







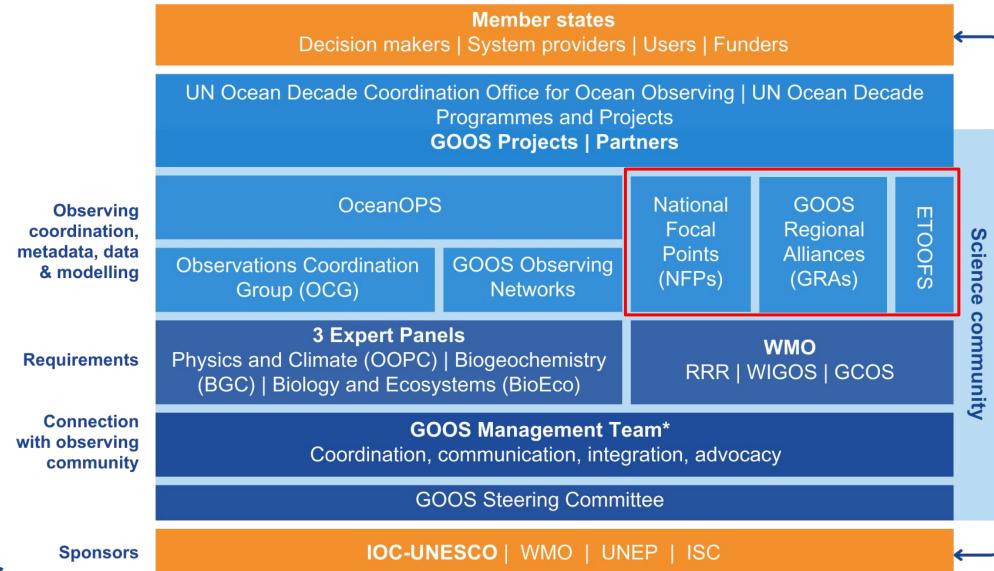


GRAs, NFPs and ETOOFS of GOOS

Jing LI, GOOS Office
Ocean Observations and Services Section, IOC-UNESCO

IODE | Data | Data portals

GOOS Structure

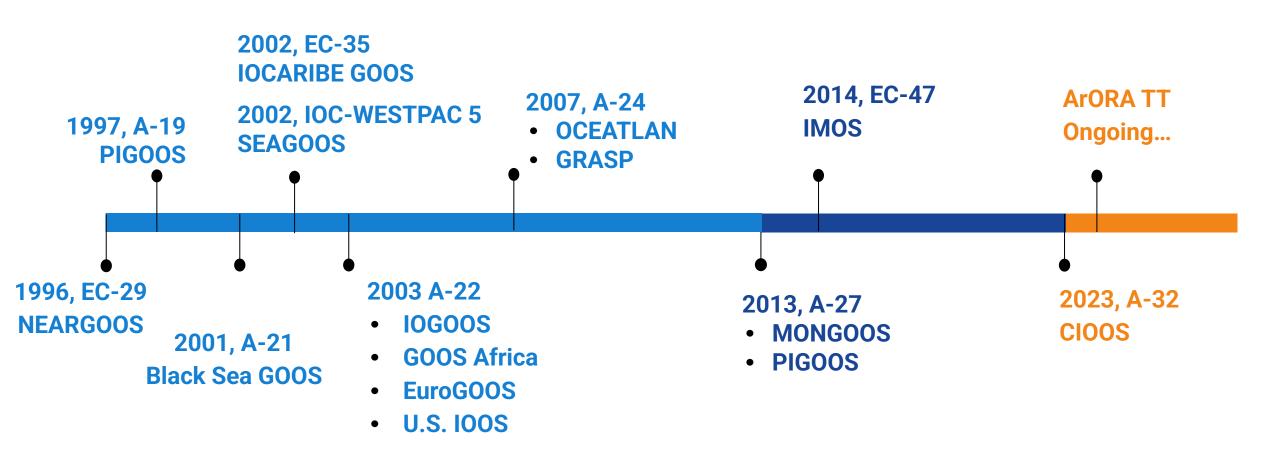




GOOS Regional Alliances and National Focal Points



GRA development





GRA Category

| Туре | GRAs |
|--------------------------------------|---|
| Association (4) | Black Sea GOOS OCEATLAN IOGOOS MONGOOS |
| Network of regional organization (6) | PI GOOS GRASP NEAR-GOOS SEAGOOS GOOS Africa IOCARIBE GOOS |
| Non-profit legal organization (1) | EuroGOOS (since 2013) |
| National system (3) | U.S. IOOS IMOS CIOOS |

GRAs established with diversity:

- Established with different background and regional context, and tackle different issues that relevant to the region
- Different types
- Approved by different authorities (IOC Assembly, IOC Executive Council, Subsidiary body's meeting)
- Different governance mechanisms, highly self-organized.
- Different level of advancement, support and challenges, in terms of connection to GOOS, contribution to GOOS networks, data delivery, etc.

Issues and opportunities

Issues:

- Lack of procedures for GRAs application, approval and reporting
- Unclear path how GRAs could contribute to GOOS networks and dataflow
- Lack of mechanism for GRAs-NFPs communication and collaboration.

Opportunities:

- GRAs have a key role in supporting new technology and capacity development, but there is no existing mechanism for GRAs to contribute to emerging observation networks of GOOS.
- Bridge data accessibility gaps in the region.
- Act as intermediaries between national authorities and research networks and facilitate
 Ocean Observations within National Jurisdiction (OONJ).



GOOS National Focal Points (NFPs)

- 2017: IOC Circular Letter 2666: 1st Call for Nominations
- 2018: IOC Circular Letter 2734: 2nd Call for Nominations
- 2023: IOC Circular Letter 2931: Update the Terms of Reference for GOOS NFPs & 3rd Call for Nominations
- 2025: IOC Circular Letter 3024: 4th Call for Nominations
 - ✓ GOOS NFPs identified in 5 new Member States (Malta, Peru, Qatar, Senegal, Tunisia)
 - ✓ 11 Member States updated their GOOS NFPs

* High turn-over rate for GOOS NFPs – How to keep tracking of these changes? How to carry on the NFPs' role even the focal point is changed.



Existing issues

1. Unbalanced NFP distribution

2. Different levels of activeness

| IOC Groups | Member States | GOOS NFPs | | Reponses to survey | | 2 nd NFP Forum Participation | |
|---------------|------------------|-----------|-----------|--------------------|-----------|--|-----------|
| | No. (a) | No. (b) | % (c=b/a) | No. (d) | % (e=d/b) | No. (f) | % (g=f/b) |
| Group I | 24 | 19 | 79% | 6 | 32% | 13 | 68% |
| Group II | 14 | 8 | 57% | 3 | 38% | 3 | 38% |
| Group III | 30 | 10 | 33% | 7 | 70% | 6 | 60% |
| Group IV | 35 | 16 | 46% | 7 | 44% | 3 | 19% |
| Group V | 47 | 23 | 49% | 10 | 43% | 6 | 26% |
| Total | 150 | 76 | 51% | 33 | 43% | 31 | 41% |

3. NFPs lack of engagement with GOOS Components

4. GOOS lack of understanding of national priorities and support needed

Island states and territories

Lack of understanding of GOOS

Lack of the capacity for national coordination

Lack of communication (e.g., NFP reporting)

Lack of guidaelines/support NFPs

Expectation from GOOS components



NFPs Work Plan

Develop GOOS NFPs Implementation Plan (including NFP reporting)

National coordination | Connect & contribute to GOOS

Publish 2025 NFP Survey Analysis Report

Identify key areas for enhanced communication and capacity building

- 3rd GOOS National Focal Points Forum (Oct. 2025)
- Enhance NFP-GRA interactions

GOOS Stakeholder Conference in 2027



GOOS SC-14 Decisions on GRAs and NFPs

| ACTIONS | Due by | Key Participants | Focal point | Report back to GOOS SC in |
|--|-----------|---|-------------|------------------------------------|
| Session 6a. System implementation at national and regional level | | | | |
| NFP / GRA | | | | |
| Establish a task team with the following SC members: Matias Sifon, Alvaro Scardilli and Caroline Cusack, as well as Champika Gallage from the WMO, supported by the secretariat (Jing Li), to develop a proposal for NFP implementation guidelines (by 30 Sep 2025). | 30-Sep-25 | Matias Sifon, Alvaro Scardilli, Caroline Cusack, Champika Gallage (WMO) | Jing Li | Q4 2025 / Q1 2026 |
| Encouraged the GRA council to propose some application areas (and leverage these to their alliance members and wider GOOS components) to support data access and delivery to GOOS at regional and national level as well as report increases in data flow and national-level engagement to GOOS. | 30-Sep-25 | GRA Council Chair (Carl Gouldman) and Vice Chair (Alvaro Scardilli) | Jing Li | Q1 2026 |
| Virtual meeting (in 2025) between members of the GRA council and the GOOS co-design and Coast Predict programmes and then a subsequent GRA council call to discuss opportunities for strengthened engagement and data sharing. | 31-Dec-25 | GRA Council and GOOS Decade Programmes | Jing Li | Q4 2025 / Q1 2026 |
| Consider how to establish a mechanism to optimise and facilitate NFP and GRA engagement with, and reporting to, GOOS | ongoing | Considered as part of GOOS reform | | Q1 2026 |

| ACTIONS | Due by | Key Participants | Focal point | Report back to GOOS SO in |
|---|---------|--|---|------------------------------------|
| GOOS SC Regional Experts to connect with GRAs and NFPs in their regions to optimise and enhance engagement with other GOOS components by these GRAs and NFPs as much as possible. | ongoing | Regional Experts | GOOS regional focal points | Q1 2026 |
| GRA meetings should be uploaded to Ocean Expert | ongoing | GOOS SC Regional Representatives, GRA Council | GOOS regional focal points / Jing Li | |
| Encourage participation of GOOS SC regional experts and GRA Council in the GRA annual/periodic meetings. | ongoing | GOOS SC Regional Representatives, GRA Council | GOOS regional focal points / Jing Li | |
| Encourage engagement between GOOS/IOC focal points | 2027 | All | All | To be further discussed |
| Future GOOS conference including with GRA, NFP, GOOS SC, panels and other IOC focal points and relevant stakeholders | tbc | All | All | To be further discussed |
| | | | | |



Expert Team on Operational Ocean Forecast Systems (ETOOFS)

ETOOFS provides states and organizations with high-level standards, support and guidance for developing efficient, reliable and interoperable ocean monitoring and forecasting systems essential prerequisites for tackling climatic, environmental and societal challenges.

ETOOFS EXPERT TEAM ON OPERATIONAL OCEAN FORECASTING SYSTEMS

IMPLEMENTING OPERATIONAL OCEAN MONITORING AND FORECASTING SYSTEMS

EDITORS: ENRIQUE ALVAREZ FANIUL, STEFANIA CILIBERTI, AND PIERRE BAHUREL GOOS/ETOOFS SECRETARIAT: DENIS CHANG SENG



















































































SC-14 Decision on ETOOFS

| ACTIONS | Due by | ' | | Report back to GOOS SC in |
|---|--------|--|---|---------------------------|
| Establish a task team with the following members: ETOOFS co-chairs, Patrick Heimbach, David Legler, Caroline Cusack, Vero Garcon, Jerome Aucan, WMO representative, supported by the secretariat (Jing Li), to identify the role of ETOOFS vis a vis GOOS and to agree a revised ToR for ETOOFS and its membership (by end May 2025). The task team will consider, inter alia, how to: | · | ETOOFS Co-chairs (Pierre Bahurel and Enrique Alvarez), Patrick H, David Legler, Caroline Cusack, Vero Garcon, Jerome Aucan(, Albert Fischer (WMO, tbc) | 3 | Q3 2025 |
| Advice on OO needs for upstream and downstream Optimise OO system design Define and certify Operational readiness of observation Systems Define and certify standard services, e.g. in GBON Recommended to include representatives from National operational Oceanographic Centers and modelling communities to participate in ETOOFS (e.g. WCRP ESMO) | | | | |

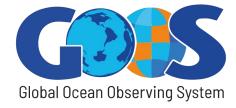


Potential connections to OOPC

- Leverage the full potential of GRA datasets
- Regional / National pilot projects/activities/experiments for OOPC initiatives
 - Ocean indicators pilot applications at national/regional levels
 - ✔ Pan-tropical observation system & GRAs
- Reflect the regional/national requirements to OOPC (e.g. on ECVs/EOVs-physics)
- OOPC representatives in ETOOFS
 - ✓ Operational Readiness Level a potential ETOOFS activity
 - Model evaluation metrics WG of OOPC

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Thank you

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