



EuroGOOS

European Global Ocean
Observing System



EuroGOOS

European Global Ocean
Observing System

Integration workshop

November 19th and 20th 2019 at RBINS

Primarily ROOS, WG and TT chairs

EuroGOOS members welcome

Based on the following documents:

- 1: EuroGOOS 2020+ strategy and functional plan (in prep).
- 2: Results of SAWG survey on capacity and future R&D priorities (completed by 6 EuroGOOS & 2 MONGOOS members to date):
- 3: Operational modelling questionnaire prepared by Coastal WG.
- 4: Context from Ocean Decade and GOOS Strategy
- 5: EOOS Strategy and Implementation Plan

Likely structure:

Intro on EuroGOOS strategy, GOOS Strategy, EOOS and Ocean Decade

SWOT assessment by ROOS, TT, WG

Discussion

Formulation of recommendations



EuroGOOS

European Global Ocean
Observing System

Technology Plan Working Group (TPWG) SWOT analysis

Rajesh Nair, Vicente Fernández, Laurent Delauney



Strengths: Technology Plan Working Group (TPWG)

- The centrality of the Working Group to the **EOOS Technological Forum** initiative.
- **General consensus** within EuroGOOS on the necessity to **support standardization** of measurement activity (procedures, **Best Practice**, reference material, etc.), and **strong agreement** on the necessity of a community approach to address this need.



Pilot project 3.4.1 EOOS Technologies Forum

Time-line: This activity will be initiated in 2018 for delivery in 2019 by EuroGOOS

- **Existing** bank of **expertise** to tap: other EuroGOOS Working Groups, observing platforms Task Teams, experts in the different regions.
- Close and active **collaboration** with other networks and projects (AtlantOS, JERICO, EMSO, EuroARGO, ENVRI, GOOS), and the **UNESCO-IOC Ocean Best Practices System**.
- Good level of **collaboration and support** with the **EuroGOOS Office**.



Weaknesses: Technology Plan Working Group (TPWG)

- **Lack** of an **established network** connecting the hands-on technology and operations professionals involved in the day-to-day running of EuroGOOS observing systems/infrastructure



Pilot project 3.4.1 E00S Technologies Forum

Time-line: This activity will be initiated in 2018 for delivery in 2019 by EuroGOOS

- **Lack** of **integration** with other EuroGOOS Working Groups and Task Teams.
=> **EuroGOOS Office** could help ?
- **Poor** **communication of the TPWG (internal and external)**.
=> **EuroGOOS Office** could help ?
- **Lack** of involvement of **more members**



Opportunities: Technology Plan Working Group (TPWG)

- The EOOS Technological Forum initiative.



Pilot project 3.4.1 EOOS Technologies Forum

Time-line: This activity will be initiated in 2018 for delivery in 2019 by EuroGOOS

- The **ever-increasing** need, at all levels, to inform measures to pursue **technological compatibility** and **innovation** at the transnational scale in the field of marine observing.
- The acknowledged **need** for **interoperability** between marine observing technologies (link to specific ROOSs, WGs and TTs, depending on the technologies addressed).
- The acknowledged **need** for a certain degree of **technical and operational standardization** in the use of marine observing technologies (link to specific ROOSs, WGs and TTs, depending on the technologies addressed).
- The **growing** focus on **Best Practices** in the global ocean research and observing community.



EuroGOOS

European Global Ocean
Observing System

Integration workshop

Threats: Technology Plan Working Group (TPWG)

- **Lack** of **funding** for activities.
- **Lack** of **active** membership (no funding does not help).
- **Difficulty** in the definition of **goals**, especially in the short and medium terms, owing to the vastness of the subject of the WG.
- **Confusing** and/or **non-attainable** **goals**.
- **Difficulty** convincing companies to participate to the EOOS Technological Forum.



How can the EuroGOOS Office better service the needs of your ROOS, WG or TT?

- **Help** for **Integration** with **other EuroGOOS Working Groups and Platforms Task Teams** (Tide Gauges, Gliders, HF Radars, etc.)
- **Help** for **communication** of the **TPWG** (internal and external).
- **Help** to **define** clear **prioritized tasks** that fits with the **EuroGOOS overall Strategy**.
- **Help** to **established network** connecting the hands-on technology and operations professionals involved in the day-to-day running of EuroGOOS observing systems/infrastructure:

Pilot project 3.4.1 EOOS Technologies Forum

Time-line: This activity will be initiated in 2018 for delivery in 2019 by EuroGOOS

- **Help** for convincing companies to participate to the EOOS Technological Forum.

Technology Plan Working Group (TPWG) proposed to **FOCUS ON:**

EOOS Implementation Plan

Task 3.4 Technologies mapping

EOOS needs to be capable of **incorporating new technologies** into the observing system as they progress sufficiently through the technology readiness levels. The **community lacks the ability to systematically measure many of the Essential Ocean Variables for Biology and Ecosystems** proposed by the Global Ocean Observing System (GOOS) and other variables required outside the EOV lists.

Genomic technologies and observatories will be particularly relevant to this work.

This task also needs to **consider MSFD reporting requirements at national and Regional Sea Convention level** to ensure there is strong **complementarity between EOVs and national monitoring requirements**. This is a task that needs some concerted effort by the community to address these gaps.

In addition to these variables, **bathymetry, sedimentology** and all **physical components** should be taken into account.



EuroGOOS

European Global Ocean
Observing System

Integration workshop

Technology Plan Working Group (TPWG) proposed to **FOCUS ON:**

E00S Implementation Plan

Pilot project 3.4.1 E00S Technologies Forum

Time-line: This activity will be initiated in 2018 for delivery in 2019 by EuroGOOS

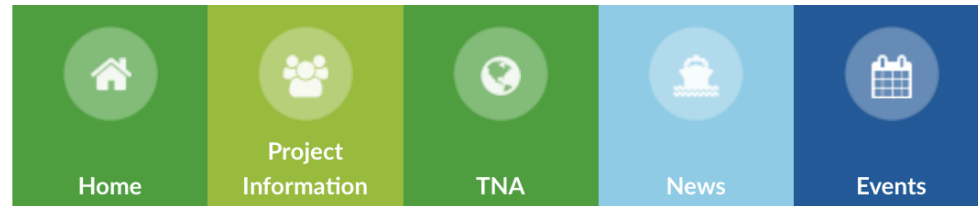
A technologies forum will be established as part of E00S to enable new and old observing technologies be compared, to share data from these new technologies, and to provide guidance to technology developers to ensure a strong understanding of the user requirements for such technologies. This forum will build upon work conducted in the AtlantOS

project (database of technology readiness of known sensors) and activities of Research Infrastructures including EMSO, EuroArgo and Eurofleets among many others. Maritime clusters will be invited to participate in this Forum to share expertise and to ascertain user requirements for manufacturers and service providers.

Technology Plan Working Group (TPWG) proposed to **FOCUS ON:**

Pilot project 3.4.1 E00S Technologies Forum

Previous efforts <http://www.jerico-ri.eu/previous-project/coastal-technologies-fct/>



1. FCT Terms of Reference

In Europe we have a high level of research in public and academic institutes, but this research doesn't always lead to instruments that are able to be used in an operational way. To give momentum, we must create (or make understandable) the value of the technology to the instrument user.

Companies need visibility to invest in the oceanographic market (which is a niche market). Looking outside our traditional technical and scientific environment, we see that many technologies could be suitable to develop new sensors. On the other hand, many instrument users don't have a sound knowledge of the available market.

Home > Previous Project > Coastal Technologies (FCT)

Coastal Technologies (FCT)



Technology Plan Working Group (TPWG) proposed to **FOCUS ON:**

Pilot project 3.4.1 EOOS Technologies Forum

Previous efforts



FCT Objectives

- Provide a **strong interface between SMEs, industry, stakeholders and science & technology**, e.g. by joint developments and technology transfer.
- Provide a **market intelligence tool**, indicator of the tendencies/growth in the related market for instruments and services.
- Seed a **Euro-ACT**, based on the model and in close collaboration with the US-Alliance for Coastal Technologies (ACT) organisation.
- Provide an **unbiased third party test-bed for sensors and measuring systems (JERICO, EMSO, and others TNA)**.
- **Analyse the market, forecasting scientific and societal needs** for new coastal observations.
- **Identify upcoming standards** for quality assessment and for reducing equipment and maintenance costs, by exchanging ideas about best practices.
- **Sustain joint research and development initiatives on sensors and platforms**