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marine.copernicus.eu

DIAS Copernicus

Eumetsat – ECMWF – Mercator Ocean

Alain Arnaud DIAS Program manager at Mercator Ocean

DIAS



Data and Information Access Services



Added value of the partnership among EUMETSAT, ECMWF and Mercator-Ocean

Successful experience of **proactive interactions with user communities** and of attracting new communities to data and information

Sound scientific and operational background in weather, climate, ocean and environment monitoring and forecasting

In-depth knowledge of data and information from **a variety of satellite missions and information services**, within and beyond Copernicus, and their user communities

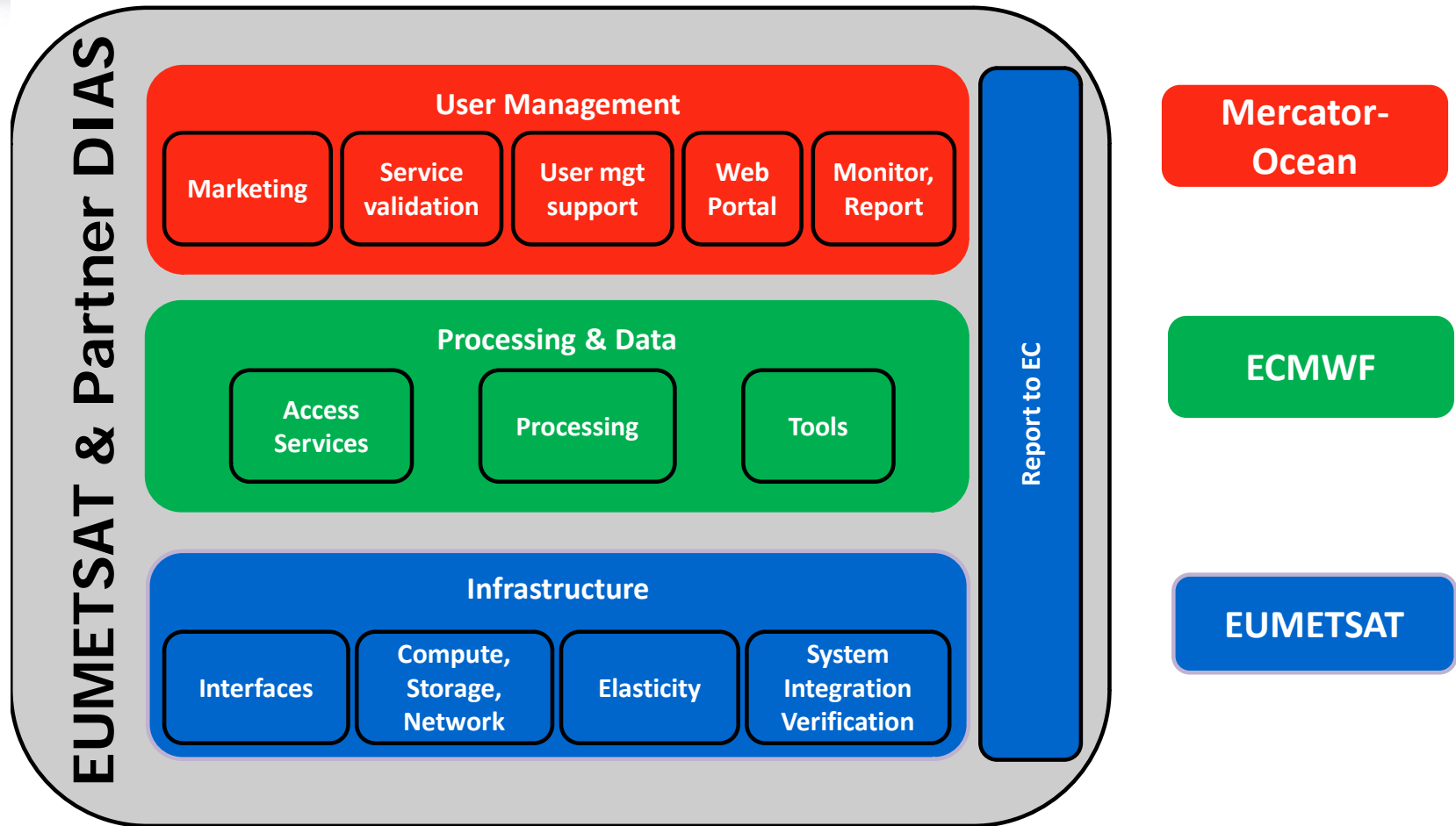
Strong background and experience in **large data management and processing**

24x7 operational services to end users

19/04/2018 Name of the event, Place



Added value of the partnership among EUMETSAT, ECMWF and Mercator-Ocean



The COPERNICUS DNA



The Copernicus approach for DIAS



Copernicus

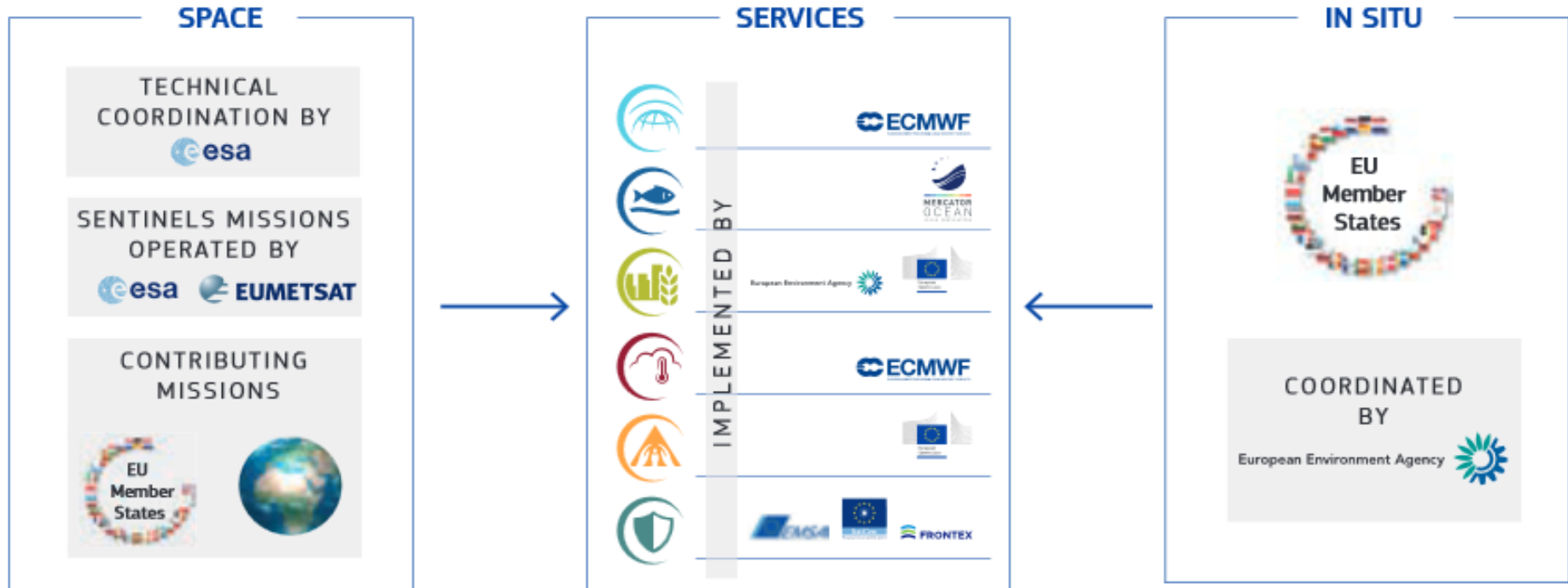
Principles at the heart of Copernicus

1. **User-driven** : local to EU institutions, downstream sector, education and Science. The assessment of needs is essential
2. **Copernicus is "Services"** : information more than data, accompanying measures like training and outreach, on-call support services
3. Copernicus is **full, free and open**
4. **Copernicus is based on an integrated infrastructure** including satellites, in-situ data, contributing missions and modelling capacities
5. **Copernicus is sustainable** with a fleet of satellites planned until 2030
6. **Copernicus is global** and creates cooperation opportunities

4



Copernicus components





Copernicus Services

Monitoring the State of the Earth System Environment ...



Copernicus Land Monitoring Service



Copernicus Marine Environment Monitoring Service



Copernicus Climate Change Service



Copernicus Atmosphere Monitoring Service



Copernicus Emergency Management Service
Mapping Component
Early Warning Component



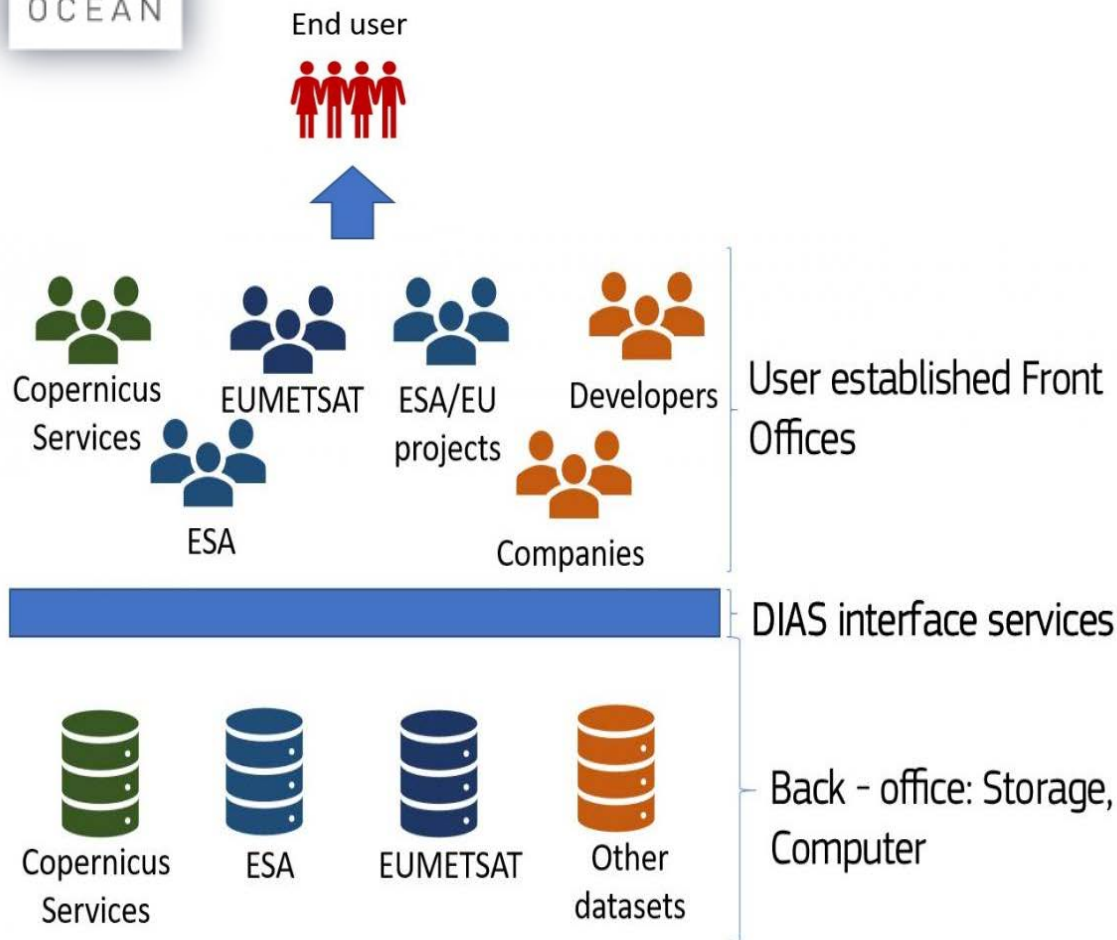
Copernicus Security Service

6 Services





What is a DIAS USER



Service Baseline

User front-office

Software as a service approach (SaaS)

Development/computing and storage resources

Platform as a Service approach (PaaS)

Access to ALL Sentinel data and Copernicus services

Data as a Service approach (DaaS) & Infrastructure as a Service approach (IaaS)



The User-driven approach basis

The Copernicus experience of the team members bring onboard more than 50.000 users (10.000 for MO, 20.000 for ECMWF)

It includes end-users, SMEs and Large Companies, Research institutes and Universities, Data producers, Programmers, H2020 projects and ESA projects, Others Copernicus Services, European and non European

They are organized in **communities with specifics needs**. The Copernicus services offer them data, information and accompanying measures like training, on call user support , outreach etc..

=> We want to maintain this user driven approach, based on interactions between users, data producers, data distributors in our DIAS



The User-driven approach:

1) Removing the barriers

The most important benefit for USERS will be **a unified access to all the Sentinel data and Copernicus services.**

This data access will allow the user to process information close to the data, in its own virtual environment.

This system will be fast, efficient and reliable.

⇒ **We will grant automatically access to the current users of EUMETSAT, ECMWF and MO without need of additional registration**

⇒ **Processing capabilities will be free for basic tool like data extraction/slicing or payable to the elastic cloud provider(s) for advanced computing and storage**



The User-driven approach:

2) User Support

Being given the access to a **very large portfolio of Copernicus services information and Sentinel data**, user may be facing quantities of question regarding data access, format, content or usage.

Dedicated User Support Functions will offer a **service desk**:

- To give answer all question regarding access to data
- With skilled contact points for each level (DIAS, DIAS components, IT...)
- Provision of documentation and other support information,
- Training activities,
- ...

In order to facilitate the sharing of large and diversified amounts of data and information within and beyond Copernicus



The User-driven approach:

3) Training support

DIAS Training Activities will be put in place in order to support each type of users typologies (front offices users, "simple" third parties, end users...):

- Invitation to DIAS Training sessions during events dedicated to users,
- Direct access to information through MOOC and Forum tools,
- Invitation to Copernicus Services training sessions (already existing),
- Training and informations to anticipate release of new products

Training activities will be tailored for each user communities (regional users communities, thematic users communities...) to share the most efficient and suitable level of information.



The User-driven approach:

4) Outreach activities

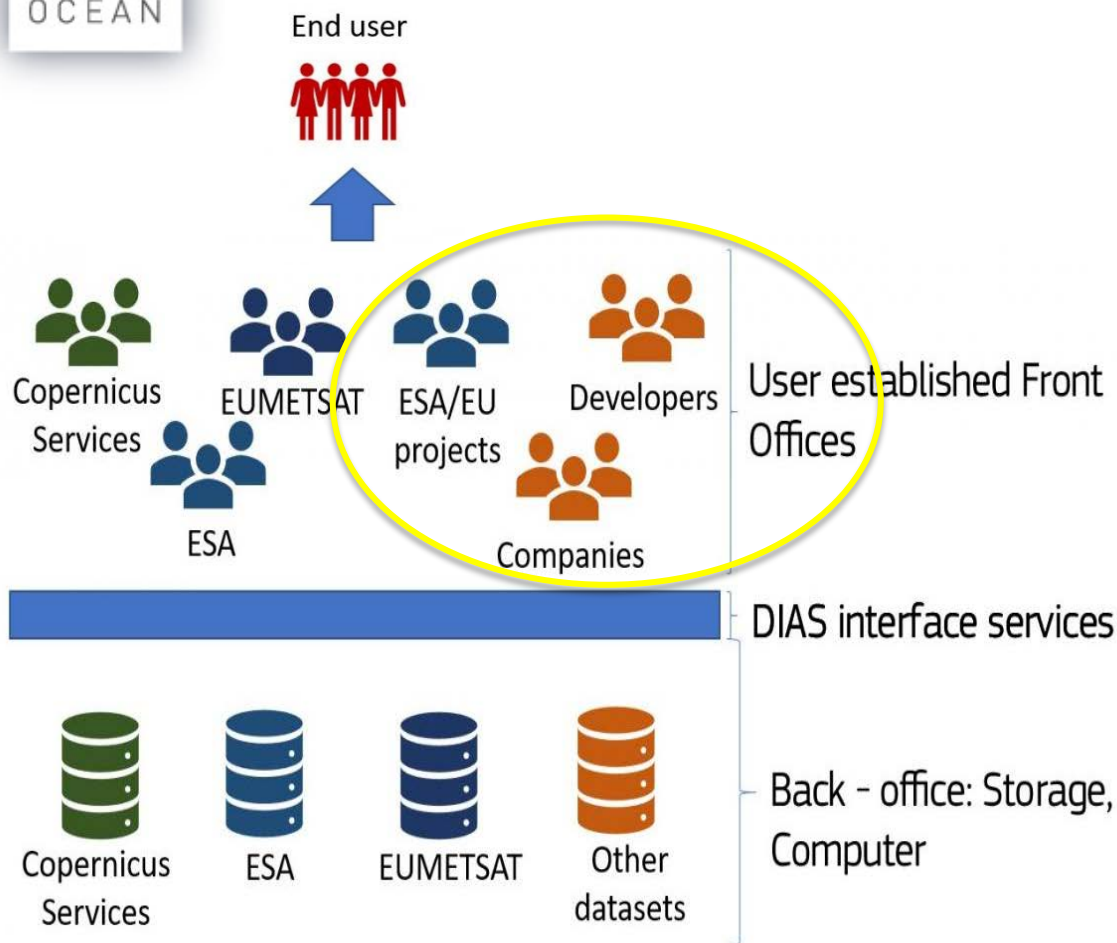
The implementation of user uptake and outreach will include:

- communication,
- market assessment,
- impact assessment,
- social uptake and
- management of partnerships

=> to give incentive for hosting communities, market places and incubators registered via the DIAS portal



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Third Parties: a key-asset to promote

Third party users will be primary actors of the DIAS overall approach :

- by completing the Copernicus Value Chain with Business Models addressing many end-uses;
- by developing downstream services of the DIAS and as economic players (bringing potential for jobs, turnover, business ...)
- by acting as Copernicus Distributors in their Member States and play a multiplier role for Copernicus;

Benefits : They will have to be promoted in the DIAS and should be promoted in each Copernicus Component's Portal.



Third Parties : Specific User support

We will provide a set special set of tools for this activity

It will be supported by:

- Specific training activities
- User support for developers

⇒ **Helping the migration toward DIAS for already established service**

⇒ **Propose a sustainable solution for the next years compatible with the devopment of EUM**

The Idea: The Shopping Mall



-  SERVIZI
-  RISTORAZIONE
-  ABBIGLIAMENTO E ACCESSORI
-  PREZIOSI E REGALISTICA
-  CASA E TEMPO LIBERO
-  CURA DELLA PERSONA

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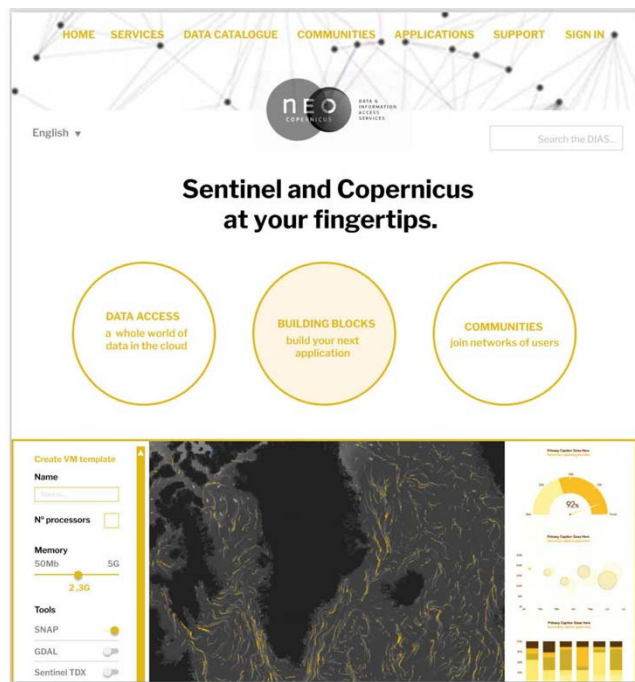


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New feature of DIAS Web Portal



Overview



Data Services:



- +EUM
- +qualified datasets
- +contributing missions

...

Cloud Services:



...

New feature of DIAS Web Portal



Onboarding

Focus on:

- User **uptake** → new visitors
- User **engagement** → application discovery & creation

Two key types of users:

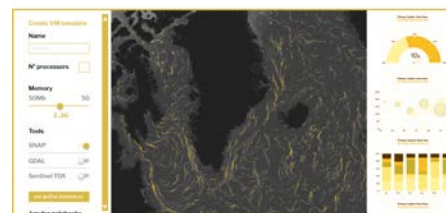
- End users
- Application owners

Key perceived values:

- Openness, test drive
- Ease of use, consistency
- Performance



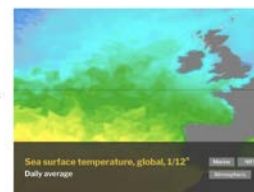
Sentinel and Copernicus at your fingertips.



A world of data: research and data visualization.

Fusce lacus nulla, venenatis a neque eget, hendrerit fringilla turpis. Vivamus vulputate, tortor eget felibus sagittis, tellus eros commodo nibh, vitae vulputate odio magna ut magna

Discover data =>



Build your next application

Vestibulum odio velit, ultrices nec egestas in, lobortis sed ante. Ut blandi eget felis in tristique. Sed sagittis tincidunt egestas

Building blocks | Case studies

Join like-minded users around the world

Discover communities >



Newsletter | Contact | System status | Privacy policy | Using DIAS data | Legal



New feature of DIAS Web Portal



Application browsing

Consume **DIAS** data, use DIAS services (VMs, Jupyter notebooks, toolboxes...) produce outputs (potentially on DIAS)

Highly **discoverable** (free-text search, filters, gateways, communities, site-wide search, featured content)

Research, incubator, marketplace, regional **gateways**

A screenshot of the DIAS Web Portal's Applications page. The page features a navigation bar with "HOME", "SERVICES", "DATA CATALOGUE", "COMMUNITIES", "APPLICATIONS", "SUPPORT", and "J.SMITH". Below the navigation bar is a search bar and a list of filters including "By area" (Global, Africa, America, Asia, Europe, Oceania, Arctic), "By tag" (Atmosphere, Marine, Coastal, Arctic), and "By maturity" (Research, Pilot, Commercial/operational). The main content area displays three application cards, each with a thumbnail image and a brief description. The first card shows a snowy landscape with the text "Donec nec vestibulum mauris". The second card shows a map of Europe with the text "Ut non aliquet urna". The third card shows a close-up of ice with the text "Nulla cursus magna eros". Each card includes tags, area, maturity, and links to the application's homepage or Jupyter interface.

New feature of DIAS Web Portal



Other functions

Community browsing:

- **Group** of applications that share certain characteristics
- Promote application discovery among **similar users**
- Highly **discoverable** (free-text search, gateways, site-wide search)

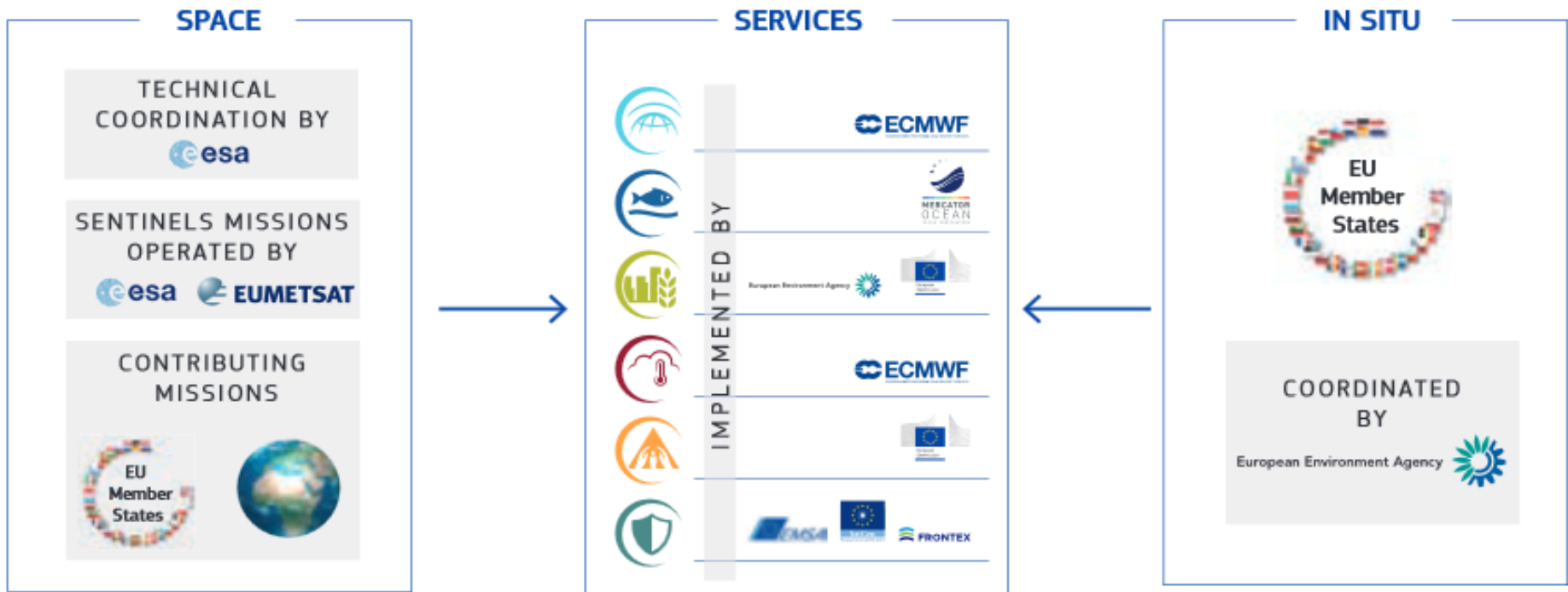
Site-wide search: data catalogue, communities, applications and support

A screenshot of the DIAS Web Portal interface. The top navigation bar includes links for HOME, SERVICES, DATA CATALOGUE, COMMUNITIES, APPLICATIONS, and SUPPORT. Below this is a secondary navigation bar with tabs for all, research, incubator, marketplace, regional, and favorites. The main content area is divided into several sections:

- Filters | Search:** A sidebar with a "By tag" section listing Atmosphere (5), Marine (3), Coastal (3), and Arctic (3).
- All communities:** A section showing "Showing 1-10 out of 12" results. It features two community cards: "Niger River" with 5 applications (tags: Regional, Hydro) and "Sorbonne University" with 12 applications (tag: Education).
- Found datasets:** A section showing "Showing 1-10 out of 43" results. It features a dataset card for "Sea surface temperature, global, 1/12°" with a color-coded map of the world. The card includes a description, tags (Marine, NRT), type (CEMS), area (Global), parameter (Sea surface temperature), and time coverage (Recent).



Copernicus Coastal Community and DIAS



Costal Community will be an examplar user of DIAS, setting up its own community in DIAS, using Sentinnetl Data and Copernicus services, promoting SMES and value added services in our Market place