



THE COPERNICUS MARINE WEEK
BRUSSELS, 25-29 SEPTEMBER 2017



The Copernicus Marine Week 25/29 SEPTEMBER 2017 - BRUSSELS

The EU Copernicus Marine Service was launched in May of 2015.

Mercator Ocean, entrusted by the European Commission to implement and operate the Service, has decided to dedicate an event through which it will carry out an open mid-term review:

The Copernicus Marine Week

The Marine Week is an open forum meant for stakeholders, contributors and beneficiaries of the EU Marine Service and beyond. It is therefore open to a large panel of institutions, agencies, regional stakeholders, entrepreneurs, service providers, and scientists.

The purpose of the week is to present and openly release the major achievements of the Copernicus Marine Environment and Monitoring Service (CMEMS) in regards to the economy, societal challenges, science, EU leadership worldwide, and it is also meant to present the future prospects of CMEMS, which benefit Member States, regions, and society in general.

Over the course of one week (5 days), we will cover CMEMS achievements and create a platform for open dialogue, engaging major Blue Growth actors worldwide.

Learn, Meet, Exchange, Share, Get training, Join us for the Copernicus Marine Week!

The Copernicus Marine Week Partnership Committee:

BSH, CLS, CMCC, CNR, DMI, ECMWF, EEA, EMSA, ESA, EUMETSAT, EuroGOOS, IFREMER, INGV, IPMA, MERCATOR OCEAN (MO), MET NORWAY, NERSC, PUERTOS del ESTADO, UK MET OFFICE



PLENARY SESSIONS OUTLINES

Day 1: FROM THE EU VISION TO AN EU OPERATIONAL SERVICE

The “CMEMS Ecosystem in the EU” session first aims at setting the scene about the Copernicus Marine Service. This obviously starts by the EU Copernicus Vision. The Space and InSitu components will be presented so as the other Copernicus Services and how the Services are interconnected. Then a focus will be made on current and future benefits of the Copernicus Marine Service for EU

DAY 2: PRODUCING AND DISSEMINATING RELIABLE & USER-DRIVEN DATA AND INFORMATION

The session will provide a review of CMEMS production and service activities over the past 3 years. The external dependency with respect to in-situ and satellite data will be first presented and a summary of achievements for the different building blocks of CMEMS will be discussed (TACs, MFCs, Central Information System, Services and User Interface, Indicators and Ocean State Report). The objective is to give an overview of CMEMS products and services as of today (end of phase I of CMEMS), to showcase the major achievements and progresses made over the past couple of years and to provide recommendations for future activities.

Day 3: SERVING USERS AND SOCIETY

This session will show that by serving users, CMEMS serves Society at large. The round table is important to highlight that beside Member States, Regions have also expectations for CMEMS (incl. actions towards LRAs, SMEs, Public Services, General Public...).

Day 4: R&D ACHIEVEMENTS AND SERVICE EVOLUTION CHALLENGES

The session will review CMEMS related R&D achievements in ocean high level processing, ocean analysis and forecasting over the past couple of years and illustrate the key role of R&D to better serve users and applications. The role and organization of the different R&D streams (Tier 1/ short-term, Tier 2/ mid-term and Tier 3 / long-term), the different instruments and actors (e.g. TACs and MFCs R&D, CMEMS Service Evolution R&D, H2020) and the organization of the transfer of R&D results towards operational systems will be reviewed.

Day 5: CMEMS FUTURE PROSPECTS

This session is practically the acme of the Copernicus Marine Week during which Mercator Ocean will have enabled discussions with CMEMS Stakeholders and Users about CMEMS prospects and future challenges.



DAY 1: 25th SEPTEMBER

13h30 – 18h30: PLENARY SESSION

FROM AN EU VISION TO AN EU OPERATIONAL SERVICE

Overall Session content	CMEMS Ecosystem in the EU
Chairs:	P. Bahurel (Mercator Ocean)
ROOM	Ballroom 1+2

Keynote

13h30 - 13h45: CMEMS Ecosystem in the EU – M. Facchini (EC DG GROW)

Setting the Scene for the Week

13h45 - 14h15: “Where the Copernicus Marine Service stands now and expectations for Copernicus Marine Week”, P. Bahurel (MO)

Links with the other Copernicus Components

14h15 - 14h45: The Space Component: Live exchanges, S. Mecklenburg (ESA), P. Counet (EUMETSAT)

14h45 - 15h15: The In-Situ Component: Live exchanges, H.S. Andersen (EEA), G. Nolan (EUROGOOS)

15h15 - 16h30: Bridges with other Copernicus Services, F. Rabier (ECMWF), H. Dufourmont/H. S. Andersen (EEA), L. BAL (EMSA), D. Vande Ryse (FRONTEX), O. Nordbeck (EC DG GROW)

16h30-17h00: Coffee Break



Addressing European Commission DGs needs and requirements

17h00 - 17h15: Synergies between CMEMS and DG Needs, C. Thomas-Courcoux (MO)

17h15 - 18h30: Round Table: Next Opportunities, I. Shepherd (EC DG MARE), M. Weydert (EC DG RTD), C. Martinez (EC DG CONNECT)

18h30: SESSION END



DAY 2: 26th SEPTEMBER

9h00 – 13h00: SPLINTER SESSIONS

USER SPLINTER SESSION	HF RADAR in EUROPE
ROOM : Ball Room1+2	ROOM : Copenhagen + Essen + Warsaw
Moderator: D. Obaton (MO)	Chairs: J. Mader (AZTI), G. Nolan (EUROGOOS)
<p>PART I : 9h00-10h30 User feedback on current catalogue search CMEMS presentation, Feedback/requests from the audience</p> <p>PART II: 11h00- 13h00 Improving the CMEMS data service. In terms of service, what is planned for the coming years?</p> <p>CMEMS presentation, Feedback/requests from the audience</p>	<p>PART I: Introduction to HF radar [presented by INCREASE Team; 45min]</p> <ul style="list-style-type: none"> ▪ How does HFR work and what data can they produce? (15min) ▪ Paving the way for a European HFR network in line with international efforts (15min) ▪ Outline of INCREASE project (15min) <p>PART II: Showcasing HF radar applications [presentation of 15min + 5min for questions]</p> <p>1- “Review of applications worldwide”, INCREASE Team.</p> <p>SECURITY</p> <p>2- “HFR and Security in Portugal”, C. S. Fernandes, IH 3- “Operational Data Delivery and Forecasting for emergency responders (SAR operators)”, J. Tintoré & E. Reyes, SOCIB</p> <p>PORT MANAGMENT</p> <p>4- “Port management in The Netherlands”, R. Schroevers, Deltares 5- “Port management in Spain”, E. Alvarez, Puertos del Estado</p> <p>MARINE RESOURCES AND ENVIRONMENTAL MANAGMENT</p> <p>6- “HF radar and coastal fisheries: some experiences gathered in the Mediterranean Sea”, F. Fiorentino, A. Griffa, F. Raffa, CNR 7- “Impact on Marine Litter management, LIFE LEMA project”, M. Delpy, RPT SUEZ-Environnement 8- “Integration of HF radar, satellites and models for the generation of downstream services: from environmental monitoring to sea safety in Tuscany”, C. Brandini, LaMMA</p>

10h30-11h: *Coffee Break*

CMEMS Service Desk Practical Sessions from 9:00 to 13:00 (Room Lisbon)
 CMEMS for Beginners (2x1h sessions), How to download data using Python? (1h30)

13h00: **SESSION END**

DAY 2: 26th SEPTEMBER

14h00 - 18h30: PLENARY SESSION

PRODUCING & DISSEMINATING RELIABLE, USER-DRIVEN DATA & INFORMATION

Overall Session content	Ensuring Availability, Timeliness, Reliability. How does it work with Space Data, In-Situ Data, Models, and Quality for a user-driven service?
Co chairs:	G. Coppini (CMCC), R. Gilmore (EC DG GROW), J. Johannessen (NERSC)
ROOM	Ballroom 1+2

14h00 - 14h10: Producing data and information: overview – M. Fabardines (MO)

14h10 - 14h25: Upstream satellite observations – C. Donlon (ESA), S. Wannop (EUMETSAT)

14h25 - 14h40: Upstream in-situ observations - G. Nolan (EUROGOOS), S. Pouliquen (Euro-Argo)

14h40 - 15h10: Preparing ocean products based on observations– Y. Faugère (CLS)

15h10 - 15h40: Preparing ocean products based on 3D models – M. Tonani (UK Met Office)

15h40 - 16h10: Deriving information through multi-year assessments – K. von Schuckmann (MO), S. Isoard (EEA)

16h10-16h40: Coffee Break



16h40 - 17h00: Assessing the quality of data & information, F. Hernandez (MO)

17h00 - 17h20: Managing all the data sets, G. Gasciarino (MO)

17h20 - 17h40: Serving data and supporting users, S. Ciliberti (CMCC), C. Giordan (MO)

17h40 - 18h00: Getting feedback from users and adapting the service, A. Delamarche (MO)

18h00 - 18h30: Q&A

18h30: SESSION END

CMEMS Baltic MFC Practical Sessions from 14:00 to 18:00 (Room Lisbon)

DAY 3: 27th SEPTEMBER

8h30 – 12h30: PLENARY SESSION SERVING USERS AND SOCIETY

Overall Session content	CMEMS benefits for Member States, Regions and Society
Chairs:	D. Obaton (MO), E. Alvarez (Puertos del Estado)
ROOM	Ballroom 1+2

☑ **8h30 - 8h45: Keynotes on market development**, C. Thomas-Courcoux (MO)

☑ **8h45 - 9h25: MARITIME SAFETY**

- CMEMS downstream Ice Service in the Baltic Sea: land fast ice extent and thickness, M. Mäkynen, FMI, Finland
- Seismic Ship Operation performance at sea, T. Mensch, CGG, France
- Saving fuel thanks to ship routing, P. Bara, CMA CGM, France, and S. Raynaud, ACTIMAR, France
- Copernicus Maritime Surveillance: an integrated Maritime Service, R. Vicente, EMSA

☑ **9h25 - 9h55: MARINE RESOURCES**

- Multi-platform integrated assessment for the sustainability of Bluefin Tuna in the Mediterranean Sea, J. Tintore, SOCIB, Spain
- SIMOcean, Meteo-Ocean data from the Portuguese EEZ to characterize fishing areas, N. Catarino, Deimos, Portugal
- SEAWETRA: an integrated platform for monitoring marine systems, P. Tepsich, Cima Foundation, Italy

☑ **9h55 - 10h30: COASTAL & MARINE ENVIRONMENT**

- Decision support systems for rapid mapping, coastal and marine monitoring: the START project, P. Marra, LINKS, Italy
- Downstreaming CMEMS products to serve Port needs: The SAMOA system, M. Garcia Sotillo, Puertos del Estado, Spain
- EarthLab for coastal services – The case of water quality monitoring, S. Capo, Telespazio, France

10h30-11h: Coffee Break

☑ **11h00 -11h20: COASTAL & MARINE ENVIRONMENT**

- Support to exploration activities for Deep Sea Mining, J. Carvalho, ISQ, Portugal
- Environmental monitoring of offshore wind farm in the Mediterranean Sea, M. Lux, Noveltis, France



☑ **11h20-11h30: WEATHER, CLIMATE AND SEASONAL FORECASTING**

- Seasonal Forecasting at ECMWF, A. Brookshaw, ECMWF

☑ **11h30 - 12h30: ROUND TABLE “Understanding and Meeting the Expectations of EU Member States and Regions”**

R. Ayazi NEREUS, F. Wallenstein, Regional Government of the Azores, C. Clergeau (FR/PES), CoR Rapporteur on "A new stage in the European policy on blue growth", Conseiller régional du Conseil régional Pays-de-la-Loire, A. Buchanan (UK/EA), CoR Rapporteur on ocean governance, Council Leader East Renfrewshire Council, Representative of CRPM (TBC)

CMEMS continuous practical sessions from 9:00 to 12:30: 1/ **CMEMS IN SITU TAC** (Room Madrid): Meet the INSTAC partners, How to get in situ data from INSTAC and how to use them 2/ **CMEMS Baltic MFC** (Room Lisbon)

12h30: SESSION END



DAY 3: 27th SEPTEMBER

14h00 – 18h00: SPLINTER SESSIONS

Copernicus Space Component and CMEMS: current state of the system	Current state of the system: In situ Infrastructure and CMEMS	User Uptake Activities
ROOM : Ballroom 1+2	ROOM: Madrid	ROOM: Copenhagen+ Essen + Warsaw
Chairs: A. Reppucci (MO), C. Donlon (ESA), F. Montagner (EUMETSAT)	Chairs: P.Y. Le Traon (MO), H.S. Andersen (EEA), S. Pouliquen (Ifremer)	Chairs: E. Durand (MO), T. Delourme (EC DG GROW)
<p>Introduction CMEMS : A . Reppucci (MO); 10'</p> <p>S1 (marine capabilities and status). P. Potin (ESA); 20'</p> <p>S2 (marine capabilities and status). C. Donlon (ESA) ; 20'</p> <p>S3 (marine capabilities and status). S. Mecklenburg (ESA) & H. Wilson (EUMETSAT) ; 20'</p> <p>Contributing missions: F. Montagner (EUMETSAT), S. Mecklenburg (ESA) ; 20'</p> <p>CMEMS satellite TAC activities (products, algorithms, requirements, impact of sentinels):</p> <ul style="list-style-type: none"> • SST: J. Siddorn (Met Office) 20' • Sea Level: Y. Faugere (CLS) 20' • Ocean Color: V. Brando (CNR) 20' • Sea Ice: L.A. Breivik (Met.no/DMI) 20' • Wind: A. Stoffelen (KNMI/Ifremer) 20' • Waves: Y. Faugere (CLS) 20' <p>Overview of impact of satellite observations on CMEMS MFCs: E. Remy (MO); 20'</p>	<p>Introduction CMEMS : P.Y. Le Traon (MO) 10'</p> <p>Euro-Argo / Argo and CMEMS: S. Pouliquen (Euro-Argo ERIC): 25'</p> <p>ROOSes and CMEMS: G. Nolan and ROOSes chairs (EuroGOOS): 35'</p> <p>In-situ TAC and its links with Emodnet and SeaDataNet/Cloud: S. Pouliquen (Ifremer) with inputs from Emodnet (A. Novellino) and SeaDataNet (D. Schaap): 45'</p> <p>Impact of in-situ observations on CMEMS products:</p> <ul style="list-style-type: none"> • Impact in CMEMS global systems: F. Gasparin (Mercator Ocean) 20' • Impact in CMEMS Med Sea systems: G. Coppini (CMMC) 20' • Impact in CMEMS Baltic Sea systems: J She (DMI) 20' <p>Discussion (30')</p>	<p>Introduction CMEMS: T. Delourme (EC DG GROW), E. Durand (MO)</p> <p>User Uptake 2017: Demonstration of coastal operational services downstream of CMEMS</p> <p>Coastal forecasting</p> <ul style="list-style-type: none"> • Data.Shom web portal: G. Voineson (SHOM) • Marine Weather Information Services: A. Silva (Hidromod) <p>Water quality</p> <ul style="list-style-type: none"> • ISWIM: R. Mateescu (NIMRD) • Rheticus Marine: D. Iasillo (Planetek) <p>Marine Strategy Directive</p> <ul style="list-style-type: none"> • CHLO4MSFD: Y. Sagarminaga (AZTI) • Quonops: T. Folegot (Quiet Oceans) • MSFD Eutro project, G. El Serafy (Deltares) <p>Maritime security</p> <ul style="list-style-type: none"> • Greenland Floe Edge Service: D. Arthurs (Polar View) • Marine energy • TidEA: F. Jeliuzovski (Noveltis) <p>Projects (H2020) ongoing</p> <ul style="list-style-type: none"> • Odyssey: G. Sylaios (DUTH) • NextGEOSS: N. Catarino (Deimos) • Copernicus App Lab: V. Venus (Ujuizi) <p>Discussions on 2018 User Uptake activities</p>

16h00-16h30pm Coffee Break

CMEMS Service Desk Practical Sessions from 14:00 to 18:00 (Room Lisbon)
How to download data using Python? (1h30), How to visualize data using QGIS (2h00)

18h30-20h00 Social Event (Hotel Renaissance)

Opened by Ms Marika Popp, Counsellor for Economic Affairs at the Permanent representation of Estonia to the EU



DAY 4: 28th SEPTEMBER

8h30 - 12h45: PLENARY SESSION

R&D ACHIEVEMENTS AND SERVICE EVOLUTION CHALLENGES

Overall Session content	CMEMS, paving the way to face the challenges of tomorrow
Chairs	P.Y. Le Traon (MO), P. Brasseur (CNRS/STAC), L. Santoleri (CNR)
ROOM	Ballroom 1+2

8h30-8h45: Keynote on Service Evolution and R&D (strategy, challenges): P.Y. Le Traon (MO)

8h45-9h55: Main R&D achievements from TACs and MFCs and user testimonies

- High level altimetry data processing: G. Larnicol (CLS)
- Advanced sea ice monitoring from a multi-sensor approach: L.A. Breivik (Met.NO)
- High resolution ocean monitoring and forecasting : Y. Drillet and J.M. Lellouche (MO)
- Biogeochemical modelling in the Black Sea and MSFD: M.L. Gregoire (ULG)

9h55-10h40: Benefits of CMEMS Service Evolution R&D projects / three examples

- Increase. Innovation and networking for the integration of coastal radars into European marine services (Increase). J. Mader (AZTI)
- Wave2nemo. Coupled ocean-wave model development in forecast environment : J. Staneva (HZG)
- Greenup: a new ecosystem variable for the marine resources sector: P. Lehodey (CLS)

10h40-11h10: Coffee Break

11h10-11h45: Big data challenges and opportunities for CMEMS

- The Copernicus DIAS platforms: D. Quintart (EC DG GROW)
- The EUMETSAT/ECMWF/MO DIAS: A. Arnaud (MO), Y. Buhler (Eumetsat), J. Garces de Marcilla (ECMWF)

11h45-12h00: CMEMS R&D priorities and roadmap: the main thematic areas: P. Brasseur (CNRS/STAC)

12h00 - 12h45: ROUND TABLE: THE ROLE OF H2020 TO ADDRESS CMEMS LONG TERM EVOLUTION AND SCIENTIFIC CHALLENGES: P.Y. Le Traon (MO), P. Breger (EC DG GROW) (TBC), V. Puzzolo (REA), P. Brasseur (CNRS/STAC), L. Santoleri (CNR).

12h45: SESSION END

CMEMS continuous practical sessions from 9:00 to 12:30:

- 1/ **CMEMS IN SITU TAC** (Room Madrid): Meet the INSTAC partners,
How to get in situ data from INSTAC and how to use them
- 2/ **CMEMS Baltic MFC** (Room Lisbon)



DAY 4: 28th SEPTEMBER

14h00-16h00: SPLINTER SESSIONS

<p>14h - 16h00 : Long term evolution of Copernicus satellite component & marine requirements</p>	<p>14h - 18h30: (To be continued until 18h30) CMEMS Service Evolution and H2020 R&D</p>
<p>ROOM : Ballroom 1+2</p>	<p>ROOM : Copenhagen + Essen + Warsaw</p>
<p>Chairs: A. Reppucci (MO), C. Donlon (ESA), F. Montagner (EUMETSAT)</p>	<p>Chairs: P.Y. Le Traon (MO), P. Brasseur (CNRS/STAC), J. Siddorn (UK Met Office)</p>
<p>Introduction and main CMEMS long term requirements: A. Reppucci (MO) (10')</p> <p>User Requirement analysis : H. Zunker, (EC DG GROW) (15')</p> <p>Evolution of Sentinels and contributing missions: C. Donlon (ESA), F. Montagner (EUMETSAT) (20')</p> <p>Impact of future satellite observations in CMEMS :</p> <ul style="list-style-type: none"> • Swath altimetry: A. Bonaduce (MO) (10') • Sea Ice thickness: L. Bertino (NERSC) (10') • Ocean Colour: P. Brasseur (CNRS/LGGE) (10') • Sea Surface Salinity : B. Tranchant (CLS) (10') • Sea Surface Temperature: J. Siddorn (UKMO) (10') • Sea state from space: L. Aouf (Meteo France), F Arduin (Ifremer) (10'). <p>Discussion</p>	<p>Introduction: P.Y. Le Traon/P. Brasseur</p> <p>Ocean/Wave/Atmosphere/Ice Coupling (40')</p> <ul style="list-style-type: none"> • Ocean-wave-atmosphere interactions in regional seas. H. Lewis (UK Met Office) • Impact of additional contributions to the vertical mixing for the simulation of Arctic ocean and sea-ice states C. Lique, F. Arduin (Ifremer) • Toward an improved representation of air-sea interactions in high-resolution global oceanic forecasting systems : F. Lemarié (INRIA) <p>Mesoscale/sub-mesoscale dynamics (25')</p> <ul style="list-style-type: none"> • Diagnose, interpret, monitor upper ocean circulation: novel data synergies via dynamical exploration. L. Gaultier (Ocean data lab), A. Ponte (Ifremer) • Understanding meso/submesoscale ocean interactions to improve Mediterranean cmems products. S. Ruiz (CSIC/IMEDEA) <p>Data Assimilation (25')</p> <ul style="list-style-type: none"> • Statistical-dynamical observation operator for sst data assimilation. A. Storto (CMCC). • Stochastic coastal/regional uncertainty modelling: Sensitivity, consistency and potential contribution to cmems ensemble data assimilation. V. Vervatis (Univ. of Athens) <p>Advances in global and regional ocean reanalyses (30')</p> <ul style="list-style-type: none"> • Global ocean physical reanalyses at high and low resolutions: M.Drevillon (MO)/G. Garric (MO) • Regional reanalyses for biogeochemistry / Arctic example: L. Bertino (NERSC)

16h00 - 16h30: Coffee Break





DAY 4: 28th SEPTEMBER

16h30-18h30: SPLINTER SESSIONS

<p>16h30 - 18h30 : Long term evolution of in-Situ observing systems & marine requirements</p>	<p>16h30 - 18h30 : CMEMS Service Evolution R&D and H2020 R&D (Follow up)</p>
<p>Chairs: A. Reppucci (MO), E. Buch (EUROGOOS)</p>	<p>Chairs: P.Y. Le Traon (MO), P. Brasseur (CNRS/STAC), J. Siddorn (UK Met Office)</p>
<p>ROOM : Ballroom 1+2</p>	<p>ROOM : Copenhagen + Essen + Warsaw</p>
<ul style="list-style-type: none"> - CMEMS vision: A. Reppucci (MO) (10') - Evolution of Euro Argo-ERIC: S. Pouliquen (Ifremer, Euro-Argo ERIC) (20') - Evolution of Rooses : G. Nolan (Eurogoos) (20') - Contribution of H2020 projects: <ul style="list-style-type: none"> • JERICO-NEXT, D. Durand (Covartec), J. Mader (AZTI) (10') • Atlantos, M. Visbeck (GEOMAR) (10') • Intaros, S. Sandven (NERSC) (10') • Odyssea, G. Sylaios (Democritus University of Thrace) (10') -Towards EOOS: G. Nolan (EuroGOOS), K. Larkin (European Marine Board) (10') - Discussion (20') 	<p>Coastal ocean (60')</p> <ul style="list-style-type: none"> • High resolution ocean colour (FP7 Highroc): K. Ruddick (IRSNB) • Copernicus evolution and applications for the coastal zone (H2020 Ceaseless): A. Sanchez-Arcilla (UPC-BarcelonaTech) • Upscaling. Propagating information back from coastal/regional models to CMEMS. A. Barth (Univ. of Liège). • Co-ReSyF – Coastal Waters Research Synergy Framework. (H2020 Co-Resyf). N. Catarino (Deimos). <p>Biogeochemistry and ecosystems in the marine environment (40')</p> <ul style="list-style-type: none"> • Advances in ocean colour data processing in CMEMS : V. Brando (CNR). • Massimili. Development of a biogeochemical multi-data assimilation scheme to integrate Bio-Argo data with ocean colour data. G. Cossarini (OGS). • Tosca. Towards operational size-class chlorophyll assimilation. S. Ciavatta (PML). <p>Discussion / Synthesis (20')</p>

CMEMS Service Desk Practical Sessions from 14:00 to 18:00

(Room Lisbon and Madrid)

How to view products with Ncview? (2x 1h sessions),

How to visualize data using QGIS (2h00)

DAY 5: 29th SEPTEMBER

9h00 - 13h00: PLENARY SESSION CMEMS FUTURE PROSPECTS

Overall Session content	YOUR COPERNICUS MARINE SERVICE TOMORROW
Chairs:	P. Bahurel (MO), N. Pinardi (UNIBO/CMCC)
ROOM	Ballroom 1+2

- 9h00 - 9h15: Keynotes: CMEMS as a piece of the EU Space Strategy**, P. Brunet (EC DG GROW)
- 9h15 - 10h15: Improving the Copernicus Marine Service and Products**
 - The Space Component,
 - ESA perspective, C. Donlon (ESA)
 - EUMETSAT perspective, A. Ratier (EUMETSAT)
 - The In-Situ Component, E. Buch (EUROGOOS)
 - Copernicus Marine Service Tomorrow: What offer for what needs? P.Y. Le Traon (MO), D. Obaton (MO)
- 10h15 - 10h30: Industry and Public Sectors, Complementarity & New Paradigm**, D. Dinkova (EC DG GROW)

10h30-11h00: Coffee Break



- 11h00 - 11h15: CMEMS and GMES and Africa**, C. Roeland (EC DG GROW)
- 11h15 - 11h30: CMEMS to Serve EU Leadership Worldwide**, S. Ramage (GEO)
- 11h30 - 11h45: CMEMS and International Collaboration** (tbc)
- 11h45 - 12h00: Training the Next Generation of CMEMS Actors**, N. Pinardi (UNIBO/CMCC)
- 12h00 - 12h45: ROUND TABLE: "CMEMS II, Future Prospects"**: M. Facchini (EC DG GROW), P. Bahurel (MO), C. Stenmans (EEA), A. Ratier (EUMETSAT), S. Ramage (GEO), N. Pinardi (UNIBO/CMCC), E. Buch (EuroGOOS)
- 12h45 - 13h00: Your Copernicus Marine Service: What's next?** P. Bahurel (MO)

13h00: CLOSURE