

IOCAFRICA-V/3s Nairobi, 28 May 2019 Original: English<sup>1</sup>

# INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

## FIFTH SESSION OF IOC SUB-COMMISSION FOR AFRICA AND THE ADJACENT ISLAND STATES

Nairobi, Kenya 25–27 March 2019

# 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 30<sup>th</sup> session (UNESCO, Paris, 26 June–4 July) will be invited to consider this executive summary.

1. The Fifth session of the IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA-V) was held at the United Nations Office at Nairobi (UNON), Kenya, from 25 to 27 March 2019. The session was attended by more than 45 participants representing 22 Member States (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, including the Food and Agriculture Organization of the United Nations (FAO), the Secretariats of the UN Environment Abidjan and Nairobi Conventions, and the Western Indian Ocean Marine Sciences Association (WIOMSA).

2. The session was officially opened by Prof Japheth Micheni Ntiba, Principal Secretary of the Kenya's State Department for Fisheries, Aquaculture and the Blue Economy, on behalf of the Cabinet Secretary Ministry of Agriculture, Livestock, Fisheries and Irrigation, who highlighted important regional and global processes such as the African Union's <u>Agenda 2063</u>, the 2050 Africa's Integrated Maritime Strategic Plan of Action (AIMS2050), the Decade of African Seas and

<sup>&</sup>lt;sup>1</sup> Executive Summary is available in French.

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Oceans (2015–2025), and the UN Decade of Ocean Sciences for Sustainable Development (2021–2030) which provide frameworks that will enable Africa and the Adjacent Island States to harness ocean science and research to optimally utilize their blue economy potential. He requested the Sub-Commission to pay special attention to the building of capacities for marine science and technology in the region, and the development of a comprehensive African Ocean Observing System contributing to human and economic security. He emphasized the need to strengthen the Sub-Commission so that it achieve the objectives for which it was established, especially by providing its secretariat means commensurate to its tasks. The opening session was also addressed by the Chair of IOCAFRICA, Prof Mohamed Said, and the IOC Executive Secretary, Dr Vladimir Ryabinin.

- 3. The delegates observed a minute of silence in honour of Dr Moamer Eltayeb Ali, who represented Sudan in previous sessions of the Sub-Commission and had passed away in February 2019, and also in memory of the victims of cyclone Idai which had caused catastrophic damage in Mozambique, Zimbabwe, and Malawi, leaving more than 1,000 people dead and thousands more missing during the period 4–21 March 2019.
- 4. The IOCAFRICA Chair presented an overview of the activities implemented by the Sub-Commission during the intersessional period 2017–2019.
- 5. <u>Capacity development</u> continues to be a key area of focus for the Sub-Commission, with the Ocean Teacher Global Academy (OTGA) regional training centres in Africa organizing training courses on: Research Data Management (3–7 July 2017, Mombasa, Kenya), Marine Biodiversity Data Management (17–20 July 2017 in Dakar, Senegal, and 12–16 February 2018, in Mombasa, Kenya), the Application of Remote Sensing and GIS for Marine and Coastal Zone Management (22–26 January 2018, Maputo, Mozambique), and Hydrodynamic and Environmental Modelling (28 May–1 June 2018, Dakar, Senegal).
- 6. IOCAFRICA and the South African Department of Environmental Affairs (DEA) organized two regional research cruises on board the South African oceanographic research vessel, the SA Agulhas II in the framework of the Second International Indian Ocean Expedition from 17 October to 3 November 2017, and from 10 June to 13 July 2018, respectively. The vessel undertook surveys in the waters off Comoros, Madagascar, Mozambique, South Africa and Tanzania. The focus was on observations and training in the areas of physical oceanography, chemistry, biological oceanography, benthic biodiversity, marine top predators (whales, sharks, dolphins, seabirds etc.), marine geology, marine plastics and social sciences. IOCAFRICA provided travel support to enable the participation of more than 50 marine scientists and students from Comoros, Egypt, Kenya, Madagascar, Mozambique, Nigeria, Tanzania and Zimbabwe to join the two cruises.
- 7. The development of the <u>African Coastal and Marine Atlas</u> continued with a workshop organized to provide training on Geonode, followed by the migration of the contents of African Coastal and Marine Atlas from SmartAtlas to Geonode (12–16 March 2018, Swakopmund, Namibia). The development of the African node for the Ocean Data portal is ongoing, and the information collected on Indian Ocean cruises and datasets from 1965 to current data have already been incorporated in the portal.
- IOCAFRICA organized four workshops on <u>Marine Spatial Planning</u> in Mindelo, Cabo Verde, 5–7 February 2018 (Portuguese); in Dakar, Senegal, 5–7 September 2018 (English); in Mombasa, Kenya, 10–14 September 2018 (English); and in Mauritius, 8–12 October 2018 (French). The workshops, which were organized with various partners including the <u>Mami Wata</u>

<u>Project</u>, the UNEP Abidjan and Nairobi Convention secretariats, the Western Indian Ocean Marine Science Association (WIOMSA), the World Wildlife Fund for Nature (<u>WWF</u>), and UNDP enabled participants to develop a common understanding of Marine Spatial Planning in order to support the implementation of sustainable resource use planning. Through these workshops, IOC of UNESCO has strived to provide the knowledge and skills that governments in the region require to support the sustainable development of the ocean economy, taking into account and balancing the needs of all the sectors. Seventy-five trainees from 20 African Member States attended the four training courses.

- 9. In order to improve <u>awareness</u> of ocean related issues in the region, IOCAFRICA supported the organization of activities to mark the World Oceans Day in Maputo on 8 June 2017 in collaboration with the UNESCO Maputo office, and in Kilifi, Kenya, from 7–8 June 2018, in collaboration with Pwani University, Regeneration Africa, Ocean Mamas and the Watamu Marine Association. Several Member States also organized the activities on the World Ocean Day at national level.
- 10. IOCAFRICA also organized an essay competition (for university students and early career scientists), focusing on the UN Decade of Ocean Science for Sustainable Development (2021–2030). Other events organized to improve awareness included a session on the Second International Indian Ocean Expedition at WIOMSA scientific symposium (October 2017, Dar es Salaam, Tanzania), a session on Ocean Observations in Africa at the Coast to Ocean conference (12–14 February 2019, Alexandria, Egypt), and a National information workshop on IOC programmes (Swakopmund, Namibia in March 2018).
- 11. IOC/UNESCO participated actively in the global <u>Sustainable Blue Economy Conference</u> (26–28 November 2018, Nairobi, Kenya) and organized three side events with partners on the following topics: (i) Marine Spatial Planning and ecosystem-based approaches to support national and transboundary sustainable blue economy; (ii) Towards a knowledge-based sustainable ocean economy: The contribution of ocean science, observation, and marine technologies towards sustainable blue economy; and (iii) Large marine ecosystems approach: an essential management and partnership tool for realizing blue economy opportunities. IOC also organized an exhibition show casing its activities and made key contributions during the Signature thematic sessions, the Science and research symposium and the Leaders circle and closing ceremony.
- 12. The project on "Responses of Biological Productivity and Fisheries to Changes in Atmospheric and Oceanographic Conditions in the Upwelling Region associated with the East African Coastal Current", implemented jointly with WIOMSA, was finalized during this period, with a review workshop held in Tanga, Tanzania, in July 2017. The third phase of the project on "Enhancing oceanography capacities in Canary Current Large Marine Ecosystem (CCLME) Western Africa countries", funded by the Spanish Agency for International Development Cooperation (AECID), was launched at a workshop on "The effects of climate change on the productivity in the CCLME" held in Tenerife, Spain, from 18 to 20 September 2018. Participants noted that different hypotheses predict unequal effects of climate change on winds dynamics, which may affect the ocean dynamics and hence the primary production off North Western Africa. IOCAFRICA is also leading the development of a regional framework to support the Western Indian Ocean islands of Comoros, Madagascar, Mauritius, Seychelles and Zanzibar (Tanzania) to respond to transboundary challenges and opportunities resulting from climate change. The framework is the initiative of the regional UN Development Group for Eastern and Southern Africa (R-UNDG/ESA).

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- 13. The workshop for the <u>African Regional Network for the project on "Strengthening Global</u> <u>Governance of Large Marine Ecosystems and their Coasts through Enhanced Sharing and</u> <u>Application of LME/ICM/MPA Knowledge and Information Tools</u>" (GEF-LME:LEARN project) was held in Dakar, Senegal, on 3–4 September 2018. The workshop was attended by 30 participants from 14 countries, representing national academic and other organizations, GEF funded projects, UN agencies, private companies and non-governmental organizations. The meeting reviewed existing and potential twinning opportunities between projects, replication of science-tomanagement best practices, involvement of private sector and strengthening of the coordination mechanisms.
- 14. IOCAFRICA continues to explore opportunities for strengthening collaboration with the Chinese marine institutions and participated in the Third Sino -Africa Forum on Marine Science and Technology 28–30 November 2017 in Hangzhou, China.
- 15. 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

*16.* The Sub-Commission considered presentations under the various agenda items and reached the following decisions.

## National Ocean programmes and Plans

- 17. The Sub-Commission welcomed the presentations on the National Ocean Programmes and Plans for the following Member States: Angola, Benin, Cameroon, Republic of Congo, Egypt, Ghana, Guinea, Kenya, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Senegal, Seychelles, South Africa, Tanzania and Tunisia. In addition, Madagascar, Sudan and Togo submitted their national reports, although they did not participate in the session.
- 18. The Sub-Commission noted that a wide range of relevant activities had been implemented by the Member States and requested the secretariat to prepare a template for the preparation of the national reports for future sessions. The secretariat should collate the information from the national reports ahead of the IOCAFRICA sessions and prepare a summary outlining key issues and common themes to assist in the development of the work programmes for the Sub-Commission.

## Pan Africa Conference on Ocean Sciences for Sustainable Development

- *19.* The Sub-Commission noted that the conference provides an important opportunity to highlight the developments and achievements in ocean sciences in the region. It will also be an opportunity to bring new actors to the table, such as the regional development banks, the regional economic communities, and the private sector.
- 20. The Sub-Commission noted that the conference comes at the mid-point of the African Union's (AU) Decade of African Seas and Oceans (2015–2025) and will be an occasion to take stock of progress made and plan for the remaining part of the Decade, building on the momentum of existing initiatives such as the Second International Indian Ocean Expedition. In this regard, it

will be important to engage the African Union in the planning and organization of the conference (Recommendation IOCAFRICA-V.1).

## UN Decade of Ocean Sciences for Sustainable Development

- 21. The Sub-Commission noted that the future of Africa lies in on sustainable use of oceans. This will require a complete understanding of the oceans and its role, including impacts of climate change.
- 22. The Sub-Commission stressed that Africa should not only participate in the implementation of the Decade, but must contribute to the planning process. Africa must set its own agenda for oceans sciences, including targets and expected results. It will be important that Africa commit its own financing in order to deliver on the agenda. However, collaboration is crucial to ensure complete understanding of the world oceans as they are all connected.
- 23. The Sub-Commission pointed out the need to have synergy between the conference and the planning for the regions contribution to the UN Decade of Ocean Science for Sustainable Development. The Conference and the Decade should be used to transform the way ocean sciences are handled in the region. (Recommendation IOCAFRICA V.2 on the Establishment of IOCAFRICA Strategic Planning Group).

## **Ocean Observations and Monitoring**

- 24. The Sub-Commission emphasized the importance of reinforcing the existing ocean observations system around the coastal and deep ocean areas of Africa and the adjacent island states.
- 25. The Sub-Commission recognized the need for increased collaboration and cooperation between Member States to optimize the sharing, exchange and common utilization of marine equipment amongst Member States particularly on joint activities such as field trips, research cruises and expeditions.
- 26. The Sub-Commission thanked the Government of South Africa for providing the oceanographic research vessel *SA Agulhas II* for regional research cruises and covering the costs for two such cruises in October/November 2017 and June/July 2018 in the framework of the Second International Indian Ocean Expedition.
- 27. The Sub-Commission requested the Government of South Africa to consider extending this support, and welcomed the offer of South Africa to explore all possibilities towards this end.
- 28. The Sub-Commission urged Member States in the region to explore the use of new technologies for ocean observations, and to focus on attracting the youth to ocean sciences as scientists and technicians.
- 29. The Sub-Commission welcomed the recommendation of the third IIOE-2 Steering Committee meeting (12–13 March 2019, Port Elizabeth, South Africa) to continue the mission of the IIOE-2 to at least 2025, in order to build on the significant scientific achievements already made. The extension will also enable the IIOE-2 to contribute to the UN Decade of Ocean Science for Sustainable Development 2021–2030.

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*30.* The Sub-Commission noted that GOOS-AFRICA continues to be inactive, and emphasized the importance of reviving and restructuring GOOS-AFRICA so that it can support the Sub-Commission in responding to the ocean observations requirement of Member States from the region, including contribution to the Second International Indian Ocean Expedition, and the UN Decade of Ocean Science for Sustainable Development. (<u>Recommendation IOCAFRICA V.3</u>: Priority for the Revival and Reactivation of GOOS-AFRICA).

## **Ocean Sciences and Assessments**

- 31. The Sub-Commission thanked Dr Jacqueline Uku (GOSR Co-Chair) and Dr Itahisa Deniz Gonzalez (Technical Coordinator for Ecosystem Dynamics and Climate Change) on the very illuminating presentation of the Global Ocean Science Report (GOSR) and expressed concern at the disappointing statistics on publications and citations from Africa and the Adjacent Island Sates in the report.
- 32. The Sub-Commission encouraged Member States to complete the online questionnaire for collecting information for the second edition of GOSR, and emphasized the importance of initiating programmes that will enable scientists from the region to publish the results of their research work in order to address the huge gap in publications and citations as identified in the GOSR-I report.
- 33. The Sub-Commission expressed appreciation to the Government of Spain for the support provided for the implementation of the project on "Enhancing oceanography capacities in the Canary Current LME Western Africa countries" and encouraged collaboration between the project and the initiative on the development of the African node for the Ocean Data portal.
- *34.* The Sub-Commission encouraged Member States from the region to actively participate in the second UN World Ocean Assessment (WOA-II), including through the nomination of experts to join the pool of experts.
- 35. The Sub-Commission recalled that a regional programme on Harmful Algal Blooms, prepared by the IOCAFRICA Group of Experts on HABs had been presented to it at its 4<sup>th</sup> session (IOCAFRICA-IV, 6–8 March 2017, Alexandria, Egypt) and requested the secretariat to revive the group of experts and fast track the implementation of the programme.
- *36.* The Sub-Commission emphasized the requirement for continuous long-time series of ocean and climate data (including marine biodiversity and evolution of coastlines) for development of climate change scenarios for the coastal zone, and the generation of indices and thresholds for selected oceanographic parameters to facilitate early warning of risks to human life and property.
- 37. The Sub-Commission requested the secretariat to undertake a review of the availability of such data sets in the region and identify gaps that need to be addressed.

# **Ocean Data and Information Management**

- 38. The Sub-Commission stressed the importance of improving access to ocean data and information in the region and supported the development of the African node for the Ocean Data portal as a mechanism to provide access to reliable data and metadata.
- *39.* The Sub-Commission recognized the need to develop clear protocols and agreements for sharing of data and information so that local scientists can benefit from publishing.

- 40. The Sub-Commission emphasized the importance of transforming data to products/information for practical use and requested the secretariat to update the websites, directories and catalogues developed in the framework of the ODINAFRICA project.
- 41. The Sub-Commission thanked the Government of Flanders (Belgium) for the support provided for implementation of the Ocean Teacher Global Academy, which has substantially contributed to strengthening capacity for ocean data and information management through the three OTGA regional training centres in Africa.
- 42. The Sub-Commission noted the continued requirements for capacity development for ocean data and information management and requested the Government of Flanders (Belgium) to provide support for an extension to the project.
- 43. The Sub-Commission requested the secretariat, in consultation with Member States in the region and the IODE project Office to develop a proposal for a follow-up to the ODINAFRICA project focusing on utilization of skills and infrastructure that had already been developed to prepare data and information products for integrated coastal management.

## **Capacity Development in Marine Science and Technology**

- 44. The Sub-Commission thanked Dr Francesca Santoro (IOC Programme Specialist, Ocean Literacy) for the presentation on the IOC Capacity Development Strategy, and emphasized the continued importance of capacity development in the region.
- 45. The Sub-Commission expressed concern that only four Member States from the region have designated national focal points for Capacity Development (Côte d'Ivoire, Democratic Republic of the Congo, Mauritius and Tanzania), and urged other Member States from the region to designate Capacity Development focal points.
- 46. The Sub-Commission recalled the detailed capacity development surveys, which were undertaken in 2013 and 2017 and requested the secretariat to repeat the capacity development survey and present the report to the next session of IOCAFRICA.
- 47. The Sub-Commission recognized the importance of setting-up a regional hub for the Clearing House Mechanism for transfer of marine technology (CHM/TMT) and requested for details on requirements, as this will aid in deciding the appropriate location for the hub.
- 48. The Sub-Commission welcomed the offer of collaboration by the Suez University (Egypt) and requested the secretariat to formalize this and explore collaboration with other training and research institutions in the region.
- 49. The Sub-Commission recognized the importance of sharing facilities and resources, and requested the secretariat to develop and maintain an online schedule of national oceanographic research cruises and programmes to facilitate collaboration.

#### Public Awareness and Science to Policy Interface

50. The Sub-Commission thanked Dr Francesca Santoro (IOC Programme Specialist, Ocean Literacy) for her presentation on the Ocean Literacy initiative and requested for translation of the toolkit to local languages such as Arabic. This together with incorporation of traditional knowledge would enable the tools to reach a wider range of population, such as those in primary IOCAFRICA-V/3s page 8

schools and those without education. The secretariat pointed out that it will not be possible for IOC to provide financial support for implementation of national activities in each Member State. Support can only be provided for activities implemented jointly by several countries.

- 51. The Sub-Commission noted that it would be important to develop linkages between Marine Spatial Planning and Ocean Literacy, and to work with the UNESCO Education programme to mainstream ocean issues in school curriculum.
- 52. The Sub-Commission urged Member States to organize activities to mark the World Oceans Day (8 June) and the African Day of Seas and Oceans (25 July) as a way of improving public awareness of ocean issues, and noted that the theme for World Ocean Day for 2019 Gender and Oceans–is particularly relevant to the region.
- 53. The Sub-Commission requested the secretariat to revamp the IOCAFRICA website to include information on relevant international/regional frameworks as well as existing national ocean policies and legislation. This will assist Member States that need to develop similar policies and mainstream ocean sciences in their national development plans.
- 54. The Sub-Commission emphasized the importance on engaging resource managers, policy-makers and politicians and identified the development of policy briefs on relevant goals of 2030 Agenda and Agenda 2063 as one of the ways of initiating such engagements.
- 55. The Sub-Commission welcomed the offer of South Africa to support the preparation and publication of a brochure outlining objectives, and plans of the Sub-Commission, and invited other Member States to collaborate on this.
- 56. The Sub-Commission requested the IOC Executive Secretary to undertake missions to Member States in the region as this would assist in increasing awareness of the importance of ocean sciences.

# Partnerships and Linkages

- 57. The Sub-Commission welcomed the collaboration that had been developed with secretariats of UN Environment Abidjan and Nairobi Conventions, UN Environment regional seas programme, the UN Food and Agriculture Organization, the Western Indian Ocean Marine Science Organization and other organizations, programmes and projects and urged the secretariat to strengthen these partnerships and initiate the development of new partnerships, especially with the Regional Economic Communities and the Regional Development Banks.
- 58. The Sub-Commission requested the secretariat to establish formal mechanisms for collaboration with partners (Memorandum of Understanding or Letters of Agreement), including the Abidjan Convention secretariat, and invite them to join relevant technical and scientific committees of the Sub-Commission.
- 59. The Sub-Commission urged the secretariat to explore linkages with other organizations and reiterated that IOCAFRICA should truly serve as a "unique Africa-wide platform, bringing together Member States, UN agencies and other stakeholders, to drive research, observations, and disaster preparedness and mitigation for the sustainable management of the African oceans and coastal areas" as outlined in the Sub-Commissions vision statement.

60. The Sub-Commission requested the IOC secretariat to liaise with African Union and United Nations Economic Commission for Africa on developing joint activities and initiatives in the framework of the AU's Decade of African Oceans and Seas (2015–2025).

## **Resources Mobilization**

- 61. The Sub-Commission noted that the resources 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.
- 62. The Sub-Commission thanked the Member States from the region and outside which have provided resources and facilities to support the implementation of IOCAFRICA activities, in particular Belgium, China, Kenya, Mauritius, Mozambique, Nigeria, Senegal, South Africa, Spain and urged other Member States to explore possibilities of extending support.
- 63. The Sub-Commission requested the IOCAFRICA Strategic Planning Group to explore modalities for funding the work programme of the Sub-Commission, including identifying possible funding sources.
- 64. 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.)

## National and regional coordination mechanisms

- 65. The Sub-Commission urged Member States from the region to update their lists of IOC national focal points.
- 66. The Sub-Commission encouraged the development of sub-regional projects that can attract resources (taking into account specificities and challenges of sub-regions), and requested the IOCAFRICA Vice-Chairs to support the secretariat by initiating the development of such initiatives.
- 67. The Sub-Commission welcomed the proposal by the Republic of Congo to lead the development of a sub-regional programme on Coastal Vulnerability with special attention to coastal erosion for the Central and Equatorial African Member States (Angola, Cameroon, Congo, DR Congo and Gabon).

# **Election of IOCAFRICA Officers**

68. The Sub-Commission elected the following members of the Bureau for the Sub-Commission to serve for the next inter-sessional period and the sixth session of the IOCAFRICA in 2021:

Chair:	Prof Mohamed Ahmed SAID (Egypt)
Vice-Chair Region A:	Dr Adesina ADEGBIE (Nigeria)
Vice-Chair Region B:	Dr John BEMIASA (Madagascar)
Vice-Chair Region C:	Dr Hamet Diaw DIADHIOU (Senegal)

- 69. The Sub-Commission requested its Bureau to assign specific responsibilities to each of the Vice-Chairs. This will facilitate a more efficient implementation of the work programme of the Sub-Commission.
- 70. The Sub-Commission endorsed the proposal by the IOCAFRICA Officers to incorporate the immediate previous Chair of the sub-commission and the future IOC Vice-Chair Group V in their deliberations.

## Date and Place of the Sixth session of IOCAFRICA

71. The Sub-Commission decided to hold its next (sixth) session in the first quarter of 2021, and welcomed the offer of Nigeria to explore the possibility of hosting the next session in Lagos, Nigeria. The Sub-Commission requested the secretariat to ensure that the dates of the sixth session do not overlap with those of the UNESCO governing bodies and other relevant meetings.

## Adoption of Draft IOCAFRICA Programme of Work 2019–2021

72. The Sub-Commission reviewed and revised the work plans that were presented by the sessional working groups on: (i) Ocean Observations and Monitoring; (ii) Ocean Sciences and Assessments; (iii) Ocean Data and Information Management; (iv) Capacity Development for Marine Science and Technology; and (v) Public Awareness and Science – Policy interface (see detail in Recommendation <u>IOCAFRICA V.4</u>).

## Adoption of Report and Recommendations

- 73. The Sub-Commission reviewed the draft summary report for the session and requested the secretariat to work with the rapporteur and the IOCAFRICA Officers to finalize it and circulate it to the delegates for final approval.
- 74. The Sub-Commission requested the Chair to present the executive summary report and recommendations to the IOC Assembly at its 30th session (UNESCO, Paris, 26 June–4 July 2019).

## ANNEX I

# PROGRAMME

# Monday, 25 March 2019

09:00-10:00	WELCOME AND OFFICIAL OPENING.
10:00-10:30	TEA/COFFEE BREAK
10:30–10:45	<ul> <li>2. ADMINISTRATIVE ARRANGEMENTS FOR THE MEETING</li> <li>2.1 ADOPTION OF AGENDA</li> <li>2.2 DESIGNATION OF RAPPORTEUR</li> <li>2.3 CONDUCT OF SESSION</li> </ul>
10:45–12:00	<ol> <li>INTERSESSIONAL REPORTS</li> <li>STATEMENT OF THE CHAIRPERSON</li> <li>RECENT DEVELOPMENTS WITHIN UNESCO AND IOC AND THEIR RELEVANCE TO IOCAFRICA</li> <li>REPORT ON IOCAFRICA ACTIVITIES 2017-2019</li> </ol>
12:00–13:30	LUNCH BREAK
13:30–15:00	3.4 NATIONAL OCEAN PROGRAMMES AND PLANS (Angola, Benin, Cameroon, Congo, Egypt)
15:00–15:15	TEA/COFFEE BREAK
15:15–16:30	3.4 NATIONAL OCEAN PROGRAMMES AND PLANS (Ghana, Guinea, Kenya, Mauritius, Morocco)
	END OF DAY
18:30-20:00	STEERING COMMITTEE AFRICA CITY LODGE OCEAN 2020
Tuesday, 26 Marc	:h 2019
09:00–10:30	3.4 NATIONAL OCEAN PROGRAMMES AND PLANS (Mozambique, Namibia, Nigeria, Senegal, Seychelles, Somalia, South Africa, Tanzania, Tunisia)
10:30–10:45	TEA/COFFEE BREAK
10:45–12:00	Enhancing oceanography capacities in CCLME Western Africa countries (Itahisa Deniz Gonzalez) Global Ocean Science Report (Jacqueline Uku and Itahisa Deniz Gonzalez)
12:00-13:30	LUNCH BREAK
13:30–15:00	4. DEVELOPMENT OF IOCAFRICA WORK PLAN 2019-2021
	<ul> <li>UN Decade for Ocean Science for Sustainable Development (Vladimir Ryabinin)</li> </ul>

	<ul> <li>Pan African Conference on Marine Science and Technology – 2020 (Mohamed Said)</li> </ul>
	DISCUSSIONS ON DEVELOPMENT OF OCEAN SCIENCES IN AFRICA
15:00-15:15	TEA/COFFEE BREAK
15:15–16:30	<ul> <li>4.1 OCEAN OBSERVATIONS AND MONITORING OCEAN SCIENCES AND ASSESSMENTS</li> <li>4.3 OCEAN DATA AND INFORMATION MANAGEMENT</li> <li>4.4 CAPACITY DEVELOPMENT IN MARINE SCIENCE AND TECHNOLOGY</li> <li>4.5 PUBLIC AWARENESS AND SCIENCE TO POLICY INTERFACE IOC Capacity Development Strategy (Francesca Santoro)</li> </ul>
	END OF DAY
18:30–20:00	NOMINATIONS/ELECTIONS CITY LODGE WORKING GROUP
Madua a day, 07.	
Wednesday, 27	
09:00–10:30	<ul> <li>IOC Capacity Development Strategy (Francesca Santoro)</li> <li>Ocean Literacy for Africa (Francesca Santoro)</li> <li>5.2 PARTNERSHIPS AND LINKAGES</li> <li>5.2.1 Western Indian Ocean Marine Science Association (Julius Francis)</li> <li>5.2.2 UN Environnent Abidjan Convention (Diagana Abdoulaye)</li> <li>5.2.3 UN Environnent Nairobi Convention (Mwangi Theuri)</li> <li>5.2.4 South West Indian Ocean Commission (Luca Garibaldi)</li> </ul>
10:30–10:45	TEA/COFFEE BREAK
10:45–12:00	<ol> <li>5.1 RESOURCES MOBILIZATION</li> <li>5.3 STRENGTHENING OF NATIONAL AND REGIONAL COORDINATION MECHANISMS</li> <li>6. ADDRESSING OTHER RELEVANT ISSUES ON THE AGENDA OF THE 30<sup>TH</sup> SESSION OF THE IOC ASSEMBLY</li> <li>8. OTHER BUSSINESS</li> <li>9. DATES AND PLACES OF THE 6TH SESSION OF THE IOC-AFRICA SUB-COMMISSION.</li> </ol>
12:00-13:30	LUNCH BREAK
13:30–15:00	<ol> <li>ELECTIONS OF THE OFFICERS OF IOC- AFRICA</li> <li>ADOPTION OF THE DRAFT IOCAFRICA WORK PLAN AND BUDGET 2019–2021.</li> <li>ADOPTION OF THE DECISIONS/RECOMMENDATIONS AND SUMMARY REPORT</li> </ol>
15:00–15:15	
15:15–16:30	<ol> <li>ADOPTION OF THE DECISIONS/RECOMMENDATIONS AND SUMMARY REPORT</li> <li>CLOSURE</li> </ol>

### ANNEX II

### RECOMMENDATIONS

### Recommendation IOCAFRICA-V.1

### Pan African Conference on Ocean Sciences for Sustainable Development

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

**Recalling the** discussions at the IOCAFRICA-II (3–4 April 2013, Cape Town, South Africa) and IOCAFRICA-IV (6–8 March 2017, Alexandria, Egypt) on the importance of organizing a Pan African Conference on Marine Sciences,

**Noting that** the African Union at its 22<sup>nd</sup> Ordinary Session (30–31 January 2014) decided to retain the 2015–2025 decade as the "Decade of African Seas and Oceans" to explore the potential of oceans and seas around Africa,

**Further noting** that UN General Assembly at its 72<sup>nd</sup> session (December 2017, New York, USA), proclaimed the United Nations Decade of Ocean Science for Sustainable Development for the 10-year period beginning on 1 January 2021,

**Agreed that** the Pan African Conference on Ocean Sciences for Sustainable Development will provide an opportunity to take stock of the progress made in the implementation of the "Decade of African Seas and Oceans", as well as plan for the active participation of the region in the "UN Decade for Ocean Sciences for Sustainable Development";

**Welcomes the** offer of Egypt to organize and host the Pan African Conference on Ocean Sciences for Sustainable Development in Sharm El Sheikh from 19–22 October 2020;

**Stressed that** the conference must be different from previous conferences and should be used to take ocean sciences in Africa to another level, by bringing new actors to the table, such as the regional economic communities, regional development banks and the private sector;

**Request the** secretariat to:

- (i) liaise with Permanent Delegation of Egypt and other Member States from the region to highlight the importance of the conference;
- (ii) to work with Egypt in engaging the African Union and other partners in the organization of the conference;

**Urges** IOC Member States to provide support to ensure the successful organization of the conference.

## Recommendation IOCAFRICA-V.2

#### Establishment of IOCAFRICA Strategic Planning Group

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

**Noting** that several governments in the region have demonstrated their commitments by investing in ocean research and education institutions, as well as putting in place policies on coastal and marine management,

**Recognises that** Africa must set its own agenda, including targets and results expected and use its own efforts and financing in order to deliver on the agenda;

**Emphasises the** connectedness of the oceans and acknowledges that partnerships are therefore important strategy for mobilizing additional resources for ocean sciences in the region, especially as what happens in one part of the world oceans affects other regions;

**Establishes the** IOCAFRICA Strategic Planning Group (comprising the IOCAFRICA Officers and other experts from the region) to guide the planning for the conference and develop ideas for the UN Decade for Ocean Science for Sustainable Development (2021–2030) as well as the IOCAFRICA Strategic Plan for 2022–2029;

**Requests** the IOCAFRICA Officers to develop terms of reference for the Group;

## Request the secretariat to:

- (i) Assist in the identification of experts to join the Group;
- (ii) Provide support to enable the IOCAFRICA Strategic Planning Group undertake its tasks.

## Recommendation IOCAFRICA-V.3

## Priority for the Revival and Reactivation of GOOS-AFRICA

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

**Recognising** the exceptional role of the GOOS-AFRICA Coordinating Committee with a longstanding experience of mobilising human and financial capacities, which enabled the establishment of a continental framework for operational ocean observations networks in Africa over the past two decades,

**Supports** the outcomes and recommendations of different intergovernmental forums such as the successive IOCAFRICA Sessions and Global Regional Alliance (GRA) forums since 2013, which requested the reactivation of the GOOS-AFRICA Coordinating Committee towards a reinforced GOOS-AFRICA in close cooperation with the IOCAFRICA;

**Stressed the importance** of reviving GOOS AFRICA so that it can support the Sub-Commission in responding to the ocean observations requirement of member states from the region, including contribution to the Second International Indian Ocean Expedition, and the UN Decade of Ocean Science for Sustainable Development;

Decides to reconstitute the GOOS AFRICA Coordinating Committee;

Requests the IOC Executive Secretary to:

- (i) Invite Member States to nominate experts to join the reconstituted GOOS-AFRICA Committee.
- (ii) Identify suitable allocations of financial resources from the Regular Budget and extra budgetary of the IOC for the reactivation of GOOS-AFRICA based on the capital legacy of the GOOS-AFRICA Coordinating Committee and existing African networks.

### Recommendation IOCAFRICA-V.4

## Programme of Work, 2019–2021

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

Noting the progress made in the implementation of the IOCAFRICA-IV 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;

**Thanks** the Member States from the region who have provided in-kind support for the Sub-Commission, especially South Africa for availing its oceanographic research vessel the SA Agulhas II for regional surveys and training;

**The Sub-Commission commended** the experts who had participated in the IOCAFRICA-V Preparatory Experts meeting (3–4 March 2019, Mombasa, Kenya) for the detailed proposals they had prepared for consideration, and requested the secretariat to organize similar experts meeting ahead of future sessions of the Sub-Commission;

**Adopts** the programme of work for the Sub-Commission for the period 2019–2021 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 V.4

Ocean Ob	servations and Monitoring
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)
-	Increase collaboration and cooperation between member states to optimise the sharing, exchange and common utilization of marine equipment amongst member states arly on joint research cruises and expeditions.
Activity 1.3:	Organise training workshops on ocean monitoring, forecasting and modelling (focus on ROMS and then downscaling) using data and information from the Ocean Observing System.
Activity 1.4:	Revive GOOS-Africa and review the functions to serve the needs of the African ocean observations systems
Ocean Sci	ences and Assessments
	Climate change adaptation in the coastal zones (including review of availability of long time series ocean and climate data and identification of data gaps that need to be ressed)
	Implementation of IOCAFRICA HAB programme (including the organize workshop on Harmful Algal Blooms, with possible collaboration of the International Atomic Energy ncy - IAEA and HABs program in IOC-UNESCO)

Activity 2.3: Survey of and assessment of marine pollution related parameters (including micro and macro plastics, ocean acidification, oxygen depletion etc.)

Activity 2.4: Marine Spatial Planning, including mapping of resources (maritime, critical resources) and delineation to allow exchange of lessons learned and best practices of MSP among Member States.

### **Ocean Data and Information Management**

Activity 3.1: Further development of the African node for the Ocean Data portal to provide information about and access to ocean data from African oceans and coastal areas (including satellite observations)

Activity 3.2: Development and maintenance of directories of marine related institutions and experts (academic, research and management), as well as information centres and linking these to the IOC Ocean Data and Information System (ODIS) and Ocean-Expert (the Directory of Marine and Freshwater Professionals).

Activity 3.3: Finalizing continental and regional coastal and marine atlases, including mapping of corals, mangroves, natural resources, protected areas, waste dumping, dredging and other vital ecosystems)

Activity 3.4: Processing, analysis and interpret ocean data (e.g. cruise data from SA AGULHAS II, RV Dr Fridjof Nansen etc.)

Activity 3.5: 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).

Activity 3.6: Development and submission of proposal for follow-up to the ODINAFRICA project.

### Capacity Development

Activity 4.1: 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 4.2: Setting up a regional hub for CHM/TMT

Activity 4.3: Strengthening of the linkages and collaboration between ocean programmes in universities and research institutions in the region to facilitate capacity development and transfer of marine technology (including sharing of facilities, exchange visits/ sabbaticals, and exchange of publications);

Activity 4.4: Organize training courses and workshops on priority topics identified by IOCAFRICA. (Operational oceanography, shipboard training, application of remote sensing to marine sciences; ocean modelling and forecasting, science communication etc.)

Activity 4.5: Support regional centres (Ocean Teacher Global Academy RTCs, UNESCO Chairs and Centres of Excellence) to provide continuous professional development;

Activity 4.6: Develop and maintain an online schedule of national cruises and programmes to facilitate collaboration.

### Public Awareness and Science Policy Interface

Activity 5.1: Establishment of the IOCAFRICA Strategic Planning Group

Activity 5.2: Support for relevant events (conferences, symposia etc.), especially the Pan African Conference on Ocean Science for Sustainable Development, and activities to mark World Ocean Day and African Day of Seas and Oceans.

Activity 5.3: Revamping of IOCAFRICA websites to incorporate international/regional agreements and frameworks as well as existing national ocean policies and legislation.

Activity 5.4: Preparation of policy briefs on relevant goals of Agenda 2063 and 2030.

Activity 5.5: Support for the establishment of African Association of Marine Scientists

Activity 5.6: Organize activities to improve ocean literacy/awareness

Activity 5.7: Science to Policy frameworks- strengthening of the collaboration between the various research institutions of the continent (e.g. RAFISMER & COMHAFAT programmes in some of the countries)

Activity 5.8: Organization of the Sixth session of IOCAFRICA (Lagos, Nigeria, 2021).