

COPERNICUS MARINE SERVICE



Marine Monitoring

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Marine
Monitoring

OUTLINE

- OVERVIEW OF THE COPERNICUS MARINE SERVICE
- WHICH MARINE PRODUCTS?
- WHO ARE THE COPERNICUS MARINE CONTRACTANTS?
- WHO ARE THE COPERNICUS MARINE USERS?
- MAIN 2019 EVENTS & TRAINING



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C O P E R N I C U S I N B R I E F

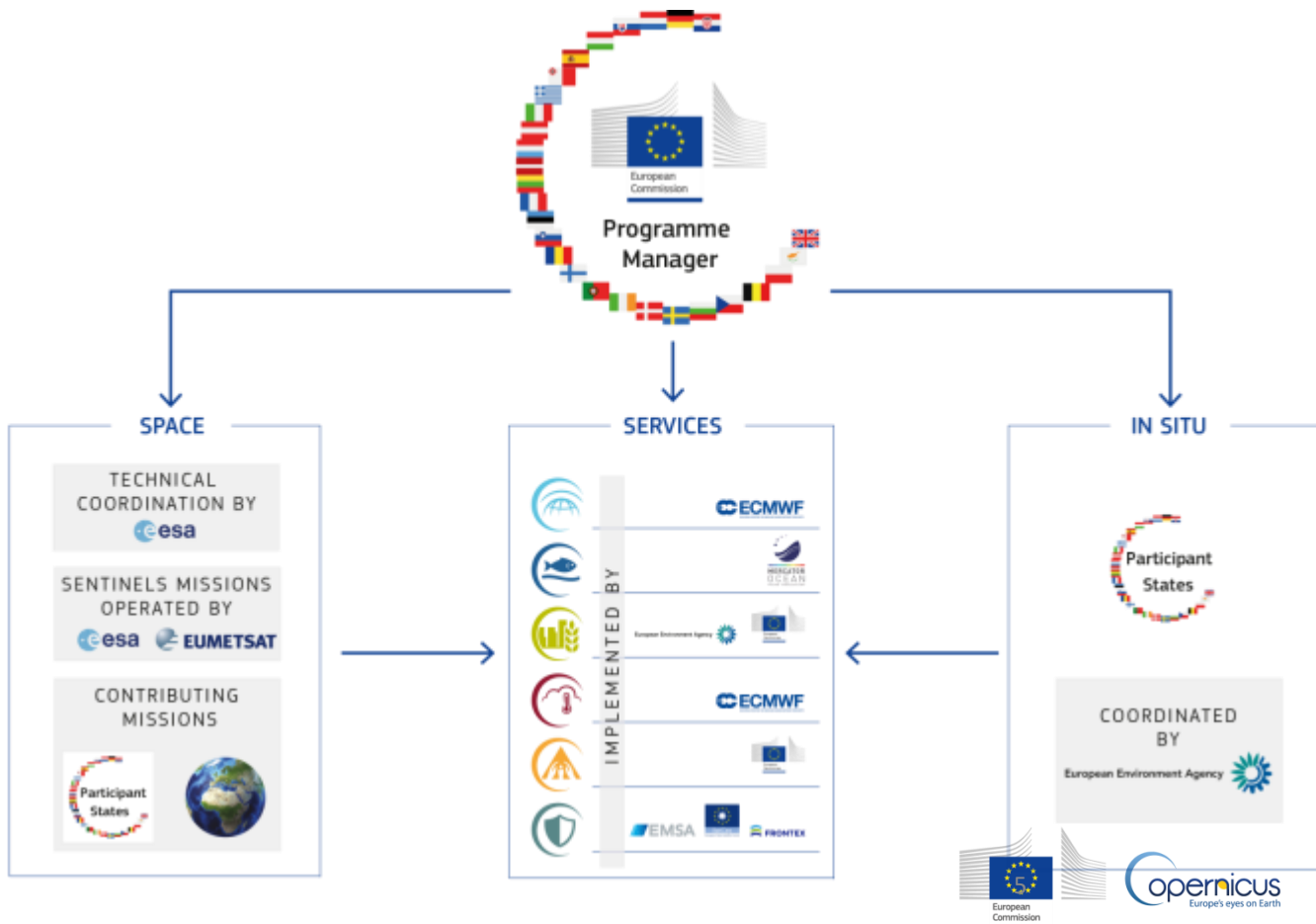
- **The Copernicus programme** ([REGULATION \(EU\) No 377/2014](#)) is a cornerstone of the European Union' efforts:
 - To monitor **the Earth**, its environment and ecosystems
 - To ensure its citizens are prepared and protected for **crises, security risks** and **natural or man-made disasters**
- Places a world of insight (data and information) about our planet at the disposal of citizens, public authorities and policy makers, scientists, entrepreneurs and businesses on a **full, free and open basis**
- Is a tool for **economic development** and a driver for the **digital economy**





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COPERNICUS GOVERNANCE





COPERNICUS MARINE SERVICE

Marine
Monitoring

<http://www.marine.copernicus.eu>

COPERNICUS MARINE ENVIRONMENT MONITORING SERVICE
Providing PRODUCTS and SERVICES for all marine applications

Search terms OK

ABOUT US | MARKETS & BENEFITS | NEWS | SCIENCE & MONITORING | TRAINING & EDUCATION | SERVICES PORTFOLIO

ACCESS YOUR OCEAN INFORMATION

GETTING STARTED →

OCEAN PRODUCTS
Ocean product catalogue, to download or visualize data across more than 10 variables, including historic, current and forecasted data.
DATA →

OCEAN MONITORING INDICATORS
Essential variables monitoring the health of the ocean
TRENDS →

OCEAN STATE REPORT
Extensive annual analysis on the state of the ocean over nearly 20 years and severe/notable annual events
EXPERTISE →

SHORT-CUT TO SERVICES

- REGISTER NOW! →
- SCIENTIFIC QUALITY →
- ONLINE TUTORIALS →
- COLLABORATIVE FORUM →

LATEST NEWS FLASH
CMEMS-7324-A
New Service Release on 22 March 2018 - Status on updates
INFORMATION
ALL NEWS FLASH

28 March EVENTS AGENDA

PARTNERS AND STAKEHOLDERS

FOCUS ON

TRAINING

COPERNICUS MARINE SERVICE AND OCEAN ENERGY EUROPE PARTNERSHIP KICK-OFF IN BRUSSELS
Mercator Ocean and Ocean Energy Europe (OEE) are pleased to invite you to a reception cocktail to kick off a partnership signed between the two entities in the context of supporting ocean renewable energy through the Copernicus Marine Service.
READ MORE

Copernicus Marine Service and Ocean Energy Europe Partnership Kick-Off in Brussels
SAVE THE DATE: April 23, 2018

Copernicus Marine Service | Ocean Energy Europe

- One Single Portal
- **MARINE PRODUCTS**
- **OPEN&FREE**
- Sustained in the long term
- User-Driven





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Ocean Data & Information

OCEAN PRODUCTS

Ocean product catalogue, to download or visualize data across more than 10 variables, including historic, current and forecasted data.

DATA



ONLINE CATALOGUE

YOUR SEARCH

Found 151 ocean products matching your criteria.

GLOBAL_ANALYSIS_FORECAST_PHY_001_024

GLOBAL OCEAN 1/2° PHYSICS ANALYSIS AND FORECAST UPDATED DAILY

MODEL: GLO

T bottomT S SSH UN MLD SIC SIT SILV

0.003 degree x 0.003 degree (50 depth levels)

From 2006-12-27 to Present

monthly-mean, daily-mean, hourly-mean

weekly-mean

GLOBAL_ANALYSIS_FORECAST_BIO_001_014

GLOBAL OCEAN BIOGEOCHEMISTRY ANALYSIS AND WEEKLY FORECAST

MODEL: GLO

CHL PHYC_O2 NO3 PO4 SI FE PP

0.5 degree x 0.5 degree (50 depth levels)

From 2012-01-01 to Present

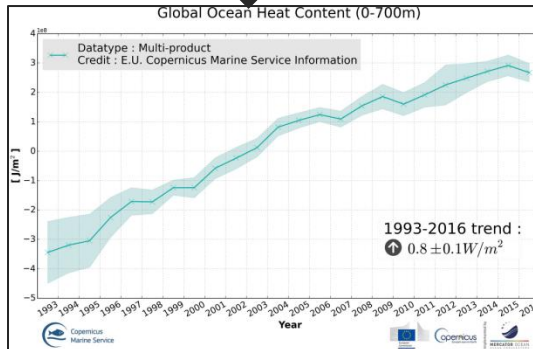
weekly-mean

MORE INFO ADD TO CART WMS Sub-setting

OCEAN MONITORING INDICATORS

Essential variables monitoring the health of the ocean

TRENDS



OCEAN STATE REPORT

Extensive annual analysis on the state of the ocean over nearly 20 years and severe/notable annual events

EXPERTISE



Copernicus

European Marine Service

Taylor & Francis

Journal of Operational Oceanography

volume 35, supplement 1

Implemented by
**MERCATOR
OCEAN**
INTERNATIONAL



Marine
Monitoring

Marine.copernicus.eu

ACCESS TO DATA & INFORMATION

Free and open access
to worldwide Ocean information
marine.copernicus.eu

• SEARCH
& BROWSE



• DISCOVER
& VISUALISE



• REGISTER



• DOWNLOAD



• COMPUTE



• JOIN UP





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OCEAN DATA, A PUBLIC GOOD

REANALYSES
~25 years



REAL-TIME
Daily, hourly



FORECAST
5 to 10 days

**ESSENTIAL
OCEAN
VARIABLES**



- 1 Global
- 2 Arctic
- 3 Baltic
- 4 NWS
- 5 IBI
- 6 Med Sea
- 7 Black Sea





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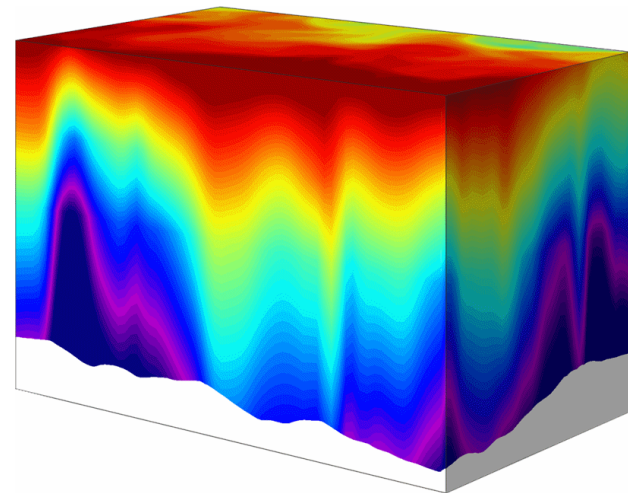
PORTFOLIO GATHERS DATA FROM 3 SOURCES



**SATELLITE
OBSERVATION**



**IN SITU
OBSERVATION**



**OCEAN MODEL
COMPUTATION**





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OUTLINE

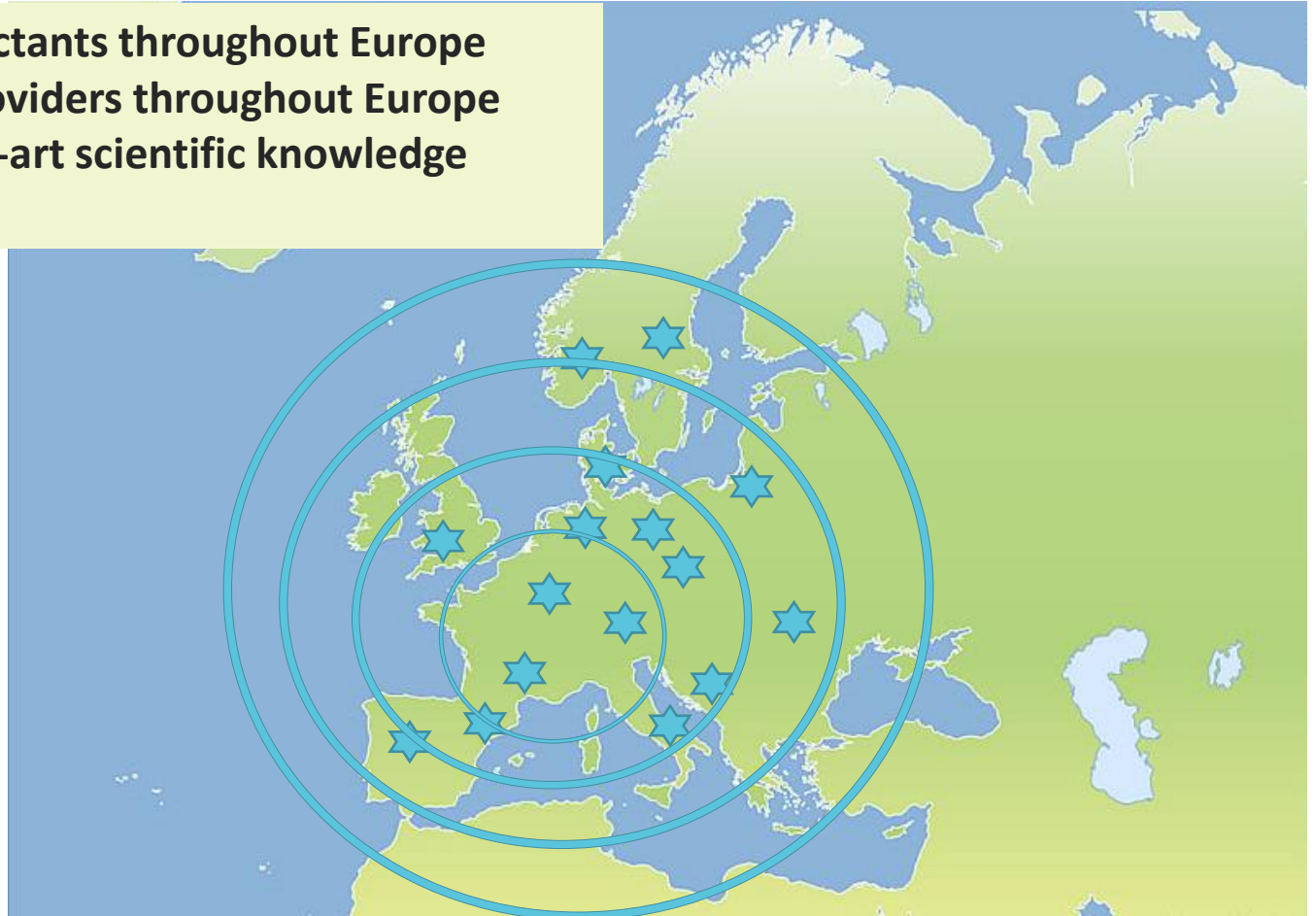
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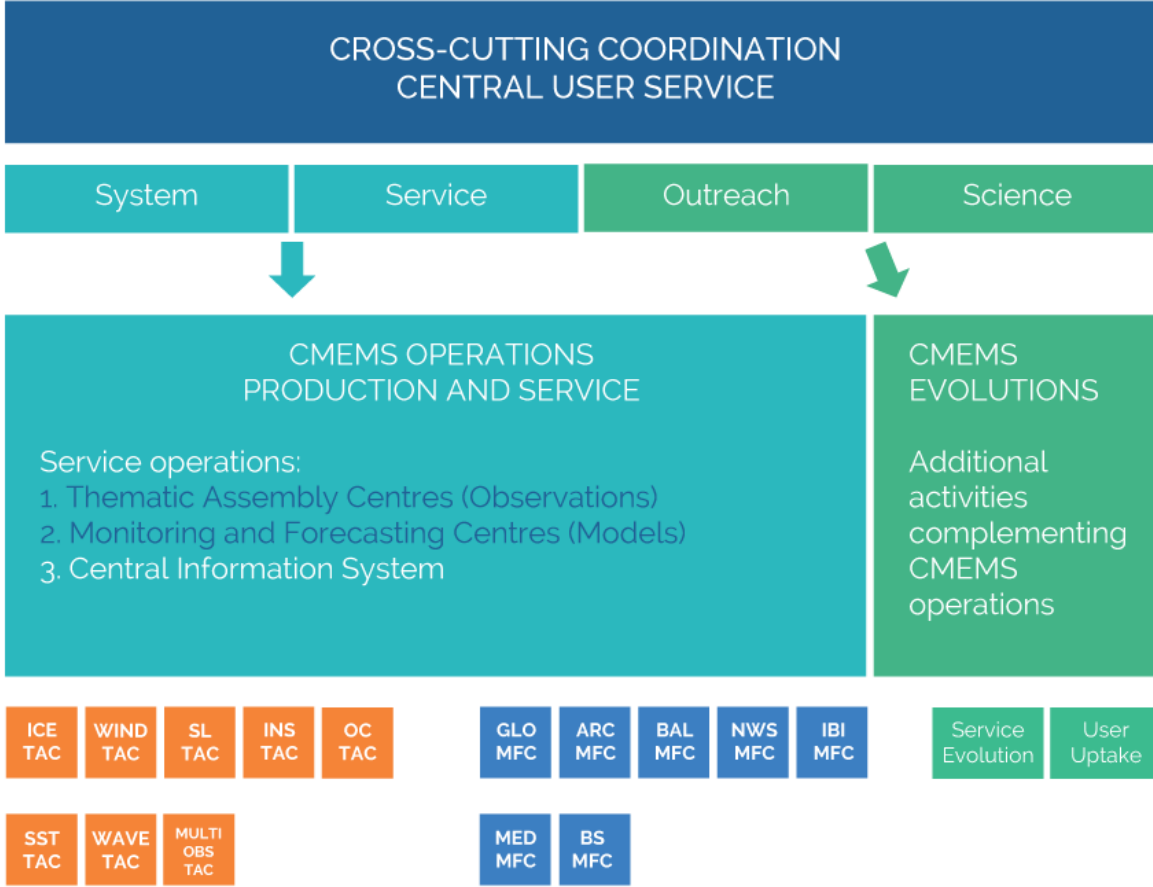


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CMEMS CONTRACTANTS in Europe

- **~300 contractants throughout Europe**
- **40+ data providers throughout Europe**
- **State-of-the-art scientific knowledge**







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Marine
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Serving users in various sectors



- | | | | |
|---|--------------------------------------|----|------------------------|
| 1 | SEA ICE
MONITORING | 6 | COASTAL
MONITORING |
| 2 | MARINE
CONSERVATION
& POLICIES | 7 | SOCIETY
& EDUCATION |
| 3 | SCIENCE
& CLIMATE | 8 | MARINE
FOOD |
| 4 | NATURAL
RESOURCES
& ENERGY | 9 | MARINE
NAVIGATION |
| 5 | WATER
QUALITY | 10 | SAFETY
& DISASTER |



Marine
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A KEY DRIVER FOR BLUE GROWTH

End users

Intermediate
users

Copernicus

BLUE GROWTH
And JOBS

Added-value and Customised
Solutions to End-Users.
Public/Private Sectors

Core Service
Free of Charge
Sustained in the long term

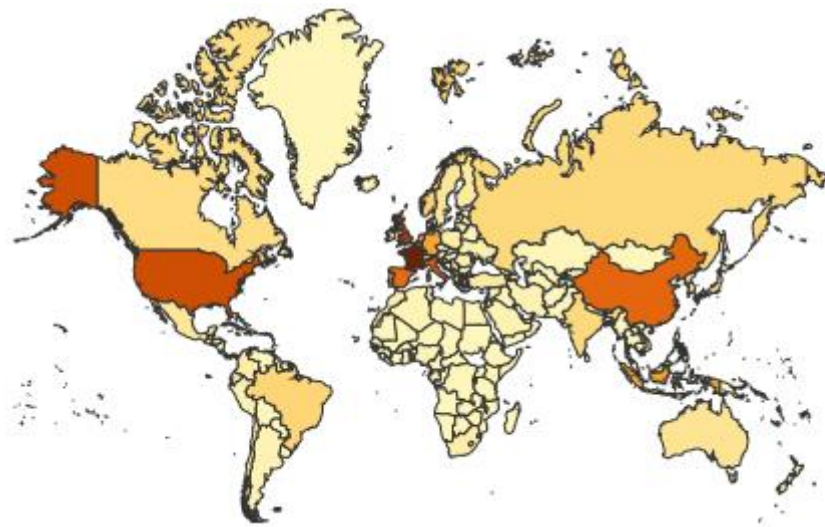
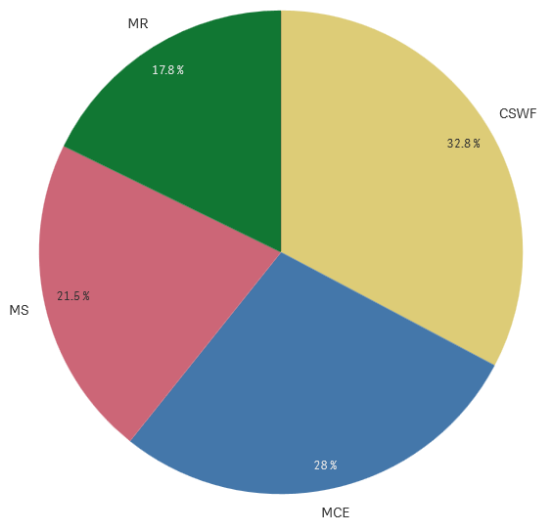




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CMEMS USERS

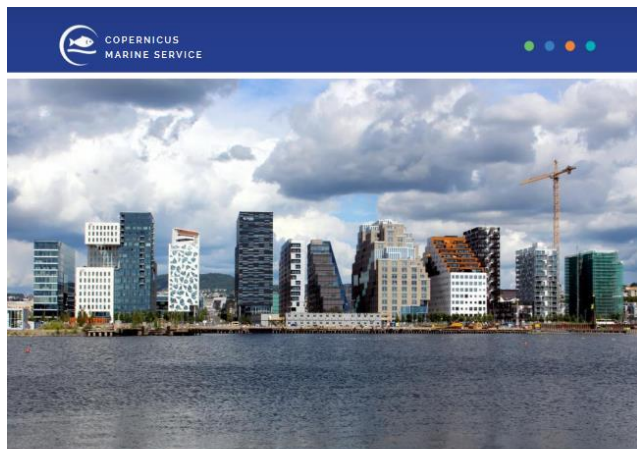
>17.300 users from 3327 organisations and 168 countries
2600 regular users (download data at least 3 times in 1 month)





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150 USE CASES



COPERNICUS MARINE SERVICE
IN SUPPORT TO NORWAY



USE CASE EXAMPLES



COASTAL
& MARINE
ENVIRONMENT



MARINE
RESOURCES



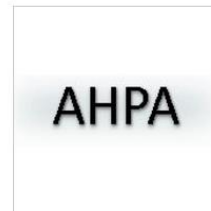
MARITIME
SAFETY



WEATHER CLIMATE
& SEASONAL
FORECASTING



USE CASES



StormGeo



SUBMIT YOUR USE CASE

<http://marine.copernicus.eu/markets/submit-your-use-case/>



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- WHO ARE THE COPERNICUS MARINE CONTRACTANTS?
 - Data Providers in Norway
 - Service Evolution Contractants in Norway
- WHO ARE THE COPERNICUS MARINE USERS?
- **MAIN 2019 EVENTS & TRAINING**



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ORGANIZING TRAINING WORKSHOPS

IBI
Lisbon
14-15 May



In collaboration
with Fórum Oceano
and Puertos del Estado

BS
Constanta
26-27 June



In collaboration
with National Institute for Marine Research NIMRD

BALTIC
Goteborg
September

NWS
Dublin
October

ARCTIC
Helsinki
November

MED
Roma
December



<http://marine.copernicus.eu/training/next-sessions/?keywords=Training%20sessions>



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1) our contractors, 2) outermost regions, 3) aquaculture sector, 4) public authorities

SAVE THE DATE | May 20-24 2019

**Copernicus Marine Service
General Assembly**

In Brussels, Belgium



Logos: Copernicus Marine Service, European Union, Copernicus, Mercator Ocean International, and others.

SAVE THE DATE | June 6-7 2019

**Copernicus Marine
for Outermost
Regions**

In Azores, Faial Island, Horta city



Logos: Copernicus Marine Service, European Union, Copernicus, Mercator Ocean International, and others.

SAVE THE DATE | September 24-25 2019

**Copernicus Marine Service
for the Aquaculture Sector**

In Athens, Greece



Logos: European Union, Copernicus, Mercator Ocean International, and others.

SAVE THE DATE | October 2, 2019

**Copernicus Marine
for MSFD**

Renaissance Brussels Hotel
Rue du Farnasse 19,
1050 Brussels, Belgium



Logos: European Union, Copernicus, Mercator Ocean International, and others.

- **SAVE THE DATE**
- **MAY 20-24 2019, Brussels**
- **COPERNICUS Marine Service General Assembly**

- **SAVE THE DATE**
- **JUN 6-7 2019, Azores, Faial Island, Horta city**
- **COPERNICUS Marine for Outermost Regions**

- **SAVE THE DATE**
- **SEP 24-25 2019, Athens, Greece**
- **COPERNICUS Marine for the Aquaculture sector**

- **SAVE THE DATE**
- **October 2 2019, Brussels, Belgium**
- **COPERNICUS Marine for MSFD**





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CONTACT US

JOIN THE COPERNICUS MARINE SERVICE COMMUNITY



Web portal

marine.copernicus.eu

Service Desk's email

servicedesk.cmems@mercator-ocean.eu

Collaborative Forum

<http://forum.marine.copernicus.eu/>



Mercator Océan

@MercatorOcean

Copernicus EU

@CMEMS_EU



MercatorOcean



Linkedin CMEMS partnership Meeting place

<https://www.linkedin.com/groups/8243515>



Tutorials on CMEMS YouTube channel

Copernicus Marine Service





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THANK YOU

