The Global Ocean Observing System

OceanOPS Task Team

SLA Network review

OceanOPS / OceanGliders, 11th February 2025

OceanOPS Service Levels recap

We are looking at three levels (tiers) of services provided by OceanOPS:

(i) Baseline Core - largely automated cross cutting service applicable to all endorsed OCG networks (but would require ~$20k to set up for new networks)

(ii) Standard – comes as a package, with several additional (Standard Plus) options

(iii) Advanced - including direct network-specific services and more options

Standard and Advanced are only available to those Networks that provide sufficient annual funding to OceanOPS and will reflect the level of funding provided by the network

SLA Document

Outline of OceanOPS Service Levels for the Networks

Background

OceanOPS takes the pulse of the observing system and provides tools to assess its current and future state. This means monitoring and reporting on the status of the global ocean observing system and networks, supporting efficient observing system operations and enabling the transmission and timely exchange of high quality platform metadata. Currently, OceanOPS tracks over 10,000 observing platforms from the global networks delivering 100,000 observations a day.

With the restructuring of OceanOPS it has been agreed that Service Level Agreements (SLAs) should be developed between OceanOPS and the GOOS OCG Networks. The SLA agreements will define the services that OceanOPS will provide to each network and fall into three main categories (i) baseline, (ii) standard and standard plus, and (iii) advanced services.

The Baseline Services are largely automated cross-cutting services~~and are applicable~~~~available~~ to all endorsed OCG networks and are underpinned by the core funding provided by IOC/UNESCO and WMO to OceanOPS and non-network specific contributions from some Members, including the host country. However, it is recognised that some of the more mature networks may have their own capabilities for some of the baseline services (e.g. network status monitoring, data monitoring) so may not use all of those services on offer.

The Standard Service builds on the Baseline Service and comes as a package of services that include more advanced levels of tailored services that can be provided to those networks who provide funding into OceanOPS. Minimal technical coordination will be provided to ensure standard services delivery.

A Standard Plus option enables the networks to secure services of a dedicated technical coordinator (from 0.25 to 0.5 FTE) and optional Project Office support.

The Advanced Services built on top of the standard services package, are network-specific and may include more advanced monitoring and reporting, data and metadata management, operational and technical support. They include further dedicated network support from the technical coordinators in OceanOPS (from 0.75 FTE). The level of the direct services and dedicated network support being agreed with each network reflects the level of financial support provided to OceanOPS by the network.

As some networks are organised through Panels (e.g. DBCP and SOT), the SLA with the Panel can be consolidated across its constituent networks but should be first worked out for each of its components.

STANDARD SERVICES

The Standard Service builds on the Baseline Service and comes as a **package** of services that include more advanced levels of services that can be provided to all networks who provide funding into OceanOPS. Minimal technical coordination will be provided through the pool of resources of OceanOPS to ensure standard services are delivered. This package of services does not include dedicated technical coordinator time, which is available as an additional option.

SERVICE LEVEL	DESCRIPTION	BENEFIT	REQUIREMENTS
Standard Network Monitoring/Web	Enhanced monitoring with additional tools for operations, instrumentation, and data flows, including (key) performance indicators.	Provides a refined capacity for monitoring, enabling the identification of gaps and trends.	OceanOPS: To document standard maps, statistics and indicators (see examples in annex 2). Networks: To regularly review and assess the usefulness of maps and indicators and web-based tools.
	Monitoring dashboard pre-configured for the specific network, providing dedicated tools for refined monitoring.	Capacity to develop network-specific web features, including maps, statistics, monitoring tools, and key performance indicators.	
Standard Reporting to Network	Inclusion in Ocean Observing System Bulletin (published semestrial, http://www.ocean-ops.org/bulletin) for internal and technical communication on network status.	Provides networks with a status report before their annual session, highlighting members' contributions and analyzing gaps and trends for continuous improvement. The semiannual technical bulletin offers two additional opportunities for internal communication, addressing aspects in more detail such as spatial coverage and instrumentation performance.	OceanOPS: Network focal point to analyze monitoring tools and report as appropriate. Networks: Network focal point (e.g. if provided in kind and remotely) to liaise with OceanOPS and contribute to these reports. See Technical Coordination service.
	Standard yearly report on network status, covering implementation, instrumentation, operations, and data flows, with recommendations for network performance improvement.	Status analysis and recommendations are produced based on the support provided, including in-kind contributions. For more details, see the Technical Coordination service. [Add some structure for standard reporting: Implementation, Instrumentation (and parameters), Operations, Data/Metadata flows,]	

	SERVICE LEVEL AGREEMENT OVERVIEW			
SERVICES	**BASELINE**	**STANDARD**	**STANDARD PLUS**	**ADVANCED**
Network Monitoring/Web[5]				
GOOS Reporting				
Platforms Metadata Management[5]				
Data Monitoring[5]				
API Metadata Output				
API WIGOS/OSCAR Integration				
Reporting to Networks				
Dedicated Technical Coordination		Minimal TBD	[¼ to ½ FTE]	[¾ to 1 FTE]
Operations coordination				
Notifications and alert systems				
Project Office[6]			[¼ to ½ FTE]	[¾ to 1 FTE]
Expertise/ Assistance / Training[6]				
Cost estimation[7] (TBD)	$20k to set up $5k recurring	$25-35k	$55-90k[8]	≥$135k[8]

Optional	Common service	Service in service level

[5] Scale up together from baseline through standard to advanced.
[6] Optional with extra costs (FTE, travel e.g.)
[7] Estimation does not include options and do not add up between service levels
[8] Estimation includes travel, IT, metadata, and administrative support, scaled to base technical coordination FTE.

OceanOPS Services

- Prerequisites
  - Platform metadata exchange with OceanOPS is a requirement for all services provided, where metadata exchange should be machine to machine as specified by OceanOPS when possible and reasonable
  - Network should have at least a real-time data delivery (on GTS/WIS2.0 of the WMO) and/or a global data node where OceanOPS can monitor data availability

Responsibilities

The responsibilities of OceanOPS include:

- ensuring the **availability of service** as per the defined SLAs
- monitoring and maintaining the service level objectives, through **defined performance metrics** (such as % produced monthly maps and tools, % web/API uptime, ReportCard, Bulletin x2, % Report to networks, % helpdesk/ticketing stats resolved, % availability in OSCAR)
- providing a **yearly report at GOOS OCG** session on service performance (including work plan, budget, KPIs)
- monitoring the SLA progress for each network in a specific **project management web-based tool** (monday.com,used in GOOS and OceanOPS)
- Tracking the **dedicated FTE effectively provided** (in effective days)
- Tracking the **incoming funds by Network**; OceanOPS has now its dedicated Trust Fund at WMO with reporting segments by Network

The responsibilities of the Network include:

- ensuring the timely payment for the service rendered, according to **commitments** made (on a calendar year)
- providing access to required resources and information, and committing to **unrestricted metadata and data exchange for all elements monitored by OceanOPS**
- providing the name of the **focal point** (technical coordinator or project officer) who will contribute **in-kind** to the services (minimum reporting and helpdesk) if Network does not select any technical support in a direct service
- **promptly reporting any issues** with the services

Incidents will be logged and potentially escalated through network exec boards, OCG exec and OceanOPS management board.

OceanOPS funding (2024 Financial Report)

Average contributions by Networks:

To facilitate discussions during the OCG-15 session regarding the SLAs agreement, the table below illustrates the average contributions by Networks over the period 2022-2024.

Networks	Mean 2022-2023-2024 including EU Projects	Mean 2022-2023-2024 without EU Projects	Contributors
DBCP	$91,211	$91,211	Australia, Canada, EUMETNET, India, US
Argo	$179,999	$178,145	Australia, China, Euro-Argo, EuroArgo RISE Project, France, Germany, India, Italy, Japan, Monaco, UK, US
SOT	$79,910	$79,910	Australia, Germany, EUMETNET, US
OceanSITES	$33,795	$32,189	Australia, France, US
GO-SHIP	$50,920	$24,709	Australia, EuroGOSHIP, EuroSea, US
OceanGliders	$46,734	$25,425	EuroSea, GROOM, US
SOCONET*	$30,000	$30,000	US, EU project submitted (TRICUSO)
Total Networks	**$512,569**	**$461,588**	
OceanOPS	$538,958	$465,096	AMRIT Project, EmodNET, EuroSea Project, France, Monaco, TRUSTED Project, US, WMO EU project submitted (AMRIT C2)
TOTAL	**$1,051,527**	**$926,684**	

*In 2024, a new contribution of 30 k$ towards SOCONET coordination will be received

US funding should continue for the next 3 years (2025-2027. ~$21.000)

In kind support from France (EGO community) at a rate of ¾ FT (Mariarita Caracciolo)

OceanOPS and OceanGliders - status

- ~2,800 OceanGliders mission registered in the OceanOPS system.
- Specific theme for OceanGliders with dedicated tools (form, upload, visualisation, data-base evolution, GTS and GDAC partial monitoring, etc.)
- Participation to steering team meeting, reporting to community meeting, participating in the data team (leaded OG1.0, delayed mode working group, vocabulary working groups), support community development (EGO, UG2), programme office support
- 1 FTE from June, 2019 to 2023.
- ½ FTE from Jan to June 2024.
- ¼ FTE since June 2024.

OceanOPS and OceanGliders - Financial status

- In kind ¾ FTE (In kind - including travel cost ? likely 2 to 4 mission a year)
- Support from OceanOPS expert between ⅛ and ¼ FTE funding by US.IOOS ~21,000$ during 2025 to 2027

- Indirect cost to be defined:
  - **Infrastructure: from 11,250$ to 15,000$**
  - **Other indirect cost coming along with in kind support (subscription, overhead)?**

OceanOPS and OceanGliders - SLA

- What are the needs of OceanGliders ?
  - **Support to operators**
    - **Data/metadata management support to operators**
    - **Dedicated tools, map, indicators.**
    - **Real time monitoring of the activity**
    - **Monitoring the data flow through multiple nodes**
  - **Organisation of international coordination**
    - **Support to program management (meeting, reporting)**
    - **Participation to task teams (data/metadata, BOON, User groups)**
- Between Standard plus and Advanced

Next steps

Need to estimate accurately the cost of Standard plus / Advanced in the case of In kind support + OceanOPS expert.

OceanOPS to draft a SLA document (under a Letter of Agreement) and share with OceanGliders

Sign off of SLA/LoA targeted by OCG-16 session (April)