

Mapping and environmental monitoring in the EUcooperation with the Indo-Pacific region

European Commissior

19 October 2022

Copernicus Programme Webinar

Objectives of this webinar

- Introduce you to Copernicus Programme
- Promote awareness of the many potential uses of its data and information
- These can benefit EU's international partnerships and its actions



Agenda of the webinar: 3 modules

- Welcome
- Introduction
- 1. Earth observation examples
- 2. How to work with Copernicus?
- 3. Features of the Copernicus Programme
- Evaluation & closure





Module 3: Overview of the Copernicus Programme

Main features, operational services and mission



Main features



- Europe's eyes on Earth Collaboration between European countries
- Member States Germany, France, UK have important space programmes. They collaborate in the European Space Agency since 1975 (22 countries).
- Copernicus streamlines the delivery of 6 types of services
- Earth observation from the air or space, but also in situ, field data
- Information packed as services to users and public in general



Six thematic information services provided by the Copernicus Earth Observation Programme



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Users of the data and information services

- Local and regional authorities
- Decision makers
- Downstream users:
 - private sector,
 - academia,
 - Civil Society Organisation



Advantages of Copernicus

- Free
- Open
- Full accessibility
- Web pages in 24 EU languages
- Transparent decision making



Benefits for the European society and economy



Copernicus helps us address key societal challenges of our times, such as climate change, natural disasters or border control. It also creates endless business opportunities.

Past studies have estimated that, between 2017 and 2035, Copernicus would generate between €67 and €131 billion in benefits for the European society and economy. This is ten to twenty times the cost of the Copernicus component of the EU Space Programme. Interestingly, more than 80% of the benefits are expected to be generated outside of the space sector, through the use of Copernicus data in other parts of the economy (agriculture, fisheries, insurance, air quality etc.). As demonstrated by the EUSPA EO and GNSS Market Report for 2022, the Earth Observation market is growing at a steady pace and Copernicus open data is a key driver of growth in this area.



EU budget: A €16 billion Space Programme to boost EU space leadership beyond 2020

- For the next long-term EU budget 2021-2027:
- the European Commission is proposing to devote €16 billion to help maintain and further enhance the EU's leadership in space.
- Allocated as follows:
 - €9.7 billion for Galileo and EGNOS, the EU's global and regional satellite navigation systems
 - €5.8 billion for Copernicus, the EU's Earth Observation Programme
 - €500 million to develop new security components



ESA's video on the Copernicus Programme





Practical use for private sector

- Use already available and develop new commercial applications based on freely available data: innovation boosts the economy, 'made in Europe'
- Climate and weather data
- Precision agriculture
- Water management
- Health, insurance, energy, transport, infrastructure, coastal zone, shipping, tourism, disaster response



Examples of use by private companies in New Caledonia

- Bluecham: mapping and monitoring for decision support
- Digital imaging for land and coastal management



Practical use for public authorities

- Develop added-value information services/products tailored to specific, local needs;
- Governments need operational data to manage society:
 - Public services
 - Spatial planning
 - Pollution surveillance



Examples of use by public authorities

- Forest monitoring for forest management in Fiji
- Papua-New-Guinea: a lot of field work still needed



Practical use for decision-makers

- Monitoring of policies and evidence-based decisions
- Politics is about looking ahead, thus knowing what is likely to happen
- Trend analysis allows to predict in the future.
- Learning from the past, extreme event statistics



Examples of use for decision-making

- Response to disappearing islands in Kiribati Republic
- Adapt to extreme weather events: cyclones, drought in Fiji
- Use of Copernicus Marine Service products to describe the State of the Tropical Western Pacific Ocean around the Islands
- El Nino Southern Oscillation studies
- Monitoring sea-surface height is critical to understanding the changes taking place so that decision-makers have the evidence to implement appropriate policies





Module 3: Overview of the Copernicus Programme

Quiz time!



Questions & Answers

- Ask your questions
- Remarks
- Suggestions on Module 3



Webinar's evaluation

5 minutes



Keep in touch



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Thank you



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