





# CALLISTO

# Bridging the gap between Copernicus data providers and end users through Artificial Intelligence solutions

## FOR IMMEDIATE RELEASE

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<u>Copernicus</u> is the European Union's Earth Observation (EO) programme, that provides data on a free, full and open basis. These data are widely used by public and private organisations for the development of EO-driven products and for research purposes for a variety of different sectors. To facilitate and standardize access to these data, the European Commission has funded the deployment of five platforms, known as the <u>DIAS</u> or Data and Information Access Services, that index, store and exchange these tremendous amounts of data and provide cloud-based computational resources. Despite the EU efforts, Copernicus data and other georeferenced data sources are often numerous and highly heterogeneous, and thus they cannot be easily integrated by stakeholders.

The EU-funded H2020 project CALLISTO - "Copernicus Artificial Intelligence (AI) Services and data fusion with other distributed data sources and processing at the edge to support DIAS and HPC infrastructures", aims to bridge the gap between the DIAS providers and the users of the above-mentioned data through dedicated AI solutions that add value to the large volumes of satellite data frequently coming to Earth from the Copernicus Sentinel constellation.

CALLISTO has the ambition to enable *virtual presence* and *situational awareness* in any desired area of interest, through Virtual, Augmented and Mixed Reality solutions. To this purpose, Earth Observation data from <u>ONDA DIAS</u> are combined with data from heterogeneous distributed sources (including crowdsourced data, videos from Unmanned Aerial Vehicles and data from in situ sensors) through *machine learning* and *data fusion technologies*; the outcomes are *semantically-enriched* and served to the public in interactive interfaces, mobile and *Mixed Reality* apps, creating a novel and innovative immersive environment for the Copernicus market.

CALLISTO will be pilot tested in different operational environments with the support of the partners Deutsch Welle (bringing innovation in journalism), De Watergroep (public drinking water company in Flanders), SMAT Group (water utility managing authority in Turin), the European Union Satellite Centre (Common Security and Defence Policy), and the National Observatory of Athens (for the monitoring of the implementation of the Common Agricultural Policy – CAP).

The project brings together 16 partners from 7 European countries and South Korea representing industry, SMEs and academia. On the 1<sup>st</sup> of January 2021 the CALLISTO consortium launched the project, and on the 28<sup>th</sup> and 29<sup>th</sup> of January they organized the online kick-off meeting. During this meeting, the partners discussed about the best way to exploit current AI technologies in order to provide enhanced scalability and timely services to water utility operators, journalists, EU agriculture and CAP policymakers, and security agencies. Furthermore, they planned and prepared the framework of activities of the strategic partnership and agreed on the common goals and results.











#### **Project Partners**

- Ethniko Kentro Erevnas kai Technologikis Anaptyxis (CERTH), Greece
- Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. (Fraunhofer), Germany
- CS GROUP (CS), France
- Barcelona Supercomputing Center Centro Nacional de Supercomputacion (BSC), Spain
- 🚔 Institut für Angewandte Informatik (InfAI) e.V., Germany
- ACCELIGENCE LTD (ACCELI), Cyprus
- <u>Ethniko Asteroskopeio Athinon (NOA)</u>, Greece
- Deutsche Welle (DW), Germany
- Vlaamse Maatschappij voor Watervoorziening (vmw), Belgium
- Institut royal des Sciences naturelles de Belgique (RBINS), Belgium
- Società Metropolitana Acque Torino S.p.A (SMAT S.p.A), Italy
- <u>Nurogames GmbH (NURO)</u>, Germany
- <u>European Union Satellite Centre (SATCHEN)</u>, Spain
- DRAXIS Environmental S.A. (DRAXIS), Greece
- <u>Korea University (KU)</u>, South Korea

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