The Observations Coordination Group (OCG) works to efficiently operate, maintain, coordinate and integrate a comprehensive in-situ global ocean observing system OCG now targets 8 foci, plus communicates on its work. Below is a table for the Exec to use to work on setting 4-5 year goals for the various foci to work towards, with some ideas on progress through measures of success

*Expectations: Person of Contact (POC) will be responsible to assess and synthesize the information in the other columns and ensure the goals are advanced over the next 4-5 years.*

| **FOCI** | **5 YEAR GOALS** | **ACTIONS** | **MEASURES OF SUCCESS** | **POC** |
| --- | --- | --- | --- | --- |
| **Requirements** | 1. Advance OCG cross-network activities through observing system co-design activities. | 1.1 Identify opportunities for continuous dialogue with the networks to identify co-design and cross-network activities. | * Number of engagements in co-design areas. * Number of networks engaged in Decade activities. * Number investment from funding agencies at the national level in the outputs of the co-design areas. | David, Jon, Emma |
|  | 1. Established functional connections with key modeling centers and operational services that regularly identify actionable observing gaps and requirements. | 2.1 Identify key global modeling entities (e.g., CMEMS/Mercator, WMO, Met Office for climate).  2.2 Establish regular exchange with key global modeling entities and processes to develop gaps and requirements. | * Demonstration of impacts of specific EOVs on forecasts (simulated and/or real-time). * Adjustments to the ocean obs systems (e.g. Argo floats profiling more quickly) to address needs; increased int’l expansion of such capabilities with data shared. * Published requirements and gap analysis. |  |
|  | 1. Established roles and responsibilities with WMO[[1]](#footnote-0) on the Oceans element of GBON[[2]](#footnote-1) and RRR[[3]](#footnote-2) (including application areas, SoG[[4]](#footnote-3)). | 3.1 OCG to regularly provide input (across the networks) into GBON and the WMO RRR process (e.g., Advisory Group for Oceans).  3.2 Define those elements of GOOS that should contribute to the WMO GBON process and RRR.  3.3 Assess whether OCG networks included in GBON are sufficiently mature.  3.4 Determine whether additional application areas are required to sufficiently represent the ocean in RRR.  3.5 Engage with GOOS to identify the role of panels and networks in RRR. | * The specified GOOS elements are formally accepted by WMO as part of the WMO GBON. * Number of Ocean related application areas. * OCG network maturity. | Ann, Emma, David |
| **Observing Advances** | 1. OCG to support additional emerging networks (one a BioEco or cross discipline network). | 1.1 Adopt 4 new emerging networks.  1.2 Advances in maturity of current emerging and global networks.  1.3 Identify processes to identify maturity levels of networks. | * Increased number of networks. * Number of networks and their maturity level. * Network maturity level process identified and published. |  |
|  | 1. Developed testing/evaluation approach on new technologies and engages private sector interest and capabilities. | 2.1 Identified processes/methods to encourage testing and more rapid adoption of suitable new technologies.  2.2 Develop processes/methods to identify and define new technology needs at cross-network level. | * Tracking of TRL of network platforms. * Interactions between the GOOS and technology providers has led to faster TRL[[5]](#footnote-4) advances. * Number and type of technology/sensor requirements. * Increased number of cross-network activity collaboration. |  |
|  | 1. Increased standardization of sensors/EOVs and cross-comparison capabilities. | 3.1 Develop guidance for the use of specification sheets.  3.2 Develop pilots and relevant activities to address them through expansion of existing OCG networks. | * Number of updated specification sheets. * Guidance on using the specification sheets has been published. * Number of EOV’s observed for each platform. |  |
|  | 1. Horizon scan of biological and BGC[[6]](#footnote-5) requirements. | 4.1 Establish regular exchange between OCG and BioEco / BGC.  4.2 Identify opportunities for cross-network adoption of biological and BGC observations. | * Number of requirements adopted within networks. |  |
| **Standards and Best Practices** | 1. Networks have coherent, accessible, community reviewed best practices for different stages of the observing life cycle and all EOV’s measured published through OBPS[[7]](#footnote-6). | 1.1 Determine already existing and published best practices for all networks.  1.2 Determine levels of best practices still missing.  1.3 Support, plan and progress the implementation of best practices by all networks. | * Number of best practices. * Number of GOOS endorsed best practices available on the OBPS and information stored on the GOOS website. * List of DOIs[[8]](#footnote-7) of best practices references. | Juliet |
| **Data Management** | 1. Increased support/interaction among global network data teams and OCG. | 1.1 Maintain OCG Data mapping for networks, where possible, and liaise with groups such as IODE to extend mappings where required.  1.2 Continue quarterly data/metadata topics focused on pertinent issues/activities and set priorities.  1.3 Extend data mapping to determine what data modeling groups use data (which variables, which networks), how they access them, and what they use it for (assimilation, validation etc). | * Data mapping advanced. * Data maps published. * Number of network data team POC’s regularly involved in OCG data exchanges. * Identified key modeling groups. | Kevin |
|  | 1. Implemented OCG Data strategy implementation plan across OCG global networks. | 2.1 Publish and raise awareness for the OCG Data Strategy Implementation plan with Networks and evaluate feedback.  2.2 Advance OCG networks to be compliant with OCG data strategy recommendations.  2.4 Work with networks to develop and document best practices of QC Systems. | * OCG Data Strategy Implementation published. * Level (%) of compliance with OCG Data Strategy requirements per network. * Published data best practices. * QC systems are more efficient and timely. |  |
|  | 1. Integration of OCG data/metadata services with regional, national and global stakeholders. | 3.1 Improve/Increase metadata content at OceanOPS, IODE(ODIS/OIH), WMO (WIGOS, etc).  3.2 Implement ERDDAP services for connections to IODE (ODIS/OIH), WMO (WIS 2, WIGOS, etc).  3.3 Integration of OCG data/metadata services with GOOS GRAs. | * % of networks whose data/metadata integrated with [IODE](https://iode.org/)[[9]](#footnote-8) ([ODIS](https://www.iode.org/index.php?option=com_content&view=article&id=559&Itemid=100362)/[OIH](https://www.iode.org/index.php?option=com_content&view=article&id=612&Itemid=100404)) and WMO (WIGOS/OSCAR) services. * # of standards for additional metadata (e.g. for attribution) developed and adopted. * Stakeholders can easily and seamlessly query and access data from all OCG networks. * % of Network data endpoints implementing ERDDAP services. |  |
|  | 1. Open-GTS[[10]](#footnote-9) interactions with WIS/WIS2.0[[11]](#footnote-10). | 4.1 Continue pilot work with AIS data and other potential data producers in line with U.N. Decade activities.  4.2 Engage new partners to serve as Open-GTS nodes. | * Successfully demonstrated distribution of NRT ocean data through NetCDF and WIS 2.0. * # of partners? |  |
| **OceanOPS** | 1. Improved monitoring of global ocean observing system performance. | 1.1 Develop performance monitoring tools for all networks.  1.2 Run regular basin based coordination meetings to develop and enhance partnerships for deployments (i.e., UNOLS, charters). | * Integrated OceanOPS dashboard with cross networks analysis tools. * Growing use of OceanOPS integrated dashboard and tools. * Strengthened cooperation for optimal use of ship time (IRSO and beyond). * Report Card with EOV-focused and use-inspired measures. | Mathieu |
|  | 1. Metadata standardization and integration across the global ocean observing networks. | 2.1 Finalize OceanOPS metadata standardization and integration.  2.2 Established relationship/exchange with BioEco metadata realm (OBIS). | * % of metadata collected per network. * % of metadata harvested through m2m services. * % of metadata integrated with WIGOS. * BGC and BIO metadata represented at OceanOPS. |  |
|  | 1. Enable new data streams & networks. | 3.1 Add regional and emerging networks under OceanOPS and grow third parties' contribution. | * # of regional and emerging networks. |  |
|  | 1. Sustainable OceanOPS infrastructure. | 4.1 Stabilize budget and all core staff contracts. | * Increased funding support for OceanOPS. * Increase host country funding into OceanOPS. |  |
| **Metrics** | 1. Processes and tools that regularly assess adequacy and coverage of all relevant EOVs through RRR and Observing System Co-Design. | 1.1 Compile a group of experts to determine metrics and requirements across all relevant EOVs (e.g., per basin, societal benefit area).  1.2 Participate in the RRR process and apply processes to the GOOS community, where applicable. | * Established and recognised requirements for EOVs. * Requirements for EOV’s published. | Emma |
| **Environmental Stewardship** | 1. All OCG networks, as relevant, have published environmental impact assessments. | 1.1 Create an overview (summary table or other) of all networks' environmental impact assessments and links.  1.2 Determine what networks that have environmental impact have prepared and published environmental impact assessments.  1.3 If not already provided, work with OCG networks to conduct environmental assessment of their environmental footprint.  1.4 Continued and active work across networks with technology suppliers to reduce environmental impact. | * Publish summary overview table on OCG website and socialize. * Number of OCG networks with environmental impact. * Number of environmental assessments. | Ann |
|  | 1. GOOS tracks a set of environmental impact measures. | 2.1 Develop impact measures. | * % of impact measures completed by networks. |  |
| **Capacity Development (CD)** | 1. Successful and coordinated CD activities webinars and in-person training components across the networks, sharing resources where possible, and a diverse CD Task Team. | 1.1 Increase network participation using synergy between OCG/network meetings.  1.2 Roll out pilots, support with data, webinars on how to develop ocean observing systems.  1.3 Increase engagement of Early Career professionals in webinars, training opportunities and beyond.  1.4 Link in-person training opportunities with OCG, Network meetings and other opportunities. | * # of webinars. * Survey results of webinars including country participation and topic requests. * Number of participants in training opportunities. * # of participants in CD activities from countries not yet actively engaged through e.g., social media, WMO PR, GOOS Focal points. | Zulfi and CD Team |
|  | 1. Enhanced support for limited resource countries to develop coastal and ocean observations. | 2.1 Find resources to support the cross OCG capacity development strategy. | * # of resources available for CD activities. |  |
| **Communications** | 1. Report Card funded and expanded to include BioEco networks and cross EOV / user assessments. | 1.1 Work on advancing the Report Card to include OCG-BioEco networks (status tables).  1.2 Reporting on observing system progress across OCG networks (e.g., EOV views). | * Report Card fully embraces OCG-BioEco networks (status tables). * Increased # of the target audience of the report card. * # of EOV’s reported in the Report Card. | Emma |
|  | 1. Understanding in the ocean observing community and beyond of the roles of the global ocean observing networks, the tools for information, and the global, operational and science focused work of OCG. | 2.1 Report on the components and differences between components of the global ocean observing system. | * # of clicks on news stories. * # of reports and stories. |  |

1. [World Meteorological Organization](https://public.wmo.int/en) [↑](#footnote-ref-0)
2. [Global Basic Observing Network](https://community.wmo.int/en/activity-areas/wigos/gbon) [↑](#footnote-ref-1)
3. [Rolling Review of Requirements](https://community.wmo.int/en/rolling-review-requirements-process) [↑](#footnote-ref-2)
4. Statement of Guidance [↑](#footnote-ref-3)
5. Technology Readiness Level [↑](#footnote-ref-4)
6. Biogeochemical [↑](#footnote-ref-5)
7. [Ocean Best Practices System](https://www.oceanbestpractices.org/) [↑](#footnote-ref-6)
8. Digital Object Identifier [↑](#footnote-ref-7)
9. International Oceanographic Data and Information Exchange [↑](#footnote-ref-8)
10. Global Technology Systems [↑](#footnote-ref-9)
11. [WMO Information System](https://community.wmo.int/en/activity-areas/wis/wis2-implementation) [↑](#footnote-ref-10)