



Fourteenth Steering Committee
27-29 May 2026

SOFF Compliance Phase Framework

Decision 14.3

Systematic Observations
Financing Facility

**Weather
and climate
data for
resilience**



Decision 14.3: SOFF Compliance Phase Framework

The SOFF Steering Committee

Notes the importance of the SOFF Compliance Phase and the unique feature of SOFF to provide long-term, results-based financial and peer-to-peer technical assistance to beneficiary countries to operate and maintain their basic observing system in a sustained manner.

Welcomes the participatory approach and extensive consultation process including SOFF beneficiary countries, Peer Advisors, Implementing Entities, SOFF co-founders, WMO, UNDP and UNEP, UNMPTF Office as well as Advisory Board and Steering Committee.

Decides to

- (i) adopt the SOFF Compliance Phase Framework with an initial lifespan until 2032, and reviewed in 2033, with country eligibility defined at the date of approval of its Readiness Funding Request; and
- (ii) review early experience with its implementation once the first five countries have completed the first year of the Compliance Phase.

Requests the SOFF Secretariat to

- (i) communicate the Compliance Phase Framework with all beneficiary countries, SOFF operational partners, and the SOFF Advisory Board;
- (ii) Include in the Compliance Phase funding agreements with beneficiary countries that future compliance payments are subject to fund availability and their ability to pay;
- (iii) In order to facilitate a potential effective regional compliance support, step up Resource Mobilization, with the aim of closing regional investment gaps with urgency, including in the Pacific;
- (iv) Engage with the Coalition of Finance Ministers for Climate Action to i) communicate the critical importance of countries' systematic observation infrastructure and international exchange of weather and climate data, ii) communicate the opportunity SOFF provides with the compliance framework, and iii) explore mechanisms for fund transfers to the National Meteorological Services under the Compliance Framework;
- (v) make the framework public on the SOFF website; and
- (vi) adjust the SOFF Operational Manual accordingly and present the updated version of the Manual to the 15th Steering Committee for its consideration.

Purpose of this Document

Long-term, results-based support to beneficiary countries represents a unique feature of SOFF to effectively support countries to operate and maintain their basic observing system in a sustained manner. The SOFF Compliance Phase Framework states how and under what conditions this support is provided. The Framework was developed in a highly participatory approach and reflects inputs received from all relevant stakeholders.

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SOFF Compliance Phase Framework

1. Introduction

The Compliance Phase of the Systematic Observations Financing Facility (SOFF) is a distinctive and innovative feature of the fund, created to ensure long-term sustainability of investments. Experience has shown that without sustained financial and technical support for the operation and maintenance of observation networks, in countries with limited technical and financial resources systems often fail, data is not shared internationally, and investments fail to achieve their objective¹. To address this sustainability gap and aligned with the principle of internationally agreed and mandatory Global Basic Observing Network (GBON) data representing a global public good, SOFF was designed with a Compliance Phase to provide support following the Investment Phase. In the Compliance Phase, countries will receive results-based finance and peer technical assistance to sustain investments and ensure long-term international sharing of data. To date, no other funding mechanism provides such long-term, results-based support for sustaining hydrometeorological networks.

2. Compliance Phase Overview

2.1. Principles

The [SOFF Operational Manual](#) (section 4.5.3) and Steering Committee decision [5.7 SOFF and GBON Compliance](#) provide the foundation for the SOFF Compliance Phase. These documents define key requirements, tools and criteria for compliance monitoring, including operational elements related to monitoring, reporting and verification.

The SOFF Compliance Phase builds on four key principles:

- **Results-based finance:** Compliance payments are made upon WMO Technical Authority independent verification of results, i.e. international sharing of GBON data.
- **Predictable long-term support:** Long-term financial and technical support enables countries to sustain operations, following completion of the Investment Phase. As a United Nations pooled multi-partner fund with many donors contributing to the fund, SOFF aims to provide long-term support to countries.
- **Continued technical support:** Peer Advisors, funded by SOFF on a cost-recovery basis, provide on-demand technical assistance.

¹<https://openknowledge.worldbank.org/entities/publication/4fc1bf3e-7cc3-5134-a966-8aef62ce817f>

- **Performance monitoring:** WMO Technical Authority routinely monitors and verifies performance through the WIGOS Data Quality Monitoring System (WDQMS) and the GBON compliance app.

2.2. Scope and Eligibility

Funding from SOFF is allocated in three phases of support: Readiness, Investment and Compliance. SOFF support starts with Readiness, in which the necessary assessments and plans are put in place for SOFF implementation. The SOFF Investment Phase builds on the outputs of the Readiness Phase and funding is used to procure, install and operate the observation infrastructure, telecommunications, and other equipment needed for GBON stations, as well as strengthen the human and institutional capacity needed to operate, maintain, and share GBON observations. A country transitions from the Investment Phase to the Compliance Phase once it demonstrates sustained operations of SOFF-funded stations and completes the commissioning period².

Commissioning is the process by which GBON data is reliably shared through WIS 2.0 in line with GBON compliance criteria. During the final year of the Investment Phase, countries must operate and maintain their networks according to these criteria. Performance is monitored jointly by the country and the Implementing Entity, with support from the Peer Advisor and the WMO Technical Authority. A station is formally declared *commissioned* once WMO verifies that it has met the criteria over a continuous three-month period.

The scope of Compliance Phase support is to provide both technical assistance and results-based finance, enabling countries to operate and maintain their national contribution to GBON and sustain international data sharing.

SOFF prioritizes support to SIDS and LDCs. Eligibility for different phases of SOFF support is defined in the SOFF [Operational Manual](#), currently as follows:

- **Small Island Developing States (SIDS) and Least Developed Countries (LDCs):** Eligible for all SOFF phases, including Compliance.
- **Other Official Development Assistance (ODA) eligible developing countries:** Eligible for the Readiness Phase only.
- **Potential future expansion:** The Steering Committee may open eligibility of Investment and Compliance support to additional countries through future decisions.

2.3. A results-based approach

A results-based approach to financing requires clear, measurable and independently verified metrics to validate the achievement of results. The SOFF model is based on the

² [Decision-5.8-SOFF-Investment-Phase-Framework-and-Funding-Request-Template.pdf](#)

definition of GBON as agreed by WMO and its members³ and independent verification of compliance by the WMO Technical Authority to meet the requirements of a results-based approach. Payment for Compliance will be explicitly linked to these metrics and independent verification systems will be in place to ensure transparency. The results-based approach of the SOFF Compliance Phase also enables learning and accountability, including allowing governments and SOFF donors to easily monitor performance and demonstrate value for money.

3. Monitoring, Reporting and Verification of Compliance

3.1. GBON Compliance

This chapter describes how compliance of SOFF countries with the Global Basic Observing Network (GBON), established by [Resolution 2 \(Cg-Ext\(2021\)\)](#) - Amendments to the Technical Regulations related to the establishment of the Global Basic Observing Network - will be monitored and verified. GBON compliance is defined in two ways, station-level compliance and WMO Member (country) level compliance.

SOFF Compliance Phase support will be provided based on the station-level compliance, which will be achieved when a given station reports the required measurements, at the required temporal frequency, with the required reporting quality.

SOFF uses the GBON compliance criteria applicable to all WMO Members (193 states and territories) as the basis to plan and implement activities and monitor and verify results. Criteria are clearly outlined in Section 10.4 of the [Guide to the WMO Integrated Global Observing System](#) (WMO-No. 1165). The criteria for station-level compliance are defined by the WMO as outlined in [INF 6.2](#). The WMO Technical Authority is responsible for the tools to monitor GBON compliance. Monitoring and data collection are entirely based on the [WIGOS Data Quality Monitoring System \(WDQMS\)](#) web tool.

3.2. Compliance monitoring

Monitoring of GBON stations is achieved through publicly available tools developed by WMO:

- The **WDQMS web tool**, which provides in almost real-time information on the daily availability and quality of observational data; see [WMO website](#);
- The **GBON Compliance app**, which provides quarterly compliance information by station and by WMO Member; see [WMO website](#);
- The **SOFF Compliance Monitoring tool**, which represents a SOFF-tailored version of the GBON Compliance app and will monitor the status of SOFF-funded stations

³ GBON Guide which was approved by the 76th WMO Executive Council (EC-76) and in the WIGOS Manual (WMO-No. 1160)

and corresponding targets set through National Gap Analysis. It will be included in the [SOFF monitoring dashboard](#) on the SOFF website.

Currently, these tools draw on data from four global Numerical Weather Prediction (NWP) centres: Deutscher Wetterdienst (DWD); European Centre for Medium-Range Weather Forecasts (ECMWF); Japan Meteorological Agency (JMA) and United States National Centers for Environmental Prediction (NCEP).

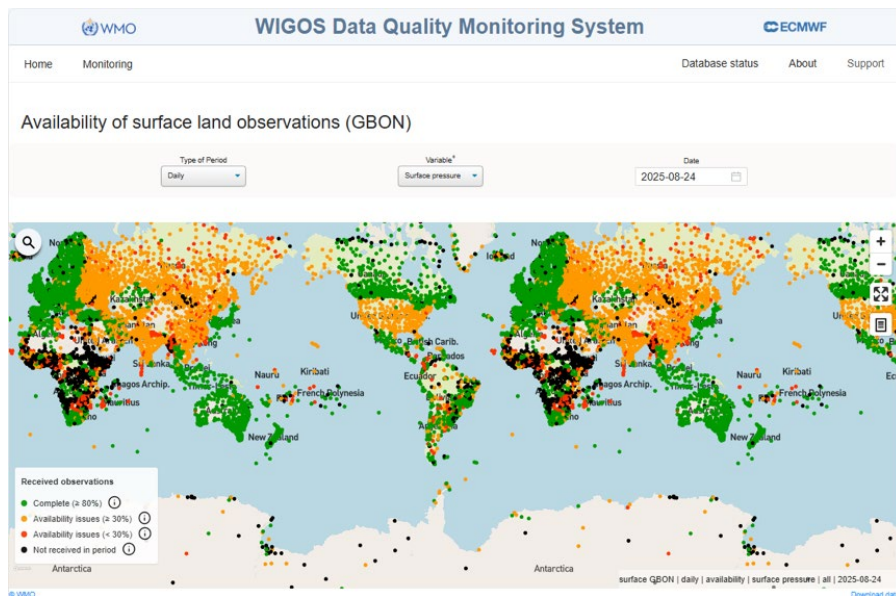


Figure 1: GBON surface station monitoring on WDQMS

Quarterly and annual GBON compliance monitoring reports will be made publicly available on the SOFF website.

3.3. Verification and WMO Annual Compliance Report

During the Compliance Phase, station level compliance will be verified by the WMO Technical Authority quarterly and annually. WMO will provide SOFF-tailored quarterly GBON compliance reports showing the SOFF-funded stations' performance and progress, including the percentage of Compliance across a given time period for each SOFF country. Quarterly GBON compliance monitoring reports will be made publicly available on the SOFF website.

These Compliance monitoring processes and outputs are integrated into the SOFF Monitoring, Evaluation, and Learning (MEL) framework.

4. Implementation Arrangements

4.1. Process

The Compliance Phase provides predictable, results-based financing to sustain GBON operations. Given the global public good nature of GBON data generated and

internationally exchanged by SOFF beneficiary countries, the provision of Compliance Phase support is envisioned as long as countries remain eligible for funding, initially until 2032 taking into consideration that the SOFF UN fund is currently set up for an initial 10-year period.

The financial and operational design features of the SOFF Compliance Phase are outlined in this section.

4.2. Eligible expenditures for Compliance payments

Eligible expenditures for Compliance payments are those that are deemed essential for sustained operation, maintenance and international sharing of GBON data. Below is an initial overview of eligible expenditures that will be further developed based on lessons learned and countries' needs that are deemed essential from a technical and financial point of view.

- **Consumables:** including consumables for 2 launches per day for upper-air stations.
- **Spares and replacement costs:** while the expected lifetime of a system can be as high as 20 years (or more for upper-air) if maintained properly, parts and sensors will typically have shorter lifetimes and are included.
- **Calibration:** depending on the calibration solution and process decided by the country and reflected in the SOFF Investment Phase funding request, the needs for supporting regular calibration will differ. The cost of calibration includes shipping of equipment, as necessary, and any cost of the calibration service from the manufacturer or a local calibration facility.
- **Operation and maintenance WIS2.0:** costs to enable reporting through WIS2.0
- **Software licenses:** including annual expenditures to provide various levels of upgrades and support.
- **Service-level agreements:** including software for complex equipment, this will reduce the expense of training and salaries of highly qualified technical staff.
- **Training of field staff for annual preventive maintenance:** while staff costs are borne by the NMHS, expenditures related to capacity development of staff to perform GBON compliance-related activities, e.g. radiosonde launches, as well as regular preventive maintenance costs are included in the cost of Compliance.
- **Travel cost for maintenance:** including public transportation, vehicle rental or maintenance of vehicle including, fuel and accommodation.
- **Station security related costs:** including expenditures related to protecting stations from vandalism.

Expenditures beyond those outlined above will require justification.

Expenditures to be covered by the country's in-kind contributions:

- **Business operating expenditures:** include operating expenses such as staff costs, rent (office, furniture, etc.) and basic equipment (services, computers, vehicles).
- **Administrative expenditures:** include the cost of staff salaries required to carry out the work of the financial and human resource management and day-to-day administrative work.
- **Utilities:** including mains power, water, sewer, and communications required for all sites.

4.3. Calculation of Compliance payments

4.3.1. Country tailored fixed amount per station

For each country a tailored fixed amount for surface and upper-air station Compliance payments will be established before the end of the Investment Phase, based on the eligible expenditures defined in section 4.2. These fixed amounts per station will be determined jointly by the country, the Implementing Entity and the Peer Advisor, with technical input from the WMO Technical Authority. To determine the total annual Compliance payment to be made to the country, the calculation will consider the number of compliant stations (see 4.3.3) and the financial contribution of the country (see 4.3.2).

4.3.2 Country financial contribution to Compliance – ability to pay

While acknowledging the global public good value of data generated and internationally shared by countries, **countries are expected to financially contribute with up to 25% to the eligible expenditures**, in addition to the in-kind contribution outlined in section 4.2. The financing of this contribution can come from a country's own budget, other public or multilateral sources, climate or development funds, NGOs, or the private sector.

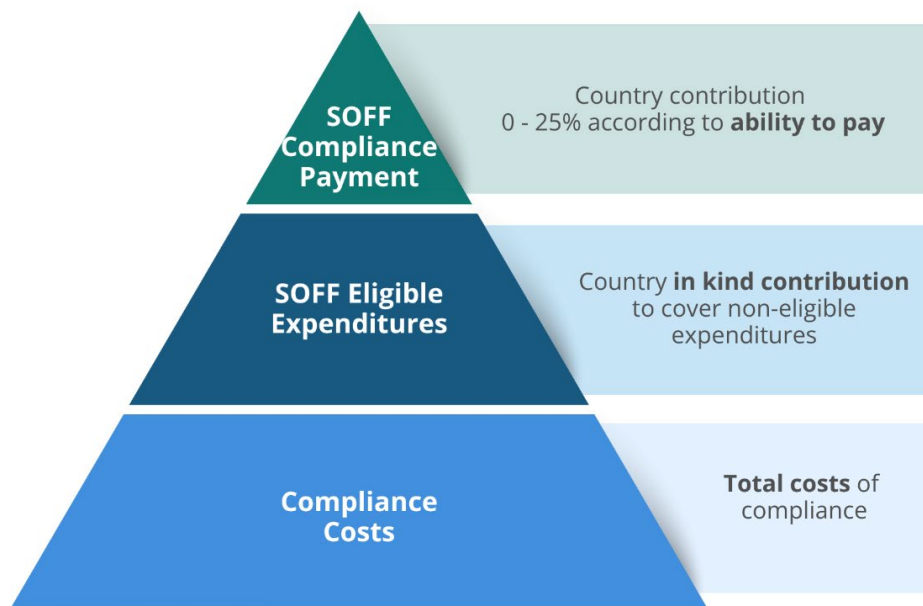
A country's contribution will be based on its **economic ability to pay under GBON**, defined as **GDP per surface area** (including EEZ for SIDS). The number of internationally mandated GBON stations is a function of its surface area. Based on this calculation, countries are grouped into five categories:

Category	GDP per surface area	Percentage contribution
Category I	< 50,000 USD/km ²	0%
Category II	50,000 – < 100,000 USD/km ²	5%
Category III	100,000 – < 200,000 USD/km ²	10%
Category IV	200,000 – < 500,000 USD/km ²	15%
Category V	≥ 500,000 USD/km ²	25%

The current distribution of SIDS and LDCs is presented in [Annex II](#).

4.3.3. Calculation of the amount of annual Compliance payments

Payments will be made annually, covering the period 1 July to 30 June, following Steering Committee approval at the October Steering Committee meeting. The yearly compliance payment is calculated as the sum of the yearly fixed costs for each station type, multiplied by the ratio of compliant quarters, minus the country contribution. The WMO Annual Compliance Report issued in September will provide the number of quarters that each SOFF-funded station meets GBON compliance requirements.



4.3.4. Compliance payments special considerations for upper-air stations

Many SOFF countries will be operating upper-air stations for the first time through SOFF investments. Due to the particular importance of upper-air observations for NWP and the reliance of successful launches on the purchase of consumables for the stations, lack of sufficient resources might jeopardize future compliance. To address this challenge, special considerations for upper-air stations are made in which payments for non-compliance of 4 full quarters are issued before transitioning to a strict results-based model.

This results in the following approach for compliance payments:

- For **surface stations** – SOFF will provide payments for compliant quarters.
- For **upper-air stations** – SOFF will provide payments for up to four quarters of non-compliance, before transitioning to the strict payment for results model of payments only for compliant quarters.

4.4. Execution and disbursements

In order to ensure continuation of GBON compliance after the Investment Phase, countries will submit their first SOFF Compliance Phase funding request prior to the end of the SOFF Investment Phase so that Compliance payments can kick in immediately after the end of the Investment Phase.

Compliance payments will be made according to a results-based finance model in which funds are disbursed upon WMO verification of GBON compliance through their quarterly and annual Compliance reports.

To disburse funds, two modalities will be available to SOFF countries depending on the financial and legal structures in place within the NMHS. The preferred option should be selected by the country in the Compliance Phase funding request. The two options for disbursement of results-based annual Compliance payments are as follows:

- **Direct disbursement from UNMPTF to the NMHS (or national government entity designated by the country).** In this model, the UNMPTF will directly disburse the annual Compliance Phase payments to the country upon approval of the Steering Committee. The NMHS or designated government entity will need to pass mandatory due diligence assessments required by the UN System. The assessments will evaluate the financial management capacity and risks of implementing partners.
- **Disbursement through UN entity pooled project modality to the NMHS.** In this model, funds from the UNMPTF will be disbursed to a UN entity as a pooled multi-country project managed by the entity. The entity will directly manage the disbursement of results-based payments to all countries who have selected this model, preferably through their decentralized office using the entity's internal due diligence requirements. The UN entity will manage these funds with the 7% Implementing Entity fee as determined by the UNMPTF. This option is suitable for NMHSs in which the financial and legal structures for direct receipt of payment are not yet established. The funds for Compliance will be transferred to the NMHS according to an agreement between the UN entity and the NMHS.

4.5. Contingency funding

Compliance Phase contingency funding will cover costs for corrective maintenance that is not considered part of the annual and regular costs of Compliance. This funding will be available to countries upon request to provide support for unanticipated damages and reporting failures related to natural disasters, extreme weather events and conflict contexts. As the country is responsible to protect the stations against vandalism and as these costs are included in the eligible expenditures for compliance payment, damages related to vandalism are not covered by contingency funding.

Contingency support requires a request for support from the country outlining the problem and the need. The request further requires validation by the Peer Advisor. The request will be reviewed by the WMO Technical Authority and the Steering Committee will consider each request individually.

4.6. Regional window for Compliance

Regional efficiency is a core SOFF principle defined in the SOFF programming criteria (Decision 1.4), specifically the criteria on opportunities to create economies of scale and optimize the design of the observing networks through multi-country/sub-regional implementation. As in the Readiness and Investment Phases, the Compliance Phase aims to create economies of scale and optimize observing networks through multi-country and sub-regional approaches.

Upon consultation with countries, the need for a regional window of funding for the Compliance Phase was emphasized, in particular in the Pacific and in the Caribbean, where countries collaborate through regional institutions due to the small size and limited resources of certain NMHSs. Depending on the needs of a particular country and/or region, SOFF will consider proposals for pooling Compliance payments of eligible countries and upon request of the respective countries through a regional request. The payments will still be calculated as outlined above. If countries agree to request Compliance support regionally, the request for funding can be considered in the UN entity pooled payment modality as a regional request that can support regional institutions or functions. The proposal would need to be prepared by and signed by all countries involved. The regional Compliance support is an option available to countries, but the decision will remain with the WMO Permanent Representative of each country. Given the phased manner in which countries enter into the Compliance Phase, potential pooled regional compliance support is expected to evolve over time.

4.7. Availability and allocation of resources

In its resource mobilization and resource allocation efforts, SOFF will prioritize Compliance Phase payments, while balancing the needs of investments in Readiness and Investment phases. A potential setting aside of resources for future Compliance Phase payments as well as potential prioritization of Compliance Phase funding requests will be decided by the Steering Committee as part of SOFF's approach to managing its funds and according to SOFF donors' regulations.

5. Technical support in the Compliance Phase

5.1. Peer Advisory technical support

Peer Advisors provide on-demand GBON operational and maintenance advisory support throughout the Compliance Phase. When issues occur with the performance of SOFF funded stations, or GBON compliance is threatened or compromised, the Peer Advisors

are the “first line of defense” and liaise with the NMHS and WMO regional centers, as necessary, to ensure the fastest possible resolution of issues.

Peer Advisory costs will be provided upon country request and will be included in the Compliance Phase funding request. Peer technical assistance is capped at USD 100,000 per country over a 3-year period.

5.2. WMO Technical Authority

In the Compliance Phase, WMO will continue to perform its function of monitoring and verifying GBON compliance using the monitoring tools stated in section 3.2. WMO will further support the operationalization of the Compliance Phase by providing timely technical feedback to countries and Peer Advisors, helping to diagnose compliance issues related to observation quality, metadata, communications, or data exchange.

This support will be delivered in close coordination with WMO-designated regional centres, ensuring that regional capacities are leveraged effectively while maintaining a clear Technical Authority interface for SOFF.

Annex I: Roles and Responsibilities during Compliance

SOFF Countries

Countries are responsible for ensuring GBON compliance. Through their NMHSs, SOFF countries are responsible for operating and maintaining their station network, including GBON stations, in line with GBON regulations, and ensuring adequate protection and security of these stations. Any compliance-related problems must be communicated to the respective Peer Advisor and WMO Technical Authority.

SOFF Peer Advisors

Peer Advisors provide on-demand technical support to SOFF countries, which remain responsible for operating and maintaining their GBON stations in line with GBON regulations. Peer Advisors support the SOFF country to resolve problems quickly when performance issues occur, and also for liaising with Regional WIGOS Centres (RWCs) and Global Information System Centres (GISCs) when requested by the SOFF country.

Their main functions include:

- Advising National Focal Points (NFPs) for WIGOS, OSCAR/Surface, WDQMS and WIS on GBON implementation;
- Supporting SOFF countries, in particular, NFPs for WIGOS, OSCAR/Surface, WDQMS and WIS, to resolve issues regarding monitoring results and payment triggers;
- Funding for Peer Advisory support during the Compliance Phase will be approved by the Steering Committee in the Compliance Phase funding request. WMO acts as pass-through entity to contract Peer Advisors. Countries can request support through the SOFF Secretariat, but responsibility for resolving station issues remains with the NMHS. Peer technical assistance is capped at USD 100,000 per country over a period of 3 years.

WMO Technical Authority (WMO TA)

The WMO Technical Authority will:

- Verify the status of GBON compliance after the commissioning period and provide verification for all SOFF Compliance Phase payments;
- Produce quarterly GBON compliance reports;
- Provide timely technical feedback to countries and Peer Advisors, helping to diagnose compliance issues related to observation quality, metadata, communications, or data exchange;

- Coordinate with WMO-designated regional centres, ensuring that regional capacities are leveraged effectively while maintaining a clear Technical Authority interface for SOFF.

SOFF Secretariat

The SOFF Secretariat facilitates coordination and collaboration among operational partners during the Compliance Phase. Its responsibilities include:

- Coordinating the review of Compliance Phase funding requests and submitting them to the Steering Committee;
- Maintaining the SOFF GBON compliance tool, with support from the WMO Technical Authority;
- Reporting to the UNMPTF and SOFF Steering Committee on progress in the Compliance Phase

Steering Committee

- The Steering Committee will consider and approve annual Compliance payments at the October Steering Committee meeting based on the WMO Annual Compliance Report issued by September.
- The Steering Committee will decide on updates/revisions to the Compliance Phase Framework as required based on lessons learned.

Annex II: Financial contribution of SIDS and LDCs by category

Category V - 25% contribution	
Bangladesh	Rwanda
Cook Islands	Singapore

Category IV - 15% contribution	
Cambodia	Nepal
Cuba	Trinidad and Tobago
Dominican Republic	Uganda
Gambia, The	

Category III - 10% contribution	
Benin	Senegal
Djibouti	Sierra Leone
Ethiopia	St. Kitts and Nevis
Guinea	St. Lucia
Haiti	Togo
Myanmar	

Category II - 5% contribution	
Angola	Jamaica
Belize	Lao PDR
Burkina Faso	Lesotho
Bhutan	Malawi
Burundi	Nuie
Grenada	Tanzania
Guyana	

Category I - 0% contribution	
Afghanistan	Micronesia, Fed. Sts.
Antigua and Barbuda	Mozambique
Bahamas, The	Nauru
Barbados	Niger
Cabo Verde	Palau
Central African Republic	Papua New Guinea
Chad	Samoa
Comoros	Sao Tome and Principe
Democratic Republic of the Congo	Seychelles
Dominica	Solomon Islands
Eritrea	Somalia
Fiji	South Sudan
Guinea-Bissau	St. Vincent and the Grenadines
Kiribati	Sudan
Liberia	Suriname
Madagascar	Timor-Leste
Maldives	Tonga
Mali	Tuvalu
Marshall Islands	Vanuatu
Mauritania	Yemen, Rep.
Mauritius	Zambia

Notes:

GDP data are based on World Bank sources, or other reliable sources where World Bank data are not available.

Surface area data are based on those used for the WMO GBON Global Gap Analysis. The calculations are planned to be updated annually to ensure they remain up to date.