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Intergovernmental
Oceanographic
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INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

**SIXTH SESSION OF IOC SUB-COMMISSION FOR AFRICA
AND THE ADJACENT ISLAND STATES**

13–15 April 2021 (online)

EXECUTIVE SUMMARY

In accordance with Rule of Procedure 48.3, the IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA), as a Primary Subsidiary Body of IOC, is required to report to a governing body on its sessions.

The IOC Assembly at its 31st session (14–25 June 2021, online,) will be invited to consider this executive summary.

¹ This Executive Summary is available in English, French, Spanish and Russian.

Executive Summary

1. The Sixth session of the IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA-VI) was held online on 13–15 April 2021 (for three hours each day starting from 10h00 UTC to 13H00 UTC). The session was attended by more than 75 participants representing 23 Member States (Algeria, Angola, Benin, Cameroon, Comoros, Republic of Congo, Democratic Republic of the Congo, Egypt, Ghana, Guinea, Kenya, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Tunisia, and the United Republic of Tanzania) and other partners.

Report on IOCAFRICA Activities 2019–2021

2. IOCAFRICA made good progress in the implementation of its ambitious work plan adopted by its fifth session meeting from 25–27 March 2019, Nairobi, Kenya. Due to the COVID-19 pandemic, some events were held online and others postponed to the second half of 2021. The activities implemented covered all priorities areas identified by the Sub Commission.
3. A regional training course on marine GIS was hosted by the Kenya Marine and Fisheries Research Institute in Mombasa from 28 October to 1 November 2019 and attended by 22 trainees from Kenya, Mauritius, Mozambique, Nigeria, Senegal, South Africa, and Tanzania. Regional Training Centres for the new phase of the Ocean Teacher Academy programme were designated at the University of Ghana (Accra, Ghana), the Eduardo Mondlane University (Maputo, Mozambique) and the Kenya Marine and Fisheries Research Institute (Mombasa, Kenya). A joint workshop on Environmental Data Analysis planned the FAO/NANSEN programme was postponed due to the COVID-19 pandemic. The preparation of materials to be used for online training is ongoing.
4. IOCAFRICA organized an online regional workshop on “Mapping the Sea Floor around Africa” jointly with the GEBCO SeaBed2030 project on 10 and 24 February 2021. The webinars, attended by more than 100 participants from 25 countries provided an opportunity to review the current status of mapping in the region, identify and discuss the needs of stakeholders, and explore opportunities for collaboratively advancing seabed mapping to achieve mutually beneficial outcomes.
5. A series of national marine spatial planning workshops (including environmental pressures that impact on MSP and decision support tools) were organized with support from the Government of Sweden in the following countries in 2020: Cameroun, Gabon, Ghana, Kenya, Madagascar, Mauritius, Morocco, Mozambique and Tanzania. A regional workshop was also organized for the Gulf of Guinea region. IOCAFRICA is working with the Kenya Marine and Fisheries Research Institute on a publication on “Marine Spatial Planning and the Blue Economy in Kenya”.
6. In the context of the institutional Integrated Coastal Area Management Strategy, IOCAFRICA and IOC/MPR, with the support of the Central African Countries organized a technical workshop on coastal vulnerability in Libreville, Gabon (5–7 November 2019) with the participation of national experts from Angola, Cameroon, Congo, Equatorial Guinea, Gabon, R.D. of Congo and Sao Tome and Principe
7. The development of the regional node for the Ocean Information Hub commenced with the organization of an online stakeholders meeting in June 2020, followed by bilateral consultations with partners, including IUCN, CORDIO, UNEP (Abidjan and Nairobi Convention secretariats), and WIOMSA on developing interoperability projects. Two virtual meetings on the seaweed

Sargassum for Atlantic region organized in 2020, in collaboration with UNEP and IOC's Sub Commission for the Caribbean and Adjacent regions, agreed on working together on development of Sargassum Information Hub. IOCAFRICA is preparing four policy briefs on climate change adaptation in coastal zones of Africa focusing on: (i) Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities, (ii) Changing Oceans, Marine Ecosystems and Dependent Communities, (iii) Extremes, Abrupt Changes and Managing Risks and (iv) Climate Change & Ocean Economy.

8. IOC is implementing a project, funded by the Spanish International Technical Cooperation Agency, aimed at furthering the scientific knowledge and capacity basis in the Canary Current Large Marine Ecosystem (CCLME). The project focuses on assessing the effects of climate change and ocean stressors on the natural dynamics of the Canary Current through a collaborative approach involving scientists, with a focus on female and early career ocean scientists, from Cabo Verde, Gambia, Guinea, Guinea-Bissau, Mauritania, Morocco, Senegal and Spain (Canary Islands). The results of the project have contributed to informing science-based management of the CCLME. As part of this initiative, a workshop was organized in St Vicente, Cabo Verde from 10–13 March 2020.
9. IOCAFRICA organized an online regional tsunami awareness event with the UNDRR and a national event for Nigeria with the Nigerian Institute of Ocean and Marine Research (NIOMR) and the National Commission for UNESCO on 5 November 2020. IOC also worked on the publication of a tsunami awareness manual in Swahili with UNDRR. An ongoing survey of the status of ocean observations along the African coastline will inform the preparation of a proposal for the development of a comprehensive African Ocean Observing System.
10. The Sub Commission expressed sincere appreciation to Member States that had supported the development and implementation of programmes of the Sub Commission during the inter-sessional period, and especially the Governments of Flanders (Belgium), China, Norway, Spain and Sweden.

Main outcomes of the session

11. The Sixth Session of IOC's Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA-VI) adopted four Recommendations on:
 1. Establishment of a Regional Planning Group for the UN Decade of Ocean Science for Sustainable Development,
 2. Extension of the mandate of the IOCAFRICA Strategic Planning Group,
 3. Strengthening Collaboration with the African Union Commission, and
 4. IOCAFRICA Programme of Work for 2021-2023 focussing on Ocean Observations and Data and Information Management, Capacity Development for Marine Science and Technology and Ocean Literacy, and Ocean Sciences and its Application to Management. The Sub Commission had stressed the importance of aligning its programmes to frameworks adopted by the African Union Commission such as the Agenda 2063, the 2050 Africa Integrated Maritime Strategy, the African Blue Economy Strategy, as well as the Implementation Plan for the UN Decade of Ocean Science for Sustainable Development.

12. The session supported the establishment of the IOCINDIO Sub Commission comprising the current member states of the Regional Committee for IOCINDIO. The Sub Commission further proposed the establishment of an Inter-regional Committee bringing together IOCAFRICA, IOC-WESTPAC and IOCINDO, which will act as a mechanism to develop and coordinate the implementation of basin-wide programmes for the Indian Ocean.
13. The Sub Commission was not able to elect new IOCAFRICA Officers at its Sixth session due to: (i) Lack of nominations from member States for the positions of IOCAFRICA Chair and Vice Chairs at the close of the deadline for nominations, and (ii) the challenges of holding online elections by secret ballot. The Sub Commission requested the secretariat to send a fresh call for candidates and explore the possibility of holding elections during the 31st session of the IOC Assembly in June 2021. The Sub Commission thanked the outgoing IOCAFRICA Officers for accepting to stay in Office in the interim until fresh elections are held. The Sub Commission congratulated them on the excellent work they had implemented, especially in the light of the challenging COVID-19 pandemic situation.

Résumé exécutif

1. La sixième session de la Sous-Commission de la COI pour l'Afrique et les États insulaires adjacents (IOCAFRICA-VI) s'est tenue en ligne du 13 au 15 avril 2021 (pendant trois heures chaque jour, de 10 h 00 UTC à 13 h 00 UTC). Y ont assisté plus de 75 participants représentant 23 États membres (Afrique du Sud, Algérie, Angola, Bénin, Cameroun, Comores, République du Congo, République démocratique du Congo, Égypte, Ghana, Guinée, Kenya, Maroc, Maurice, Mozambique, Namibie, Nigeria, Sénégal, Seychelles, Sierra Leone, Somalie, Tunisie et République-Unie de Tanzanie) et d'autres partenaires.

Rapport sur les activités de l'IOCAFRICA 2019-2021

2. L'IOCAFRICA a bien progressé dans la mise en œuvre de son ambitieux plan de travail adopté par à sa cinquième session du 25 au 27 mars 2019, à Nairobi, au Kenya. En raison de la pandémie de COVID-19, certains événements ont été organisés en ligne et d'autres reportés au second semestre 2021. Les activités mises en œuvre ont couvert tous les domaines prioritaires identifiés par la Sous-commission.
3. Un cours de formation régional sur les SIG marins a été tenu par l'Institut de recherche marine et halieutique du Kenya à Mombasa du 28 octobre au 1er novembre 2019 et a été suivi par 22 stagiaires du Kenya, de Maurice, du Mozambique, du Nigeria, du Sénégal, d'Afrique du Sud et de Tanzanie. Les centres de formation régionaux pour la nouvelle phase du programme Ocean Teacher Academy ont été désignés à l'Université du Ghana (Accra, Ghana), à l'Université Eduardo Mondlane (Maputo, Mozambique) et à l'Institut de recherche marine et halieutique du Kenya (Mombasa, Kenya). En raison de la pandémie de COVID-19, un atelier conjoint sur l'analyse des données environnementales prévu par le programme FAO/NANSEN a été reporté. Le matériel nécessaire à la formation en ligne est en cours de préparation.
4. L'IOCAFRICA a organisé un atelier régional en ligne sur la « Cartographie des fonds marins autour de l'Afrique », conjointement avec le projet Seabed 2030-GEBCO les 10 et 24 février 2021. Les webinaires, auxquels ont assisté plus de 100 participants provenant de 25 pays différents, ont permis de faire le point sur l'état actuel de la cartographie dans la région, d'identifier et de discuter des besoins des parties prenantes, et d'explorer les possibilités de faire évoluer la cartographie des fonds marins en collaboration, afin d'obtenir des résultats mutuellement bénéfiques.
5. Une série d'ateliers nationaux portant sur la planification de l'espace marin (y compris les pressions environnementales impactant sur l'AEM et les outils d'aide à la décision) ont été organisés avec le soutien du gouvernement suédois dans les pays suivants en 2020 : Cameroun, Gabon, Ghana, Kenya, Madagascar, Maurice, Maroc, Mozambique et Tanzanie. Un atelier régional a également été organisé pour la région du Golfe de Guinée. L'IOCAFRICA travaille conjointement avec l'Institut de recherche marine et halieutique du Kenya sur une publication intitulée « Marine Spatial Planning and the Blue Economy in Kenya » (« L'aménagement de l'espace marin et l'économie bleue au Kenya »).
6. Dans le cadre de la Stratégie institutionnelle de gestion intégrée des zones côtières, l'IOCAFRICA et la Section des politiques marines et de la coordination régionale de la COI, avec le soutien des pays d'Afrique centrale, ont organisé un atelier technique sur la vulnérabilité côtière à Libreville, au Gabon (5-7 novembre 2019). Des experts nationaux de l'Angola, du Cameroun, du Congo, de la Guinée équatoriale, du Gabon, de la République démocratique du Congo et de Sao Tomé-et-Principe ont participé à ces ateliers.

7. Le développement du nœud régional du Hub d'information océanique a été initié par l'organisation d'une réunion en ligne des parties prenantes en juin 2020, suivie de consultations bilatérales avec les partenaires, notamment l'UICN, le CORDIO, le PNUE (secrétariats de la Convention d'Abidjan et de Nairobi) et la WIOMSA sur le développement de projets d'interopérabilité. Deux réunions virtuelles sur l'algue Sargasse pour la région atlantique organisées en 2020, en collaboration avec le PNUE et la Sous-commission de la COI pour les Caraïbes et les régions adjacentes, ont convenu de travailler ensemble au développement du centre d'information sur la sargasse. L'IOCAFRICAL prépare quatre notes d'orientation sur l'adaptation au changement climatique dans les zones côtières d'Afrique, se concentrant sur : (i) l'élévation du niveau de la mer et les implications pour les îles, les côtes et les communautés de faible altitude ; (ii) l'évolution des océans, des écosystèmes marins et des communautés dépendantes ; (iii) les extrêmes, les changements brusques et la gestion des risques ; et (iv) le changement climatique et l'économie des océans.
8. La COI met en œuvre un projet, financé par l'Agence espagnole de coopération technique internationale, qui a pour objectif de développer les connaissances scientifiques et les capacités de base dans le grand écosystème marin du courant des Canaries (CCLME). Le projet prévoit l'évaluation des effets du changement climatique et des facteurs de stress océaniques sur la dynamique naturelle du courant des Canaries par le biais d'une approche collaborative impliquant des scientifiques, en mettant l'accent sur les femmes scientifiques et en début de carrière, du Cap Vert, de Gambie, de Guinée, de Guinée-Bissau, de Mauritanie, du Maroc, du Sénégal et d'Espagne (îles Canaries). Les résultats du projet ont contribué à informer la gestion scientifique du CCLME. Dans le cadre de cette initiative, un atelier a été organisé à St Vicente, Cap Vert, entre le 10 et le 13 mars 2020.
9. L'IOCAFRICA a organisé un événement régional de sensibilisation aux tsunamis en ligne avec l'UNDRR, ainsi qu'un événement national pour le Nigeria aux côtés de l'Institut nigérian de recherche océanique et marine (NIOMR) et de la Commission nationale pour l'UNESCO le 5 novembre 2020. La COI a également travaillé sur la publication d'un manuel de sensibilisation aux tsunamis en swahili avec l'UNDRR. Une enquête en cours sur l'état des observations océaniques le long du littoral africain permettra d'établir une proposition pour le développement d'un système africain complet d'observation des océans.
10. La Sous-commission a exprimé sa sincère gratitude envers les États membres qui ont soutenu l'élaboration et la mise en œuvre des programmes de la Sous-Commission pendant la période intersessions, et en particulier aux gouvernements de la Flandre (Belgique), de la Chine, de la Norvège, de l'Espagne et de la Suède.

Principaux résultats de la session

11. La sixième session de la Sous-commission de la COI pour l'Afrique et les États insulaires adjacents (IOCAFRICA-VI) a adopté quatre recommandations :
 1. Création d'un groupe de planification régional pour la Décennie des Nations Unies pour les sciences océaniques au service du développement durable,
 2. Extension du mandat du Groupe de planification stratégique de l'IOCAFRICA,
 3. Renforcement de la collaboration avec la Commission de l'Union africaine, et

4. Le programme de travail de l'IOCAFRICA pour 2021-2023, axé sur les observations océaniques et la gestion des données et de l'information, le renforcement des capacités en matière de sciences et technologies marines et d'initiation à l'océan, et les sciences océaniques et leur application à la gestion. La Sous-commission a souligné l'importance d'aligner ses programmes sur les cadres adoptés par la Commission de l'Union africaine, tels que l'Agenda 2063, la Stratégie maritime intégrée pour l'Afrique 2050, la Stratégie pour l'économie bleue africaine, ainsi que le Plan de mise en œuvre de la Décennie des Nations Unies pour les sciences océaniques au service du développement durable.

12. La session a soutenu la création d'une Sous-commission de l'IOCINDIO composée des États membres actuels du Comité régional de l'IOCINDIO. La Sous-commission a aussi proposé la création d'un comité interrégional réunissant l'IOCAFRICA, l'IOC-WESTPAC et l'IOCINDO, qui servira de mécanisme pour élaborer et coordonner la mise en œuvre de programmes relatif au bassin pour l'océan Indien.

13. La Sous-commission n'a pas pu élire de nouveaux membres pour le Bureau de l'IOCAFRICA lors de sa sixième session en raison : (i) de l'absence de candidatures des États membres aux postes de Président et de Vice-présidents de l'IOCAFRICA à la date limite de dépôt des candidatures ; et (ii) des difficultés à organiser des élections en ligne à bulletin secret. La Sous-commission a demandé au secrétariat d'envoyer un nouvel appel à candidatures et d'étudier la possibilité d'organiser des élections au cours de la 31^e session de l'Assemblée de la COI en juin 2021. La Sous-commission a remercié les membres sortants du Bureau d'IOCAFRICA d'avoir accepté de rester en fonction jusqu'à la tenue des élections. La Sous-commission les a félicités pour leur excellent travail, notamment à la lumière de la situation difficile due à la pandémie de COVID-19.

Resumen dispositivo

1. La sexta reunión de la Subcomisión de la COI para África y los Estados Insulares Adyacentes (IOCAFRICA-VI) se celebró en línea del 13 al 15 de abril de 2021 (durante tres horas cada día a partir de las 10 h UTC hasta las 13 h UTC). A la reunión asistieron más de 75 participantes en representación de 23 Estados Miembros (Angola, Argelia, Benín, Camerún, Comoras, República del Congo, República Democrática del Congo, Egipto, Ghana, Guinea, Kenia, Mauricio, Marruecos, Mozambique, Namibia, Nigeria, Senegal, Seychelles, Sierra Leona, Somalia, Sudáfrica, Túnez y la República Unida de Tanzania) y otros colaboradores.

Informe sobre las actividades de IOCAFRICA 2019-2021

2. IOCAFRICA avanzó mucho en la ejecución de su ambicioso plan de trabajo adoptado por su quinta reunión del 25 al 27 de marzo de 2019, en Nairobi, Kenia. Debido a la pandemia de la COVID-19, algunos eventos se celebraron en línea y otros se pospusieron al segundo semestre de 2021. Las actividades realizadas abarcaron todos los ámbitos prioritarios identificados por la Subcomisión.
3. Del 28 de octubre al 1 de noviembre de 2019, el Instituto de Investigación Marina y Pesquera de Kenia acogió un curso de formación regional sobre SIG marino al que asistieron 22 alumnos de Kenia, Mauricio, Mozambique, Nigeria, Senegal, Sudáfrica y Tanzania. Los centros regionales de formación para la nueva fase del programa de la Academia Ocean Teacher se designaron en la Universidad de Ghana (Accra, Ghana), la Universidad Eduardo Mondlane (Maputo, Mozambique) y el Instituto de Investigación Marina y Pesquera de Kenia (Mombasa, Kenia). Un taller conjunto sobre análisis de datos medioambientales previsto en el programa FAO/NANSEN fue aplazado debido a la pandemia de la COVID-19. Se está preparando el material que se utilizará para la formación en línea.
4. IOCAFRICA organizó un taller regional en línea sobre "Cartografía del fondo marino en África" conjuntamente con el proyecto SeaBed2030 de la GEBCO los días 10 y 24 de febrero de 2021. Los seminarios web, a los que asistieron más de 100 participantes de 25 países, ofrecieron la oportunidad de revisar el estado actual de la cartografía en la región, identificar y debatir las necesidades de las partes interesadas y explorar las oportunidades de avanzar en colaboración en la cartografía de los fondos marinos para lograr resultados mutuamente beneficiosos.
5. En 2020 se organizaron, con el apoyo del Gobierno de Suecia, una serie de talleres nacionales de planificación del espacio marino (incluyendo las presiones medioambientales que repercuten en la ordenación del espacio marino y las herramientas de apoyo a la toma de decisiones) en los siguientes países: Camerún, Gabón, Ghana, Kenia, Madagascar, Mauricio, Marruecos, Mozambique y Tanzania. También se organizó un taller regional para la región del Golfo de Guinea. IOCAFRICA colabora con el Instituto de Investigación Marina y Pesquera de Kenia en la elaboración de una publicación sobre "La planificación espacial marina y la economía azul en Kenia".

6. En el contexto de la estrategia institucional de gestión integrada de las zonas costeras, IOCAFRICA y la COI/MPR, con el apoyo de los países de África Central, organizaron un taller técnico sobre la vulnerabilidad costera en Libreville, Gabón (5-7 de noviembre de 2019) con la participación de expertos nacionales de Angola, Camerún, Congo, Guinea Ecuatorial, Gabón, R.D. del Congo y Santo Tomé y Príncipe
7. El desarrollo del nodo regional del Centro de Información sobre los Océanos comenzó con la organización de una reunión en línea de las partes interesadas en junio de 2020, seguida de consultas bilaterales con los colaboradores, entre ellos la UICN, CORDIO, el PNUMA (secretarías del Convenio de Abiyán y Nairobi) y WIOMSA sobre el desarrollo de proyectos de interoperabilidad. En dos reuniones virtuales sobre el alga Sargassum (sargazo) para la región del Atlántico organizadas en 2020, en colaboración con el PNUMA y la Subcomisión de la COI para el Caribe y regiones adyacentes, se acordó trabajar conjuntamente en el desarrollo del centro de información sobre el sargazo. IOCAFRICA está preparando cuatro informes políticos sobre la adaptación al cambio climático en las zonas costeras de África, centrados en: (i) La subida del nivel del mar y las implicaciones para las islas bajas, las costas y las comunidades; (ii) Los océanos cambiantes, los ecosistemas marinos y las comunidades dependientes; (iii) Los extremos, los cambios bruscos y la gestión de los riesgos; y (iv) El cambio climático y la economía oceánica.
8. La COI está llevando a cabo un proyecto, financiado por la Agencia Española de Cooperación Técnica Internacional, cuyo objetivo es ampliar los conocimientos científicos y la base de capacidades en el Gran Ecosistema Marino de la Corriente de Canarias (CCLME). El proyecto se centra en la evaluación de los efectos del cambio climático y de los factores de estrés oceánicos en la dinámica natural de la corriente de Canarias mediante un enfoque de colaboración en el que participan científicos, con especial atención a las mujeres y a los científicos oceánicos que inician su carrera, de Cabo Verde, Gambia, Guinea, Guinea-Bissau, Mauritania, Marruecos, Senegal y España (Islas Canarias). Los resultados del proyecto han contribuido a informar sobre la gestión de base científica del CCLME. Como parte de esta iniciativa se organizó un taller en San Vicente, Cabo Verde, del 10 al 13 de marzo de 2020.
9. IOCAFRICA organizó un evento regional de concienciación sobre los tsunamis con la UNDRR y un evento nacional para Nigeria con el Instituto Nigeriano de Investigación Oceánica y Marina (NIOMR) y la Comisión Nacional para la UNESCO el 5 de noviembre de 2020. La COI también trabajó en la publicación de un manual de sensibilización sobre tsunamis en swahili con la UNDRR. Un estudio en curso sobre el estado de las observaciones oceánicas a lo largo del litoral africano servirá de base para la preparación de una propuesta de desarrollo de un sistema global de observación de los océanos africanos.
10. La Subcomisión expresó su sincero agradecimiento a los Estados Miembros que han apoyado el desarrollo y la ejecución de los programas de la Subcomisión durante el periodo entre reuniones, y especialmente a los Gobiernos de Flandes (Reino de Bélgica), China, Noruega, España y Suecia.

Principales resultados de la reunión

11. La sexta reunión de la Subcomisión de la COI para África y los Estados Insulares Adyacentes (IOCAFRICA-VI) aprobó cuatro Recomendaciones sobre:
 1. Creación de un grupo de planificación regional para el Decenio de las Naciones Unidas de las Ciencias Oceánicas para el Desarrollo Sostenible,
 2. Ampliación del mandato del grupo de planificación estratégica de IOCAFRICA,
 3. Refuerzo de la colaboración con la Comisión de la Unión Africana, y
 4. El Programa de Trabajo de IOCAFRICA para 2021-2023 centrado en las observaciones oceánicas y la gestión de datos e información, el desarrollo de capacidades para la ciencia y tecnología marinas y la alfabetización oceánica, y las ciencias oceánicas y su aplicación a la gestión. La Subcomisión ha subrayado la importancia de alinear sus programas con los marcos adoptados por la Comisión de la Unión Africana, como la Agenda 2063, la Estrategia Marítima Integrada de África 2050, la Estrategia Africana de Economía Azul, así como el Plan de Ejecución del Decenio de las Naciones Unidas de las Ciencias Oceánicas para el Desarrollo Sostenible.
12. La reunión apoyó la creación de la Subcomisión de IOCINDIO integrada por los actuales Estados Miembros del Comité Regional para IOCINDIO. La Subcomisión propuso además la creación de un Comité Interregional que reuniera a IOCAFRICA, IOC-WESTPAC e IOCINDO, que actuará como mecanismo para desarrollar y coordinar la ejecución de programas a nivel de la cuenca para el Océano Índico.
13. La Subcomisión no pudo elegir a los nuevos miembros de la Mesa de IOCAFRICA en su sexta reunión debido a: (i) la falta de candidaturas de los Estados Miembros para los puestos de Presidente y Vicepresidentes de IOCAFRICA al cierre del plazo de presentación de candidaturas, y (ii) las dificultades para celebrar elecciones en línea mediante votación secreta. La Subcomisión pidió a la secretaría que enviara una nueva convocatoria de candidatos y estudiara la posibilidad de celebrar elecciones durante la 31.^a reunión de la Asamblea de la COI en junio de 2021. La Subcomisión dio las gracias a la Mesa saliente de IOCAFRICA por haber aceptado permanecer en el cargo hasta que se celebren las nuevas elecciones. La Subcomisión les felicitó por el excelente trabajo realizado, especialmente a la luz de la difícil situación de la pandemia la COVID-19.

Краткий Рабочий Доклад

1. Шестая сессия Подкомиссии МОК для Африки и прилегающих островных государств (IOCAFRICA-VI) состоялась в режиме онлайн 13–15 апреля 2021 года (в течение трех часов ежедневно с 10.00 до 13.00 UTC). На сессии присутствовали более 75 участников из 23 государств-членов (Алжир, Ангола, Бенин, Гана, Гвинея, Демократическая Республика Конго, Египет, Камерун, Кения, Коморские Острова, Республика Конго, Маврикий, Марокко, Мозамбик, Намибия, Нигерия, Сенегал, Сейшельские Острова, Сьерра-Леоне, Сомали, Объединенная Республика Танзания, Тунис, Южная Африка) и другие партнеры.

Доклад о деятельности МОКАФРИКА в 2019–2021 гг.

2. МОКАФРИКА добилась значительного прогресса в осуществлении своего амбициозного плана работы, утвержденного на ее пятой сессии, состоявшейся 25–27 марта 2019 года в г. Найроби (Кения). В связи с пандемией COVID-19 некоторые мероприятия были проведены в режиме онлайн, а другие перенесены на вторую половину 2021 года. Проведенные мероприятия охватывали все приоритетные области, определенные Подкомиссией.
3. С 28 октября по 1 ноября 2019 года Кенийский научно-исследовательский институт морского и рыбного хозяйства в Момбасе организовал региональный учебный курс по морским ГИС, в котором приняли участие 22 слушателя из Кении, Маврикия, Мозамбика, Нигерии, Сенегала, Танзании и Южной Африки. Региональные учебные центры для нового этапа программы «Глобальная академия “Океан-Инструктор”» были назначены в Университете Ганы (Аккра, Гана), Университете им. Эдуардо Мондлане (Мапуту, Мозамбик) и Кенийском научно-исследовательском институте морского и рыбного хозяйства (Момбаса, Кения). Совместный семинар по анализу данных об окружающей среде, запланированный в рамках программы ФАО/НАНСЕН, был отложен из-за пандемии COVID-19. Продолжается подготовка материалов, которые будут использоваться для онлайн-обучения.
4. 10 и 24 февраля 2021 года МОКАФРИКА совместно с проектом ГЕБКО «Морское дно 2030» организовала региональный онлайн-семинар на тему «Картирование морского дна вокруг Африки». Вебинары, в которых приняли участие более 100 человек из 25 стран, предоставили возможность оценить текущее состояние картирования в регионе, определить и обсудить потребности заинтересованных сторон, а также изучить возможности совместных действий в области картирования морского дна для достижения взаимовыгодных результатов.
5. В 2020 году при поддержке правительства Швеции была организована серия национальных семинаров по морскому пространственному планированию (включая давление на окружающую среду, влияющее на МПП, и инструменты поддержки решений), которые прошли в следующих странах: Габон, Гана, Камерун, Кения, Маврикий, Мадагаскар, Марокко, Мозамбик и Танзания. Также был организован региональный семинар для региона Гвинейского залива. В подготовке публикации «Морское пространственное планирование и “голубая” экономика в Кении» МОКАФРИКА сотрудничает с Кенийским научно-исследовательским институтом морского и рыбного хозяйства.
6. В контексте институциональной стратегии комплексного управления прибрежными районами, МОКАФРИКА и Секция МОК по морской политике и региональной координации

при поддержке стран Центральной Африки организовали технический семинар, посвященный уязвимости прибрежных районов, который прошел в Либревиле (Габон) (5–7 ноября 2019 года) с участием национальных экспертов из Анголы, Габона, Демократической Республики Конго, Камеруна, Конго, Сан-Томе и Принсипи, Экваториальной Гвинеи.

7. Разработка регионального узла для проекта «Инфохаб-Океан» началась с организации онлайн-совещания заинтересованных сторон в июне 2020 года, за которым последовали двусторонние консультации с партнерами, включая МСОП, проект CORDIO, ЮНЕП (секретариаты Абиджанской и Найробийской конвенций) и ВАОМСА, по вопросу разработки проектов оперативной совместимости. На двух виртуальных совещаниях по водоросли саргассум для Атлантического региона, организованных в 2020 году в сотрудничестве с ЮНЕП и Подкомиссией МОК по Карибскому бассейну и прилегающим регионам, была достигнута договоренность о совместной работе по созданию информационного центра по саргассуму. МОКАФРИКА готовит четыре аналитические записки по адаптации к изменению климата в прибрежных районах Африки, посвященные следующим темам: (i) повышение уровня моря и последствия для низколежащих островов, прибрежных зон и сообществ; (ii) изменение океанов, морских экосистем и зависимых сообществ; (iii) экстремальные, резкие изменения и управление рисками; (iv) изменение климата и экономика океана.
8. МОК осуществляет проект, финансируемый Испанским агентством международного технического сотрудничества, направленный на углубление научных знаний и укрепление потенциала в проекте по охране крупной морской экосистемы Канарского течения (CCLME). Его целью является оценка влияния изменения климата и стрессовых факторов океана на естественную динамику Канарского течения на основе совместного подхода с участием ученых, в первую очередь женщин и начинающих ученых-океанологов, из Гамбии, Гвинеи, Гвинеи-Бисау, Испании (Канарские острова), Кабо-Верде, Мавритании, Марокко и Сенегала. Результаты проекта внесли свой вклад в информационное обеспечение научно обоснованного управления CCLME. В рамках этой инициативы был организован семинар, который состоялся в Сан-Висенте (Кабо-Верде) 10–13 марта 2020 года.
9. МОКАФРИКА организовала онлайн-мероприятие по повышению осведомленности о цунами совместно с УСРБ ООН, а также национальное мероприятие для Нигерии совместно с Нигерийским институтом океанографии и морских исследований (НИОМР) и Национальной комиссией по делам ЮНЕСКО 5 ноября 2020 года. МОК совместно с УСРБ ООН также работала над публикацией руководства по распространению информации о цунами на суахили. Текущее исследование состояния наблюдений за океаном вдоль африканского побережья послужит основой для подготовки предложения по созданию всеобъемлющей Африканской системы наблюдений за океаном.
10. Подкомиссия выразила искреннюю признательность государствам-членам, которые поддерживали разработку и реализацию программ Подкомиссии в межсессионный период, и особенно правительствам Испании, Китая, Норвегии, Фландрии (Бельгия) и Швеции.

Основные итоги сессии

11. Шестая сессия Подкомиссии МОК для Африки и прилегающих островных государств (IOCAFRICA-VI) утвердила четыре рекомендации, касающиеся:

1. создания региональной группы по планированию Десятилетия ООН, посвященного науке об океане в интересах устойчивого развития;
 2. продления мандата Группы стратегического планирования МОКАФРИКА;
 3. укрепления сотрудничества с Комиссией Африканского союза;
 4. программы работы МОКАФРИКА на 2021–2023 гг. с упором на наблюдения за океаном и управление данными и информацией, развитие потенциала в области морских наук и технологий и грамотности в связанных с океаном вопросах, а также наук об океане и их применение в управлении. Подкомиссия подчеркнула важность согласования своих программ с рамочными документами, утвержденными Комиссией Африканского союза, такими как Повестка дня на период до 2063 года, Комплексная морская стратегия Африки на период до 2050 года, Африканская стратегия в области «голубой» экономики, а также План проведения Десятилетия ООН, посвященного науке об океане в интересах устойчивого развития.
12. Сессия поддержала создание Подкомиссии ИОСИНДИО в составе нынешних государств-членов Регионального комитета ИОСИНДИО. Подкомиссия также предложила создать Межрегиональный комитет, объединяющий МОКАФРИКА, МОК-ВЕСТПАК и ИОСИНДО, который будет действовать в качестве механизма для разработки и координации осуществления программ в масштабах бассейна Индийского океана.
13. На своей шестой сессии Подкомиссия не смогла избрать новых должностных лиц МОКАФРИКА по причине: (i) отсутствия кандидатур от государств-членов на должности председателя и заместителей председателя МОКАФРИКА по истечении крайнего срока для выдвижения кандидатур; (ii) сложности проведения выборов путем тайного голосования в режиме онлайн. Подкомиссия просила секретариат направить новый запрос на выдвижение кандидатур и изучить возможность проведения выборов в ходе 31-й сессии Ассамблеи МОК в июне 2021 года. Подкомиссия поблагодарила сменяемых должностных лиц МОКАФРИКА за согласие остаться в должности до проведения новых выборов. Подкомиссия поздравила их с отличной работой, которую они провели, особенно в свете сложной ситуации в связи с пандемией COVID-19.

Introduction

The Sixth session of the IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA-VI) was held online on 13–15 April 2021 (for three hours each day starting from 10h00 UTC to 13H00 UTC). The session was attended by more than 75 participants representing 23 Member States (Algeria, Angola, Benin, Cameroon, Comoros, Republic of Congo, Democratic Republic of the Congo, Egypt, Ghana, Guinea, Kenya, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Tunisia, and the United Republic of Tanzania) and other partners.

The session was officially opened by Prof Mohamed Said, IOCAFRICA Chair, who recalled that the [fifth session of IOCAFRICA](#) (25–27 March 2019, Nairobi, Kenya) had adopted an ambitious work plan for 2019–2021 focusing on: Ocean Observations and Monitoring, Ocean Sciences and Assessments, Ocean Data and Information Management, Capacity Development for Marine Science and Technology, and Raising Awareness and Science-Policy Interface. The session also adopted recommendations on: (i) the African Kick-Off Conference of the UN Decade of Ocean Science for Sustainable Development, (ii) Establishment of IOCAFRICA Strategic Planning Group, and (iii) Priority for the revival and reactivation of GOOS-AFRICA. Prof Mohamed Said informed the delegates that good progress had been made in implementing the recommendations.

Regarding the regional Kick-Off conference for the UN Decade of Ocean Science, the IOC Executive Secretary had visited Egypt for high level consultations, resulting in the establishment of the local organizing committee chaired by the Minister for Higher Education and the Scientific Research, the finalization of the concept note, and the preparation of a draft scientific programme.

The IOCAFRICA Strategic Planning group held its first session on 21–23 October 2019, in Nairobi, Kenya, and came-up with elements of the draft IOCAFRICA Strategic Plan for the period 2022–2029 which will be presented during this session. A meeting for revival and reactivation of GOOS-Africa was hosted by the Government of Cote d'Ivoire, with support from the African Union's GMES and Africa programme in Abidjan on 16–18 December 2019, attended by experts in ocean observations from Africa, including the IOCAFRICA Officers. Prof. Mohamed Said acknowledged the support of the Governments of Flanders (Kingdom of Belgium), China, and Norway for the support that they had provided for implementation of IOCAFRICA programmes during the intersessional period.

In her opening remarks, the Director of the UNESCO Regional Office for Eastern Africa, Ms Ann-Therese Ndong Jatta, noted that the session provided an opportunity to reflect on how Africa and the Adjacent Island States can harness ocean science and research to optimally utilize their substantial blue economy potential, which is the new frontier for development. The region has demonstrated that it recognises the importance of its ocean resources and is determined to ensure that they are sustainably used for its development by adopting frameworks such as the African Union's Agenda 2063, the 2050 African Integrated Maritime Strategy and the African Blue Economy Strategy all of which provide guidance for the development of a thriving ocean economy.

She recalled that the regional consultations on the UN Decade of Ocean Science for Sustainable Development had identified capacity development as a priority, in particular the improvement of infrastructure and facilities for research, provision of training for scientific and technical staff, as well as translation of science to policy. She urged the Member States to explore ways of strengthening the secretariat of the Sub-Commission to enable it to achieve the objectives for which it was established.

The session designated Ms Kazadi Mpemba Jocelyne (Democratic Republic of Congo) as the rapporteur.

Report on IOCAFRICA activities 2019 – 2021

The IOCAFRICA Technical Secretary presented an overview of the activities implemented by the Sub-Commission during the intersessional period 2019–2021.

IOCAFRICA made good progress in the implementation of its ambitious work plan adopted by its fifth session meeting on 25–27 March 2019, Nairobi, Kenya. Due to the COVID-19 pandemic, some events were held online and others postponed to the second half of 2021. The activities implemented covered all priorities areas identified by the Sub-Commission.

A regional training course on marine GIS was hosted by the Kenya Marine and Fisheries Research Institute in Mombasa on 28 October–1 November 2019 and attended by 22 trainees from Kenya, Mauritius, Mozambique, Nigeria, Senegal, South Africa, and Tanzania. Regional Training Centres for the new phase of the Ocean Teacher Academy programme were designated at the University of Ghana (Accra, Ghana), the Eduardo Mondlane University (Maputo, Mozambique) and the Kenya Marine and Fisheries Research Institute (Mombasa, Kenya). A joint workshop on Environmental Data Analysis planned for the FAO/NANSEN programme was postponed due to the COVID-19 pandemic. The preparation of materials to be used for online training is ongoing.

IOCAFRICA organized an online regional workshop on “Mapping the Sea Floor around Africa” jointly with the GEBCO SeaBed2030 project on 10 and 24 February 2021. The webinars, attended by more than 100 participants from 25 countries provided an opportunity to review the current status of mapping in the region, identify and discuss the needs of stakeholders, and explore opportunities for collaboratively advancing seabed mapping to achieve mutually beneficial outcomes.

A series of national marine spatial planning workshops (including environmental pressures that impact on MSP and decision support tools) were organized with support from the Government of Sweden in the following countries in 2020: Cameroun, Gabon, Ghana, Kenya, Madagascar, Mauritius, Morocco, Mozambique and Tanzania. A regional workshop was also organized for the Gulf of Guinea region. IOCAFRICA is working with the Kenya Marine and Fisheries Research Institute on a publication on Marine Spatial Planning and the Blue Economy in Kenya.

In the context of the institutional Integrated Coastal Area Management Strategy, IOCAFRICA and IOC/MPR, with the support of the Central African Countries organized a technical workshop on coastal vulnerability in Libreville, Gabon (5–7 November 2019) with the participation of national experts from Angola, Cameroon, Congo, Equatorial Guinea, Gabon, R.D. of Congo and Sao Tome and Principe.

The development of the regional node for the Ocean Information Hub commenced with the organization of an online stakeholders meeting in June 2020, followed by bilateral consultations with partners, including IUCN, CORDIO, UNEP (Abidjan and Nairobi Convention Secretariats), and WIOMSA on developing interoperability projects. Two virtual meetings on the seaweed Sargassum for Atlantic region organized in 2020, in collaboration with UNEP and IOC’s Sub-Commission for the Caribbean and Adjacent regions, agreed on working together on development of Sargassum Information Hub. IOCAFRICA is preparing four policy briefs on climate change adaptation in coastal zones of Africa focusing on (i) Sea Level Rise and Implications for Low-Lying

Islands, Coasts and Communities, (ii) Changing Oceans, Marine Ecosystems and Dependent Communities, (iii) Extremes, Abrupt Changes and Managing Risks and (iv) Climate Change & Ocean Economy.

IOC is implementing a project, funded by the Spanish International Technical Cooperation Agency, aimed at furthering the scientific knowledge and capacity basis in the Canary Current Large Marine Ecosystem (CCLME). The project focuses on assessing the effects of climate change and ocean stressors on the natural dynamics of the Canary Current through a collaborative approach involving scientists, with a focus on female and early career ocean scientists, from Cabo Verde, Gambia, Guinea, Guinea-Bissau, Mauritania, Morocco, Senegal and Spain (Canary Islands). The results of the project have contributed to informing science-based management of the CCLME. As part of this initiative a workshop was organized in St Vicente, Cabo Verde, from 10–13 March 2020.

IOCAFRICA organized an online regional tsunami awareness event with the UNDRR, and a national event for Nigeria with the Nigerian Institute of Ocean and Marine Research (NIOMR) and the National Commission for UNESCO on 5 November 2020. IOC also worked on the publication of a tsunami awareness manual in Swahili with UNDRR. An ongoing survey of the status of ocean observations along the African coastline will inform the preparation of a proposal for the development of a comprehensive African Ocean Observing System.

The Sub-Commission congratulated the IOCAFRICA Secretariat and Officers on the good progress that has been made in the implementation of the planned activities. The Sub-Commission requested the secretariat to include statistics on experts trained and additional data generated in future reports.

Main outcomes of the session

The Sub-Commission adopted 4 recommendations in Annex II to this document.

UN Decade of Ocean Science for Sustainable Development.

The Sub-Commission welcomed the presentations on the United Nation's Decade of Ocean Science for Sustainable Development provided by the IOC Executive Secretary, Mr Vladimir Ryabinin, and the IOC Vice Chair Group V, Prof. Karim Hilmi.

Prof. Karim Hilmi, provided an overview of the regional consultations on the UN Decade of Ocean Science for Sustainable Development.

The Regional Consultative Workshop on the UN Decade of Ocean Science for Sustainable Development for Africa and the Adjacent Island States (27–29 January 2020, Nairobi, Kenya) hosted by the Government of Kenya, and the workshop on “Co-designing the Ocean Science we need for Africa” held online on 3 November 2020 offered a crucial opportunity to co-design mission-oriented research strategies and actions for the region.

The workshops emphasized the need to strengthen and build upon existing mechanisms and frameworks, and align with the African Unions initiatives. This includes the Agenda 2063, which recognized the Blue Economy as a major contributor to continental transformation and growth, and the 2050 African Integrated Marine Strategic Plan of Action (AIMS2050), which provides a road for increased wealth creation from Africa's oceans and seas by developing a sustainable thriving blue economy.

Capacity development was identified as a priority, in particular the improvement of infrastructure and facilities for research, provision of training for scientific and technical staff, as well as translation of science to policy. In particular ocean research in the region should be strengthened through stronger integration of sciences, greater investment in ocean observing systems and improved science-policy interface. Other issues highlighted include the role of youth and job creation, marine spatial planning, climate change impacts on the coastal zones, land-sea interactions and pollution, and innovative financing models for the ocean economy.

The following were identified as some of the key areas that the region should focus on during the Decade:

(i) Harnessing the demographic dividend by empowering the huge pool of youthful population. The focus should be on getting them into ocean sciences through focussed ocean literacy programmes, supporting skills development and mentoring to enable them fit in the job market and creating new opportunities for employment. This will facilitate the unlocking of scientific excellence and the creation of the new generation of ocean experts.

(ii) The Decade should catalyse research in the following fields: marine renewable energy and deep ocean water applications; bioprospecting, biotechnology and pharmaceuticals; mariculture and offshore aquaculture; climate change impacts and the oceans-climate nexus; baseline monitoring of essential ocean variables; mapping ecosystems and habitats; and linking the research results to societal applications.

(iii) Improving the quality and quantity of research outputs. Scientists and institutions should think beyond producing publications to transforming lives through innovation and robust application of ocean science. They should be able to demonstrate that the research results have been applied and impacted on the society.

(iv) Ocean research in the region should be strengthened through stronger integration of sciences, greater investment in ocean observing systems and improved science-policy interface. New partnerships should be developed, supported by a new ocean-climate finance, and improved ocean literacy and education to modify social norms and behaviour.

(v) Establishment of university-based ocean innovation incubator hubs, supported by the private sector, to serve as a conduit to transform research results to action via technological development that is adapted to regional and local contexts and led by African researchers.

The Government of Egypt will host the regional Kick-Off workshop for the UN Decade of Ocean Science for Sustainable Development for Africa and the Adjacent Islands on 7–9 December 2021 in hybrid format.

Egypt informed the Sub-Commission that they had informed the IOC secretariat on their offer to host a Decade Coordination Office at NIOF in Alexandria, Egypt. A detailed proposal will be submitted shortly.

The Sub-Commission emphasised the importance of developing a strong UN Decade programme for Africa and encouraged Member States from the region to establish broad-based National Decade Coordination mechanisms, incorporating institutions working in ocean related fields.

The Sub-Commission adopted Recommendation [IOCAFRICA-VI.1](#) on the establishment of a Regional Planning Group for the UN Decade of Ocean Science for Sustainable Development,

bringing together a broad range of stakeholders working on oceans in the region, including UN agencies, regional intergovernmental organizations, and NGOs.

IOCAFRICA Strategic Plan for 2022–2029

The Sub-Commission commended the IOCAFRICA Strategic Planning Group for their efforts in developing elements of the draft IOCAFRICA Strategic Plan 2022–2029 which included the following:

- Six thematic areas proposed: (i) Sustainable Blue Economy, (ii) Ocean Health and Resilience, (iii) Disaster Risk Reduction, (iv) Climate Change Adaptation, (v) Ocean Forecasting and Prediction, and (vi) Ocean Pollution, and
- Five means of achieving the expected results: (a) Knowledge generation and management, (b) Capacity Development, (c) Partnerships, (d) Resource Mobilization, and (e) Public Awareness.

The Sub-Commission proposed that the “Sustainable Blue Economy” be changed to “Sustainable Ocean Economy” and that the possible activities identified under each thematic area be reviewed and further developed taking into account the mandates of the Intergovernmental Oceanographic Commission of UNESCO.

The Sub-Commission adopted Recommendation [IOCAFRICA-VI.2](#) on the extension of the mandate of the Strategic Planning Group, and urged the Group to focus on ambitious, but achievable goals, while concentrating on the real needs of the region.

Ocean Observations and Data and Information Management

The Sub-Commission noted that priority should be given to the reinforcement of the ocean observations network along the African coastal during the next intersessional period (2021–2023). Member States and ocean related institutions in the region are encouraging to complete the questionnaire about the "Development of the observation systems" as this will provide the information on the status of ocean observation of each country. This will greatly assist in the preparation of the plan for development and reinforcement of an African Ocean Observations system.

The Sub-Commission thanked the Governments of South Africa and Kenya for providing opportunities for regional oceanographic survey and training on their vessels and requesting them, and other countries in the region to continue providing support to such initiatives. The Sub-Commission requested the Secretariat to explore continued collaboration with the FAO/NANSEN programme and similar initiatives.

The Sub-Commission proposed the development and maintenance of an online schedule of national cruises and programmes to facilitate collaboration.

The Sub-Commission welcomed the collaboration that has been established with GOOS-Africa following the meeting in Abidjan, Cote d’Ivoire, in December 2019 and urged the IOCAFRICA Secretariat to continue developing synergy with GOOS Africa and GMES Africa in improving ocean observations along the African coasts. The collaboration should in particular focus on supporting relevant African Union frameworks, including the African Union Integrated Maritime Strategy, the African Decade of Oceans and Seas, the African Blue Economy Strategy in the

broader context of the African Vision'2063 and the UN Decade of Ocean Science for Sustainable Development. GOOS Africa should also establish links with other GRAs (e.g. MONGOOS, IOGOOS and EuroGOOS), and seek collaboration with the European Space Agency on surveillance of oil spills and water quality. Other potential partners include the NOC-UK. The Sub-Commission express appreciation and gratitude for the support to the AUC in organizing the meeting, and thanked Cote d'Ivoire for its generous offer to host the secretariat of GOOS-Africa at CURAT (University HB).

The Sub-Commission adopted Recommendation [IOCAFRICA-VI.3](#) on strengthening collaboration with the AUC.

The Sub-Commission welcomed the start of the Ocean InfoHub project in 2020 (and will continue until mid-end 2023), noting that this project "will link and anchor a network of regional and thematic nodes that will improve online access to and synthesis of existing global, regional and national data, information and knowledge resources, including existing clearinghouse mechanisms". Reference was made to the project web site <https://www.oceaninfohub.org>. The Sub-Commission urged all IOCAFRICA Member States to actively participate in the project. The Sub-Commission thanked the Government of Flanders (Kingdom of Belgium) for its support to the project.

The Sub-Commission noted with appreciation the achievements of ODINAFRICA from phase I to IV during the past 20 years and thanked the Government of Flanders (Kingdom of Belgium) for its support of that long period. However, the Sub-Commission noted that in many IOCAFRICA Member States staff and institutional changes have resulted in loss of capacity and requested the IODE programme to re-start its capacity development efforts related to data and information management in Africa.

The Sub-Commission requested the Secretariat (IOCAFRICA and OIH) to reactivate the ODINAFRICA network of NODCs as a mechanism to support the contribution of Member States to the Ocean Information Hub. The network should support the updating of databases, directories and products developed during the earlier phases of the project, such as experts and institutions, marine related projects, African node for the Ocean Data portal, and the African Register of Marine Species. The Sub-Commission noted with concern that the African OBIS nodes have been inactive over the last two years and urged member states to actively engage in the reactivation of the nodes and networks.

The Sub-Commission emphasised the need to further develop the African Coastal and Marine Atlases (ACMA) in close collaboration with the Caribbean Marine Atlas, and incorporating the mapping of corals, mangroves, natural resources, marine protected areas, waste dumping, dredging and other vital ecosystems and processes.

The Sub-Commission encouraged the establishment of new collaboration with the GEBCO-Nippon Foundation Seabed2030 project and the UNESCO Culture Sector (Underwater Heritage programme) on development and implementation of programmes that will improve the mapping and understating of the structures on the sea floor around Africa.

The Sub-Commission emphasised the importance of access to and exchange of ocean data and requested the secretariat to explore opportunities for collaboration with other networks (e.g RAFISMER) and private sector, including petroleum companies to facilitate the collection and exchange of data.

Capacity Development in Marine Science and Technology and Ocean Literacy

The Sub-Commission reiterated that Capacity Development continues to be a key focus for the region and should be incorporated in all its programmes. New technologies such as gliders should be considered, while ensuring that those trained will have access to the equipment. Additional open source software (e.g. SNAP, DELFT 3D, and Copernicus products) should be incorporated in the training programmes.

The Sub-Commission stressed the need to strengthen existing mechanisms such as OTGA regional training centres and the UNESCO Chairs related to ocean sciences in the region.

The Sub-Commission noted that none of the OTGA regional training centres was located in a French speaking country and urged IOCAFRICA Member States to consider establishing RTC's in their countries to supporting training in French.

The Sub-Commission proposed the establishment of mentorship programme to enable young scientist to benefit from the experience of established experts, and a network of early career scientists.

The Sub-Commission welcomed the collaboration with FAO/NANSEN in the organization of a training course on environmental data processing, analysis and interpretation and urged similar collaboration with other programmes and organizations.

The Sub-Commission requested the Secretariat to explore opportunities for collaboration in capacity development with other programmes such as the POGO Fellowship Programme that has implemented the NF-POGO shipboard training on-board in the Gulf of Guinea.

The Sub-Commission proposed the organization of Pan African conferences on Ocean Science for Sustainable Development every three years, with the rotation of venue between different sub-regions.

Ocean Sciences and Application to Management – including Science-Policy interface

The Sub-Commission noted that oceanographic research in the region should address critical uncertainties for the management of marine environment and climate change, focusing on climate change and ecosystems, adaptation to climate change, marine biodiversity, harmful algal blooms, nutrients research, ocean acidification, ocean carbon, marine spatial planning, integrated coastal management, and ocean assessments. The programmes developed should endeavour to provide scientific information targeting different categories users, especially resource managers, research and academic institutions as well as regional and international programmes in order to facilitate the integrated management of the marine and coastal environment and resources.

Resources Mobilization

The Sub-Commission noted with concern that the funding and staffing available to IOCAFRICA through the regular programme budget are not sufficient to implement the ambitious programme that is necessary for development of ocean sciences in the region.

The Sub-Commission invited Member States from the region and outside to explore modalities to support the Sub-Commission, including financial and in-kind contributions. Noting that the current COVID-19 pandemic had demonstrated that a lot work can be implemented remotely, and taking

into account the considerable expertise available in Member States from the region, the Sub-Commission urged Member States to consider the possibility of dedicating staff to support the implementation of IOCAFRICA activities while working from their home institutions.

The Sub-Commission thanked Member States from the region and beyond which have previously made significant in-kind contributions, such as the provision of financial support, research vessels for use in regional programmes, the secondment of staff, and the hosting and covering of local costs for IOCAFRICA events. The Sub-Commission invited them to continue their highly appreciated assistance.

The Sub-Commission further requested the IOCAFRICA Secretariat, working together with the IOCAFRICA Officers and institutions in the region to develop project proposals that can be submitted to potential funding sources (including development agencies, foundations, etc.)

Kick-Off Conference for the UN Decade of Ocean Science for Sustainable Development

The Sub-Commission noted the significant progress that has been made in preparations for the Kick-Off Conference from 7–9 December 2021 and lauded the Government of Egypt for the support it has continued to provide. Egypt had established: (i) Organizing Committee, comprising institutions from Egypt who are working diligently on the logistics of the conference, and (ii) a scientific committee comprising professors from different universities and scientific institutions in Egypt who have already prepared a draft scientific programme for the conference.

The Sub-Commission requested the Executive Secretary to assist in the identification of resources to support the organization of the conference.

Proposal for the Establishment of the IOCINDIO Sub-Commission and Implication for IOCAFRICA

The Sub-Commission thanked the IOCINDIO Chair, Dr Atmanand M.A, for his excellent presentation on the proposal for establishment of the IOCINDIO Sub-Commission.

The Sub-Commission supported the establishment of the IOCINDIO Sub-Commission comprising the current Member States of the Regional Committee for IOCINDIO. The Sub-Commission further proposed the establishment of an Inter-regional Committee bringing together IOCAFRICA, WESTPAC and IOCINDIO, which will act as a mechanism to develop and coordinate the implementation of basin-wide programmes for the Indian Ocean.

Date and Place of the Seventh session of IOCAFRICA

The Sub-Commission decided to hold its next (seventh) session in the first quarter of 2023. The Sub-Commission requested the Secretariat to consult with Member States on the possibility of hosting the session, and to ensure that the dates of the seventh session do not overlap with those of the UNESCO governing bodies and other relevant meetings.

Adoption of Draft IOCAFRICA Programme of Work 2021–2023

The Sub-Commission reviewed and revised the work plans that were presented by the sessional working groups on: (i) Ocean Observations and Data and Information Management; (ii) Capacity Development for Marine Science and Technology and Ocean Literacy; and (iii) Ocean Sciences

and Application to Management – including Policy interface (see detail in Recommendation [IOCAFRICA VI.4](#)).

Election of IOCAFRICA Officers

The Sub-Commission recalled that Member States had been invited to submit candidatures for election as IOCAFRICA Officers by 9 April 2021 at 17h00 UTC via [IOC Circular Letter No 2838](#) of 20 March 2021. However, no nominations were received by the closing time.

The Sub-Commission noted the challenges of holding online elections by secret ballot, and requested the secretariat to send a fresh call for candidates and explore the possibility of holding elections during the 31st session of the IOC Assembly in June 2021.

The Sub-Commission thanked the outgoing IOCAFRICA Officers for accepting to stay in Office in the interim till fresh elections are held. The Sub-Commission congratulated them on the excellent work they had implemented, especially in the light of the challenging COVID-19 pandemic situation.

Adoption of Report and Recommendations

The Sub-Commission adopted the four Recommendations of the session and requested the Secretariat to work with the rapporteur and the IOCAFRICA Officers in finalizing the draft summary report and circulate it to the delegates for final approval.

The Sub-Commission requested the Chair to present the executive summary report and recommendations to the IOC Assembly at its 31st online session (14–25 June 2021).

ANNEX I

AGENDA

- 1. WELCOME**
- 2. ADMINISTRATIVE ARRANGEMENTS FOR THE MEETING**
 - 2.1 ADOPTION OF THE AGENDA [Rules of Procedure 8]
 - 2.2 DESIGNATION OF THE RAPPORTEUR FOR THE SESSION.
 - 2.3 CONDUCT OF THE SESSION AND DOCUMENTATION.
- 3. INTERSESSIONAL REPORTS**
 - 3.1 REPORT ON IOCAFRICA ACTIVITIES 2019-2021
 - 3.2 RECENT DEVELOPMENTS WITHIN UNESCO AND IOC AND THEIR RELEVANNCE TO IOCAFRICA
- 4. DEVELOPMENT OF IOCAFRICA WORK PLANS 2021-2023**
 - 4.1 OCEAN OBSERVATIONS AND DATA & INFORMATION MANAGEMENT
 - 4.2 CAPACITY DEVELOPMENT IN MARINE SCIENCE AND TECHNOLOGY & OCEAN LITERACY
 - 4.3 OCEAN SCIENCES AND APPLICATION TO MANAGEMENT – INCLUDING SCIENCE POLICY INTERFACE.
 - 4.2 RESOURCE MOBILIZATION.
- 5. KICK-OFF CONFERENCE FOR THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT**
- 6. PROPOSAL FOR THE ESTABLISHMENT OF IOCINDIO SUB-COMMISSION AND IMPLICATION FOR IOCAFRICA**
- 7. OTHER BUSSINESS**
- 8. DATES AND PLACES OF THE 7th SESSION OF THE IOCAFRICA SUB-COMMISSION**
- 9. PROGRAMME OF WORK FOR IOC AFRICA FOR 2021-2023**
- 10. ELECTIONS OF THE OFFICERS OF IOCAFRICA**
- 11. ADOPTION OF THE DECISIONS/RECOMMENDATIONS AND SUMMARY REPORT**
- 12. CLOSURE**

ANNEX II

RECOMMENDATIONS

Recommendation IOCAFRICA-VI.1

Establishment of a Regional Planning Group for the UN Decade of Ocean Science for Sustainable Development

The IOC Sub-Commission for Africa and the Adjacent Island States,

Recalling the discussions at the Regional Consultative Workshop on the UN Decade of Ocean Science for Sustainable Development for Africa and the Adjacent Island States (27–29 January 2020, Nairobi, Kenya) hosted by the Government of Kenya, and the workshop on “Co-designing the Ocean Science we need for Africa” held online on 3 November 2020,

Emphasises the importance of developing a strong regional programme for the UN Decade of Ocean Science for Sustainable Development for Africa and the Adjacent Island States;

Encourages Member States from the region to establish broad based National Decade Coordination mechanisms, incorporating institutions working in ocean related fields;

Thanks the Government of Egypt for hosting the regional Kick-Off Conference for the UN Decade of Ocean Science for Sustainable Development (7–9 December 2021, Alexandria, Egypt), and **urged** Member States to actively participate in the conference;

Establishes the Regional Planning Group for the UN Decade of Ocean Science for Sustainable Development, bringing together a broad range of stakeholders working on oceans in the region, including UN agencies, regional intergovernmental organizations and NGO’s;

Requests the IOCAFRICA Officers in consultation with the Decade Coordination Office to develop terms of reference for the Group;

Requests the IOCAFRICA Secretariat to:

- (i) Provide logistic and technical support for the Regional Planning Group,
- (ii) to work with Egypt in engaging the African Union and other partners in the organization of the regional Kick-Off conference;

Urges IOC Member States to provide support to ensure the development and implementation of a Regional Implementation Plan for the UN Decade of Ocean Science for Sustainable Development.

Recommendation IOCAFRICA-VI.2

Extension of the mandate of the IOCAFRICA Strategic Planning Group

The IOC Sub-Commission for Africa and the Adjacent Island States,

Noting the progress that had been made by the IOCAFRICA Strategic Planning group in the identification of elements of the draft IOCAFRICA Strategic Plan for 2022–2029,

Emphasises the need to finalize the IOCAFRICA Strategic Plan for 2022–2029 and align it with the IOC Strategic Plan for 2022–2029, the Implementation Plan for the UN Decade of Ocean Science for Sustainable Development, the African Union’s Agenda 2063, the 2050 Africa Integrated Maritime Strategy, and the Africa Blue Economy Strategy,

Extends the mandate of the IOCAFRICA Strategic Planning Group (comprising the IOCAFRICA Officers and other experts from the region) to guide the finalization of the IOCAFRICA Strategic Plan for 2022–2029;

Requests the IOCAFRICA Strategic Planning Group to submit its draft IOCAFRICA Strategic Plan for 2022–2029, including the following elements, to the Seventh session of the IOC’s Sub-Commission for Africa and the Adjacent Island States;

- Six thematic areas proposed: (i) Sustainable Ocean Economy, (ii) Ocean Health and Resilience, (iii) Disaster Risk Reduction, (iv) Climate Change Adaptation, (v) Ocean Forecasting and Prediction, and (vi) Ocean Pollution, and
- Five means of achieving the expected results: (a) Knowledge generation and management, (b) Capacity Development, (c) Partnerships, (d) Resource Mobilization, and (e) Public Awareness.

Requests the Secretariat to provide support to enable the IOCAFRICA Strategic Planning Group undertake its tasks.

Recommendation IOCAFRICA-VI.3

Strengthening Collaboration with the African Union Commission

The IOC Sub-Commission for Africa and the Adjacent Island States,

Noting the importance of partnerships as a mechanism for joint planning and implementation of programmes, transfer of technology and exchange and sharing of resources,

Acknowledges the importance that the African Union Commission has placed on the development of the ocean economy as envisaged in its Agenda 2063, the 2050 Africa Integrated Marine Strategy, the Africa Blue Economy Strategy and the declaration of 2015–2025 as Africa Decade of Oceans and Seas and the 25 July as the Africa’s Day of Oceans and Seas;

Recalls the successful joint workshop on the revival of GOOS Africa sponsored by the AUC’s project on the Global Monitoring for Environment and Security and Africa (GMES & Africa) and hosted by the Government of Cote d’Ivoire;

Recommends that strong links be established between the Sub-Commission and the African Union and its various ministerial conferences (AMCEN, AMCOMET, and AMCOST);

Requests the secretariat to explore the formalization of such collaboration through appropriate instruments such as memorandum of understanding or aide memoire.

Recommendation IOCAFRICA-VI.4

Programme of Work, 2021–2023

The IOC Sub-Commission for Africa and the Adjacent Island States,

Noting the progress made in the implementation of the IOCAFRICA-V work plan,

Expresses its appreciation to the Member States, regional and international partners who have provided financial and technical support for implementation of activities in the region, especially the Government of Flanders (Kingdom of Belgium), China, Norway, Spain and Sweden;

Thanks the Member States from the region who have provided substantial in-kind support for the development and implementation of programmes of the Sub-Commission, including hosting and covering costs of training programmes and providing research vessels for regional training and surveys;

Taking into account the priorities identified during the regional consultations on the UN Decade of Ocean Science for Sustainable Development and the regional codesign workshops,

Adopts the programme of work for the Sub-Commission for the period 2021–2023 as outlined in the Annex to this Recommendation;

Requests the IOC Executive Secretary to:

- (i) explore opportunities for additional extra budgetary resources for the implementation of these activities;
- (ii) strengthen the IOCAFRICA secretariat through the provision of additional staff;

Urges Member States to continue and increase their support to IOCAFRICA and its secretariat through financial and in-kind contributions, including the secondment of staff.

Annex to Recommendation IOCAFRICA VI.4

Ocean Observations and Data and Information Management
Activity 1.1: Reinforce the existing ocean observations systems around coastal and deep sea areas of Africa including SIDS members states (including use of new technologies)
Activity 1.2: Increase collaboration and cooperation between Member States to optimise the sharing, exchange and common utilization of marine equipment amongst Member States particularly on joint research cruises and expeditions.
Activity 1.3: Revitalizing GOOS-Africa and review the functions to serve the needs of the African ocean observations systems
Activity 1.4.: Continue the development of the regional node for the Ocean Information Hub, and the reactivation of the ODINAFRICA network and portal to provide information about and access to ocean data from African oceans and coastal areas (including satellite and drone observations)
Activity 1.5: Further development of the African Coastal and Marine Atlas, in collaboration with the Caribbean Marine Atlas.:

Activity 1.6: Mobilization of marine biodiversity data for inclusion in the African Register of Marine Species and AfrOBIS (including strengthening of the African OBIS nodes in Kenya, Senegal and South Africa).
Capacity Development for Marine Science and Technology and Ocean Literacy
Activity 2.1: Undertake comprehensive survey of capacities available for marine science and technology in the region (including human resources and facilities/equipment), building on previous surveys.
Activity 2.2: Development of a portal on training facilities and opportunities in the region, and facilitate the strengthening of the linkages and collaboration between ocean programmes in universities and research institutions (including capacity development, transfer of marine technology, including sharing of facilities, exchange visits/ sabbaticals, and exchange of publications);
Activity 2.3: Organize and support training courses and workshops, using regional training centres (Ocean Teacher Global Academy RTCs, UNESCO Chairs and Centres of Excellence) on priority topics identified by IOCAFRICA. (Including operational oceanography, data processing, analysis & interpretation; shipboard training, application of remote sensing to marine sciences; ocean modelling and forecasting, science communication etc.).
Activity 2.4: Support the organization of the Kick-Off Conference for the UN Decade of Ocean Science for Sustainable Development (Egypt2021), and activities to mark World Ocean Day and African Day of Seas and Oceans.
Activity 2.5: Maintenance of the IOCAFRICA websites as a source of information of the Sub-Commissions programmes and other relevant information
Activity 2.6: Organize activities to improve ocean literacy/awareness
Ocean Sciences and Application to Management
Activity 3.1: Assessment of marine and coastal ecosystems in Africa: their diversity, their ecological functionality and their biological production and assess the impact of climate change and pollution.
Activity 3.2: Assessment of the vulnerability and adaptation of Africa's marine and coastal ecosystems to climate change taking into account regional ecosystems including coastal erosion, review of availability of long time series ocean and climate data and identification of data gaps that need to be addressed.
Activity 3.3. Implementation of IOCAFRICA project on building capacity for ocean acidification research and observation and detection and early warning for HAB.
Activity 3.4. Survey of and assessment of marine pollution related parameters (including micro and macro plastics, oxygen depletion etc.) including the development of technologies or processes for waste reduction and ecosystem recovery.
Activity 3.5. Support Member States in use of MSP in balancing the requirements of different industries and sectors such as shipping, marine tourism and fisheries production.
Activity 3.6: Preparation of policy briefs and advocacy on relevant goals of Agenda 2063, 2030 and the Ocean Decade (2021–2030), working with regional institutions and networks (e.g. FARI, RAFISMER & COMHAFAT programmes in some of the countries).