



Decision 8.2 Updated
Resource Mobilization



SOFF
Systematic Observations Financing Facility

Eighth Steering Committee 18-19 June 2024

SOFF Readiness Programming of four Additional Countries

Decision 8.7

Systematic Observations
Financing Facility

**Weather
and climate
data for
resilience**



Decision 8.7: Reading programming of additional four countries

The SOFF Steering Committee

Adopts the additional four countries, Niue, Guinea, Sierra Leone, and Cook Islands for programming of SOFF Readiness funding.

Requests the SOFF Secretariat to conduct the necessary actions following the process stated in the SOFF Operational Manual and to coordinate the preparation of Readiness funding requests for consideration by the Steering Committee.

Encourages SOFF Advisory Board members and Implementing Entities to reach out to their respective new SOFF programming countries to alert about opportunities and synergies between their activities and SOFF.

Purpose of this Document

The document provides an overview of the 4 countries proposed for SOFF programming and how the countries respond to SOFF programming criteria. The programming of additional countries responds to the increased level of ambition to accelerate delivery of SOFF support to Least Developed Countries (LDCs) and Small Island Developing States (SIDS) and to prepare an Investment funding pipeline for 2025. The 4 countries proposed for programming, Niue, Cook Islands, Guinea, and Sierra Leone, have formally requested SOFF support and are aligned with the programming criteria.

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SOFF Readiness programming of additional 4 countries

1. SOFF Programming approach

1.1. SOFF work programme

The updated SOFF Work Programme for the first implementation period from July 2022 to June 2025 was adopted by the SOFF Steering Committee in November 2023 with [Decision 6.6](#). The updated work programme proposes an increased level of ambition delivering 75 countries for Readiness support by June 2025 within the previously set funding target. The SOFF portfolio currently includes 62 countries that were programmed through three SOFF Steering Committee decisions ([Decision 3.4](#), [Decision 4.4](#), [Decision 5.4](#)) starting in November 2022.

1.2. Programming 4 additional beneficiary countries for SOFF support

The proposed programming of 4 additional countries, along with the SOFF Fourth Steering Committee [Decision 4.4](#) on accelerated SOFF implementation, responds to the demands to increase the level of ambition and accelerate the delivery of SOFF support to Least Developed Countries (LDCs) and Small Island Developing States (SIDS) and to prepare an Investment funding pipeline for 2025. The 4 countries proposed for programming, Niue, Cook Islands, Guinea and Sierra Leone, have formally requested SOFF support and are aligned with the programming criteria.

The programming of Niue follows [Decision 7.5](#) that included the country as SOFF beneficiary country eligible for Readiness, Investment and Compliance support. The programming of Cook Islands is pending Decision 8.6 related to its status as a SOFF beneficiary country that responds to a request from the Steering Committee of the UN Environment Programme GCF Pacific programme to consider SOFF support to ensure sustainability of GBON investments funded through the GCF programme, aligned with the [Collaboration Framework](#).

The programming of Guinea and Sierra Leone, two LDCs in Africa, highlights the importance of closing the GBON gap in Africa. Africa is the continent with the largest GBON data gaps. Of its 53 countries, 36 are SIDS and LDCs. These countries have a compliance rate of 7% for surface land stations and 9% for upper air stations. To ensure the GBON gap is closed in the most data scarce areas, the 4 countries are proposed for SOFF programming.

Table 1 below illustrates the 4 countries proposed for SOFF programming.

Table 1. Proposed SOFF additional programming

Region	Country
East Asia and Pacific	Cook Islands
	Niue
Sub-Saharan Africa	Guinea
	Sierra Leone

2. Programming criteria

All programming proposals are based on the SOFF programming criteria (listed below), as per the Operational Manual. Based on these criteria and the information provided by the beneficiary countries, WMO Technical Authority, peer advisors and Implementing Entities, the SOFF Secretariat prepared the proposal for programming of the current 4 countries for the Steering Committee's consideration and decision.

- Close the most significant data gaps: Emphasis on geographic areas with the poorest observational coverage, where strengthening the observing network would yield the largest results regarding the quality of numerical weather prediction products.
- Target "easy fixes": Countries where through relatively small interventions, stations and related infrastructure could be fixed to start quickly delivering the data into the global system per GBON regulations.
- Maximize delivery capacity: Countries where IEs and peer advisors can operate and deliver SOFF support efficiently and effectively.
- Create leverage: Opportunities for complementarity of SOFF with larger operations under implementation or preparation by the IEs and other funds, including by the Advisory Board Members.
- Sub-regional gains: Opportunities to create economies of scale and optimize the design of the observing networks through multi-country/sub-regional implementation.
- Ensure country balance: Balanced support among SIDS and LDCs and across regions, including Fragile and Conflict-affected States (FCS).

3. Considerations on SOFF programming criteria

The section outlines how the SOFF programming criteria were considered in the selection of the additional 4 countries for programming.

3.1. Close most significant data gaps

SOFF prioritizes investments which will have the highest impact in improving the quality of global numerical weather prediction products. The June 2023 WMO GBON global gap analysis acts as the baseline for identifying and targeting the largest data gaps and programming of SOFF countries is guided accordingly by these principles as described below.

Highest priority to areas in which few or no observations are currently available, addressing the biggest consistent data gaps. Getting a given country from 0 to 20% GBON compliance is likely to have a higher impact than getting its neighbour from 80% to 100%. Two of the 4 proposed countries for programming are missing 100% of the GBON-required surface stations, and all 4 countries are missing 100% of their GBON-required upper air stations that are of high importance for NWP (see Figure 1).

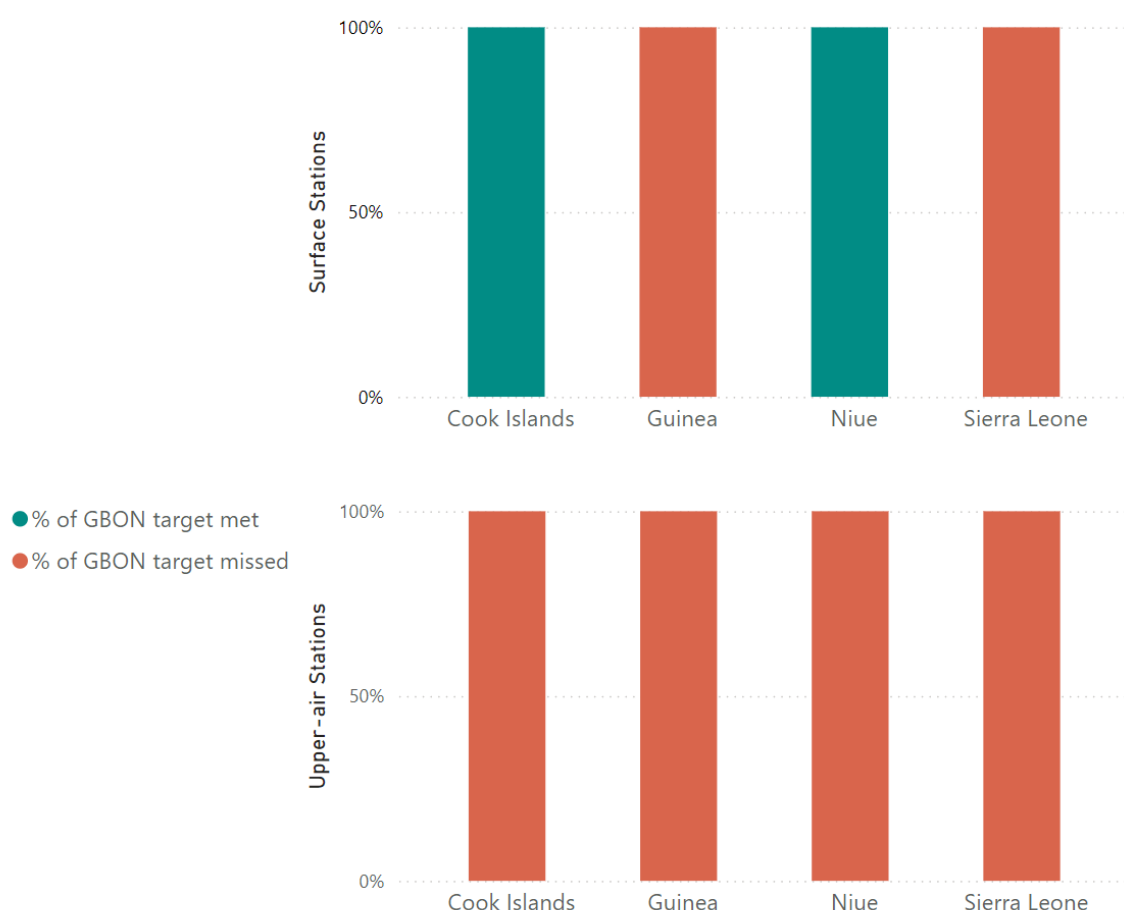


Figure 1. GBON gap per SOFF fourth batch countries against 2023 baseline of GBON Global Gap Analysis (as of June 2023).

Upper air observations have a higher NWP impact than surface observations. As outlined in Figure 1, all 4 countries proposed are missing 100% of their GBON-required upper air stations. Upper-air observations from the Pacific and Africa have major gaps and are essential for NWP models.

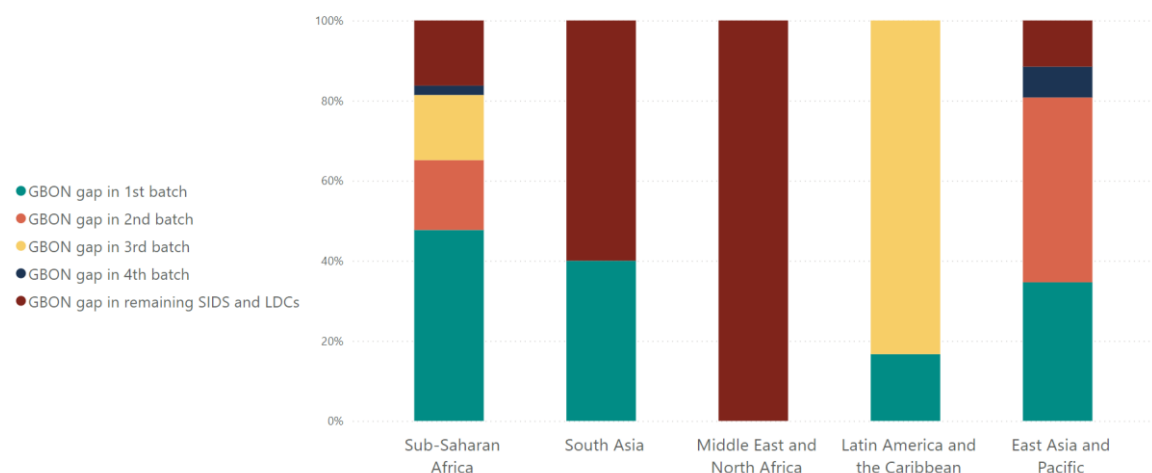


Figure 2. GBON gap percentages of upper-air stations in SIDS and LDCs aggregated by region and the respective share of the SOFF batches according to the WMO GBON Global Gap Analysis (as of June 2023). Source: WMO Secretariat and SOFF Secretariat.

If these additional countries are adopted, the 66 countries in the SOFF portfolio will cover 88% of the upper-air GBON gap in the East Asia and Pacific region and over 83% of the upper-air GBON gap in Sub-Saharan Africa (see Figure 2).

Surface observations also have applications beyond NWP and are essential for forecast verification. With the inclusion of the proposed additional countries, the total of 66 SOFF-supported countries will now cover over 84% of the GBON gap in Sub-Saharan Africa, over 82% of the GBON gap the East Asia and Pacific regions (Figure 3).

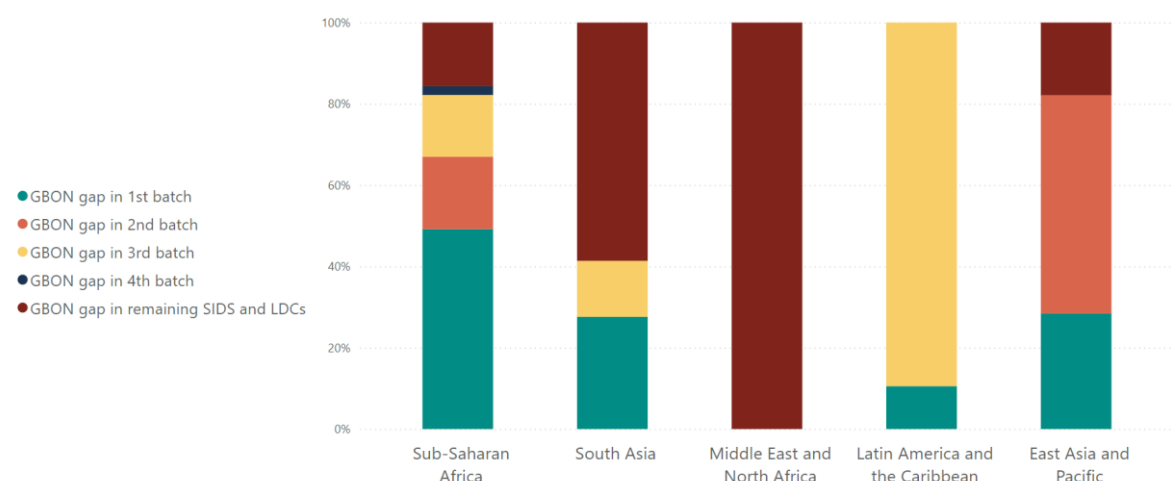


Figure 3. GBON gap percentages of surface stations in SIDS and LDCs, per region and the

respective share of SOFF batches according to GBON Global Gap Analysis (as of June 2023). Source: WMO Secretariat and SOFF Secretariat.

Sub-regional implementation is essential for successful and efficient SOFF implementation.

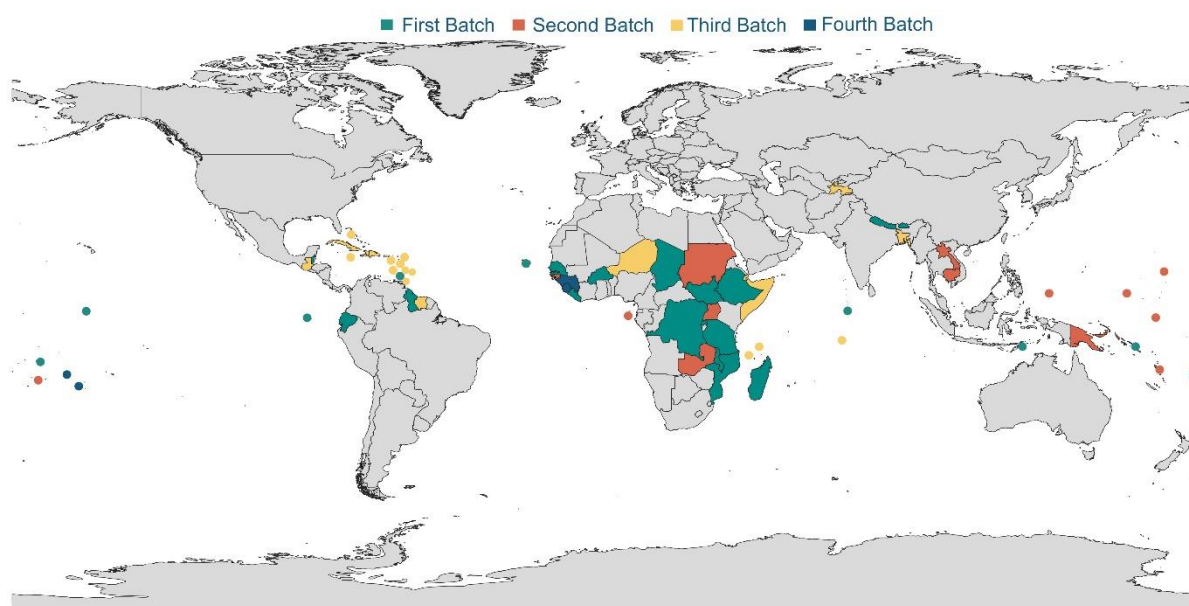


Figure 4. Geographic distribution of SOFF four batches of country programming. Dots represent countries and not stations. Source: SOFF Secretariat and WMO Secretariat.

Based on these principles and the WMO GBON Global Gap Analysis from June 2023, the countries included in this proposal reflect a geographic coverage focused on the areas with the largest data gaps, in particular for upper air observations; opportunities to rehabilitate or improve existent upper air and surface stations; and a high potential for regionally coordinated action to optimize observing network design. Africa and the Pacific are two priority areas as highlighted by SOFF portfolio to date outlined in Figure 4.

3.2. Target "easy fixes"

A wealth of observation infrastructure is already installed in many countries, however, due to resources and capacity constraints, much of this infrastructure is currently failing to generate and internationally share GBON data. SOFF aims to close the largest data gaps through new infrastructure but also by rehabilitating and improving infrastructure previously supported by other partners in projects with limited lifetimes.

According to the WMO GBON Gap Analysis, about 50% of upper-air stations and 88% of surface stations needed for the 4 countries are existing stations that could be improved or rehabilitated (see Figure 5. Distribution of surface and upper-air new and to be improved stations needed to close the GBON gap in the proposed fourth batch countries. Estimations based on the WMO GBON Global Gap Analysis results as of June 2023, Source: SOFF Secretariat. Figure 5). The specific types of improvements needed will

depend on each country. These needs will be detailed in the national GBON Gap Analysis and GBON National Contribution Plan as part of the SOFF Readiness phase.

GBON gap for upper-air stations in fourth SOFF batch against 2023 baseline of GBON Global Gap Analysis (as of June 2023)

GBON gap for surface stations in fourth SOFF batch against 2023 baseline of GBON Global Gap Analysis (as of June 2023)

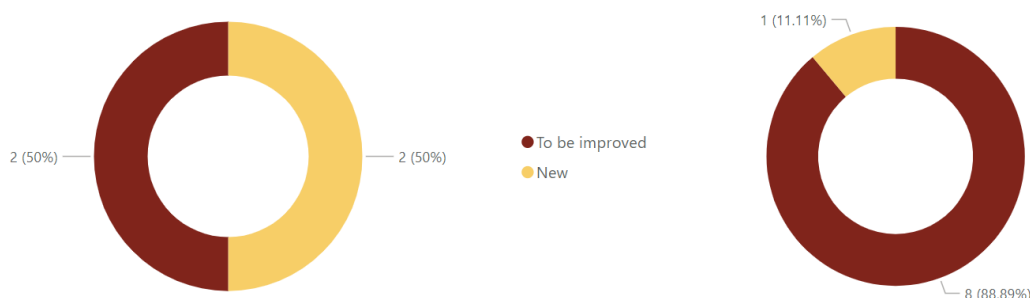


Figure 5. Distribution of surface and upper-air new and to be improved stations needed to close the GBON gap in the proposed fourth batch countries. Estimations based on the WMO GBON Global Gap Analysis results as of June 2023, Source: SOFF Secretariat.

3.3. Maximize delivery capacity

Programming is based on the indication of availability and readiness of peer advisors and SOFF Implementing Entities to support beneficiary countries in implementation and delivery. For all regions, there are peer advisors and Implementing Entities with a track record and ongoing activities in the specific countries. Some examples are provided in the next section.

3.4. Create leverage

SOFF support will be aligned and blended with investments of the SOFF Implementing Entities and other partners. These proposed countries were identified in consultation with the major climate and environment funds, the Climate Risk and Early Warning Systems (CREWS) Initiative and other development partners on their current portfolios and pipelines of activities of relevance for SOFF. The following aspects were considered.

- Opportunities for 'low hanging fruit': As outlined previously, the programming of Niue and Cook Islands is aligned with the request from the Steering Committee of the UN Environment Programme (UNEP) "Enhancing Climate Information and Knowledge Services for resilience in 5 island countries of the Pacific Ocean" funded by the Green Climate Fund (GCF). The request will leverage and operationalize the Collaboration Framework and SOFF collaboration with the GCF as it prioritizes Cook Islands and Niue for SOFF support to ensure the sustainability of GBON investments funded through this programme.
- Complementarity: The programming for SOFF investment for these 4 countries is also aligned with the CREWS activities in [West Africa Region "Seamless Operational Forecast Systems and Technical Assistance for Capacity Building"](#)

and in the Pacific Region, including Cook Islands and Niue [“Strengthening Hydro-Meteorological and Early Warning Services”](#). In the Pacific, alignment with other initiatives, such as Weather Ready Pacific, will be ensured through SOFF investment.

3.5. Sub-regional gains

SOFF promotes regional and sub-regional approaches to programming and to optimize implementation. As outlined in the SOFF Regional Workshops Intersessional Decision 2.1, regional coordination is an important priority as implementation advances. Regionally coordinated implementation in the Pacific is advancing following the Regional Workshop held in Fiji in April 2024 and the ongoing GCF initiatives led by the respective SOFF implementing entities. In Africa, regional implementation discussions have started and will be further guided by a SOFF Regional workshop expected to be held in September 2024 in collaboration with the African Development Bank. The table below summarizes the regional configuration of the SOFF portfolio for the four batches of programmed countries.

Table 2. Regional and sub-regional configuration of the SOFF portfolio (in bold the proposed 4 countries for the fourth batch)

Region	First, Second, Third, Fourth batch countries	
Africa	West Africa	Burkina Faso, Senegal, Liberia, Niger, Guinea, Sierra
	Central and East Africa	Chad, Ethiopia, United Republic of Tanzania, Democratic Republic of Congo, South Sudan, Rwanda, Uganda,
	Southern Africa	Madagascar, Malawi, Mozambique, Zambia
	Atlantic	Cabo Verde, Sao Tome and Principe, Guinea-Bissau
	Indian Ocean	Djibouti, Somalia, Comoros, Mauritius, Seychelles
Asia	Bhutan, Maldives, Nepal, Timor-Leste, Cambodia, Lao People's Democratic Republic, Bangladesh, Tajikistan	
Pacific	Fiji, Kiribati, Samoa, Solomon Islands, Tuvalu, Federated States of Micronesia, Marshall Islands, Nauru, Palau, Papua New Guinea, Tonga, Vanuatu, Cook Islands, Niue	
	Central and South America	Ecuador, Guatemala

¹ Sudan was programmed as part of the second batch, but SOFF activities were put on hold until stability is restored and the international community agrees to restart operations in the country.

Latin America and the Caribbean	Caribbean	Belize, Grenada, Guyana, Haiti, Barbados, Antigua and Barbuda, Bahamas, Cuba, Dominica, Dominican Republic, Jamaica, Saint Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname, Trinidad and Tobago
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The benefits of regional and sub-regional implementation are further explained below:

- GBON regional coordinated implementation: Investments in observational infrastructure require coordination between neighbouring countries, e.g., on the placement of upper air and surface stations to ensure cross-border efficiency; as well as the involvement of entities outside the countries such as Regional Telecommunication Hubs, Global Information System Centres and Regional WMO Integrated Global Observing Systems (WIGOS) Centres.
- Regional procurement and operation and maintenance: SOFF regional implementation in the Pacific and sub-regional of Africa will ensure harmonized and coordinated procurement and identifying areas for coordinated maintenance between partners in the region. In the Pacific, these discussions are already ongoing following the Pacific Regional Workshop, in which harmonized procurement was identified as a priority for the region. The additional programmed countries will benefit from these early discussions.
- Regional fora for learning exchange: interaction and consultations among SOFF partners are facilitated at the regional level. SOFF learning and evaluation, WMO technical training related to GBON implementation, and other consultations will strive to maximize regional collaboration and coordination.

3.6. Country balance

The fourth SOFF programming batch includes two Sub-Saharan African countries and two East Asia and Pacific countries. Figure 6 below outlines the regional distribution of SOFF programmed countries, highlighting the important coverage of support in two areas with significant data gaps. Figure 7 shows the balance of SIDS, LDCs and both SIDS and LDCs in the SOFF portfolio. These additional countries further contribute to SOFF support of SIDS and LDCs.

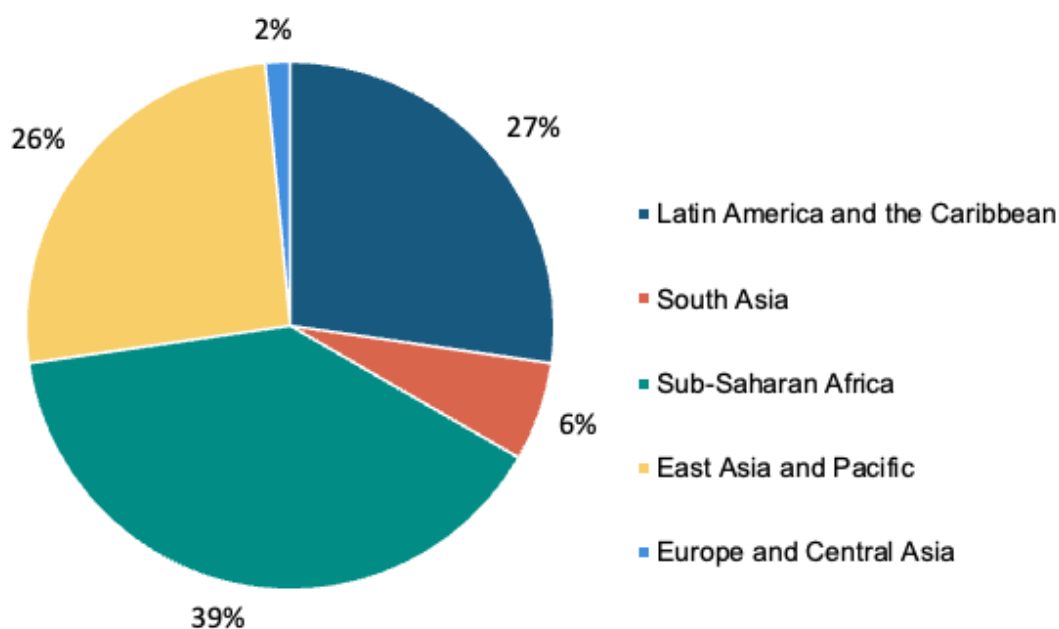


Figure 6. Regional distribution of all the four batches of countries programmed for SOFF Readiness support.

The four countries proposed for the fourth batch include two Small Island Developing States (SIDS) and two Least Developed Countries (LDCs).

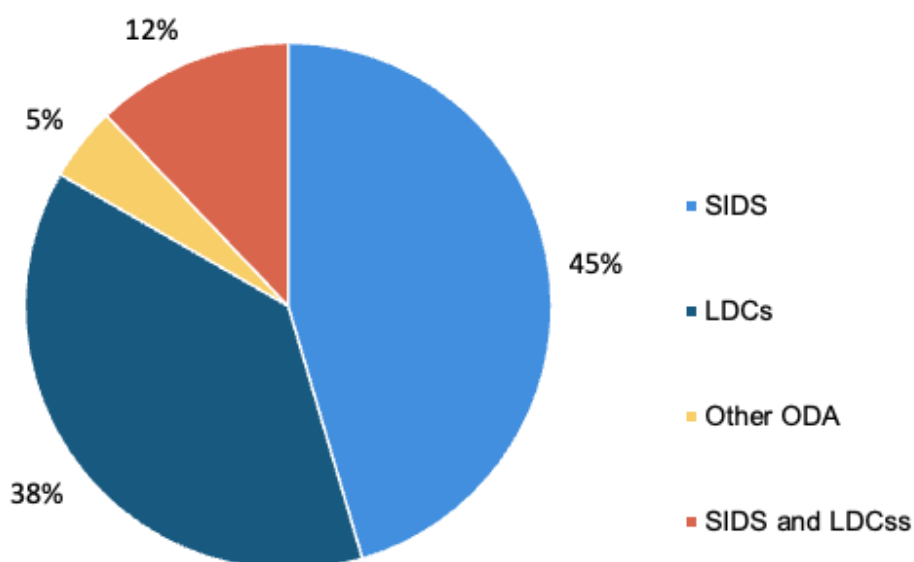


Figure 7. Balance of SIDS, LDCs, and Other ODA Recipients across the four batches.