



# Data and Information Access Services (DIAS)

Functional requirements



Data  
Access

# Copernicus / EO data challenge

## Copernicus Data Context :

- Massive amounts of data
- Full, open and free-of-charge
- Ease of access and use



Over 10 Petabyte/year of new data with just Sentinels-1, -2 and -3 fully operational



## Technological Context :

- Different types of dissemination infrastructures across Europe
- Member States' Collaborative GS
- ICT and EO cross-fertilization
- Interoperability with non-EO datasets
- Growth and jobs in downstream sector

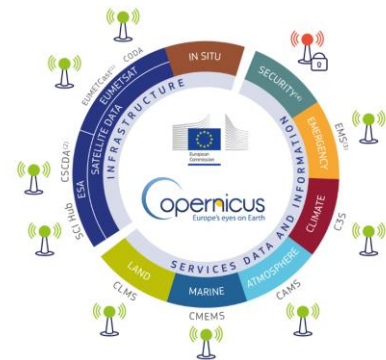


## Dual approach:

- Data available for **download only** → 10 access points

- ## 2. Setting up several **Data Access and Information Services (DIAS)**

- Access to all Copernicus data and information  
collocated with computing resources
- Allowing Big Data analytics.
- Allowing data fusion with non-EO data and information





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## DIAS: Actual Status

Several DIAS will be provided to the users in the first instance to foster the competition:

- **ESA** has selected 4 consortia to create 4 DIAS.
- **EUMETSAT** will also provide 1 DIAS

⇒ **5 platforms** with same goals and different approaches will ensure competition  
⇒ **Calendar**: Ramp-up phase at end of 2017 and availability in 2018

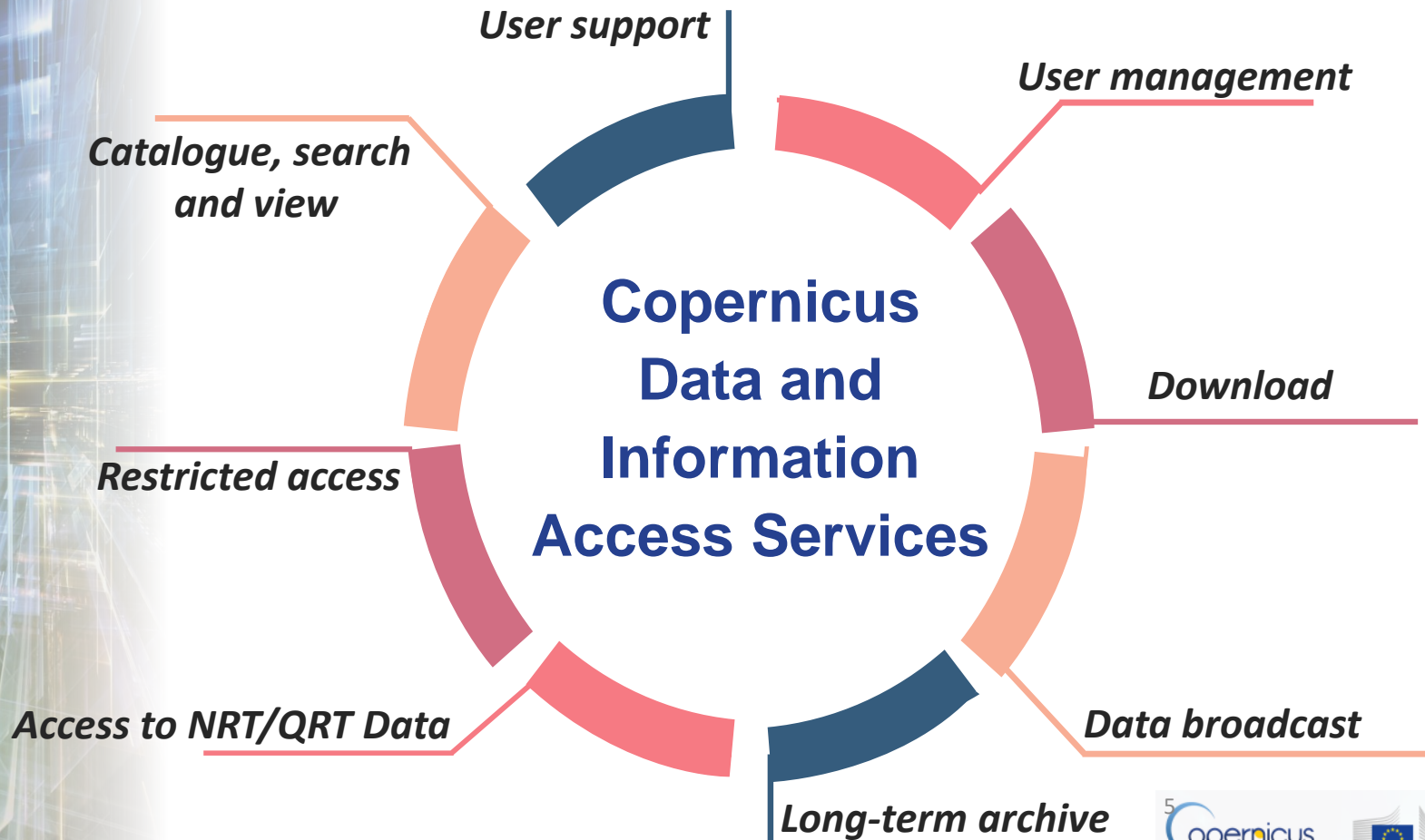






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# DIAS high level functionalities





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## DIAS: several users profiles



**DIAS provider:** Ensure availability of Sentinels data and Services information to accommodate third party services and data. Responsible for the provision of the DIAS underlying IT infrastructure and provider of IT resources to third parties.



**Third-parties:** Service providers who autonomously negotiate with DIAS provider(s) for infrastructure and services to be deployed in terms of storage, processing or service support for their own developments and operations.

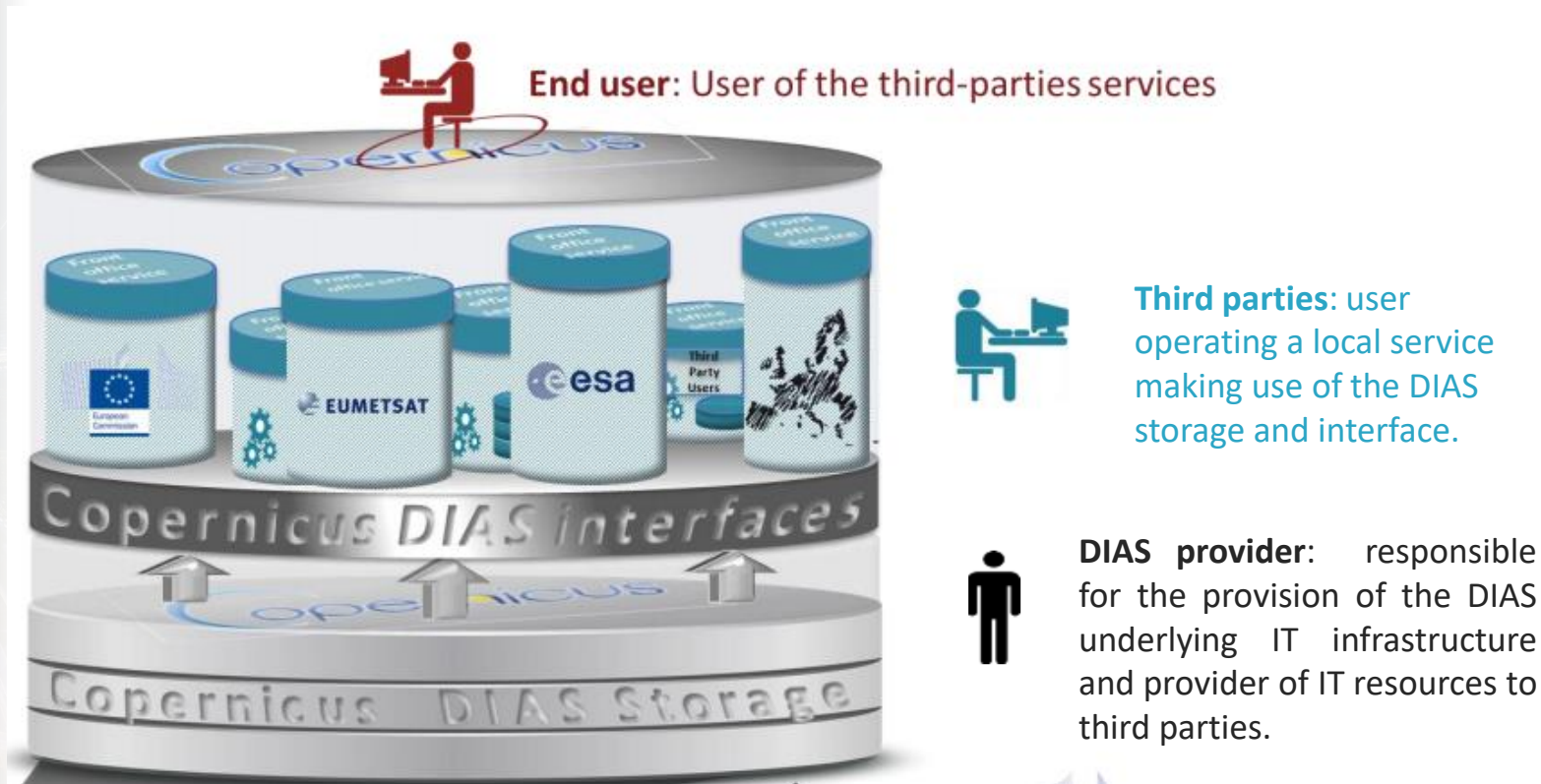


**End user:** Any user accessing a front-office service supported by the DIAS framework.



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# DIAS Overview





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# The ESA approach

## Outsourcing of 4 different industrial services (4 tenders selected):

- **DIAS Data Offer:**
  - Mandatory data collections (Sentinels and Copernicus Services Data and Information)
  - Any complementary data foreseen to be available through DIAS on Tenderer's initiative at any moment of the contract.
- **DIAS Commercial Offer:**
  - Clear cost scheme and conditions for the access to DIAS ICT resources (as for any cloud provider: storage, bandwidth, etc.)
  - Service Level Agreement proposed to DIAS users
- **Calendar:**
  - 2017: Phase-in
  - From 2018 : Services operations
  - All Copernicus data and information available after 1 year from phase in





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# The EUMETSAT Approach

