

Intergovernmental Oceanographic Sub-Commission of the Caribbean

IOC/IOCARIBE - Report

CAPACITY DEVELOPMENT WEBINAR NOVEMBER 2023

Abstract

With the firm purpose of disseminating more broadly the strategic guidelines, the continuous innovative work and future projections related to the Capacity Building of the Secretariat of the Intergovernmental Oceanographic Sub-Commission for the Caribbean (IOCARIBE) in the region, a large-scale seminar was organized through various specialized sessions where the invitation was extended to more than 500 colleagues. This event, of an inclusive nature, seeks to attract a diverse and representative audience, with the active participation of 94 of the 158 registered participants from the more than 20 countries of the region, including high-level coordinating bodies, committed Member States, distinguished professionals in the field, leading academic and research institutions, as well as emerging young talents.

The call extends beyond institutional boundaries, encompassing renowned universities, research institutes specializing in ocean issues, and professionals with experience in disciplines related to oceanography. Likewise, a warm invitation is extended to non-governmental organizations committed to marine sustainability and conservation, as well as to strategic partners and representatives of the Caribbean hotel industry, recognizing the importance of collaboration between sectors to achieve a comprehensive impact on the sustainable development of the region. This meeting is a space for the exchange of knowledge, ideas and experiences, promoting synergy among the various factors that contribute to the care and study of ocean resources in the Caribbean context.

Development of the Agenda:

The inauguration of the seminar and the opening of the event was the responsibility of the Secretary of the Caribbean Intergovernmental Oceanographic Sub-Commission, Ms. Lorna Inniss. From the outset, Ms. Inniss outlined the structure of the seminar, detailing the various sessions scheduled for November 21-22, 2023. In this regard, she emphasized the importance of the careful selection of the sectors participating in each session, a crucial factor in ensuring the homogeneity of the professionals attending and directing the conclusions towards shared objectives.

n her speech, Secretary Inniss emphasized that the main purpose of the meeting was to present the strategy for Capacity Building in the region. To this end, she gave the floor to one of the experts in Capacity Building, Mr. Alan Evans from the United Kingdom, to share his vision and experience. Subsequently, the coordinator of Capacity Development in the Caribbean Region, Ms. Johanna Diwa, had the opportunity to present her perspectives, offering a unique and valuable insight.

To close the presentations, Ms. Lorna Inniss took the floor to share her own presentation, consolidating a diverse set of approaches and knowledge. As part of the participatory process, at the end of the presentations, the Jamboard platform was enabled to receive comments and recommendations from the participants. This interactivity allowed valuable contributions and additional perspectives to be gathered, further enriching the discussions.

Finally, to formalize the results and emerging proposals, it was announced that a document would be prepared with the comments and recommendations collected. This document would be sent to the IOC with the objective of informing and providing a basis for the study of viable proposals to strengthen and expand IOCARIBE capabilities.

Intervention by Alan Evans - Chairman of the Capacity Building Group: *United Kingdom*

Considering the IOC capacity development strategy, a detailed update of this strategy, resulting from the last IOC UNESCO meeting, is presented. The central purpose of this update is to contextualize such development within the overall structure of the IOC, according to its statutes. In addition, it highlights its fundamental objective of promoting international coordination, with coordinating capacity development programs being one of the three core programs of IOC, along with services and research programs. IOC Capacity Development is positioned as a unique function, addressing its own initiatives and assessing the capacity development needs of Member States.

Among the initiatives highlighted are the Ocean Development Hub, the Ocean Teacher Academy and the Ocean Info Hub, located within IODE, underscoring the uniqueness of

these functions within the overall IOC strategy. In this context, the strategy focuses on two pathways for consistent delivery of Capacity Development across IOC. The first involves a cross-cutting role of all major functions and the primary role of key deliverables by offices. The idea is that capability development is recognized and delivered consistently across all IOC activities. Thus, the core functions and regional offices follow a common path to ensure this recognition. The second path, more relevant to the audience at this seminar, involves collaborative and coordinated efforts. It is emphasized that capacity building should not be approached in isolation, in accordance with IOC statutes. The commission will collaborate with related international organizations and all UN agencies, stressing the importance of working with other bodies to avoid duplication and maximize efforts in a coordinated manner.

The vision of this Capacity Development strategy is to achieve the key functions of the IOC, delivering the high-level objectives. The mission recognizes the need to consider other ongoing capacity development and aligns with existing activities under the strategy. The high-level activities and outcomes highlight significant actions related to evaluation and consultation. It is emphasized that it is not simply a matter of printing what needs to be said, but ensuring that the results are understood and aligned with pre-established objectives. These objectives act as a kind of template for actions to be taken, providing clear outcomes in the specified area.

The strategy maintains six key outcomes from the previous strategy, from human resource development at the individual and institutional level to sustained resource mobilization. These outcomes seek to capture what was identified through consultation, with the goal of being delivered by the end of 2030.

Overall, the structure of the strategy seeks to highlight the fundamental role of the ocean not only in society and research, but also in the political, geopolitical and commercial arenas. This approach underscores the importance of capacity development to meet the objectives of the UN ocean science design. The strategy reflects the IOC's role as a custodian of these developments, promoting international cooperation and avoiding isolation. It is crucial that Member States recognize the actions of others and bring them together for effective delivery of this strategy. The anticipated implementation function will be developed to include these activities, results and actions in a framework that facilitates international organizations, such as IOCARIBE, or any other interested entity, to understand the role of the IOC as a custodian of capacity development.

Intervention by Johanna DIWA - Coordinator of Capacity Development in the Caribbean Region:

Following the adoption of the new IOC strategy, the next step involves the implementation of this strategy in the region and in the member states. As previously mentioned, capacity building is postulated as one of the key initiatives to achieve this purpose.

In the search for efficiency and maximization of resources, it is advocated not to reinvent the wheel, especially when it makes more sense to use what is already available. This principle is particularly relevant in the area of Capacity Building, specifically in the training and education of teams, as has been carried out in the OCEAN CITY HUB. Here, the importance of centralizing information to facilitate the identification of opportunities in Capacity Development is recognized, thereby increasing access to valuable information for users. For those unfamiliar with this Hub, it is available at www.oceancity.org, aimed at facilitating access to information on Capacity Development opportunities worldwide for both individuals and organizations.

This user-friendly platform provides ongoing information on Capacity Building programs offered by national and international organizations. The City Hub does not detail individual training courses or activities; instead, it focuses on gathering relevant information and redirects the user to the website of the relevant contact. The structure of the homepage presents different categories and activities, demonstrating actions and activities that have been previously tested within the framework of IOC capacity development. These activities include training, education, higher education, research, expeditions, internships, employment, development, awards, travel grants, scholarships, donations, research funding, access to ocean infrastructure, public information and communication.

The user can click on the category of interest, and the information, marked in different colors, redirects the user to the established platform. It also has a search function that allows filters to be applied, such as type of activity, location, among others. For example, those starting an ocean career and looking for job opportunities can filter internships in the database and then focus on weather information using the search boxes. The page also presents basic information such as the title of each activity, an associated working group, descriptions, the organizer's website, and representative activities. By clicking, the user can access full details about the Capacity Building activity of interest.

During the webinar, entries in the IOCARIBE region related to priority Capacity Building news were reviewed. These topics included marine pollution, ocean observation, and ocean culture, highlighting activities that correspond to existing expertise in the region on an ongoing basis. This approach allows the region and member states to benefit from this tool by seeking opportunities and identifying potential synergies and partnerships among various organizations or interest groups. This is crucial in not only addressing capacity building needs, but also recognizing and utilizing existing capabilities to explore potential partnerships and collaborations among diverse organizations.

This approach contributes significantly to global collaboration, improving the effectiveness of Capacity Development and providing a solid platform for the exchange of knowledge and experience at regional and international levels.

Intervention by Lorna Inniss - Secretary of the Caribbean Intergovernmental Oceanographic Sub-Commission:

Requests will be sent out to experts to obtain their contribution to this very important initiative. The work carried out by IOCARIBE in the region, as well as the needs identified during the Intergovernmental Meeting held last May, led the member states to establish clear priorities. Although not all priorities have been included, work has been ongoing on several of them.

These priorities include ocean observation, which is seen as a vital element for research and sustainable development. Emphasis has also been placed on early warning, especially in the context of multi-hazard systems. Marine spatial planning, identified by small island states and some countries on the continental shelf, has also become a key focus. Last but not least, ocean culture, which goes beyond blue schools and involves sectors as varied as tourism, fishing and agriculture.

A key aspect that has been highlighted is the active participation of young people in decision making and the need to provide training in this area. During a recent research workshop, the importance of strengthening training in physical oceanography was stressed, a process that, in my opinion, requires significant capacity building. Although progress has been made in the right direction, it is imperative to consider aspects beyond human resources, such as technology and information management.

Funding emerges as a key element in this process, and work is underway to consolidate alliances and partnerships to expand capabilities. Maintaining strong collaboration with leading organizations, such as INVEMAR in Colombia, has been fundamental in this regard. In the next biennium, we will seek to expand these collaborations in order to further strengthen regional capacities.

In the thematic working groups, attention has been directed towards those with a proven track record in capacity building. For example, within the framework of the Decade of the Ocean project, we have been collaborating closely with the Ocean Observing Partnership, where many experts have a strong track record in capacity building. This collaboration is highly valued, and resources will continue to be mobilized to strengthen capacity building in the region, thus ensuring sustainable and effective progress.

STAKEHOLDER GROUPS JAMBOARD SUMMARY

Additionally, participants contributed insights on priority issues in the region related to needs, resources, and existing opportunities regarding ocean observations, ocean literacy, effective science, and policy transfer. This information can be accessed through the following links:

Session 1, Nov 21: High-level coordination bodies

Session 2, Nov 21: Member states and professionals

Session 1, Nov 22: Universities, research institutes, young professionals

Session 2, Nov 22: NGOs, industry, and other partners

Summary list also available as Annex A below

Anexo A – Jamboard

IOCARIBE Regional Capacity Development Webinar Series

Day 1: Tuesday, 21 November 2023

Session 1: High-Level Coordination Bodies - Intervention of the participants

PRIORITY ISSUES IN THE REGION:

1. Capacity Development Needs:

Ocean Observation:

- Targeted engagement sessions for policy-makers to focus on evidence-based policies and decisions with available data and information for the region.
- Training in, and access to: technology, instrumentation, maintenance, data management networks.
- Sustain Ocean Observations and contribute to IOCARIBE GOOS.
- Acquisition of Sentinel satellite data in the ocean and outside of EEZ.
- Blue economy development in the context of inclusive seafood value chains and other ocean preservation areas EG. MSP, MPA, EAF, etc.
- Need coordination/awareness of planned observing campaigns by Member States to maximize available resources.
- Training for Ocean Observations for decision making / blue economy Dvpt.
- Efficient processes for approval of data collection in EEZs.
- Coordination between international (IE. UN Agencies, etc.) regional (OAS, CARICOM, etc.) and national institutions.
- Need capability to evaluate impact of observing systems before investing.

- Expansion of Blue Schools program.
- Identification of economic sectors requiring education.
- Training of frameworks and funding proposal writing for major climate and biodiversity donors.
- Ocean Literacy support to other important contexts such as UNFCCC and CBD.
- Training to decision makers on how to use data/information.
- How to include different types of knowledge in ocean literacy activities.
- Gender and inclusion focus (indigenous people, intergenerational population, deaf communities, among others).

- Perhaps not immediately, but can there be an expansion or adaptation of the blue school's program to blue communities (community groups, and local users of the marine and coast).
- Regional fishers and managers exchanges.
- Identify (and support design) Impact investment funding mechanisms and opportunities for the Caribbean.

• Effective Science-Policy transfer.

- WTO subsidies agreement and its impact on ocean management.
- Science communications for policy makers.
- Marine spatial planning training.
- Key ocean science messages for policy support.
- Government-university collaboration.
- Architecture of institutions involved in ocean governance in the region.
- stakeholder engagement and coordination skills.
- Training for policy makers on Ocean Observations and prediction.
- Multilingual materials and messages from science to decision makers.
- Include Ocean matters at the National Policies.
- linking NGO's and decision makers.
- Increased interaction with CBD, UNFCCC, GCF, and other relevant stakeholders to increase funding at the regional level.
- Targeted session for policy-makers, to strengthen their capacity for evidence-based policies with the most current data and information available for the region.
- International Seabed Authority (ISA) Jamaica.
- Other topics of interest (I.E BBNJ).

2. Existing Resources, Expertise, Oportunities:

• Ocean Observation:

- Assets Explorer Caribbean Coastal Ocean Observing System.
- Caribbean Regional Fisheries Mechanism (CRFM)
- Carib-OOS, NOAA, UVI
- GEO Blue Planet
- RedCAM y Remarco (Monitoring Network LAC)
- Philanthropic organizations interested in capacity development in the region.
- OBIS Programme of IODE
- OTGA Courses at Regional Training Centers in the LAC Region.
- Sargassum Information Hub (will be translated soon in 3 main languages of the region).
- CAPACITY SHARING BETWEEN PAIRS (SOUTH-SOUTH COOPERATION, although I do not like the term).
- Caribbean Network of Fisherfolk Organizations (CNFO) main contributor to regional capacity development in SSF guidelines. Targets fisherfolk.

- SOFF for Ocean.
- Google and Microsoft Earth data programs.
- Commonwealth Economies Programme supports research in fisheries and marine science in Commonwealth Countries.

Ocean Literacy.

- Network of Blue Schools (CD-Hub 117).
- ECOP Nodes in the region.
- MPA Connect and CaMPAM training.
- Ocean Decade Conference in 2024.
- Regional Conferences GCFI.
- Recognition of traditional knowledge as source of data/information.
- Build capacity and awareness of the blue economy and regional initiatives.
- SDG14.
- Sea Grant program in Puerto Rico provides training and outreach to coastal stakeholders. Could be adapted for other Caribbean members.

• Effective Science-Policy transfer.

- Young State Internships (INVEMAR).
- Valuation and Use of Marine and Coastal Resources (VAR) research programmes (INVEMAR).
- MPA course training (OTGA).
- National Decade Committees.
- All-Atlantic Ocean Research and Innovation Alliance Declaration from 2022.
- World Economic Forum (Friends of Ocean Action).
- Indigenous groups are seeking more room at the table- can there be more involvement of these groups.
- (Existing resource) UK Blue Belt Programme, focused on UK OTs but has potential secondary benefits, in particular to the regions SIDS.
- Interact with other groups of interest (I.E WEF Friends of Action).

Anexo A - Jamboard

IOCARIBE Regional Capacity Development Webinar Series

Day 1: Tuesday, 21 November 2023

Session 2: Member States and Practitioners - Intervention of the participants

PRIORITY ISSUES IN THE REGION:

3. Capacity Development Needs:

Ocean Observation:

- Policy Briefs for Policy-Makers and other stakeholders.
- Oceanic culture campaigns for the entire population.
- Technology, instrumentation, maintenance, data management networks.
- More training of tide gauges.
- Training in Marine Litter.
- Training in how to access freely available ocean observations.
- Training in physical oceanography and numerical modelling.
- Setup as WMO/ICAO has for Aviation purposes, minimum requirements for OCEAN obs.
- Standardize data collection and documentation procedures across the region.
- Training in efficient technologies to collect existing marine debris.

- Expansion of Blue Schools program.
- Training programs for good fishing and aquaculture practices.
- Literacy in how oceanography affects society (HABs, Sargassum, hurricanes, storm surge, pollutants, etc.).
- Aiding states in setting up blue schools.
- Citizen science and inclusion of ocean literacy in school curriculums.
- Identification of economic sectors requiring education.
- Strengthening the transfer of knowledge on climate change and prevention topics.
- Aid in setting up blue curriculum, current OL does not have this in extenso.
- A turtle excluder device (TED) is a specialized device that allows sea turtles to escape when caught in a fishing net.
- Effective Science-Policy transfer.

- Science communications for policy makers.
- Training in Policy Brief writing/production briefs for policymakers and other stakeholders.
- Marine spatial planning.
- key ocean science messages for policy support.
- Training courses to strengthen the science-policy interface, aimed at decision-makers.
- stakeholder engagement/consultation.

4. Existing Resources, Expertise, Oportunities:

Ocean Observation:

- Assets Explorer Caribbean Coastal Ocean Observing System.
- Tsunami program ICG /GOOS.
- IOCARIBE-GOOS
 https://www.goosocean.org/index.php?option=com content&view=article&id=42&It emid=141/

- Network of Blue Schools (CD-Hub 117).
- UNESCO ASP Net.
- Other webinar series that are related to sustainable ocean governance that are executed by organisations such as UNEP and AIS.
- Effective Science-Policy transfer.
 - Valuation and Use of Marine and Coastal Resources (VAR) research programmes (INVEMAR).
 - MPA course training (OTGA).
 - Young State Internships (INVEMAR).
 - UNESCO-Chairs.
 - OCEAN Grants Programme https://www.gov.uk/government/publications/blue-planet-fund/ocean-community-empowerment-and-nature-ocean-grants-programme
 - UKs Blue Belt Programme. Focused on the UK OTs, but with secondary benefits, in particular to the regions SIDS.
 - Local2030 islands, Island Innovation, ICLEI.

Anexo A - Jamboard

IOCARIBE Regional Capacity Development Webinar Series

Day 2: Wednesday, 22 November 2023

Session 3: Universities, Research Institutions, Early Career Professionals, Etc. Intervention of the participants.

PRIORITY ISSUES IN THE REGION:

5. Capacity Development Needs:

Ocean Observation:

- Capacity development consortium for higher education institutions within the Caribbean region.
- Technology, instrumentation, maintenance data management networks.
- Some Sience-Politics integration done by Federal Universities in Brazil, specially UFPR (Paraná), UFSC (Santa Catarina), FURG (Rio Grande do Sul) and USP (São Paulo).
- Build a mechanism/network to share infrastructure.
- Data buoy NETWORK needed for real-time marine observations.
- Understand regional needs (govt, industry) for ocean observing data and services (bio-eco, physics, biogeochem, geology, combined with social economic.
- How to assure data (oceanographic data): paper to digital, database, web publishing (NODC/ADU conformation).
- Creating a basic typology of Caribbean Coastal infrastructure.
- Using disruptive technology for data inventory and management (drones etc).

Ocean Literacy.

- Identification of economic sectors requiring education.
- Expansion of Blue Schools program.
- Network of Blue Schools (CD-Hub 117).
- Integrating Marine Geography training to understand the oceans as a sense of place for different sub-regions.
- Really, I'm in Brazil, but I can cite "more infrastructure", like more buoys and more data centers.
- Training programmes in the schools.
- Paying attention to slow onset marine disasters in the region.

• Effective Science-Policy transfer.

- Science communications for policy makers.
- Marine spatial planning.
- Channels of communication between IOC-CD network and national governments.
- key ocean science messages for policy support.
- Disconnect between US, Caribbean and South American information and need to create collaboration opportunities across the regions.
- Government-academe collaboration.
- Stakeholder engagement/consultation.
- Create instruments/channels to promote more participatory decision-making.
- There also needs to be a Policy-needs to science 'transfer', a feedback process.
- Inventory of ocean decade documents already available to policy makers.
- Valuation and Use of Marine and Coastal Resources (VAR) research programmes (INVEMAR).
- More relation between scientific and politics institutions.
- Narrow the relationship with ocean governance structures in each country of the region.
- Use of bioinformatics models to review, compile and transfer data.

6. Existing Resources, Expertise, Oportunities:

Ocean Observation:

- Regional Training Center for LAC region (Invemar) and also Argentina, Uruguay and Ecuador (OTGA).
- Active ocean observing networks (e.g, MBON, LTER).
- Assets Explorer Caribbean Coastal Ocean Observing System.
- Satellite sensing is useful but limitations on resolution and sub-surface obs.
- Brazilian Navy has a Center of Hidrography, but with few resources.
- CIMH capacity to provide marine data analysis and visualization (observations and global models).
- Caribbean Marine Atlas https://www.caribbeanmarineatlas.net
- Research Network of Marine-Coastal Stressors in Latin America and the Caribbean (REMARCO): https://remarco.org/en/
- Recovering historical data and information that is not digitized or available for assessments (bio/eco, physics, etc).

- CRFM Data Portal.
- Connect with existing research, NGO, civil society networks.
- We already have some initiatives in Brazil, coordinated by NGO's.
- We have a recent community of OpenStreetMap (OpenSeaMap fewer, but exists) in Brazil and It can help to share more and more data.

- Coordinating curricula between education and continuing education programs in the region and more broadly through IOC.
- Effective Science-Policy transfer.
 - Young State Internships (INVEMAR).
 - MPA course training (OTGA).
 - ECOP Programme Nodes in the region.
 - Better coordination between CARICOM and Spanish-speaking countries in the Caribbean region on these topics.
 - More and more courses are needed in Brazil and I think the marine and coastal issues can be inserted in the fundamental and middle education curriculum.
 - Institutionalizing adaptation-based planning for the marine economy and risk reduction.

Anexo A - Jamboard

IOCARIBE Regional Capacity Development Webinar Series

Day 2: Wednesday, 22 November 2023

Session 4: NGOs, Industry, Partners, Etc. - Intervention of the participants

PRIORITY ISSUES IN THE REGION:

7. Capacity Development Needs:

Ocean Observation:

- Connect Offshore petroleum, fisheries, tourism, agriculture and other financial sectors for Sustainable Blue Economy.
- Understanding the deep sea and Seabed.
- Translate ocean science for policy.
- Include indigenous people for traditional knowledge.
- e-DNA, integrated taxonomy, collection management.
- There is historical data and information in many regions not published in reports, theses, etc., that could be recovered, curated and systematized in an easily accessible information system.
- Training in, and access to: technology, instrumentation, maintenance data management networks.
- Access to state-of-the art equipment and funds for maintenance.
- The role of Nature-Based Solutions through observations at various sites.
- Collaboration: North-South and South-South.
- Citizen science approaches.
- Open data platforms.

- Expansion of Blue Schools program.
- Identification of economic sectors requiring education.
- Primary school program for ocean culture.
- Create an enabling environment for national ocean decade committees to exchange experience and discuss on how to implement and improve ocean public policies targeting blue.
- Training in translating the technical content to a wider audience, mainly non-technical persons.

- Scientific cooperation on over-nitrification (sewage treatment discharges/failures, land-based flows, etc.) leading to algal blooms, carbon dioxide discharges, acidification.
- Effective Science-Policy transfer.
 - Creative approaches for engagement of fisherfolk communities.
 - More effective communication is required between science and society.
 - Blue finance / economic policy for the region.
 - Continue promoting workshops and webinars to foster capacity building in the TAC Region, as well as mentoring programmes in the TAC region through partnerships with loca.
 - Science communications for policy makers.
 - Marine spatial planning.
 - key ocean science messages for policy support.
 - Projects which involve policy makers, academia and industry.
 - Creative communication strategies (policy briefs, etc.)
 - Science communication from scientists to park managers.
 - Ocean CD in co-design for senate and deputies.
 - Mechanisms to encourage/compel decision-makers, particularly politicians, practically include science in policies expediently.
 - Ecosystem valuation/ natural capital valuation to inform decision-making.
 - Multi-stakeholder collaboration/engagement.
 - Sustainable financing to keep communication staff.

8. Existing Resources, Expertise, Oportunities:

Ocean Observation:

- Understand multiple stressors on the ocean.
- Opportunities to influence research at universities for sustainable development.
- Assets Explorer Caribbean Coastal Ocean Observing System.
- ICML UNAM: Ocean Best Practices.
- UNAM: At sea CD courses in the ETP and WTAC.
- Member of the Planet Startup Project <u>www.oraculuar.earth</u>.
- Basic equipment available with minimal expertise.
- Opportunity for development and training.
- Encourage private sector for coastal and ocean initiatives with fiscal incentives.

- Network of Blue Schools (CD-Hub 117).
- Open access and FAIR ocean database.
- National- LAC Regional OL webpage.

- Lunching the Social Media of the Ocean Decade in Spanish Mexico's focal point + national NGO https://www.instagram.com/decadadelosoceanos/
- OL courses c/o OTGA RTCs.
- Current resources include online/in-person courses. Need to reach grass-roots communities.
- Ocean Info-Hub regional node.

• Effective Science-Policy transfer.

- Young State Internships (INVEMAR).
- MPA course training (OTGA).
- Site for Funding options for ocean initiatives.
- Promotion of the regional committees in each country, to develop the regional action plans.
- 3 language Policy Briefs to support the region.
- Demonstrations & training in ocean food systems (sustainable ecological aquaculture & fisheries) FAO ecosystem approach and responsible fisheries.
- Valuation and Use of Marine and Coastal Resources (VAR) research programmes (INVEMAR).
- International scientific cooperation to prevent perverse "blue washing" such as sinking seaweeds to deep sea ecosystems.
- Building capacities on coastal and ocean science for local government.
- Mobilizing resources for coastal needs through online collaborations.

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