Friday, May 12, 2023

Status Report to the EuroGOOS General Assembly

Reporting period: May 2022-April 2023

EuroGOOS body: Task Team

Full title: FerryBox Task Team

Co-Chair 1 (Name and affiliation) Andrew King, NIVA

Email andrew.king@niva.no

Co-Chair 2 (Name and affiliation) Yoana Voynova, Hereon

Email yoana.voynova@hereon.de

Current members, affiliation and country

Andrew King, NIVA, Norway
Yoana Voynova, Hereon, Germany
Bengt Karlson, SMHI, Sweden
Annie Meadows, Cefas, United Kingdom
Constantin Frangoulis, HCMR, Greece
Franciscus Colijn, Hereon, Germany
George Petihakis, HCMR, Greece
Henning Wehde, IMR, Norway
Jukka Seppala, SYKE, Finland
Kai Sørensen, NIVA, Norway
Kate Collingridge, Cefas, United Kingdom
Patrick Gorringe, SMHI, Sweden
Urmas Lips, TTU, Estonia
Vicente Fernandez, EuroGOOS, Belgium
Wilhelm Petersen, Hereon, Germany
Manuel Ruiz Villarreal, IEO, Spain
Anna Wranne Willstrand, SMHI, Sweden
Manolis Ntoumas, HCMR, Greece
Andre Cattrijsse, VLIZ, Belgium
Gonzalo Gonzales Nuevo, IEO, Spain
Thanos Gkritzalis, VLIZ, Belgium
Carolina Cantoni, CNR, Italy
Eric Delory, PLOCAN, Spain

Website www.ferrybox.org; eurogoos.eu/ferrybox-task-team/

Objectives:

-Act as the European component in the global community using ships of opportunity (e.g. OceanOPS-Ship Observation Team), and incorporate links with ICOS (Integrated Carbon Observation System), and GOOS (Global Oceanographic Observation System) through EuroGOOS.
-Ensure the integration of FerryBox networks in the European Operational Oceanographic Services and contribute to the development of the European Ocean Observing System (EOOS).
-Promote availability of data via the EuroGOOS ROOS data portals including data quality procedures, as well as the publication of FB Data through DOI ; promote a common European FerryBox data portal.
-Foster dialog between task team members, other FerryBox operators, and end-users (National

Oceanographic data centres, OSPAR, EEA, HELCOM, ICES, EMODNET, shipping companies, environmental agencies, universities, climate related institutions, etc.). This dialogue can cover themes like data structure/format/dissemination (interoperability of datasets), quality control procedures, validation procedures, technological solutions, incorporation into numerical models, and provide observations for long term trend analysis.
-Ensure that, where relevant, their activities are integrated with other EuroGOOS structures and will maintain a continuous dialogue and collaboration with them.

Relevance to the EuroGOOS Strategy:

-Stimulate communities of practice:
>Continued contribution to H2020 projects such as JERICO-S3, EuroSea, CLAIM
>(Always) improving data flow/QC and feeding of data to CMEMS/EMODnet
>Best practices and QC of underway autonomous carbonate system measurements and automated phytoplankton observations, long-time QC-ed datasets analysed & published
-Advocate for coordinated and integrated OO
>Built links with Ocean-OPS/SOT and GOOS SOOPIP, also with ICOS for FB pCO2 observations, EuroGOOS BIO WG, ROOS
-Strengthen/expand partnerships
>Added new partner institutes to the FB-TT, several new members from existing partner institutes, election of new chair/co-chair planned for 2023, training new partner institutes
-Promote sustainability
>Participation in proposals/projects that include FB in infrastructure projects; continued to look for ways for FB Task Team to contribute to EOOS;
-Mobilise the public
>Promote citizen science and ocean literacy through FB-TT activities and research

Key achievements in the reporting period (May 2022-April 2023):

-Organised and held first in-person FerryBox workshop since COVID; September 2022 in Geesthacht, Germany (Hereon)
-Updated Terms of Reference
-Added eight new members to FerryBox Task Team
-Presented FerryBox Task Team updates to SOOPIP
-HCMR: After a long period of non-operation, the Poseidon FerryBox (PFB) is back in operation in the Cretan Sea (Heraklion-Piraeus); a second FerryBox system has been acquired for installation on a ferry line in the Northern Aegean Sea
-TTU: Plans have been made to resume FerryBox activities on Tallinn-Helsinki FerryBox in July 2023 after ~11 months of non-operation due to COVID-related operational changes
-SMHI: New 4H Jena FerryBox installed on Tavastland Baltic Sea FerryBox; operational FerryBox and Imaging Flow Cytobot on R/V Svea that performs monthly cruises in the Baltic/Skagerrak/Kattegat; contributing to BIOWG and European IFCB network
-SYKE-FMI: FerryBox on Silja Serenade (Helsinki-Stockholm) and Finnmaid (Helsinki-Travermunde) operational; celebrating 30 years of continuous FerryBox measurements in 2023; hosted Baltic FerryBox calibration workshop in February 2023 (SYKE, SMHI, NIVA, Univ. Tarto, Univ. Helsinki); Silja Serendate joining ICOS network in 2023; testing operational plankton imaging systems onboard Finnmaid FerryBox
-NIVA: New FerryBox line on SC Connector operational in the North Sea between Norway, UK, and Netherlands; new FerryBox line in construction on M/S Richard With operating along coastal Norway that will be part of ICOS network

Bottlenecks or obstacles during the reporting period (May 2022-April 2023):

-none to report

Main priority areas (2023-2024):

-Continue to update FB Task Team related Ocean Best Practices for operations and data handling (presently mostly from JERICO, JERICO-NEXT, and MyOcean, and now addressed by JERICO-S3 and EuroSea)
-Improve data flow and feeding of data to CMEMS/EMODnet
-Continue to look for ways for FB Task Team to contribute to EOOS – little concrete action in over last few years
- Working on establishing methods for best practices and quality control of underway autonomous carbonate system measurements

Other major activities (2023-2024):

- Plan/carry out 12th FerryBox workshop, tentatively to be held in Helsinki and organised by SYKE/FMI

Meetings during the reporting period (May 2022-April 2023):

- 11th FerryBox workshop in Sept 2022 (Geestacht, Germany)

Next planned meetings (2023-2024):

- 12th FerryBox workshop in spring 2024

Links and synergies with other EuroGOOS ROOS/Working Groups/Task Teams:

- synergies with the EuroGOOS DataMEQ WG for data-related issues.
- synergies with the EuroGOOS BIO WG for biological sensor applications

Links and synergies with non-EuroGOOS initiatives:

- Continued links with EMODnet, CMEMS, ICOS, JERICO-RI, etc.

Friday, May 12, 2023

Status Report to the EuroGOOS General Assembly

Reporting period: May 2022-April 2023

EuroGOOS body: Task Team

Full title: Tide Gauge Task Team (TGTT)

Co-Chair 1 (Name and affiliation) Angela Hibbert, National Oceanography Centre, UK

Email anhi@noc.ac.uk

Co-Chair 2 (Name and affiliation) Elizabeth Bradshaw, British Oceanographic Data Centre, UK

Email elizb@noc.ac.uk

Co-Chair 3 (Name and affiliation) Claire Fraboul, Shom, France

Email claire.fraboul@shom.fr

Current members, affiliation and country

Sara Almeida, Hydrographic Institute (IH), Portugal
Alessandro Annunziato, Joint Research Centre (JRC Ispra Site), Italy
Dora Carinhas, Hydrographic Institute (IH), Portugal
Thomas Hammarklint, Swedish Maritime Administration (SMA), Sweden
Francisco Hernández, VLIZ, IOC Sea Level Station Monitoring Facility, Belgium
Begoña Pérez, Puertos del Estado, Spain
Vibeke Huess, Danish Meteorological Institute (DMI), Denmark
Anna von Gyldenfeldt, Federal Maritime and Hydrographic Agency (BSH), Germany
Per Knudsen, Technical University of Denmark (DTU), Denmark
Marta Marcos, Mediterranean Institute for Advanced Studies (IMEDEA), Spain Marco Picone, Sara Morucci, Arianna Orasi, Italian Institute for Environmental Protection and Research (ISPRA), Italy
Fabio Raicich, Institute of Marine Science (CNR-ISMAR) Italy
Oda Roaldsdotter Rovndal, Norwegian Mapping Authority, Norway
Laurent Testut, Laboratory of Space Geophysical and Oceanographic Studies (LEGOS), France
Martin Verlaan, Deltares, Netherlands
Iviça Vílibic, Croatian Institute of Oceanography and Fisheries (IZOR), Croatia
Guy Westbrook, Deirdre Fitzhenry, Marine Institute (MI), Ireland
Guy Wöppelmann, La Rochelle Université, France

Website https://eurogoos.eu/tide-gauge-task-team/?msclkid=9c6f1703c15411ec861d087309202166

Objectives:

1. As a European Tide Gauge Network assist in the standardization of tide gauge operations, data processing and management and data applications of a multi-purpose network, based on GLOSS and ICG/NEAMTWS and other user requirements, and fulfilling the following basic needs:
Sea level trends, variability and climate change
Sea level related hazards warning systems (storm surge, tsunamis)
Validation of numerical models and forecasts
Comparison with satellite altimetry and other sources of geodetic data
Determination of coastal Mean Dynamic Topography to contribute to the unification of different height systems

Fulfill the requirements of operational users.
2. Contribute to the development of the European Ocean Observing System (EOOS) with the identification of duplication and/or gaps on the geographical coverage and on the existing sea level data portals in Europe.
3. Work with other EuroGOOS entities (ROOS, task teams and working groups) towards internal integration e.g. sharing best practices, developing common standards and processes, facilitating product development etc.
4. Promote the integration of tide gauge networks in ongoing and future European initiatives and identify relevant products required by sea level users.
5. Act as a link between national agencies of tide gauge operators and data providers, the ROOSs data portals and as the European component in GLOSS.
6. Promote research and tests of new sea level monitoring technologies.
7. Promote the recovery of historical data and related studies relevant for Europe including North African countries.
8. Acknowledge existing data portals and ensure data availability according to the different applications. Assure delivery of tide gauge data to the ROOS data portals.
9. Promote the co-localization and use of additional instrumentation relevant for sea level applications such as ocean bottom pressure sensors, land movement monitoring stations (GNSS), atmospheric parameters, or tsunami sensors.
10. Ensure the implementation of new requirements on sea level quality control and data processing.
11. Provide recommendations (from operators to end-users) on:
Data structure, format and dissemination (interoperability of datasets)
Quality control procedures
Validation procedures
Technological solutions
Complementary instrumentation (through interaction with other groups, e.g. GNSS).
12. Collaborate with the satellite altimetry community for a better understanding of altimeter and tide gauge data calibration.
13. Be a framework for:
Collation of a single database describing the in-situ monitoring equipment and its status across Europe, ensuring conformance with an internationally agreed data policy and adoption of a common citation.
Sharing success stories and difficulties including analysis of the funding strategies and importance placed on this work in the different countries
Providing and exchanging open source tools (data analysis, applications…)
Promoting the installation and/or inclusion of further stations from Northern Africa
Promoting scientific synergies for key questions
Promotion of joint proposals through networking (e.g. create synergies between different local consortium INTERREGs…).

Relevance to the EuroGOOS Strategy:

All of these objectives are aligned to the EuroGOOS Mission to lead the development and implementation of sustained and coordinated operational oceanography across Europe.
Objectives 1-6, 9-11 and 13 are aligned with the EuroGOOS goal of stimulating communities of practice.
Objectives 2-5,7-9 and 12-13 are aligned with the EuroGOOS goal of advocating for coordinated and integrated European ocean observing and operational oceanography
Objectives 1-5, 7-8 and 11-13 are aligned with the EuroGOOS goal of strengthening and expanding partnerships
All objectives are aligned with the EuroGOOS goal of promoting sustainability across the value chain of operational oceanography and ocean observing
Objectives 1, 4 and 6 are aligned with the EuroGOOS goal of mobilising the public on the importance of the ocean and oceanographic services

Key achievements in the reporting period (May 2022-April 2023):

1. Led by the Marine Institute, Ireland and funded by the EuroSea project, the TGTT has developed an on-line, live, managed metadata catalogue referred to as the tide gauge inventory(http://eutgn.marine.ie/
) to register all permanent tide gauges deployed in European and adjacent coastlines. The inventory has been released for population by tide gauge operators. Formation of a working group from all stakeholders included all the interested parties (GLOSS etc.) to develop the inventory further.
2. Led by the National Oceanography Centre (UK) and funded by the EuroSea project, the TGTT developed a data portal (

https://psmsl.org/data/gnssir/
), containing sea level records derived by Interferometric Reflectometry (IR) from Global Navigation Satellite Systems (GNSS). The catalogue contains now ~260 stations.
3. Led by LEGOS, work is underway to evaluate gaps and duplication between European sea level data portals. So far, a Python methodology has been developed to cross-compare the data portals, 5 metadata catalogues and 12 data portals have been analysed and the IOC/UNESCO Sea Level Station Catalog was found to be the most complete with 2450 stations referenced. The use of this tool must now be plebiscited.
4.The existing Copernicus NRT sea level product from the Copernicus in situ TAC had been complemented by a new REProcessed (REP) product in Nov 2022. the REP product was based upon the processing methodology implemented for the NRT, but was enhanced to incorporate de-tiding, buddy checking etc. The link to the product is:
https://data.marine.copernicus.eu/product/INSITU_GLO_PHY_SSH_DISCRETE_MY_013_053/description
5. A survey on sea level monitoring infrastructure in the MonGOOS region was performed. As a result, the survey identified 240 stations, 46 co-located TG and GNSS, 56% of TG stations had NRT transmission and 1 min data and 64% reported an ancillary variable e.g. barometric pressure. The work was summarised in this paper https://os.copernicus.org/articles/18/997/2022/.

Bottlenecks or obstacles during the reporting period (May 2022-April 2023):

/

Main priority areas (2023-2024):

• Data flow questionnaire issued to support GLOSS data mapping - April 2023
• Collation and recommendations re data flow - Sept 2023
• Establish a Tide Gauge Metadata Inventory/Data Portal WG - Dec 2023
• Establish a GNSS-IR SIG for best practice (possibly with GLOSS) - Dec 2023
• Explore a possible Copernicus GNSS-IR product - Dec 2023
• Hold TGTT hybrid Annual Meeting in Liverpool - Sept 2023
• Copernicus Sea Level REProcessed product updates - Jun & Nov 2023
• IAPSO initiative to evaluate tidal analysis and prediction methods - July 2023

Other major activities (2023-2024):

/

Meetings during the reporting period (May 2022-April 2023):

• Annual meeting - Fev 2023
• 2nd EuroSea Tide Gauge Workshop - May 2023

Next planned meetings (2023-2024):

Annual meeting hybrid Liverpool - sept 2023

Links and synergies with other EuroGOOS ROOS/Working Groups/Task Teams:

The TGTT has representatives in the following ROOS:
NOOS: Anna von Gyldenfeldt and Martin Verlaan
MONGOOS: Begoña Pérez Gómez
BOOS: Thomas Hammarlink

Links and synergies with non-EuroGOOS initiatives:

The TGTT is working via WP3 of the EuroSea project to deliver the Tide Gauge Inventory, the GNSS-IR data portal and an analysis of gaps and duplications in sea level data portals.
In addition, TGTT members are working to deliver a CMEMS Sea Level Reprocessed product to complement the near real time data product, using Copernicus funding.
TGTT members are also woking on an IAPSO initiative to evaluate tidal analysis and prediction methods and also have membership/links to the Global Sea Level Observing System (GLOSS) Group of Experts, which have been used to discuss a co-ordinated approach to data standards and dissemination.

Additional information:

/

Suggestions:

/

Thursday, May 11, 2023

Status Report to the EuroGOOS General Assembly

Reporting period: May 2022-April 2023

EuroGOOS body:	Task Team
Full title:	EuroGOOS glider task team
Co-Chair 1 (Name and affiliation)	Carlos Barrera - PLOCAN
Email	carlos.barrera@plocan.eu
Co-Chair 2 (Name and affiliation)	Pierre Testor - CNRS
Email	pierre.testor@locean.ipsl.fr
Co-Chair 3 (Name and affiliation)	Victor Turpin - OceanOPS
Email	vturpin@ocean-ops.org

Current members, affiliation and country

Belgium
Wieter Boone, Flanders Marine Institute (VLIZ), Belgium
Cyprus
Dan Hayes, Cyprus Marine and Maritime Institute (CMMI), Cyprus
Estonia
Taavi Liblik, Tallinn University of Technology (TalTech), Estonia
Finland
Kimmo Tikka, Finnish Meteorological Institute (FMI), Finland
France
Pierre Testor, French National Centre for Scientific Research (CNRS), France
Laurent Coppola, Sorbonne Université, France
Corentin Guyot, French Research Institute for Exploitation of the Sea (Ifremer), France
Antony Bosse, Aix-Marseille University, France
Germany
Lucas Merckelbach, (HZG), Germany
Greece
Evi Bourma, Hellenic Centre for Marine Research (HCMR), Greece
Ireland
Paul Gaughan, Marine Institute (MI), Ireland
Israel
Tal Ozer, Israel Oceanographic and Limnological Research (IOLR), Israel
Ayah Lazar, Israel Oceanographic and Limnological Research (IOLR), Israel
Italy
Jacopo Chiggiato, National Research Council (CNR) ISMAR, Italy
Elena Mauri, National Institute of Oceanography and Experimental Geophysics (OGS), Italy
Netherlands
Marck Smit, Royal Netherlands Institute for Sea Research (NIOZ), Netherlands
Peter Thijsse, Marine Information Service (MARIS), Netherlands
Norway
Ailin Dale Brakstad, University of Bergen (UiB), Norway
Ilker Fer, University of Bergen (UiB), Norway
Portugal

Joao Tasso, Underwater Systems and Technology Laboratory (LSTS-FEUP), Portugal
A. Martins, Institute for Sea and Atmosphere (IPMA), Portugal
Spain
Albert Miralles, The Balearic Islands Coastal Ocean Observing and Forecasting System (SOCIB), Spain
Jorge Cabrera, Universidad de Las Palmas de Gran Canaria (ULPGC), Spain
Carlos Barrera, Oceanic Platform of the Canary Islands (PLOCAN), Spain
Sweden
Bastien Queste, University of Gothenburg (GU), Sweden
United Kingdom
Matthew Palmer, National Oceanography Centre (NOC), United Kingdom
Estelle Dumont, Scottish Association for Marine Science (SAMS), United Kingdom
Justin Buck, British Oceanographic Data Centre (BODC), United Kingdom
Emma Salter, British Oceanographic Data Centre (BODC), United Kingdom
Mark Hebden, British Oceanographic Data Centre (BODC), United Kingdom
European and international initiatives and projects
Victor Turpin, OceanOPS (IOC-GOOS)
Thierry Carval, CORIOLIS
Antonio Novellino, EMODnet
Elisabeth Remy, Copernicus Marine Service (CMEMS)
Vanessa Cardin, MONGOOS
Laurent Mortier, EU GROOM II project
Patrizio Mariani, EU Mission Atlantic project
Matt Mowlem, EU TechOceans project
Jaume Piera, EU MINKE project

Website https://eurogoos.eu/gliders-task-team/

Objectives:

Support the coordination of the European glider activities

Engage the European glider community in the European Ocean Observing strategy

Assist the standardization of glider operations, data and applications;

Ensure data availability for the Copernicus Marine Environment Monitoring Service (CMEMS), via the EuroGOOS regional data portals (ROOS) in particular;

Generate and promote best practices in applications, technologies, data management, and scientific development;

Jointly contribute to European projects.

Reinforce relashonship between the scientific community and the industry to unlock BlueGrouth sectors.

Relevance to the EuroGOOS Strategy:

More than 200 operational units are used by about 30 groups in Europe and this numbers is growing. The primary role of the EuroGOOS glider task team is to offer a european umbrella for those groups to share practices and experiences and to offer a forum to engage their activity in the European strategy for Ocean Observing.
By doing this integration of an highly dynamic community, the EuroGOOS glider task team is totally in line with the EuroGOOS strategy.
Gliders is a unique tool to observe from shore to open ocean. All together, gliders contribute to maintain the observing continuum of the European seas. They are also perfectly suited to be regularly deployed on observatories and carry physical and biogeochemical sensor that can measure multiple EOVs, and deliver the data in real time. This is also in line with the EuroGOOS strategy to support the Ocean Observing value chain from observation to operational services.
Finally the capacity of glider to carry more and more sensors and the will of the EuroGOOS glider TT to encourage such expension of capacity, is also in line with the EuroGOOS strategy to support frontiers Ocean Sciences and the cooperation with industries.

Key achievements in the reporting period (May 2022-April 2023):

We can identify two key achievements during the period:
The first is the complete review of the glider capacity in Europe. This work coordinated by the EuroGOOS glider TT and the GROOM II H2020 project lead to an exhaustive view of academic (in the broad sense of the term) glider operators in Europe. Thanks to that review we realized the growing capacity of observing ocean with gliders in Europe, the massive potential and the great need for an active coordination.
The second key acheivements of this period relates to data management. After several years, the international glider community manage to harmonize its format. In this, members of the EuroGOOS glider task team brought essential contributions. In the same time, the GROOM II project released its data management road map thanks to the data management meeting organized by the EuroGOOS glider task team in June 2022. Those two important milestones will contribute to strengthen the European glider data management landscape for the next years.

Bottlenecks or obstacles during the reporting period (May 2022-April 2023):

The main bottleneck at the moment is the low capacity to meet to discuss EuroGOOS glider task team strategy. Dispite a very active coordination across many topics, groups and projects, the EuroGOOS glider task team is lacking a bit of unity around its own strategy. This issue has been identified and should be addressed during next year glider meeting in June. Indeed a special slot should be dedicated to this topic.

The second bottleneck is about our capacity to drive the multiple european glider groups toward the EuroGOOS glider data management practices. To do that the EuroGOOS glider task team would need to build a capacity to support the data flow and data sharing for the groups who don't have the human ressources to comply with the data policy of the European Ocean Observing System promoted by EuroGOOS.

Main priority areas (2023-2024):

Support new science challenges with gliders (BGC, Ecosystem, Biodiversity, Ocean Energies, Food, eDNA, Ocean noise, etc.)

Support routine services to BlueGrouth sectors (aquaculture, tourism, safety and security, marine protected areas, offshore renewables, etc.)

Support long-term monitoring through TT such Boundary Currents, Storms, Water Transformation, BP, Data Management, etc.

A design for EU MAS in direct collaboration with industry and regulatory agencies.

Promote and support GROOM RI (technical development, operations, best practices, training, societal benefits,…)

EuroGOOS GTT as EU forum to engage new GROOM RI members (users, operators, etc.)

Transition from gliders to MAS (technology/a review and implementation)
Recruitment strategy through data management.

Monitoring EU activities (through OceanOPS).

Support standardized and high qualified training at academia level.

Cross-network activities (through AMRIT) and beyond.

Other major activities (2023-2024):

GROOM II (H2020 project): Lots of coordination activities supported by the GROOM II project feeds directly the EuroGOOS glider task team activities. All the GROOM II members are part of the EuroGOOS glider task team.
OceanGliders data management task team is about to acheive harmonization of the format accross the international glider groups. The EuroGOOS glider TT is fairly well represented in the international glider data management task team. This acheivement has been highly supported by the Europeans.
Technology: Participation to many European meetings around technology to engage further with

industry and strengthen the relationship between manufacturer and scientific community.
Trainings: PLOCAN Glider school 2022.

Meetings during the reporting period (May 2022-April 2023):

Major meeting occurs in June/July 2022 around data management.
Two weeks of online workshops and meetings where organize that gather a large community, mainly European but also wider.

Next planned meetings (2023-2024):

Next major meeting for the EuroGOOS glider TT will occur in June 2024. This is not annonced officially yet but the preparatory group is working since February this year to organize that.
This is an initiative of members of the EuroGOOS glider TT, supported by the international program OceanGliders addressed to the large EGO community.

Links and synergies with other EuroGOOS ROOS/Working Groups/Task Teams:

The EuroGOOS glider task team is well engage in the AMRIT proposal submitted in March 2023 that is engaging EuroGOOS board, but also many of the EuroGOOS task team and the Marine Research Infrastrucure.

Links and synergies with non-EuroGOOS initiatives:

A collaboration with the OceanOPS team is ambitioned to ensure a better monitoring of the European glider activity. OceanOPS already have a great capacity to monitor GOOS networks and the EuroGOOS glider TT would like to benefit this capacity at limited cost.

EuroGOOS glider task team is in line with the international standard promoted by OceanGliders, GOOS-OCG and WMO.

Thursday, May 11, 2023

Status Report to the EuroGOOS General Assembly

Reporting period: May 2022-April 2023

EuroGOOS body:	Task Team
Full title:	EuroGOOS Argo Task Team
Co-Chair 1 (Name and affiliation)	Antoinio Miguel Santos
Email	amsantos@ipma.pt
Co-Chair 2 (Name and affiliation)	Griet Neukermans
Email	griet.neukermans@ugent.be

Current members, affiliation and country

Birgit Klein, Federal Maritime and Hydrographic Agency (BSH), Germany
Clare Bellingham, National Oceanography Centre (NOC), UK
Emanuele Organelli, National Research Council of Italy (CNR), Institute of Marine Sciences (ISMAR), Italy
Giulio Notarstefano, National Institute of Oceanography and Experimental Geophysics (OGS), Italy
Kamila Walicka, National Oceanography Centre (NOC), UK
Laura Tuomi, Finnish Meteorological Institute (FMI), Finland
Luísa Lamas, Hydrographic Institute (IH), Portugal
Marios Josephides, Department of Fisheries and Marine Research, Ministry of Agriculture, Rural Development and Environment, Cyprus
Tülay Çokacar, Institute of Marine Science Management, Istanbul University, Turkey
Yann-Hervé de Roeck, Euro-Argo ERIC, France
Tanya Mendes Silveira, Portuguese Institute for Sea and Atmosphere (IPMA), Portugal

Website	https://eurogoos.eu/eurogoos-argo-task-team/

Objectives:

The main objective of the Task Team is to facilitate interactions between non-Euro-Argo ERIC institutes/countries and the Euro-Argo ERIC governance structure, especially the Management Board (MB).
Detailed objectives can be found in the renewed (2022) Terms of Reference, on the TT website.

Relevance to the EuroGOOS Strategy:

The international Argo Programme is an important component of the Global Ocean Observing System (GOOS), providing freely available data on the physical and biogeochemical state of the ocean sampled by a global array of autonomous profiling floats. The EuroGOOS Argo Task Team is expected to be the main forum for non-Euro-Argo ERIC institutions/countries in issues related to planning, deployment, quality control and sustainability of Argo floats in tight collaboration with the Euro-Argo ERIC bodies and members. As all EuroGOOS Task Teams, this activity is an important building block towards an integrated end-to-end European Ocean Observing System (EOOS).

Key achievements in the reporting period (May 2022-April 2023):

Selection of two co-chairs (09/2022).
Renewal of Terms of Reference (11/2022).
Approval of Terms of Reference by Exec. Board (12/2022).

Call for members and renewed member list (01/2023).
Kick-off meeting (02/2023).

Bottlenecks or obstacles during the reporting period (May 2022-April 2023):

NA

Other major activities (2023-2024):

Contribution to 10th EuroGOOS international conference (3-5/10/2023) in Galway

Meetings during the reporting period (May 2022-April 2023):

Kick-off meeting, 02/2023

Next planned meetings (2023-2024):

Not yet scheduled

Monday, May 8, 2023

Status Report to the EuroGOOS General Assembly

Reporting period: May 2022-April 2023

EuroGOOS body: Task Team

Full title: Fixed-Platform

Co-Chair 1 (Name and affiliation) Giuseppe Magnifico, National Research Council (CNR), Italy

Email giuseppe.magnifico@cnr.it

Co-Chair 2 (Name and affiliation) Paolo Favali, EMSO-ERIC, Italy

Email paolo.favali@emso-eu.org

Current members, affiliation and country

Agnieszka Beszczynska-Möller (IOPAN, Poland), Andrew Gates (NOC, UK), Arianna Orasi (ISPRA, Italy), Branko Čermelj (NIB, Slovenia), Carl Johan Andersson (SMHI, Sweden), Conall O' Malley (MI, Ireland), Dijana Klavic (DHMZ, Croatia), Giuditta Marinaro (INGV, Italy), Holger Brix (CCI, Germany, Jitze P. van der Meulen (KNMI, Netherlands), Julian Mader (AZTI, Spain), Kai Herklotz (BSH, Germany), Laurent Coppola (CNRS, France), Marcello Magaldi (CNR, Italy), Marta de Alfonso Alonso-Muñoyerro (PdE, Spain), Michael Fettweis (RBINS, Belgium), Michel Repecaud (IFREMER, France), Nuno Gonçalo Rufino Zacarias (IH, Portugal), Paolo Favali (EMSO, Italy), Paris Pagonis (HCMR, Greece), Pieter Gurdebeke (MDk, Belgium), Raquel Somavilla (IEO-CSIC, Spain), Urmas Lips (MSI, Estonia), Vanessa Cardin (OGS, Italy).

Website https://eurogoos.eu/fixed-platforms-task-team/

Objectives:

• To develop Europe's Fixed Platform network and assist in the standardization of operations by sharing best practices, also in keeping with other relevant programmes at global level (such as OOI, ONC, IMOS, DONET).
• To contribute to the development of the European Ocean Observing System (EOOS).
• To ensure the integration of Fixed Platforms in open and coastal ocean.
• To provide European input to the OceanSites community and other relevant initiatives.
• To enhance the number of biogeochemical measurements in European seas.
• To ensure data availability via the EuroGOOS ROOS data portals and hence to CMEMS and EMODnet.
• Deliver recommendations on data structure, format, and dissemination (interoperability of datasets) and quality control procedures.
• Foster the co-operation with Research Vessel operators in terms of existing networks, projects, and other relevant coordination initiatives with large and well-equipped facilities (e.g., ERVO, OFEG and EurofleetsPlus project).
• Establish a link with DBCP (Data Buoy Cooperation Panel) and E-SURFMAR in order to coordinate activities and best practices.
• Link with EuroGOOS ROOSes, Working Groups and Task Teams and relevant ongoing programmes/projects (e.g., CMEMS INSTAC, EMODnet, JERICO-RI, etc.) and Research Infrastructures (such as EMSO ERIC) to avoid duplication of efforts.

Relevance to the EuroGOOS Strategy:

Ocean observing Fixed Platforms are deployed in all the European seas to carry out a large variety of measurements. Fixed platforms are a major contributor to European ocean observing that deliver data to the major European data aggregators, e.g., CMEMS, EMODnet and SeaDataNet. The EuroGOOS Fixed

Platforms Task Team aims at integrating the European fixed point observatories, both in the open and coastal ocean. As all EuroGOOS Task Teams, this activity is an important building block towards an integrated end-to-end European Ocean Observing System, EOOS.

Key achievements in the reporting period (May 2022-April 2023):

1. FP TT website updates (FP TT membership, presentations, recordings and minutes of the meetings)
2. Call for nominations for the third co-Chair of the FP TT
3. Review of FP TT membership to have onboard EuroGOOS members still missing in the FP TT (New members from Croatia, Germany and Spain and Invited members from Denmark, Norway, Finland, Bulgaria, Romania and Iceland)
4. EuroGOOS FP TT SWOT Analysis and action plan for the next year
5. Survey to list/map FP represented in the TT (country, operating Institution, station name, location – lat. e long. – type, WMO code, depth and remark)
6. Abstract submitted at the 10th EuroGOOS International Conference
7. Advanced design of a FP TT Information leaflet
8. Evaluation of link between the FP TT and ongoing initiatives inside and outside the EuroGOOS framework
9. EuroGOOS FP TT Event on the 5th of April 2023 in Rome

Bottlenecks or obstacles during the reporting period (May 2022-April 2023):

No bottlenecks or obstacles in the reporting period.

Main priority areas (2023-2024):

1) Sharing of Experience, Knowledge, Expertise, Best Practices and Standards
2) Dealing with Technological Issues
3) Fostering Links and Synergy inside and outside EuroGOOS
4) Delivering Recommendations, Proposals and Solutions on Data/Metadata
5) Developing Joint Initiatives and Projects
6) Contributing to EOOS
7) Expanding Observations in European Sea
8) Contributing to SDGs/UN Decade

Meetings during the reporting period (May 2022-April 2023):

1) Meeting of the EuroGOOS FP TT, Virtual, January 13, 2023, 11:00-13:00 CET
2) Meeting of the EuroGOOS FP TT, In person, April 4, 2023, 14:30-18:00 CET

Next planned meetings (2023-2024):

1) On line meeting on October/Novemver 2023 (date to be confirmed)
2) In person meeting on March/ April 2024 hosted by DHMZ, Croatia

Links and synergies with other EuroGOOS ROOS/Working Groups/Task Teams:

All ROOS, WGs and TTs

Links and synergies with non-EuroGOOS initiatives:

OCEANSITES
DBCP
Eurofleets
ITINERIS
Jerico
EuroSea
MINKE
AMRIT
EMSO ERIC

Monday, May 8, 2023

Status Report to the EuroGOOS General Assembly

Reporting period: May 2022-April 2023

EuroGOOS body: Task Team

Full title: EuroGOOS HF Radar Task Team

Co-Chair 1 (Name and affiliation) Julien Mader (AZTI)

Email jmader@azti.es

Current members, affiliation and country

AZTI, Spain: Anna Rubio, Lohitzune Solabarrieta, Julien Mader
Cetmar, Spain, Silvia Piedracoba
CNR-ISMAR, Italy: Carlo Mantovani, Lorenzo Corgnati
Consorzio LaMMA, Italy, Bartolomeo Doronzo, Stefano Taddei
ETT, Italy: Antonio Novellino
HZG, Germany: Jochen Horstmann, Johannes Schulz-Stellenfleth
IFREMER, France, Guillaume Charria, Louis Marié
Institute of Oceanography and Fisheries, Croatia: Vlado Dadic
Instituto Hidrografico, Portugal: Vânia Lima
Intecmar, Spain: Pedro Montero, Garbiñe Ayensa
MIO-Toulon, France : Céline Quentin, Bruno Zakardjian, Charles-Antoine Guérin
NIB, Slovenia, Branko Cermelj
NUIG, Ireland: Michael Hartnett
Norwegian Meteorological Institute, Norway: Bruce Hackett, Snorre Ronning, Kai Christensen
OGS, Italy: Laura Ursella, Vanessa Cardin
PLOCAN, Spain: Carlos Barrera, Ruben Marrero
Puertos del Estado, Spain: Maribel Ruiz, Pablo Lorente
Qualitas Remos, Spain-Portugal: Jorge Sanchez, Maria Fernandes
SMHI, Sweeden : Patrick Gorringe
SOCIB, Spain: Guiomar López, Emma Reyes
University of Malta, Malta: Adam Gauci
University of Naples Parthenope, Italy: Enrico Zambianchi, Pierpaolo Falco
University of Palermo, Italy: Fulvio Capodici, Giuseppe Ciraolo
University of Plymouth, UK: Daniel Conley
University of Sheffield, UK: Lucy Wyatt

Website eurogoos.eu/high-frequency-radar-task-team

Objectives:

1. To develop the European High Frequency Radar (HFR) network and assist the standardization of HFR operations, data and applications, including:
-All applications of coastal radars (surface current, wave, target detection…)
-Applications in integration with other technologies (including satellite, X-band, fixed platforms, gliders, numerical modeling…)
2. To contribute to the development of the European Ocean Observing System (EOOS)
3. To ensure the integration of HFR networks in the European Coastal Marine Service
4. To act as the European component in the global HFR community
5. To ensure data availability via the ROOS data portals
6. To provide recommendations (from operators to end-users) on:
-Data structure, format and dissemination (interoperability of datasets)
-Quality control procedures

-Validation procedures
-Technological solutions
7. To be a framework for:
-sharing success stories and difficulties;
-improving administrative procedures, regulations at European level that can be adopted in member states;
-providing and exchanging tools (data analysis, applications…);
-promoting scientific synergies for key questions;
-filling gaps and looking for complementarity with other technologies or modeling products;
-promoting joint progress through networking (e.g. creating synergies between different local consortium).

Relevance to the EuroGOOS Strategy:

SO1. Stimulate communities of practice
• Community building and governance of the European HF Radar network
• Monitoring community activities
• Harmonisation and recommendation on HFR operations and data management (OBPS)
• Contribution and alignement to Global initiatives (OBPS, OCEANOPS, IOC-HFR Global network)
• Support the delivery of fit for purpose high-quality data to services
• Support joint development of new products and services
SO2. Advocate for coordinated and integrated European ocean observing and operational oceanography
• Contribution in EOOS Operations Committee
• Monitoring of the network and support for harmonised open data flow
• Active contribution for improving coordination and integration within coastal observatories
SO3. Strengthen and expand partnerships
• Identify all relevant stakeholders and develop an engagement strategy based on good practices
• Co-produce of oceanographic services and information
• Support the development of sustained Coastal Research Infrastructure
• Support the global network for connection to OCEANOPS
SO4. Promote sustainability across the value chain of operational oceanography and ocean observing
• Endorsement and support to the platform operators
• Good practices of stakeholder commitment shared in the community
SO5. Mobilise the public on the importance of the ocean and its services
• Communication material that can be integrated in wider promotion made by EuroGOOS office or Ocean Literacy WG

Key achievements in the reporting period (May 2022-April 2023):

1. Management and Community building
• Internal Communication newsletter: Taking the pulse of the coastal ocean – read the EuroGOOS HF Radar community newsletter, August 2022
• Further discussions on governance during the annual face to face meeting
• Ongoing development of hfrnode.eu and improvement of the operational monitoring of the European network (Contributions from EuroSea, JERICO-S3: Operational map; HOORT)
• New significant networks coming (Ireland, Spain, Italy).
2. Sustainibility
Focus on Stakeholders
• Visibility through involvement in newsletters
• Key new element in proposed governance
• Contribution in joint initiatives, Good Practice
• Progress on DOI strategy in the European network
Endorsement
• Support from HF Radar Task Team if useful
• Benefits of EuroGOOS memberships
• Discussion started about integration in RIs
New opportunities for joint proposals
• Sharing information in newsletter
• One proposal in CMEMS SE call (WONDER)
3. Products & Services
• Data gap filling working group
• Wave working group: workshop performed in Florence (Nov2022)

• DEVELOPMENT OF A COASTAL UPWELLING INDEX based on HFR hourly surface currents, successfully adopted in the North-Western Iberia area and tested in the Bay of Biscay.
• RAIA MAP VIEWER: with several functionalities (video, HFR data temporal evolution, time series and custom downloads, *.csv and *.nc formats)
4. Research & Developments
• Monitoring R&D community activities (ZOTERO)
• Contribution opportunities (newsletters)

Bottlenecks or obstacles during the reporting period (May 2022-April 2023):

• The steering team is extremely busy. Need to integrate new resources
• Improvable connections with other key communities (satellite, modelling) for improving the impact of HF Radar data.
• Unlock HFR data potential: boost the integration of HFR data in data downstream services, engage end-users, more science-based from HFR observations, enhance the applications development, promote the development and delivery of operational added-value products.
• Hardware and software compatibility issues.

Main priority areas (2023-2024):

Management and Community building
• Roadmap: (i)To progress on the implementation of the proposed governance and strategy ; (ii) To promote benefits of the FAIR principles for the whole HFR community; (iii) To implement a DOI strategy at network level (iv) To emphasize the outreach of our outcomes and contributions in the coastal Operational Oceanography.
• Biannual newsletter: (i) Keep the community updated on the latest findings, ongoing initiatives, projects; (ii) Boost interaction & collaborations (internally and externally)
• Communication with stakeholders: (i)Harmonize the list of stakeholders of different past and ongoing projects under the same classification; (ii) Establish whether or not they know the HF radar technology or if they are end-users (power/interest); (iii)Define possible HF-derived products that could be of interest to each stakeholder in order to establish a specific communication strategy.
• Good practices in stakeholder commitment: (i) Focus on stakeholders: Instill awareness, build understanding, and create buy-in before commitment ; (ii) Build bidirectional commitment between HFR operators (we create a tailored product) and stakeholders (we will definitely use what you create); (iii) Tracking and keeping commitments: upgrade in case of new needs; (iv) Promotion of successful synergies to attract new stakeholders (pre-existing o new-born)

Sustainability
• Endorsement: To receive endorsement from EuroGOOS and other European infrastructures to support the importance of the role of local operators and the sustainability of the observing system
• New opportunities for joint proposals: (i)Promote networking & cooperation.; (ii) Share available funding opportunities.; (iii) Address common HFR challenges/interests; (iv) Exploit past efforts (e.g. ETN, COST).; (v) Strengthen the funding process.

Products & Services
• Data gap filling working group: (i) Exchange BPs and tools of gap filling techniques applicable to HFR data; (ii) Found standardized procedures;
• Wave data working group: (i) Establish pilot products from the European network; (ii) Determine accuracy requirements and parameters needed for different applications and users; (iii) Where are the gaps/uncertainties and how to address these; (iv) Decide on netcdf structure; (v) Provide data through EMODnet/CMEMS …

Research & Developments
• Monitoring R&D community activities: (i) Assessing R&D community activities and outcomes; (ii) Enhancing R&D joint activities and outcomes.
• Promote the opportunities for joint contribution: (i) Boost HFR team interaction & collaborations; (ii) Provide support in launching initiatives and providing opportunities, upon request.

Meetings during the reporting period (May 2022-April 2023):

High Frequency Radar Task Team Annual Meeting 21-22 November 2022

Next planned meetings (2023-2024):

Links and synergies with other EuroGOOS ROOS/Working Groups/Task Teams:

Support to the ROOSs for implementing recommendations and consolidating the HF Radar networks in the Regional Systems HFR TT ambassadors in ROOSs.
• Research activities and joint strategies are planned to be reinforced in the following years. Plans should be shared with Science Advisory WG.
• New action plans on e-services and products should be shared with the Coastal WG.

Links and synergies with non-EuroGOOS initiatives:

• Contribution in EOOS OC
• Contribution in JERICO infrastructure strategy
• Contribution in CMEMS-INSTAC/EMODnet/SeaDataNet coordination WG
• Link with Global HFR network, OCEANOPS, ROW, ROWG