
  - Established by Decision of Copernicus Programme Cttee.
  - TORs agreed on 27.05.2015 (*Doc. CC-2015-23*).
  - First Meeting tentatively planned for early July 2015, in the margins of Copernicus Cttee (BXL).



### **New Task Force - Mandate:**

- Provide strategic guidance and review progress of all activities pertaining to the Core and Collaborative GS;
- Give recommendations for approval or modification of activities as Copernicus components;
- Develop shared vision for the future Copernicus data access;
- Provide by end of 2015 roadmap with recommendations for Integrated GS.



### **New Task Force - Composition**

- COM
- ESA / EUMETSAT
- Interested Member States & participating countries
- Copernicus Service Operators
- [industry representatives, invited as observers]



### **New Task Force – short-term issues:**

- Interoperability Core Collaborative GS
- Incremental approach to fill gaps
- Transparency of MS iniatives
- Solutions for NRT processing (X-Band and EDRS)
- Delienation between GS and Downstream/Commercial activities
- Intl.relations: options & constraints for data dissemination to third countries



### **New Task Force – long-term issues:**

- Operational requirements of (post-2017) Integrated GS
- Scope, timeliness and quality of access to Sentinel Data
- Poss. incorporation of in-situ and additional E.O. data
- Integrated GS requirements: processing, storage, dissemination...
- Coordination & interoperability between Integrated GS MS' natl. initiatives
- Alignment with other 'Big Data' initiatives, incl. hosted / cloud processing etc.