



International Conference

# OPERATIONAL OCEANOGRAPHY

## Serving Sustainable Marine Development

3-5 October 2017, Bergen, Norway



### Tuesday 03/10/2017

08:00-9:00	Registration and welcome coffee
09:00-9:30	<p><b>Opening and welcome, Chair: Erik Buch, EuroGOOS</b></p> <p>Erik Buch, EuroGOOS (10')</p> <p>Norwegian Ministry TBC (10')</p> <p>Welcome from the Nansen Environmental and Remote Sensing Centre (NERSC) and Institute of Marine Research (IMR) (10')</p>
09:30-09:50	Ocean observations for society: European Commission perspective, Marco Weydert, EC DG R&I
09:50-10:10	Towards an integrated European Ocean Observing System, Glenn Nolan, EuroGOOS
10:10-11:00	Coffee break and poster session
11:00-12:00	<p><b>European ocean observing projects, Chair: Erik Buch, EuroGOOS</b></p> <p><b>AtlantOS</b>, Johannes Karstensen, GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany (20')</p> <p><b>Odyssea</b>, Ghada El Serafy, Deltares, the Netherlands (20')</p> <p><b>INTAROS</b>, Stein Sandven, Nansen Environmental and Remote Sensing Centre (NERSC), Norway (20')</p>
12:00-12:20	<b>Global Ocean Observing System: status and forward look</b> , Albert Fischer, Global Ocean Observing System, IOC UNESCO
12:20-13:20	Lunch and poster session
13:20-16:10	<p><b>Polar Session, Chair: Stein Sandven, NERSC, Norway</b></p> <p><b>Frontiers in Arctic Marine Monitoring</b>, Martina Loebel, Alfred Wegener Institute (AWI), Germany (20')</p> <p><b>Copernicus Marine Service Arctic Marine Forecasting Centre</b>, Laurent Bertino, NERSC, Norway (20')</p> <p><b>State of play in European remote sensing</b>, Johnny Johannessen, Nansen Environmental and Remote Sensing Centre (NERSC), Norway (20')</p> <p><b>The Nansen Legacy</b>, Marit Reigstad, Arctic University of Norway (UiT), Norway (20')</p>
14:40-15:10	Coffee break and poster session
16:10-16:40	<p><b>The Implementation of the Southern Ocean Observing System (SOOS)</b>, Sebastiaan Swart, University of Gothenburg, Sweden (20')</p> <p><b>Euro-Argo evolution and polar focus</b>, Claire Gourcuff, Euro Argo ERIC (20')</p> <p><b>Acoustics: The key to observing the ocean under the Arctic sea ice</b>, Hanne Sagen, Nansen Environmental and Remote Sensing Centre (NERSC), Norway (20')</p>
16:40-18:00	<b>Kostas Nittis Medal award and winner's flash talk</b>
16:40-18:00	<b>Poster session teaser</b>
18:00-19:00	Reception

### Wednesday 04/10/2017

	Session 1.1 Observations: Networks, in-situ requirements and sensors	Session 2.1. Process, modelling and Copernicus Services	Session 3.1 Modelling, data assimilation and services
09:00-12:30	Chair Stein Sandven, NERSC, Norway/Chair EuroGOOS Arctic ROOS Rapporteur Julien Mader, AZTI, Spain/Chair EuroGOOS HF Radar Task Team and co-Chair EuroGOOS IBI-ROOS	Chair Henning Wehde, IMR, Norway/co-Chair EuroGOOS NOOS Rapporteur Manuel Ruiz, IEO, Spain/co-Chair EuroGOOS IBI-ROOS	Chair Bernd Brugge, BSH, Germany/EuroGOOS Executive Board Rapporteur Sebastien Legrand, RBINS, Belgium/co-Chair EuroGOOS NOOS
9:00	'Towards an integrated EU data system within AtlantOS'. Sylvie Pouliquen, IFREMER, FR	'Tracking mesoscale eddies from combined use of satellite altimetry and Argo profiling floats'. Roshin. P. Raj., NERSC, NO	'Ensemble-based data assimilation of observations into NEMO-Nordic'. Lars Axell, Swedish Meteorological and Hydrological Institute (SMHI), SE
9:15	'JERICO-RI: The integrated coastal component of the European Ocean Observing System'. Patrick Farcy, IFREMER, FR	'Cross-shelf exchanges in the Bay of Biscay'. Anil Akpınar, LOPS/IFREMER, FR	'Last improvements in the data assimilation scheme for the Mediterranean Analysis and Forecast system of the Copernicus Marine Service'. Jenny Pistoia, Istituto Nazionale Geofisica e Vulcanologia (INGV), IT
9:30	'Deployment of new observing systems thanks to the JERICO-RI'. Ingrid Puillat, IFREMER, FR	'Operational Wave Height Monitoring Using Navigation Buoys and Marine Radars in the Baltic Sea'. Tarmo Kõuts, Marine System Institute - Tallinn University of Technology, EE	'The roles of the sea ice thickness measurements from satellites in the TOPAZ system'. Jiping Xie, Nansen Environmental and Remote Sensing Center (NERSC), NO
9:45	'COAST-HF - A fixed-platform network along French coasts'. Guillaume Charria, LOPS/IFREMER, FR	'Sea surface velocity retrievals from Synthetic Aperture Radar'. Morten W. Hansen, NERSC, NO	'The SAMOA project: downscaling operational oceanography for improving Harbour operations'. Marcos García Sotillo, Puertos del Estado, ES
10:00	'The Coastal Observing System for Northern and Arctic Seas (COSYNA): Challenges and Solutions for an Integrated Measurement and Modelling Approach'. Holger Brix, HZG, DE	'The IEO coastal observatory: understanding variability of coastal circulation and ecosystem response off North and North West Iberia'. Manuel Ruiz-Villarreal, IEO, ES	'TOWARDS A NEW SEA LEVEL FORECAST SYSTEM IN PUERTOS DEL ESTADO'. Irene Pérez González, Puertos del Estado, ES
10:15-10:30	Q&A and Discussion	Q&A and Discussion	Q&A and Discussion
10:30-11:00	Coffee break and poster session		
11:00	'Toward integrated marine observing system in Croatia'. Vlado Dadić, Institute of Oceanography and Fisheries (IOF), CR	'Relocatable ocean modelling for downscaling to the shelf and coastal areas'. Francesco Trotta, University of Bologna (UNIBO), IT	'The Copernicus Marine Service User Uptake programme, a way to show the value added chain till the end users'. Edmée Durand, Mercator Ocean, FR
11:15	'The POSEIDON system, an integrated observing infrastructure at the Eastern Mediterranean as a contribution to the European Ocean Observing System'. Perivoliotis L., Greek Center for Marine Research (HCMR), GR	'Performance and quality assessment of the global ocean eddy-permitting physical reanalysis GLORYS2V4'. G. Garric, Mercator Ocean, FR	'CMEMS Baltic Monitoring and Forecasting Centre: High-resolution wave forecasts in the seasonally ice-covered Baltic Sea'. Laura Tuomi, Finnish Meteorological Institute (FMI), FI
11:30	'FerryBoxes within Europe: State-of-the-art and Integration in the European Ocean Observation System (EOOS)'. Wilhelm Petersen, Helmholtz-Zentrum Geesthacht (HZG), DE	'A North Sea-Baltic Sea regional coupled models: Atmosphere, wind waves and ocean'. Joanna Staneva, Corinna Schrum and HZG-GCOAST team	'The new CMEMS IBI-WAV forecasting system: skill assessment using in situ and HF radar data'. Pablo Lorente, Puertos del Estado, SP

11:45	'Future scenarios for the growing European HF Radar network'. Julien Mader, AZTI, SP	'Towards seamless modelling in the Baltic Sea'. Jun She, DMI, DE	'Sea ice monitoring system based on satellite data to support safe navigation in Arctic Seas'. Anton Korosov, NERSC, NO
12:00	'CMEMS Present and Future Requirements for Satellite and In-Situ Observations'. Antonio Reppucci, Mercator Ocean, FR	'A two-way nested high resolution coastal simulation in a tidally dominated area: preliminary results'. Ioannis Mamoutos, Irish Marine Institute (IMI), IE	'Satellite data based automated arctic sea ice monitoring system'. L. Bobylev, NERSC, NO
12:15-12:30	<b>Q&amp;A and Discussion</b>	<b>Q&amp;A and Discussion</b>	<b>Q&amp;A and Discussion</b>
12:30-13:30	<b>Lunch and poster session</b>		
13:30 - 16:30	<b>Session 1.2 Observations: Networks, in-situ requirements and sensors</b> Chair Patrick Farcy, Ifremer, France/EuroGOOS Executive Board Member Rapporteur Wilhelm Petersen, HZG, Germany/co-Chair EuroGOOS FerryBox Task Team	<b>Session 2.2. Process, modelling and Services</b> Chair George Petihakis, HCMR, Greece/EuroGOOS vice-Chair Rapporteur Enrique Alvarez Fanjul, Puertos del Estado, Spain/EuroGOOS MONGOOS co-Chair	<b>Session 3.2 Data and services</b> Chair Sylvie Pouliquen, Ifremer, France/Chair EuroGOOS DATAMEQ Working Group Rapporteur Antonio Novellino, DLTM, Italy
13:30	'Assessment of Baltic Sea observations for operational oceanography'. Jun She, Danish Meteorological Institute (DMI), DE	'Ocean forecasting from regional to coastal scales: two-way nesting and seamless modeling'. Emil V. Stanev, HZG, DE	'Stress testing the EU monitoring capacity for the Blue economy'. Nadia Pinardi, UNIBO, IT
13:45	'New sources of in-situ marine data to support EC Marine Strategy Framework Directive Implementation in the Black Sea'. Violeta Slabakova, Institute of Oceanology-BAS, BG	'Performance and quality assessment of the current Copernicus Marine Service global ocean monitoring and forecasting real-time system'. J.-M. Lellouche, Mercator Ocean, FR	'EMODnet Physics: tackling new challenges'. Antonio Novellino, ETT Solutions, IT
14:00	'Novel, multi-platform acoustic and optical sensors and data services developed in the NeXOS project'. Lars Golmen, Norwegian Institute for Water research(NIVA), NO	'Overview of CMEMS BAL MFC Service and Developments'. Laura Tuomi, FMI, FI	'The new services provided by the Copernicus Marine In Situ thematic centre'. Sylvie Pouliquen, IFREMER, FR
14:15	'Acoustic tomography as a component the Atlantic Ocean Observing System: Opportunities and Challenges'. Brian Dushaw, NERC, NO	'A 1/24 degree resolution Mediterranean analysis and forecast modeling system for the Copernicus Marine Environment Monitoring Service'. Emanuela Clementi, INGV, IT	'CORA 5.0: global in-situ temperature and salinity dataset.'. Sylvie Pouliquen, IFREMER, FR
14:30-14:45	<b>Q&amp;A and Discussion</b>	<b>Q&amp;A and Discussion</b>	<b>Q&amp;A and Discussion</b>
14:45-15:15	<b>coffee break and poster session</b>		
15:15	'New acoustic profiling instrumentation with measurements of pCO2 and pH tested in the Southern Adriatic'. Vanessa Cardin, Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS), IT	'High resolution operational analysis and forecasts for the Mediterranean Sea biogeochemistry'. Stefano Salon, OGS, IT	'Virtual access activity in JERICO-NEXT: guiding users to relevant services and data'. Véronique Créach, Centre for Environment, Fisheries and Aquaculture Science (CEFAS), UK
15:30	'Current and emerging in situ biogeochemical observations using the FerryBox platform in Subarctic and Arctic Norwegian waters'. Kai Sørensen, NIVA, NO	'Modeling in the Mediterranean Sea: the MonGOOS contribution'. Georg Umgiesser, Istituto de Scienze Marine-CNR (ISMAR-CNR), IT	'Operational oceanography to serve sustainable development in Baltic-North Sea'. Jun She, DMI, DE
15:45	'Novel biogeochemical sensors: Operation of a newly developed total alkalinity analyser (TA) in combination with a FerryBox for better quantification of the carbon dynamics in the North Sea'. Wilhelm Petersen, HZG, DE	'Downscaling the Copernicus CMEMS Med MFC in the Eastern Mediterranean: The new CYCOFOS forecasting systems at regional and sub-regional scales'. George Zodiatis, Oceanography Centre, University of Cyprus (OC-UCY), CY	'HNS-MS: Improving Member States preparedness to face an HNS pollution of the Marine System'. Sébastien Legrand, Royal Belgian Institute of Natural Sciences (RBINS), BE
16:00	'GlobCurrent – A Pre-operational monitoring system for surface current and upper ocean dynamics based on sensor synergy'. Johnny A. Johannessen, NERSC, NO	'North-West European Shelf Monitoring and Forecasting Centre: system evolution since the beginning of CMEMS'. N. Mc Connell, UK Metoffice, UK	'Offshore aquaculture site selection along the Spanish, Norwegian and Irish Atlantic coasts'. Trine Dale, Manuel Ruiz-Villarreal, Tomasz Dabrowski and Caroline Cusack
16:15	'Euro-Argo in work and new potential of gliders in the Baltic Sea BOOS'. Pekka Alenius, FMI, FI	'Evolution of the IBI MFC Services along the CMEMS Phase I (2015-2018): Success stories and Future Challenges'. Marcos G. Sotillo M.G., Puertos del Estado, ES	'Societal benefits from observing and modelling systems – pilot actions in Ireland in the framework of the AtlantOS project'. Tomasz Dabrowski, IMI, IE
16:15-16:30	<b>Q&amp;A and Discussion</b>	<b>Q&amp;A and Discussion</b>	<b>Q&amp;A and Discussion</b>
16:30-17:30	<i>Conference conclusions - meeting with rapporteurs</i>		
19:00-21:00	Reception and conference dinner		

#### Thursday 05/10/2017

	Looking ahead, Chair Glenn Nolan, EuroGOOS
09:00-09:20	<b>Key-note: An International (UN) Decade of Ocean Science for Sustainable Development 2021-2030</b> Peter Haugan, Chair Intergovernmental Oceanographic Commission of UNESCO / University of Bergen (UiB), Norway
09:20-09:35	<b>Overview of new technologies: Jerico Next experience</b> , George Petihakis, Hellenic Centre for Marine Research (HCMR), Greece
09:35-09:50	<b>Animal-borne instruments</b> , Lars Boehme, St.Andrews University, UK/Chair EuroGOOS ABI Task Team
09:50-10:05	<b>Future challenges in ocean forecast</b> , Nadia Pinardi, University of Bologna, Italy
10:05-10:20	<b>EOOS: Connecting Europe's end-to-end ocean observing capability</b> , Kate Larkin, European Marine Board
10:20-10:50	Coffee break
10:50-11:05	<b>Present and future capacities of the Copernicus Marine Service</b> , Antonio Reppucci, Mercator Ocean, France
11:05-11:20	<b>Science with and for society: Outreach and "In-reach" for technological sustainability</b> , Dorothy Dankel, University of Bergen (UiB), Norway
11:20-12:00	<b>Reports from parallel &amp; poster sessions</b> by conference rapporteurs
12:00-12:40	Panel discussion <b>Operational oceanography serving the sustainable marine development - state of art</b> Moderator Johnny Johannessen, Nansen Environmental and Remote Sensing Centre (NERSC), Norway George Petihakis, Peter Haugan, Nadia Pinardi, Lars Boehme, Kate Larkin, Dorothy Dankel, Glenn Nolan, Antonio Reppucci
12:40-12:55	<b>Key conference messages</b> , George Petihakis, EuroGOOS vice-Chair
12:55-13:00	<b>Closing</b>
13:00-14:00	Lunch