

Essential Biological Data Products

A Showcase for the European Atlas of Marine Life

An EMODnet Biology End-User Event

Cultural Centre de Belém, Lisbon, Portugal

15th May 2019

Draft Agenda

08:30 - Arrival & Coffee

09:00 - Welcome & Introduction (Dan Lear, MBA)

09:15 - Opening Address (Luis Valdés Santurio, Spanish Institute of Oceanography)

09:45 - EU Commission Perspective (Iain Shepherd, EU Commission)

10:00 - Linking EMODnet Biology to EOVS (Peter Herman, Deltares)

Plankton

10:15 – How plankton data can meet global policy challenges (Abigail McQuatters-Gollop, University of Plymouth)

10:45 - Plankton Data Products (Charles Troupin, University of Liege)

11:00 - Coffee

Benthos & Fish

11:30 - ICES use of Trait-based products (Seb Valanko, ICES)

12:00 - Traits-based approaches (Gert van Hoey, ILVO)

12:15 - Thermal Niche product (Tom Webb, University of Sheffield)

Birds, Mammals & Reptiles

12:30 – Mammals & Birds in the Black Sea (Irina Makarenko, Black Sea Commission)

13:00 - Gridded abundance maps (Lennert Schepers, VLIZ)

13:15 - Lunch, Posters & Networking

Macroalgae & Coral

14:15 - OSPAR Adoption of EMODnet Products (Cristina Herbon, JNCC)

14:45 - EMODnet Seabed Habitats (Helen Lillis, EMODnet Seabed Habitats/JNCC)



Ballast Water & Invasives

15:00 – Ballast Water Management and the European Maritime Safety Agency (Mercedes Garcia Horrillo, EMSA)

15:30 - Management of port areas in the Mediterranean sea basin. (Christos Arvanitidis, HCMR)

15:45 - Breakout Groups - Gaps & Challenges

16:30 - Coffee

16:45 - Breakout Feedback & Panel on Data Product Development - Gaps and Challenges

17:30 - Towards Global Data Products (Isabel Sousa-Pinto, MBON)

18:00 - Close of Meeting



The Speakers

Luis Valdes

Luis is Research Professor at the Instituto Español de Oceanografía (IEO) and was the Head of Ocean Sciences at the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) from 2009 to 2015, formerly (2000–2008) he was the Director of the Centro Oceanográfico de Gijón (CO Gijón-IEO).

He served as the Spanish Delegate in the IOC-UNESCO (2002-2008) and in the International Council for the Exploration of the Sea (ICES).

With more than 35 years of experience in marine research and field studies related to marine ecology and climate change, he established in 1990 the time series programme, based on ocean sampling sites and marine observatories, which is maintained by Spain in the North Atlantic.

He has a long experience in science management and has advised various governmental, intergovernmental and international organizations as well as research funding agencies and chaired several Working Groups and Committees, including the ICES Oceanographic Committee.

Iain Shepherd

Iain is Senior Expert in the European Commission's Directorate General for maritime affairs and fisheries. A physics graduate, he has been working for the Commission for nearly 40 years, initially in the Joint Research Centre on scientific support to EU policy in areas such as nuclear reactor safety, humanitarian aid, fisheries control and (prevention of) weapons of mass destruction. Current responsibilities include investment, innovation, knowledge and decarbonisation in the blue economy.

Peter Herman

Peter is Professor of Ecological Hydraulic Engineering at Delft University of Technology, Senior researcher at Deltares (Coastal and Marine Systems). He is an ecologist working on physical-ecological interaction and modelling ecological dynamics in estuaries and coasts.

He is a broadly interested estuarine ecologist, fascinated by the ecological functioning of these systems full of gradients between fresh and salt, quiet and dynamic, high and low.

He uses mathematical models and theoretical concepts to better understand the complexity of these landscapes. He tries to understand and describe this complexity in quantitative terms, e.g. in biogeochemical cycles, food webs, physical structures.

He conveys the knowledge gained in these theoretical studies to society.

Abigail McQuatters-Gollop

Abigail is a plankton ecologist and lecturer in marine conservation at University of Plymouth. She is a NERC Knowledge Exchange Fellow and Defra Senior Policy Fellow and is leading the implementation of the EU Marine Strategy Framework Directive for pelagic habitats (plankton)



for the UK and OSPAR (Northern Europe). Abigail's research focuses on marine ecological responses to anthropogenic and climate change and the subsequent integration of results into the policy process. A key area of interest lies in the separation of climate responses in the plankton from those due to anthropogenic disturbances, and the linking of biodiversity state changes to manageable human pressures. Abigail also sits on the British Ecological Society Brexit Policy Working Group and has recently received a Japan Society for the Promotion of Science Invited Fellowship to work on policy impact generation in Japan.

Charles Troupin

Charles is an engineer in Physics and PhD in Oceanography. He is specialised in data analysis (in situ and remote sensing) and is one of the developers of the DIVA and DIVAnd interpolation tools. He also has experience in numerical modeling, with a particular interest of submesoscale processes in coastal upwelling areas. He was the head of the SOCIB Data Center (Balearic Islands) from March 2014 to January 2017 and lead several projects dealing with data analysis, visualisation and ingestion. He is currently involved in SeaDataCloud, EOSC-Hub and EMODnet (Chemistry, Biology, Data Ingestion).

Sebastian Valanko

Sebastian is a Professional Officer for ecosystem related advice at ICES. He is a benthic ecologist by training, working in the policy – science interface at ICES. In this role he supports and coordinates the production of environmental advice in line with the ecosystem approach to ensure that ICES evolves with the changing policy environment and that future advice outcomes are aligned with client expectations (OSPAR, HELCOM, NEAFC, DGENV, DGMARE). He also has a leading role in coordinating work related to the EU's MSFD and is a member of EU's technical group (TG) on D6. This work aims to promote understanding and dissemination of an assessment method that can be applied at the regional scale and across European Seas.

Gert van Hoey

Gert works at the Aquatic Environment and Quality department of ILVO, where he coordinates and executes projects related to the evaluation of the impact of human activities on the seafloor ecosystem. His research is focused on developing and applying structural and functional indicators in the framework of environmental impact assessments for several human activities (Dredge disposal, fishery, aggregate extraction, wind farms) and the EU Nature Directives requirements (Marine Strategy Framework Directive and Habitat Directive). In relation to this an adequate and integrated monitoring program is strived for.

Tom Webb

Tom is a marine macroecologist and biodiversity scientist, and a lecturer in marine ecology and conservation in the Department of Animal and Plant Sciences, University of Sheffield, UK. He has a particular interest in how to combine different sources of marine biodiversity data (e.g. species occurrences, taxonomy, and traits) into novel products to help us to understand how life in the seas varies in time, space, and in response to environmental and human drivers. Within



EMODnet he has been developing methods for deriving thermal affinities of marine species using open source data and tools.

Irina Makarenko

Irina has worked at the Permanent Secretariat of the Commission on the Protection of Black Sea Against Pollution (Bucharest Convention) since 2010. Before moving to Turkey she worked as a diplomat in the Mission of Ukraine to the European Union in Brussels, and earlier as a Deputy Head of Office to Vice Prime Minister of Ukraine on European Integration and as a diplomat of the Ministry for Foreign Affairs of Ukraine. She has a Master Degree in the field of Environmental and Energy Law obtained at a Faculty of Law of the Catholic University of Leuven (Kingdom of Belgium), Certificates on Water Law (University of Dundee, Scotland), Environmental Diplomacy (University of Geneva, Switzerland) and Regional Economics (University of Genoa, Italy). In April 2018 Irina was appointed as member of Pool of Experts for UN World Ocean Assessment II (WOA II) and currently contributes to process of drafting the Chapter of WOA II on Marine Mammals.

Lennert Schepers

Lennert holds a Master degree in Geography (Ugent) and a PhD degree in Science (UAntwerpen). He moved from coastal marshes, which he studied during his PhD, to the marine world in 2018 when he started working for the Flanders Marine Institute (VLIZ). Currently he is working on EMODnet Biology products and related national and international projects with a focus on (geo)spatial data.

Christina Herbon

Christina is a scientific expert on benthic ecosystems, with particular expertise on the development of indicators and targets for the assessment of benthic ecosystems as part of the implementation of EU Directives such as the Marine Strategy Framework Directive, and other international obligations such as the OSPAR Convention. Co-chair of the OSPAR ICG-COBM Benthic Expert Group, which is the group responsible for data, assessments and indicators related to benthic ecosystems in OSPAR regions. Provision of advice to EEA as part of the European Topic Centre on Regional seas Convention indicators, management of marine data flows, and technical review on the development of assessments tools.

Helen Lillis

Helen co-ordinates the EMODnet Seabed Habitats initiative, which collates and creates data and data products about seabed habitats in Europe, making them freely available online. She works for the Joint Nature Conservation Committee in the UK, where she ensures the best seabed habitat data is available to Government so it can make the best decisions about how to conserve the marine environment. The work fits her goals perfectly: to be nerdy, to go outside and (hopefully) to do her bit for the planet.



Mercedes Garcia Horrillo

Mercedes is posted as Project Officer in Unit B.3, Environment & Capacity Building in the European Maritime Safety Agency for the last four years, dealing mainly with prevention of pollution by ships, such as air emissions and ballast water. She was involved in drafting guidance documents for Sulphur Inspectors as well as Guidance, Distant Learning Packages and delivering training on the Ballast Water Convention. Before joining EMSA she worked in the Spanish Maritime Administration as Head of Unit for International Relations. Mercedes graduated from the Universidad Politécnica de Madrid as a Naval Architect/Design Engineer and started her professional career in the shipbuilding industry as maritime surveyor for the International Classification Society DNV-GL. She also holds a MSc. in Shipping.

Christos Arvanitidis

Christos' research focuses on marine biodiversity, biodiversity informatics, functional diversity, and coastal ecosystems. He works on the comparisons of marine biodiversity information patterns deriving from various biological organization levels and scales of observation, trying to develop new approaches to explore their interrelationships.

He is involved in 65 research and education projects, having coordinated 8 and attracting >€7M in research funding. Christos is author of more than 100 peer-reviewed scientific articles, including 3 monographs. He is Associate Editor in *Frontiers in Marine Science*, *Biodiversity Data Journal* and Handling Editor in *Mediterranean Marine Science* in addition to acting as Guest Editor in *Marine Ecology Progress Series* and *Journal of Sea Research*. He is a member of the editorial board of *Transitional Waters Bulletin* and has acted as reviewer in more than 45 international peer-reviewed journals.

Isabel Sousa Pinto

Isabel has PhD in Marine Biology from the University of California, Santa Barbara, USA and is Professor at the University of Porto and Head of the Biodiversity of Aquatic Ecosystems group from the Interdisciplinary Centre for Marine and Environmental Research – CIIMAR-UP. Her research focus is on algal cultivation and use and on ecology and marine biodiversity. She is co-chair of MBON - Marine Biodiversity Observation Network from GEO BON. She has been working with AtlantOS – All-Atlantic Observation System and on EOOS – European Ocean Observation System to develop the biology component of the Ocean observations and with the European Marine Board to identify gaps in biological observations and produce recommendations to fill them. Isabel is a member of the POGO working group “Planning the implementation of a global long-term observing and data sharing strategy for macroalgal communities”. She was also a Coordinating Lead Author for the Regional Assessment of Biodiversity and Ecosystem Services in Europe and Central Asia for UN IPBES – Intergovernmental Panel on Biodiversity and Ecosystem Services (2015-2018), Portuguese Representative in this platform until 2018, and is now a member of its Multidisciplinary Expert Panel.



**European
Commission**
Maritime Affairs
and Fisheries

