



# Copernicus – Product Access Tool

Copernicus Final Users Workshop  
Brussels, January 12, 2017



**1**

**Context**

**2**

**Description of the tool**

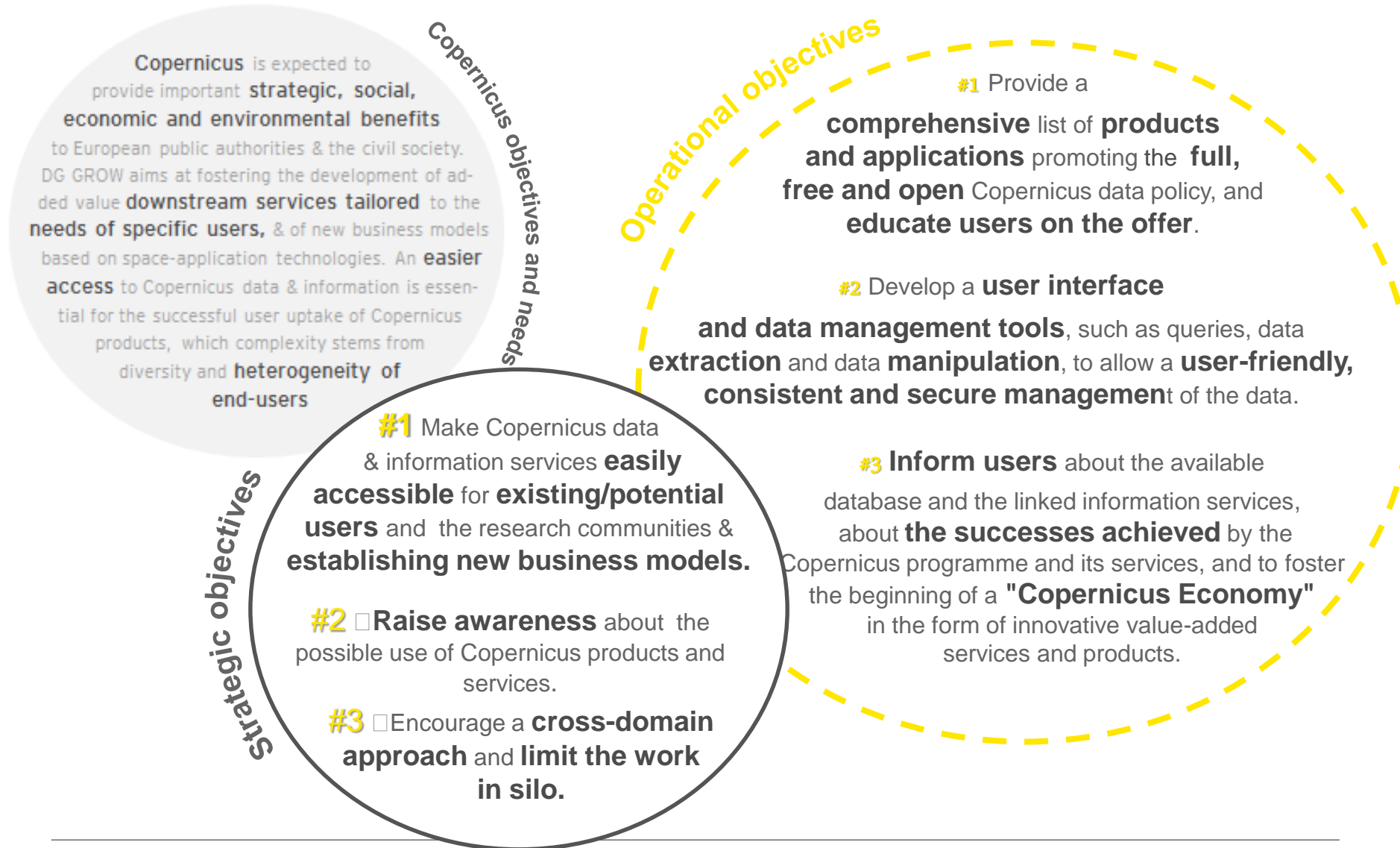
**3**

**Next Steps**



1

## Context



### No Super-Catalogue

- Considering the density, complexity and volatility of Copernicus products and services, as well as taxonomy heterogeneity existing between Copernicus domains, the EC agreed that no super-catalogue would be established.

### Interoperability and OGC Compliance

- Each Copernicus domain websites works according to its own configuration and settings which can generate interoperability issues. In this regard, the EC agreed to define OGC compliance as a reference for the tool to be delivered.

### Security Constraints

- The security domain must be treated separately due to security limitations and confidentiality

### Users Community

- At this stage, communication with Users Community goes through National Contact Point. Mid-term and long-term objectives consist in creating a wide-spread Copernicus community integrating all categories of users including private companies, NGO, public authorities, Member States ...

### Support INSPIRE regulation to facilitate data access



Organization of several calls with the Entrusted Entities\* :

- Frontex
- EMSA
- JRC
- Mercator
- ECMWF

Validation of the reshaped approach by the EC :

- Participation of the Copernicus final users for the presentation of the pilot

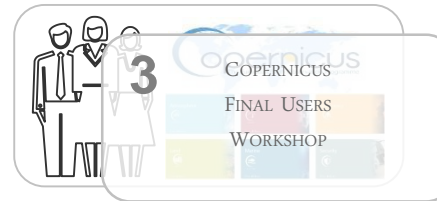
\* the call with EAC was reported due to a change in the approach



Validation of the revised format of the deliverables, integrating Entrusted Entities feedbacks, with the EC.

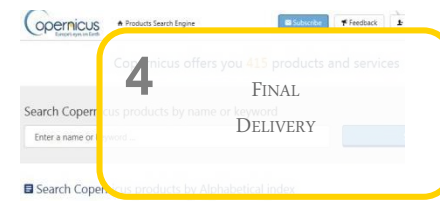
Consultation with Copernicus Domains policy officers (Land, Marine, Climate Change, Security, Atmosphere, Emergency) :

- Validation of the tool model and options application to each domain
- Definition of the data collection process



Presentation of the pilot to the Copernicus community, Copernicus programme officers, EE, MS, current and potential users :

- Presentation of the access modes
- Review of the support functionalities
- Demonstration of the pilot
- Discussion and integration of the Copernicus community feedbacks



Presentation on April, 17 and Users Forum April, 24.

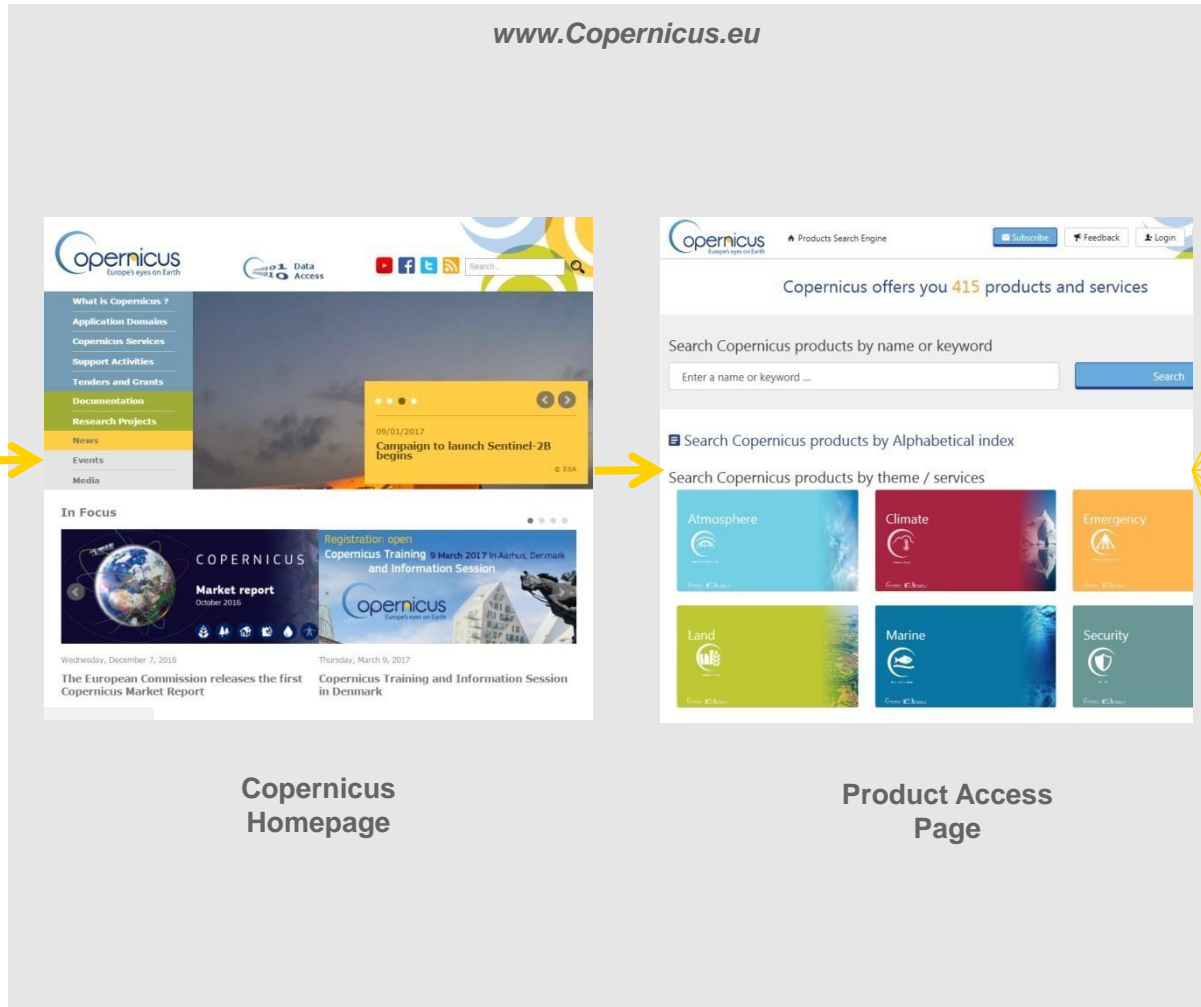
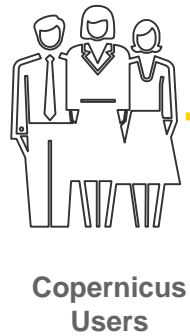




## 2 Description of the Tool



The tool operates like a navigator between the Copernicus website and Copernicus domains websites



www.Copernicusdomain.eu



### Copernicus Products Access

The tool provides 3 Copernicus access modes according to the user's level of maturity regarding Copernicus products:



Search by **name or keyword**, adapted to unfamiliar users

Search by **alphabetical index**, adapted to intermediate users



Search by **themes/services** adapted to experimented users



### Support Functionalities

The tool provides 4 support functionalities to facilitate the Copernicus website management:



**Communication/Marketing** : allows a top-down communication & the information of the Copernicus community on Copernicus news & activity



**Feedback** : allows a bottom-up communication based on users feedbacks and requests



**Reporting** : allows generating customized dashboards integrating statistics on users activity and searches

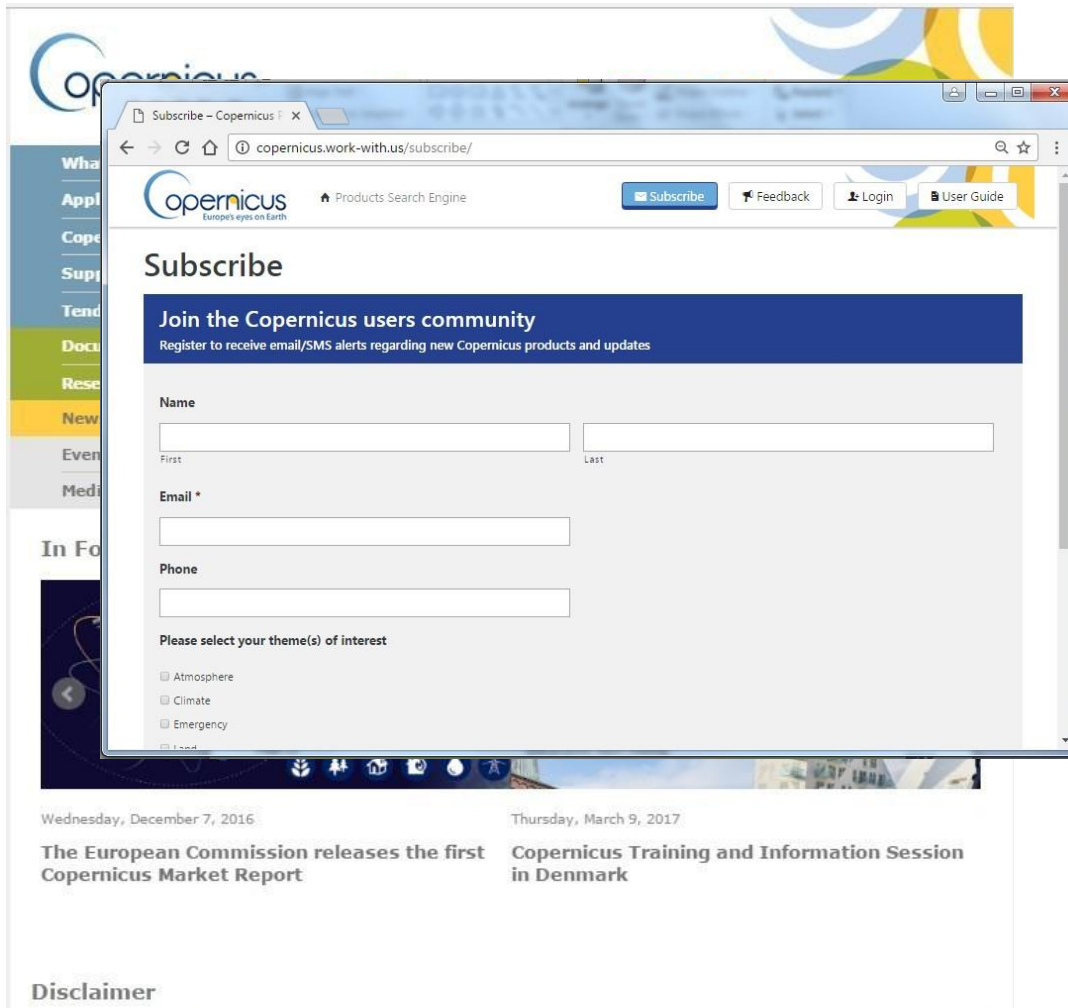


**Training** : allows the training of the Copernicus community thanks to an online User Guide

Copernicus Product Access

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





When clicking on the “Product Access” page, the user will be asked either to login with its Copernicus Personal Account or subscribe to be registered as a member of the Copernicus users community and receive Copernicus news and updates.

When subscribing, the user can select specific theme(s)/services of interest as well as notifications modes : email and/or sms.

## 2 Description of the tool – Product Access Page



Copernicus offers you 415 products and services

Search Copernicus products by name or keyword

Search Copernicus products by Alphabetical index

Search Copernicus products by theme / services



From the “**Product Access Page**”, the user can easily have access to the full list of Copernicus products by clicking on the following insert :

Copernicus offers you 415 products and services

This provides a direct access to the Alphabetical Index page, where the comprehensive list of Copernicus products is displayed under the **ALL** item with user-friendly downloading and printing options available.

[Print](#) [Download](#)



### Alphabetical Index

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | ALL [Print](#) [Download](#)

| A - 34 products  | G - 110 products  |
|--|---|
| Aerosol direct forcing based on global reanalysis <a href="#">Atmosphere</a>   | Global 10-daily Dry Matter Productivity (10° Tiles) <a href="#">Land</a>  |
| Aerosol indirect forcing based on global reanalysis <a href="#">Atmosphere</a>   | Global 10-daily Dry Matter Productivity (continents) <a href="#">Land</a>   |
| Antarctic Ocean – Sea Ice Edge from SAR <a href="#">Marine</a>   | Global 10-daily SPOT-VEGETATION Bi-hemispherical Albedo(10° Tiles) <a href="#">Land</a>                                   |
| Arctic Chlorophyll Concentration from Satellite observations (daily average) Reprocessed L3 (ESA-CCI) <a href="#">Marine</a>                     | Global 10-daily SPOT-VEGETATION Bi-hemispherical Albedo(continents) <a href="#">Land</a>                                  |
| Arctic Chlorophyll Concentration from Satellite observations (daily average) Reprocessed L3 (ESA-CCI): monthly and 8-days <a href="#">Marine</a> | Global 10-daily SPOT-VEGETATION Directional Albedo (10° Tiles) <a href="#">Land</a>                                       |
| Arctic Ocean – SAR Sea Ice Berg Concentration <a href="#">Marine</a>   | Global 10-daily SPOT-VEGETATION Directional Albedo (continents) <a href="#">Land</a>                                      |
| Arctic Ocean – Sea and Ice Surface Temperature <a href="#">Marine</a>  | Global 10-daily SPOT-VEGETATION Fraction of Absorbed Photosynthetically Active Radiation (10° Tiles) <a href="#">Land</a> |
| Arctic Ocean – Sea Ice Concentration Charts – Svalbard <a href="#">Marine</a>  |   |

Copernicus offers you **415** products and services

Search Copernicus products by name or keyword

ocean | Search

On the “Product Access” homepage :

Type a word/series of words related to your request.

Results found: **127**  
Print Download

Global Ocean- Delayed Mode in-situ observations of ocean surface currents **Marine**

"Short description:"

For the Global Ocean - In-situ observation yearly delivery in delayed mode of Ocean surface currents.

"Detailed description:"

The In Situ delayed mode product designed for reanalysis purposes integrates the best available version of in situ data for Ocean surface currents. The data are collected from the Surface Drifter Data Assembly Centre (SD-DAC at NOAA AOML) completed by European data provided by EUROGOOS regional...

Read more

Arctic Ocean, Ocean Optics Products (daily average) Reprocessed L3 (ESA-CCI) **Marine**

"Short description:"

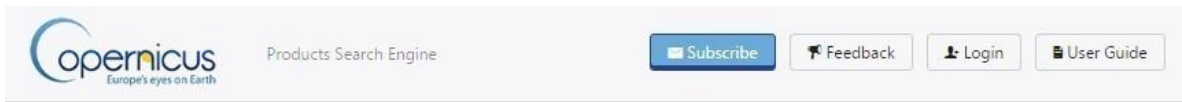
On the “Results Found” page :

A list of the Copernicus products and services containing the word/series of words entered in their name or defined as keywords in their description on the Copernicus domain website is displayed. The corresponding domain follows the name of the product.

Such list can be easily downloaded or printed



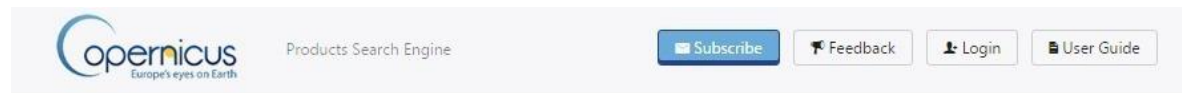




Search Copernicus products by Alphabetical index

On the “Product Access homepage” :

Select the Search by Alphabetical index option



## Alphabetical Index

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | ALL | Print | Download

**A - 34 products**

- Aerosol direct forcing based on global reanalysis Atmosphere
- Aerosol indirect forcing based on global reanalysis Atmosphere
- Antarctic Ocean – Sea Ice Edge from SAR Marine
- Arctic Chlorophyll Concentration from Satellite observations (daily average) Reprocessed L3 (ESA-CCI) Marine
- Arctic Chlorophyll Concentration from Satellite observations (daily average) Reprocessed L3 (ESA-CCI): monthly and 8-days Marine
- Arctic Ocean – SAR Sea Ice Berg Concentration Marine
- Arctic Ocean – Sea and Ice Surface Temperature Marine
- Arctic Ocean – Sea Ice Concentration Charts – Svalbard Marine
- Arctic Ocean – Sea Ice Charts – Greenland Marine
- ARCTIC OCEAN ALONG-TRACK SEA LEVEL ANOMALIES NRT Marine
- Arctic Ocean Biogeochemistry Analysis and Forecast Marine
- Arctic Ocean Biogeochemistry Reanalysis (2007-2010) Marine

**F - 3 products**

- Flux inversion reanalysis fluxes of global nitrous oxide – Fluxes and atmospheric concentrations Atmosphere
- Flux inversion reanalysis of global carbon dioxide – Fluxes and atmospheric concentrations Atmosphere
- Flux inversion reanalysis of global methane – Fluxes and atmospheric concentrations Atmosphere

**G - 110 products**

- Global 10-daily Dry Matter Productivity (10° Tiles) Land
- Global 10-daily Dry Matter Productivity (continents) Land
- Global 10-daily SPOT-VEGETATION Bi-hemispherical Albedo(10° Tiles) Land
- Global 10-daily SPOT-VEGETATION Bi-hemispherical Albedo(continents) Land

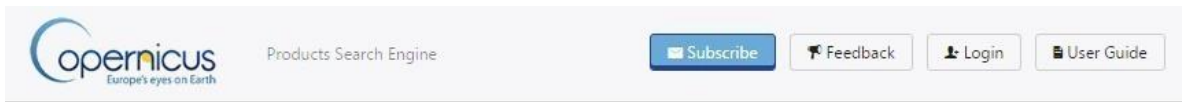
On the “Results Found” page :

A list of the Copernicus products and services sorted alphabetically is displayed.

The user can have access to the full list of Copernicus products and services selecting **ALL** or only those starting with a given letter by clicking on it.

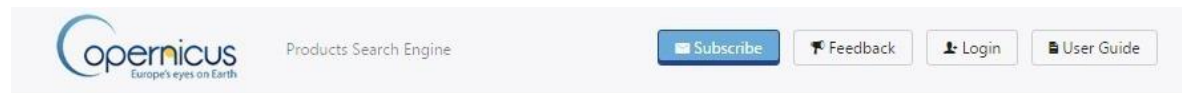
In both cases, the user can download and print the corresponding list.

Print Download



On the “Product Access homepage” :

Select the Search by Alphabetical index option



On the “Results Found” page :

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**A - 34 products**

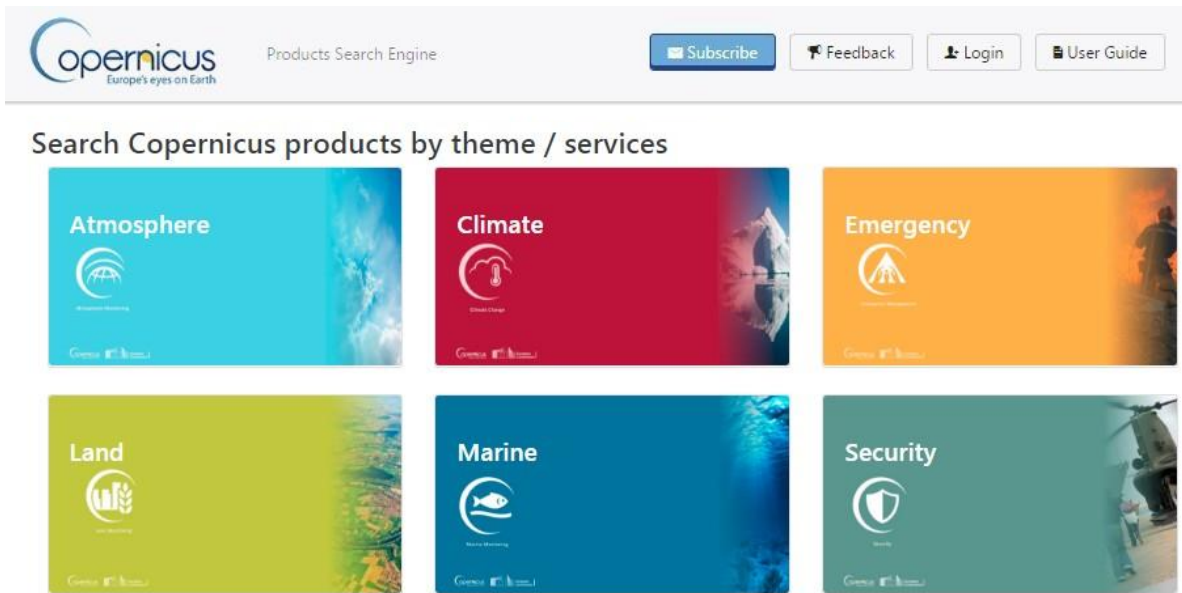
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**F - 3 products**

- Flux inversion reanalysis fluxes of global nitrous oxide – Fluxes and atmospheric concentrations Atmosphere
- Flux inversion reanalysis of global carbon dioxide – Fluxes and atmospheric concentrations Atmosphere
- Flux inversion reanalysis of global methane – Fluxes and atmospheric concentrations Atmosphere

**G - 110 products**

- Global 10-daily Dry Matter Productivity (10° Tiles) Land
- Global 10-daily Dry Matter Productivity (continents) Land
- Global 10-daily SPOT-VEGETATION Bi-hemispherical Albedo(10° Tiles) Land
- Global 10-daily SPOT-VEGETATION Bi-hemispherical Albedo(continents) Land



The screenshot shows the Copernicus Products Search Engine interface. At the top left is the Copernicus logo with the tagline "Europe's eyes on Earth" and the text "Products Search Engine". To the right are four buttons: "Subscribe", "Feedback", "Login", and "User Guide". Below the header is the heading "Search Copernicus products by theme / services". There are six colored tiles representing different themes: Atmosphere (blue), Climate (red), Emergency (orange), Land (green), Marine (dark blue), and Security (teal). Each tile features a white icon and the Copernicus logo at the bottom left.

On the “Product Access homepage” :

Select the Theme/Services to be directed to the corresponding Copernicus domain websites



**Communication / Marketing :**

- This functionality will allow a timely dissemination of Copernicus news and updates through a panel of communication tools including :
  - ✓ Emailing (on a regular or punctual basis)
  - ✓ SMS Alerts
  - ✓ Notifications on the Product Access Page
  - ✓ Smartphone application
- It will enable a top-down communication from the Copernicus officers and Entrusted Entities to targeted Copernicus users, according to their specific interest and needs



## Feedback and questions

### Send your feedback or questions

We would like to hear from you

Name



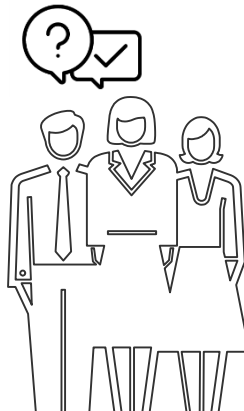
First

Last

Email \*

Query \*

Submit

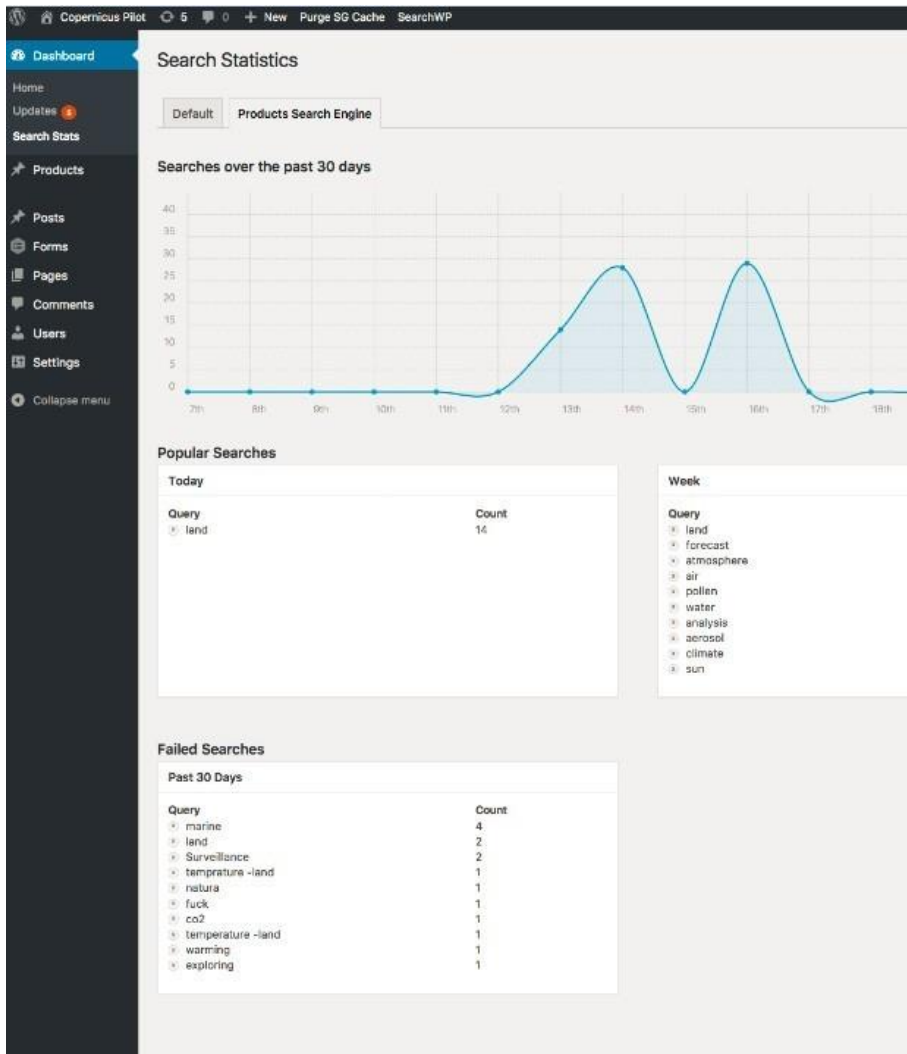


### Feedback :

- This functionality will allow users to share their feedback, query or request for clarification on Copernicus products and activity thanks to a user-friendly form available from the “Product Access” homepage
- This functionality will allow a bottom-up communication from the Copernicus users community to Copernicus officers and Entrusted Entities
- Such support will be ensured through the Copernicus Support Office

### Best practices and Lessons learnt:

Feedback and analytics functionalities will provide a solid basis for best practices analysis and lessons learnt to be mutualized in other domains.



### Reporting:

- This functionality will allow designing customized dashboards for reporting purposes, based on the key indicators and the reporting frequency defined by the Commission.
- Such indicators may comprise :
  - ✓ Number of searches per theme/services
  - ✓ Number of new accounts created
  - ✓ Number of active users
  - ✓ Number of failed searches per theme
- Such analytics will provide (by push or pull) the Commission and Entrusted Entities a clear view of Copernicus website traffic as well as users' expectations, in both quantitative and qualitative aspects.

## Product Search Results for: delta

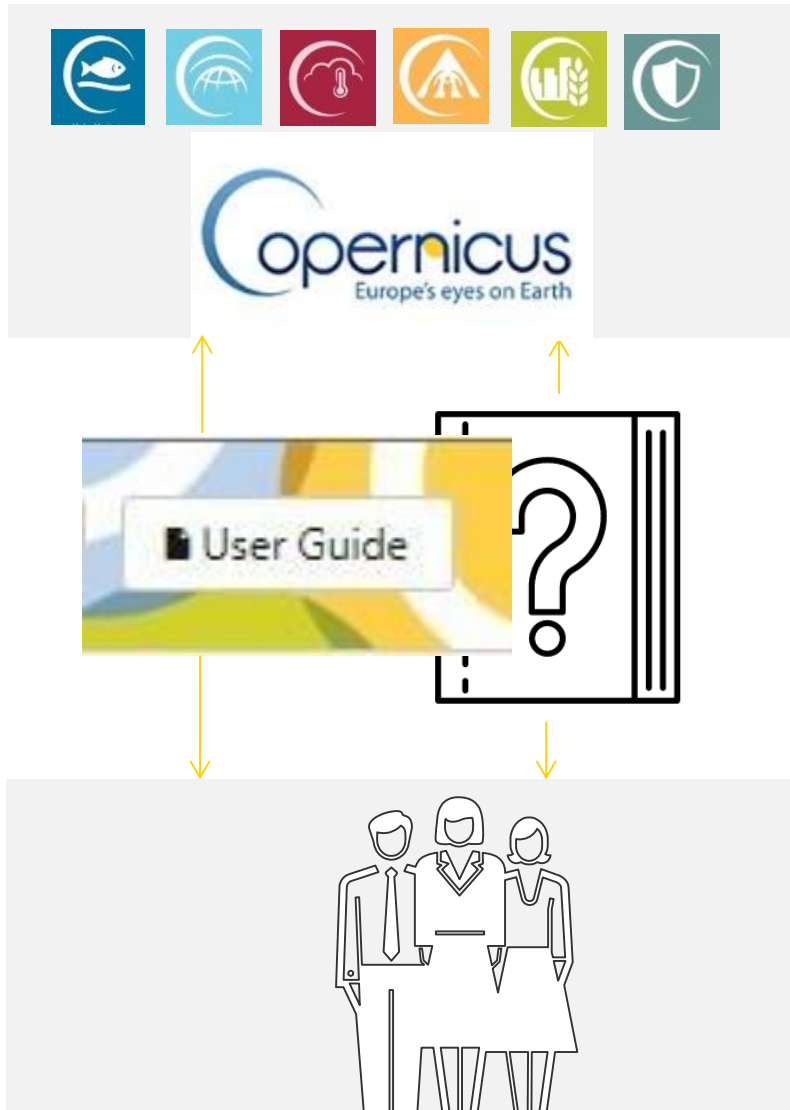
Sorry, but nothing matched your search terms. Please try again with some different keywords.

### Unsatisfied requests :

- Unsatisfied requests can stem from :
  - × Inappropriate queries (example : bed)
  - × No corresponding product
  - × Missing words in the product description, preventing the navigator to establish a link
- Thanks to the statistics module, the Commission and Entrusted Entities will be able to quantify and qualify the “unsatisfied requests” and accordingly define further actions.

### Best practices and Lessons learnt:

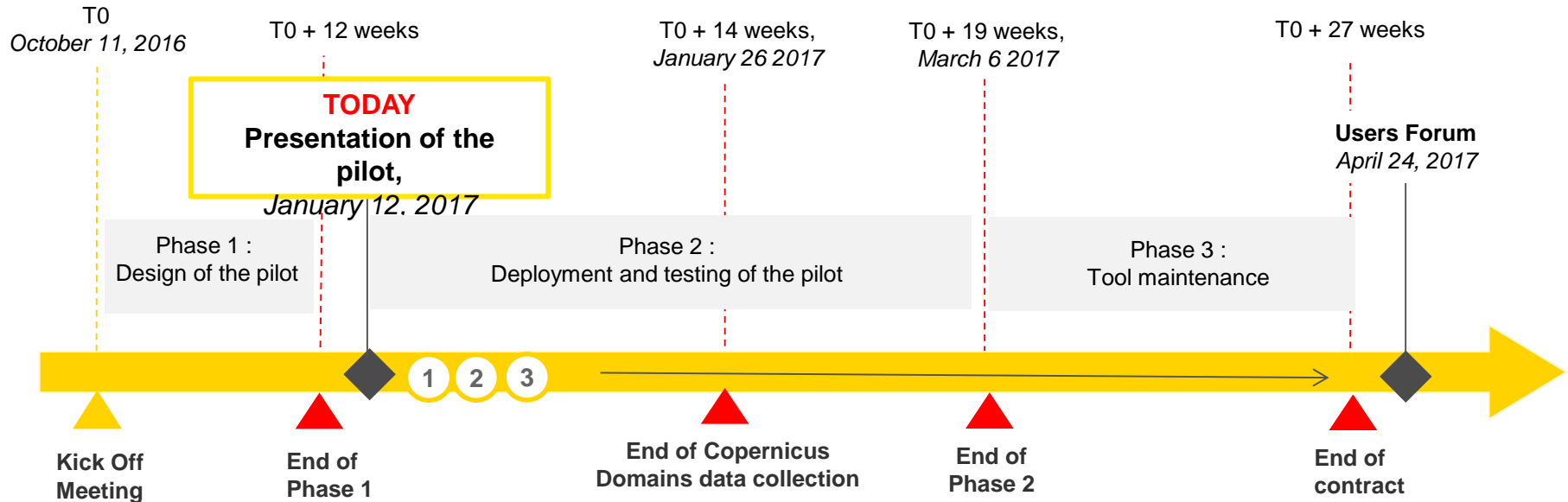
Feedback and analytics functionalities will provide a solid basis for best practices analysis and lessons learnt to be mutualized in other domains.

**Training:**

- The Product Access homepage will offer access to an online User Guide providing easy learning to both Copernicus internal community and external users



## 3 Next Steps

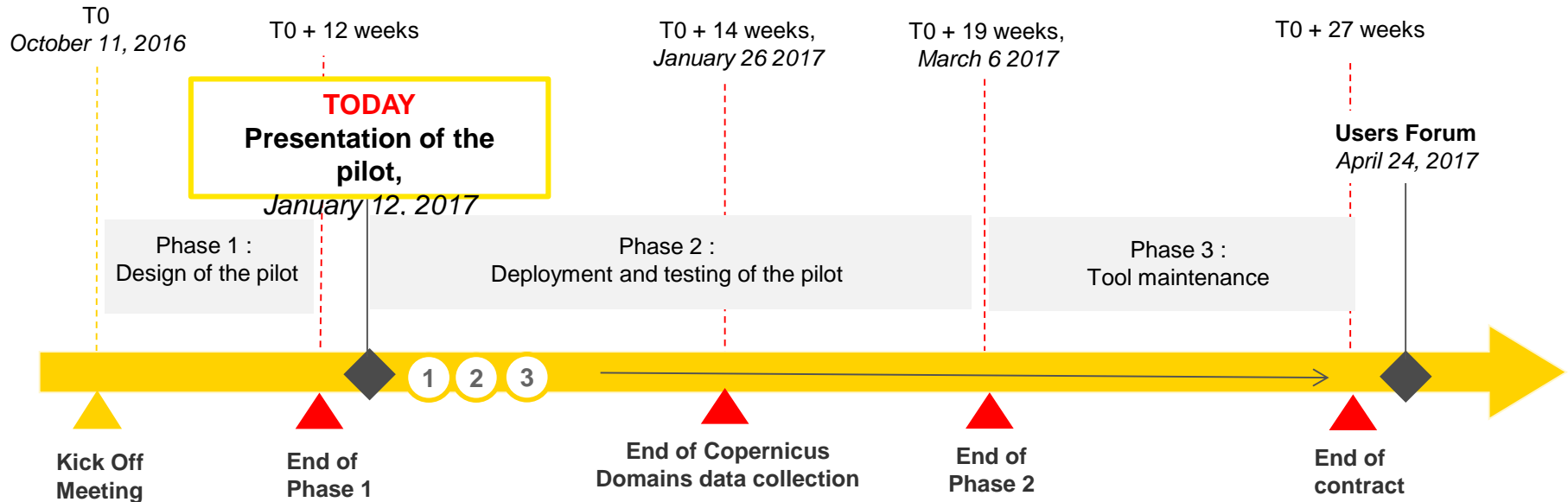


#### 1 / Application to all the Copernicus Domains

The pilot tool demonstration is based on data collected from Land, Marine and Atmosphere Copernicus domains. During the 2<sup>nd</sup> phase, the tool will have to be populated with remaining Copernicus domains data and completed with other domains Security, Emergency and Climate Change data.

#### 2 / Integration, activation and testing of the full set of functionalities

The Phase 2 and Phase 3 will allow implementing and fine tuning the full set of functionalities, fixing bugs and potential inconsistencies detected as well as integrating Copernicus community feedbacks and remarks. During this period, the Commission and Entrusted Entities will have access to the tool and will be able to provide feedbacks, comments or suggestions to be included in the final version of the tool.



### 3 / Review and adjustment of Copernicus Products and Services description for optimal results from the “Search by name or keyword” search option

- The “Search by name or keyword” outputs result from the correct matching between the words composing a user request and the words appearing in a product (i) name (ii) description (iii) associated keywords.
- To enrich and optimize the searching results, Entrusted Entities can complete and feed their Copernicus products description. Each added word will automatically be linked with the Product Access tool.



