



## The DIAS: User-friendly Access to Copernicus Data and Information



# DATA AND INFORMATION ACCESS SERVICES

Twenty years ago, in the early days of the Copernicus programme, there was no telling of the technological advances that would come. Space data was used only by government organisations and experts or scientists, satellite imagery was stored not in the relatively recently developed cloud, but physically, on magnetic tapes.

The technological evolution, especially in terms of availability and accessibility, has made Copernicus the largest space data provider in the world, currently producing 12 terabytes per day. Hence, the user base is rapidly growing to reach new stakeholders such as businesses, entrepreneurs and citizens worldwide. The mass sharing and use of Copernicus (and earlier GMES) data and information started across a series of heterogeneous platforms while the user carried the burden of download, processing and storage. To facilitate and standardise access to this data, the European Commission is funding the deployment of five cloud-based platforms providing centralised access to Copernicus data and information, as well as to processing tools. These platforms are known as the DIAS, or Data and Information Access Services.

#### DIAS: A game changer for accessing and processing Copernicus data and information



The five DIAS online platforms allow users to discover, manipulate, process and download Copernicus data and information. Each platform provides access to the full set of Copernicus data and information, as well as the ability to process and combine it with data from other sources (space and non-space). Their cloud-based systems architecture performs the heavy lifting on the back end, so users get coherent and analysis-ready information on the front end. Because the DIAS platforms are providing mass storage and handling of data, users can begin using information from a single entry point.



All DIAS platforms provide access to Copernicus Sentinel data, as well as to the information products from Copernicus' six operational services, together with cloud-based tools (open source and/or on a pay-per-use basis). Each of the five competitive platforms also provides access to additional commercial satellite or non-space data sets as well as premium offers in terms of support or priority. Thanks to a single access point for the entire Copernicus data and information, DIAS allows the users to develop and host new applications in the cloud, while removing the need to download bulky files from several access points and process them locally.

### USER FOCUSED FROM PRODUCTION TO ACTIONABLE INFORMATION

Each DIAS consortium runs its own back office where all storage and computing are performed. These back offices are the starting point for the development of a front office and third-party applications. This chain, starting with the back office and ending with the users, generates a flow of information that transforms hard data into useful services for society and businesses. This unique, ground-breaking model lowers the barriers to entry for users, enabling them to build applications and to unleash the full potential of Copernicus data and information.

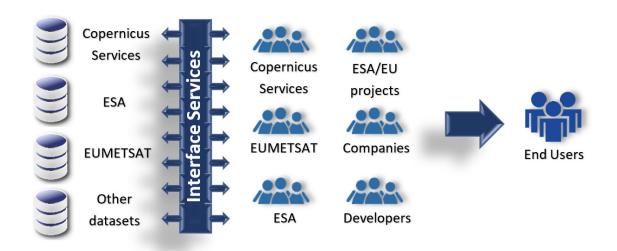


### A WORLD OF OPPORTUNITIES

WAITING TO BE CAPTURED



The DIAS architecture, as exemplified hereunder, enables further extraction of value from Copernicus data and information and increases the ease with which it is handled. While boosting opportunities for start-ups and developers, the DIAS platforms offer a complement to existing data access portals that will continue to operate. The competition between the five DIAS providers prompts quality service and emulation, thus benefitting the end-user. Thanks to these platforms, the ambitious initiative set up by the European Commission to consolidate and simplify access to Copernicus data and information is going one step further and serving public authorities, industry, data users and the public, who are the ultimate beneficiaries of Copernicus.



#### THE DIAS & WHERE TO REACH THEM

