



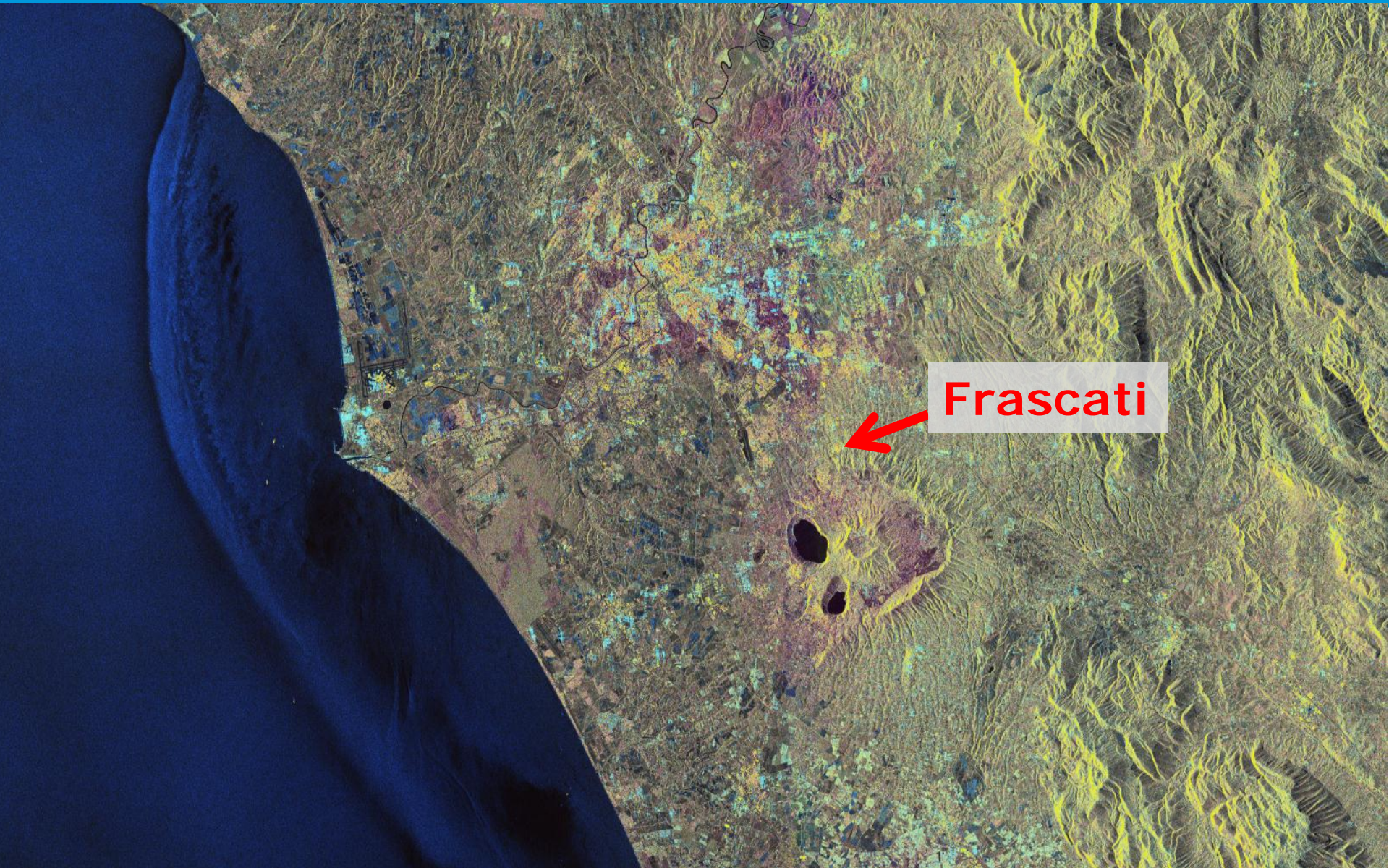
# **Copernicus Space Component Programme Status**

**FRINGE 2015 Workshop, ESRI N  
23 Mar 2015**

**S. Jutz, Head, ESA Copernicus Space Office**



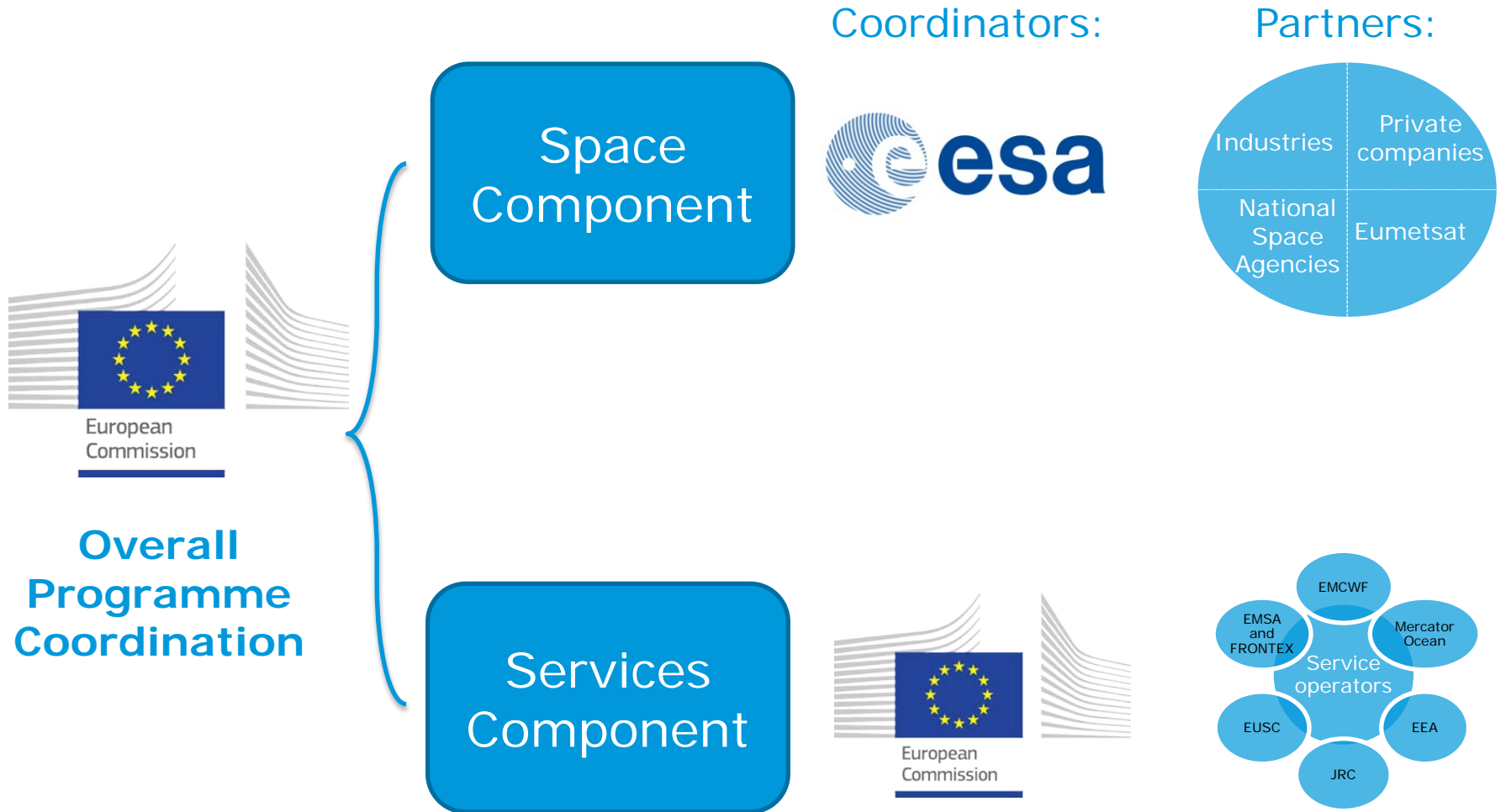
# Rome seen by Sentinel-1



**Frascati**



# Components & Competences



**In-situ data are supporting the Space and Services Components**

# Copernicus Key Milestones 2014



L 122/44

EN

Official Journal of the European Union

24.4.2014

REGULATION (EU) No 377/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

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✓ Reporting to the Commission

✓ Assets ownership transfer

(\*) Regulation (EU) No 911/2010 of the European Parliament and of the Council of 22 September 2010 on the European Earth monitoring programme (GMES) and its initial operations (2011 to 2013) (OJ L 276, 20.10.2010, p. 1).  
(\*) Council Regulation (EU, Euratom) No 1311/2013 of 2 December 2013 laying down the multiannual financial framework for the years 2014-2020 (OJ L 347, 20.12.2013, p. 884).

# Copernicus Space Component: the dedicated Sentinels ...



**S-1A/B:** Radar Mission

3 Apr 2014/early 2016



**S-2A/B:** High Resolution Optical Mission

June 2015/2016



**S-3A/B:** Medium Resolution Imaging and Altimetry Mission      end 2015/2017



**S-4A/B:** Geostationary Atmospheric Chemistry Mission

2021/2027



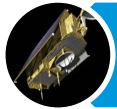
**S-5P:** Low Earth Orbit Atmospheric Chemistry Mission

2016



**S-5A/B/C:** Low Earth Orbit Atmospheric Chemistry Mission

2021/2027



**S-6A/B:** Altimetry Mission

2020/2025

# Sentinel-1 launched last year ...

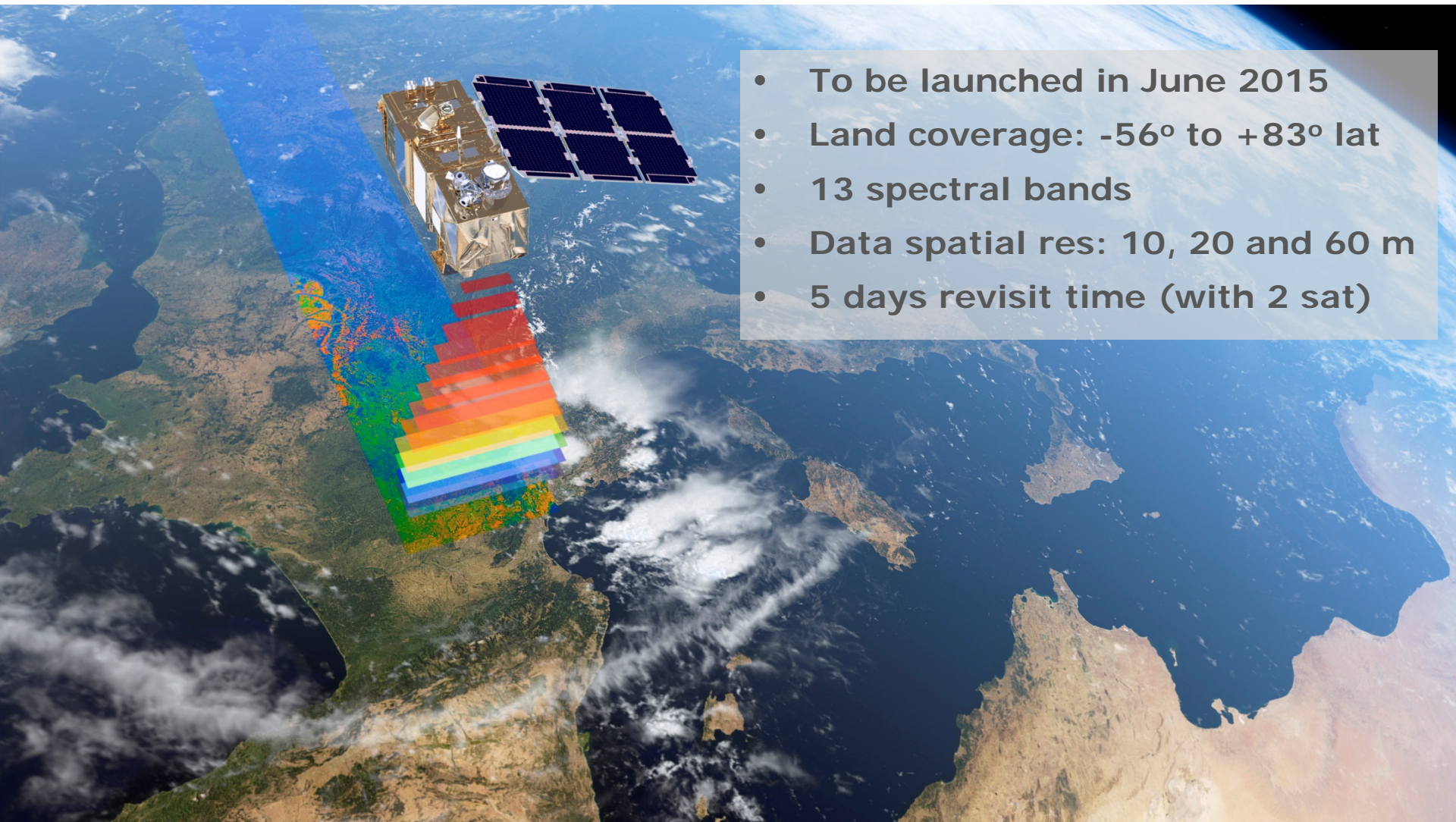


- 3 April 2014
- Kourou spaceport
- Soyuz-2 rocket
- New era of Earth observation





# ... and Sentinel-2 on its way



- To be launched in June 2015
- Land coverage:  $-56^{\circ}$  to  $+83^{\circ}$  lat
- 13 spectral bands
- Data spatial res: 10, 20 and 60 m
- 5 days revisit time (with 2 sat)

# ... with a long-term operational perspective

2011      2014                      2020                                      2030

## Access to Contributing Missions

S-1 A/B/C/D



S-1 2nd Generation



S-2 A/B/C/D



S-2 2nd Generation



S-3 A/B/C/D



S-3 2nd Generation



S-4 A/B (on MTG)



S-5 Precursor



S-5 A/B/C (on MetOp-SG)

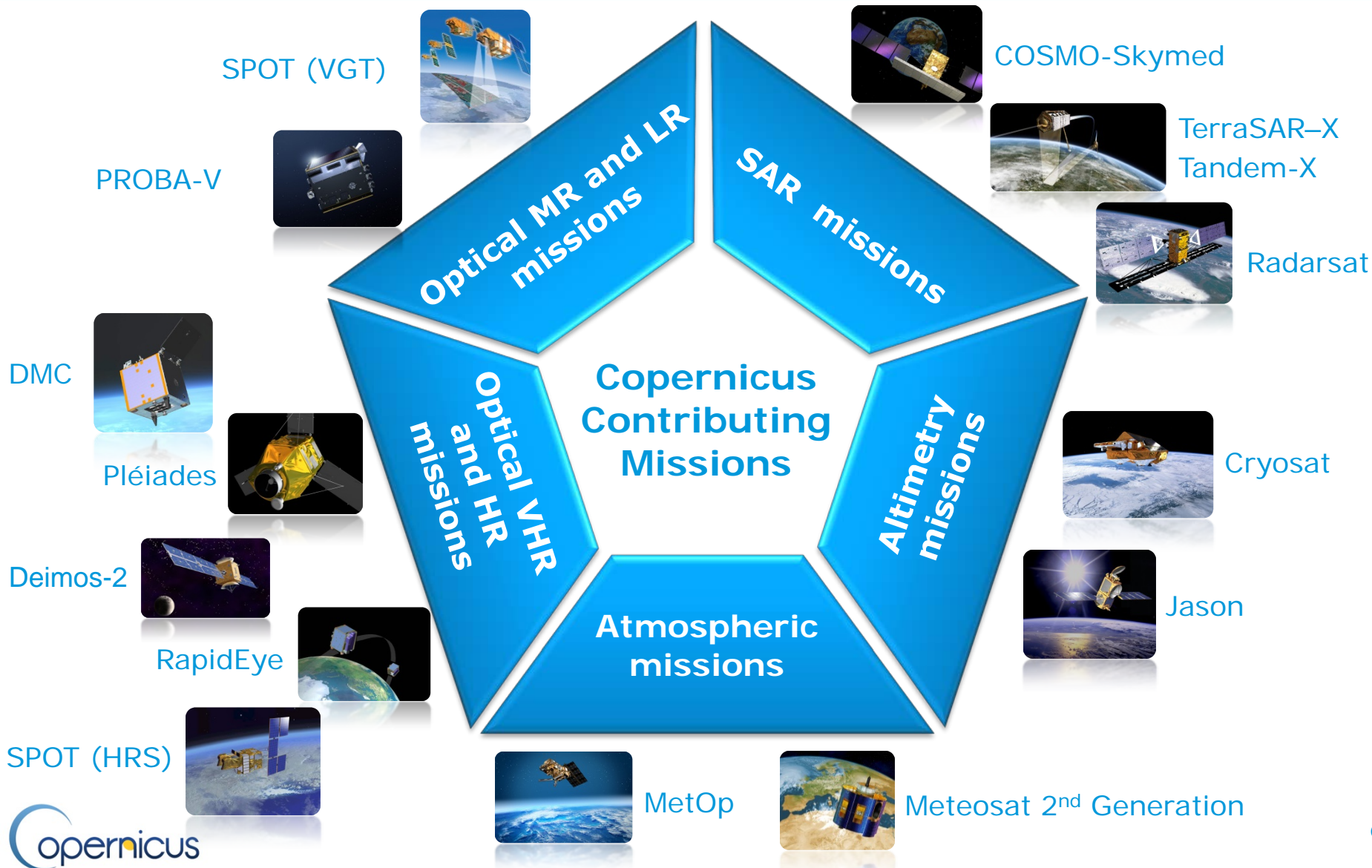


S-6 A/B

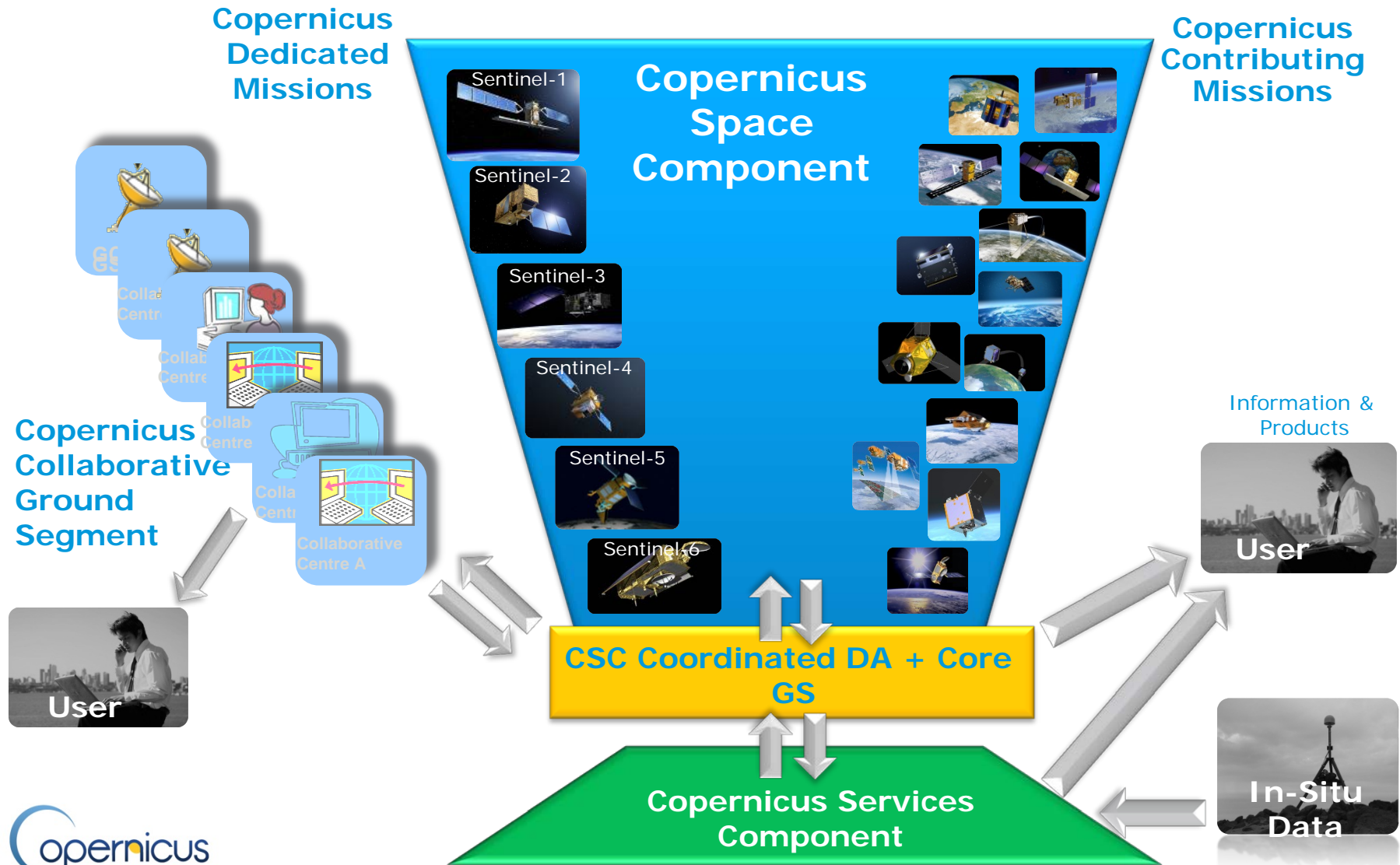




# Copernicus Contributing Missions



# Copernicus Space Component: the Ground Segment ...





# Sentinels Data Access



**Copernicus Space Component  
Data Access Portal**

***sentinel.esa.int***

**Copernicus  
Services  
Access**

**Scientific / Other  
Access Hub**

**Collaborative  
Access Hub**

**International  
Agreements  
Access Hub**

# EC Delegated Regulation on Data and Information Policy



It entered into force in December 2013 after several months of negotiation.

This Regulation is in line and reinforces the Sentinel Data Policy approved by ESA MSs in September 2013, which stipulates:

- ✓ **Open** access to Sentinel data by anybody and for any use
- ✓ **Free** of charge data licenses
- ✓ **Restrictions possible** due to technical limitations or security constraints.

Copernicus Contributing Missions data access will follow their owners data policies.



# Copernicus Space Component: current status and way forward



- Funding of GMES/Copernicus by ESA/EU ~8 B€ since 2006
- Third development segment under way (GSC-3) – ESA funding secured at last ESA Ministerial Council in Dec '14
- Sentinels-1, -2 and -3 operations and procurement of recurrent units C and D (First Generation) covered by current EU MFF
- Definition of Second Generation Sentinels to start in 2017, based on user requirements from the European Commission, with support from ESA
- Next launches: Sentinel 2A and 3A this year, full operational capacity with 2 units of each Sentinel 1,2,3 family in 2017

# Interested In More?

A diagram showing six Sentinel satellites (Sentinel-1, Sentinel-2, Sentinel-3, Sentinel-4, Sentinel-5p, and Sentinel-6) in a curved orbital path around Earth. Each satellite is labeled with its name in yellow text. The satellites are depicted as white line drawings with various solar panels and antennas.

**ESA Copernicus website**  
<http://www.esa.int/copernicus>

**EC Copernicus website**  
<http://copernicus.eu>