European Commission

Copernicus for Smart Local Governments

Copernicus

Space Goes Local: How EO Data Can Power Smart Government Practices

Today updated spatial datasets and cartography are essential inputs to make near-real time analysis, empowering better decision making by the local authorities.

The increasingly available Big Data exploitation strategies and relevant tools for geographical analysis can dramatically improve the capacity to unlock added value from raw data, generating knowledge and wisdom.

Copernicus can contribute to Smart Local Governments by providing geo information and data to be combined with other source of information to improve accessibility, transparency, and efficiency of public services and provide better e-services for the citizens. Copernicus can provide knowledge, not simply data improving spatial decision making in the following areas of benefit.

Situational Awareness

Protecting the citizen in case of major disaster is one of the most challenging responsibilities in charge to the local authorities.

The Copernicus EMS provides geospatial data in support to the national and local Civil Protection operational teams along the disaster lifecycle: early warning and preparedness, risk recovery and reconstruction.

More than 2000 emergency maps have been delivered to the users and real time fire and flood forecasts is continuously being provided to the national and local authorities since 2012.
More information at: www.emergency.copernicus.eu

Regional Planning

Space data can be used to periodically refresh territorial information, providing a powerful tool to the authorities for regional planning. Construction monitoring, urban planning, cultural heritage monitoring, as well as environmental compliance, are typical applications where Copernicus is generating data and developing relevant solutions.

In the framework of Copernicus Land, up-to-date datasets are regularly generated at global, European and local scale. Data span from raw satellite image mosaic to value added geo-information such

as LC/LU information for the larger EU cities (Urban Atlas), riparian zones along European river networks and NATURA 2000 sites.
More information at: land.copernicus.eu/

Within Copernicus Atmosphere and Marine, several bio-geophysical parameters are updated with different time frequency, ranging from days to years, feeding tools to produce numerical analysis and elaborations.
Visit: atmosphere.copernicus.eu/, marine.copernicus.eu/

Resource Monitoring

Local authorities have a crucial role in the implementation of the global policies for environmental sustainability. Resource monitoring address soil, air, water, fauna and flora.

Copernicus is providing solutions to map and monitor the environment to support agriculture, forestry and fishery.

To make an example, satellite based data are increasingly exploited for the sustainable agricultural practices in the framework of the Common Agricultural Policy in Europe, to save time-intensive on farm inspections.

Several application within the Copernicus Land and Marine domain are now available, for forest type identification, land use and land cover characterization, change detection, phytoplankton, algae and pollutants monitoring.

Copernicus full, free and open access policy to the Sentinel data today is changing the game, providing to the authorities the essential raw data to perform their own statistical analysis and to generate the due reporting.
Visit: sentinels.copernicus.eu/web/sentinel/thematic-areas

Space
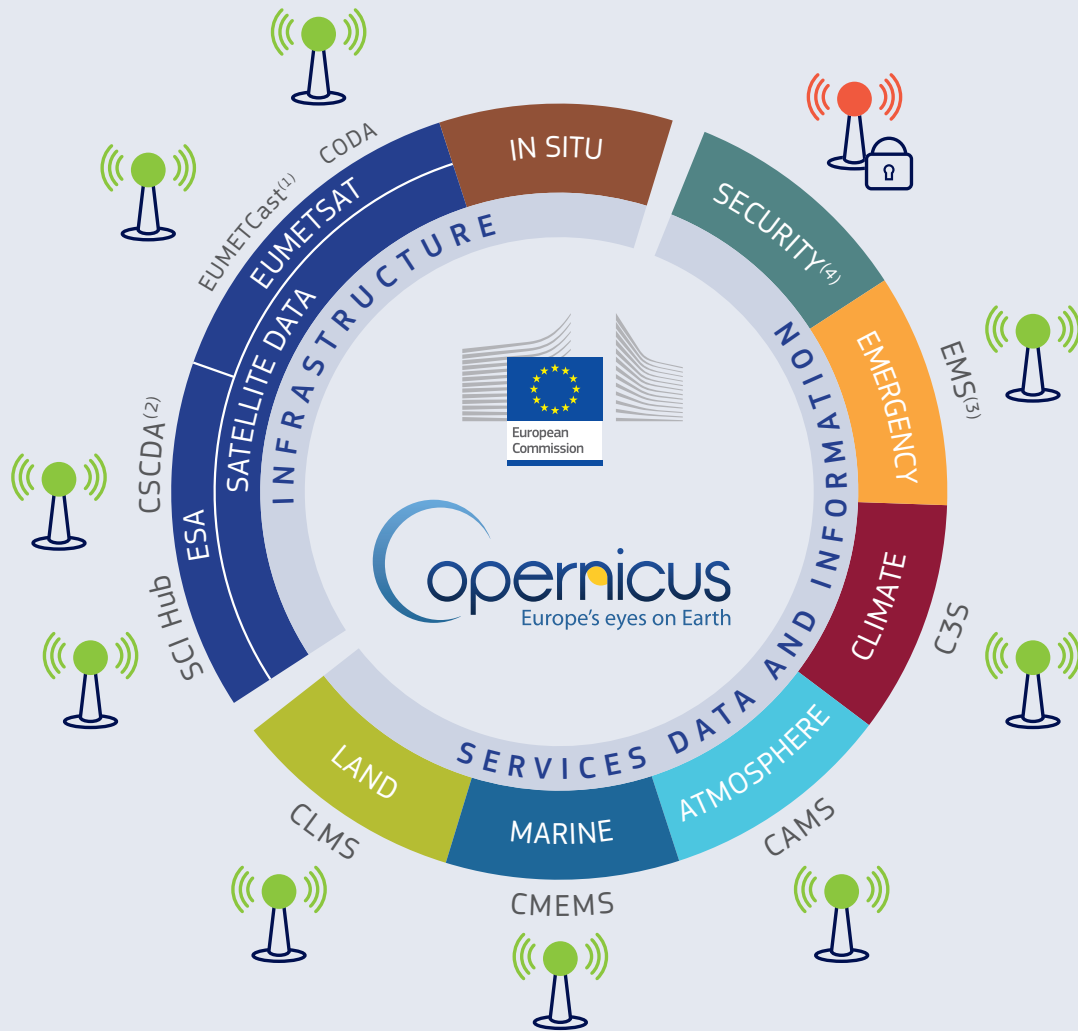
Copernicus
Europe's eyes on Earth

Copernicus is the European Earth Observation and Monitoring Programme

It is a constellation of satellites making millions of daily observations. It builds on a global network of thousands of land-, air- and marine-based sensors to create the most detailed pictures of earth.

The vast majority of data and information delivered by the Copernicus space infrastructure and the Copernicus services are made freely available and accessible to any citizen and any organisation around the world.

Copernicus provides knowledge, but it all starts with data.

The different data access points are mentioned below.

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INFRASTRUCTURE
- IN SITU
- SATELLITE DATA
  - EUMETSAT
    - CODA
    - EUMETCast[1]
  - ESA
    - CSCDA[2]
    - SCI Hub

SERVICES DATA AND INFORMATION
- SECURITY[4]
- EMERGENCY — EMS[3]
- CLIMATE — C3S
- ATMOSPHERE — CAMS
- MARINE — CMEMS
- LAND — CLMS

[1] Access subject to conditions, see page:
www.eumetsat.int/website/home/Data/DataDelivery/EUMETCast/index.html

[2] Access subject to conditions, see page:
spacedata.copernicus.eu/web/cscda/data-access

[3] Service Activation by authorised users:
emergency.copernicus.eu

[4] Access restricted, see page:
www.copernicus.eu/main/security

MORE INFORMATION
www.copernicus.eu

Status as of September 2016

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