



**INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)**

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Commission for the Western Pacific (WESTPAC-XI)**
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Item 5.4.1 of the Provisional Agenda

**WESTPAC'S CONTRIBUTION TO THE DEVELOPMENT AND IMPLEMENTATION OF
THE IOC CAPACITY DEVELOPMENT STRATEGY FOR 2015-2021**

In accordance with Terms of Reference of IOC Sub-Commission for the Western Pacific, the report is provided to facilitate the consideration by the Sub-Commission on the WESTPAC's Approach to Capacity Development and its Contribution to the Development and Implementation of the IOC Capacity Development Strategy for 2015-2021.

The Sub-Commission is invited to discuss and provide directives and advice on its future development, and further identify resources and national commitments to its implementation in the region.

Implementation strategy on the IOC Capacity Development Strategy (2015-2021)

1. IOC Capacity Development Strategy (2015-2021)

1. The IOC Assembly, at its 28th Session (2015) adopted the IOC Capacity Development Strategy (2015-2021) through the Resolution XXVIII-2.

2. The vision statement of IOC's Capacity Development Strategy is: *Through international cooperation, IOC assists its Member States to collectively achieve the IOC'S high-level objectives (HLOs¹), with particular attention to ensuring that all Member States have the capacity to meet them.*

3. The mission of IOC's Capacity Development Strategy is: *the IOC will undertake relevant actions to assist Member States with developing and sustaining the necessary capacity to undertake activities necessary to achieve the IOC vision at the national level as well as at the international cooperation level.*

4. In this regard, it is noted that IOC's interventions will be focused on the implementation process: results will be induced by use of outputs by the direct beneficiaries (Member States). IOC will contribute to a number of activities that will generate outputs which will contribute to expected results (outcomes).

5. Expected results (outcomes): the expected result of the IOC's capacity development interventions is for Member States to learn more about the nature and resources of the ocean and coastal areas and to apply that knowledge for the improvement of management, sustainable development, the protection of the marine environment, and decision-making processes.

6. Outputs: the activities and actions undertaken by the IOC within the framework of targeted capacity development will result in a number of outputs that, through their use by Member States should result in desired "changes" at the national and sub-regional level in areas such as decision-making, policy, governance, and knowledge.

7. A total of **six outputs** are identified. They all need to be addressed on a long-term and sustained basis.

- Human resources developed
- Access to physical infrastructure established or improved
- Global, regional and sub-regional mechanisms strengthened
- Development of ocean research policies in support of sustainable development objectives promoted
- Visibility and awareness increased
- Sustained (long-term) resource mobilization reinforced.

8. The identified outputs will be achieved through a number of targeted activities and related actions made possible by inputs such as funding, human resources and institutional resources. This can be summarized in the table below:

¹ The High-Level Objectives are:

- (i) Healthy ocean ecosystems and sustained ecosystem services
- (ii) Effective early warning systems and preparedness for tsunamis and other ocean-related hazards
- (iii) Increased resiliency to climate change and variability and enhanced safety, efficiency and effectiveness of all ocean-based activities through scientifically founded services, adaptation and mitigation strategies.
- (iv) Enhanced knowledge of emerging ocean science issues

Output	Activity	Action
1. Human resources developed	1.1 Academic (higher) education	1.1.1 Promote and assist with the establishment of consortia of higher education at the appropriate geographical scale
		1.1.2 Promote collaboration between UNESCO Chairs and IOC
	1.2 Continuous professional development	1.2.1 Promote and assist with the organization of training courses, workshops and “summer schools” relevant to the IOC mandate
		1.2.2 Establish, or collaborate with other organizations on an internship/fellowship programme (including on-board training)
		1.2.3 Establish and collaborate with other organisations on a visiting lecturer programme
		1.2.4 Promote and assist with the establishment of regional training (and research) centres relevant to the IOC mandate
		1.2.5 Promote the sharing of training materials
	1.3 Sharing of knowledge and expertise/community building	1.3.1 Establish a travel grant “fund”
		1.3.2 Establish or collaborate with other organizations on a mentoring programme
		1.3.3 Promote and assist with the development of IOC alumni networks
		1.3.4 Promote and support “young scientist” awards
	1.4 Gender balance	1.4.1 Promoting participation of women in ocean research
	2. Access to physical infrastructure established or improved	2.1 Facilitating access to infrastructure (facilities, instruments, vessels)
2.1.2 Promoting the development of, and expand access to, regional sustainable scientific infrastructure		
3. Global, regional and sub-regional mechanisms strengthened	3.1 Further strengthening and supporting secretariats of regional commissions	3.1.1 Improve staffing of secretariat of regional sub-commissions
	3.1.2 Reinforcing budgeting of regional sub-commissions	
	3.2 Enhance effective communication between regional sub-commission secretariats and global programmes as well as other communities of practice (incl. other organisations)	3.2.1 Establishing an effective coordination and communication mechanism between the secretariats of the regional sub-commissions and the global programmes
4. Development of ocean research policies in support of sustainable	4.1 Sharing of information on ocean research priorities	4.1.1 Compare and compile information on existing ocean research priorities among government and other organizations

Output	Activity	Action
development objectives promoted	4.2 Developing national marine science management procedures and national policies	4.2.1 Assist Member States with the development of marine science management procedures and national policies
5. Visibility and awareness increased	5.1 Public Information	5.1.1 Promote the development of public information (communication) departments in ocean research institutions
	5.2 Ocean Literacy	5.2.1 Foster development of an IOC ocean literacy programme as a community of practice to share experience within and across regions
6. Sustained (long-term) resource mobilization reinforced	6.1 In-kind opportunities	6.1.1 Fostering partnerships to increase in-kind support opportunities
	6.2 Financial support by Member States to IOC activities	6.2.1 Resource mobilisation from Member States, Institutional and Private Sector Partners

9. Meanwhile, the Strategy recognized that “*Regional Sub-Commissions and Regional Committees will play an essential role in planning, implementation and monitoring of the strategic plan. Given the needs for capacity development varying from one region to another, IOC regional sub-commissions and regional committees shall take an adaptive approach to capacity development for their respective regions while taking into account all activities and actions contained in this strategy*”.

2 WESTPAC’s contribution to the development of IOC Capacity Development Strategy

10. Capacity development is about transformations that empower individuals, leaders, organizations and societies. Drawing on long years of experience in capacity development in the region, WESTPAC consider that capacity, essential to the success of any development objectives, could be only more effective and sustained over the long term if people are best empowered to realize their full potential with a combination of capacity building tools that are sustainable – home-grown, long-term, and generated and managed collectively by those who stand to benefit.

11. Rooted in the most densely populated area with significant social and economic reliance on ocean and coast, the IOC Sub-Commission for the Western Pacific (WESTPAC) forms a strategic link between global objectives and national programs & actions. To strengthen IOC’s traditional mandate on capacity building, WESTPAC has been exploring various ways to seek the “best fit” approach to capacity development in the region, and sharing our lessons and experiences with other IOC programs.

12. Building on its long years of experience in capacity building, WESTPAC actively engaged in the development of IOC Capacity Building Strategy, and contributed greatly to this strategy by sharing its visions and practices. WESTPAC Capacity Development approach and activities were well documented in the IOC Capacity Building Strategy, which was summarized as below.

13. In considerations of regional characteristics and common interests of Member States, WESTPAC employs adaptive approaches to capacity development, with guiding principles to focus on national and regional needs, to foster North-South and South-South cooperation, and to link training to the attainment of research goals addressing critical challenges to sustainable development in the region. WESTPAC approaches to capacity development embody:

- Development of “**IOC Regional Network of Training and Research Centers on Marine Science**” through the establishment of IOC Regional Training and Research Centers (RTRCs) in national marine research institutes and/or universities, and

provision of regular trainings on the specialization focus of these Centers to young scientists mainly from developing nations within and outside the region;

- Conduct of a series of topic-specific hands-on trainings in Member States on a rotation basis²;
- “**Training Through Research**” through the engagement of early career scientists into WESTPAC research programmes;
- Establishment of “**WESTPAC Best Young Scientist Award**” and “**WESTPAC Young Scientist Travel Grant**” to nurture young science leaders and facilitate international exposure of young scientists.

3 Action taken since the adoption of the IOC CD strategy

14. The IOC Assembly, at its 28th Session (2015) adopted the Strategy through the Resolution XXVIII-2. The Resolution agrees that, by the 29th Session of the IOC Assembly, IOC Primary Subsidiary Bodies (global programmes and Regional Subsidiary Bodies) should take the following actions:

- (i) *develop programmatic and regionally relevant capacity development work plans based on this strategy and related needs assessments conducted in a consistent manner, building on ongoing activities and making use of existing training and education facilities;*
- (ii) *mobilize resources in order to reinforce the Secretariat staffing of the regional Sub-Commissions, other subsidiary bodies and global programmes;*
- (iii) *catalyze capacity development through global, regional, and national programme development, including projects prepared in consultation with Member States with a view to raise extra-budgetary resources; and*
- (iv) *enhance collaboration and communication between its global programmes and Regional Subsidiary Bodies, to contribute to (i) and (ii) above;*

15. Urges IOC Member States to:

- (i) *identify needs and new opportunities to participate in, and benefit from, reinforced partnerships through the IOC to achieve their capacity development goals in marine science, early warning systems, and ocean governance;*
- (ii) *mobilize the knowledge, personnel, infrastructural and financial resources to support IOC’s catalytic role in helping Member States achieve these goals; and*
- (iii) *raise the visibility of IOC’s unique niche in capacity development.*

16. Following up to the Resolution, an exercise was conducted to map the existing WESTPAC efforts into the strategic framework as below.

² Hands-on training and/or training on-board are involved together with professional lectures.

Output	Activity	Action	Relevant actions taken by WESTPAC	
1. Human resources developed	1.1 Academic (higher) education	1.1.1 Promote and assist with the establishment of consortia of higher education at the appropriate geographical scale	WESTPAC has been a strong supporter and advocate for consortia, both multilateral and bilateral, of higher education in the region	
		1.1.2 Promote collaboration between UNESCO Chairs and IOC	Never been informed of any UNESCO Chair relevant to IOC in the WESTPAC region.	
	1.2 Continuous professional development	1.2.1 Promote and assist with the organization of training courses, workshops and “summer schools” relevant to the IOC mandate		Based on the needs of its MS in the region, WESTPAC has been developing and organizing a series of trainings, workshops and “MOMSEI Summer School” on rotation basis in its MS; In addition, Regular Trainings on Ocean Dynamics and Climate, and Marine Biodiversity and Ecosystem Health have been provided at its established Regional Training and Research Centers (RTRC), respectively located in Qingdao China, and Jakarta, Indonesia.
			1.2.2 Establish, or collaborate with other organizations on an internship/fellowship programme (including on-board training)	WESTPAC provides internship opportunity to IOC MS in the WESTPAC region
			1.2.3 Establish and collaborate with other organisations on a visiting lecturer programme	Not a priority. Done occasionally, not fully established yet as a program
			1.2.4 Promote and assist with the establishment of regional training (and research) centres relevant to the IOC mandate	WESTPAC initiated in 2008 the IOC Regional Network of Training and Research Centers (RTRCs), with two RTRCs established, respectively on Ocean Dynamics and Climate, and Marine Biodiversity and Ecosystem Health. More RTRCs on other domains are under establishment in the WESTPAC region.
			1.2.5 Promote the sharing of training materials	Mainly through WESTPAC Website, host institutions’ website, and IOC website.
			1.3 Sharing of knowledge and expertise/community building	1.3.1 Establish a travel grant “fund”
	1.3.2 Establish or collaborate with other organizations on a mentoring programme	Collaborating with GOA-ON on a mentoring program on ocean acidification		
	1.3.3 Promote and assist with the development of IOC alumni networks	WESTPAC keeps track of its participants and engages them into relevant WESTPAC programs/activities.		
	1.3.4 Promote and support “young scientist” awards	Yes, WESTPAC established the “Best Young Scientist Award”		

Output	Activity	Action	Relevant actions taken by WESTPAC
			since 2011 in order to nurture science leaders and assist young scientists to further dedicate themselves to marine science, sustained observations and services.
	1.4 Gender balance	1.4.1 Promoting participation of women in ocean research	WESTPAC gives priority to women when selecting suitable participant with financial support
2. Access to physical infrastructure established or improved	2.1 Facilitating access to infrastructure (facilities, instruments, vessels)	2.1.1 Establishing and maintaining a register of infrastructure to facilitate access	Not a priority, as it is not that time-efficient and cost effective, given the understaffing situation.
		2.1.2 Promoting the development of, and expand access to, regional sustainable scientific infrastructure	Always. It is one of basis for WESTPAC to establish cooperation, and develop joint programs among institutions, countries in the region.
3. Global, regional and sub-regional mechanisms strengthened	3.1 Further strengthening and supporting secretariats of regional commissions	3.1.1 Improve staffing of secretariat of regional sub-commissions	A great impediment for a long time. This should be addressed by IOC Paris, as the sole technical staff is unlikely to address all demands at every level, including UNESCO, IOC Paris, MS in the region.
		3.1.2 Reinforcing budgeting of regional sub-commissions	n/a. This is to be addressed by IOC Paris.
	3.2 Enhance effective communication between regional sub-commission secretariats and global programmes as well as other communities of practice (incl. other organisations)	3.2.1 Establishing an effective coordination and communication mechanism between the secretariats of the regional sub-commissions and the global programmes	Where applicable, WESTPAC communicates with the relevant global programs mainly by sharing its activity information, providing progress report and attending the sessions of global programs. Besides, WESTPAC invites relevant global programs to join its regional activities. WESTPAC communicates its programs with other regional and global organizations, such as PICES, UNEP regional programs and WCRP/CLIVAR.
4. Development of ocean research policies in support of sustainable development objectives promoted	4.1 Sharing of information on ocean research priorities	4.1.1 Compare and compile information on existing ocean research priorities among government and other organizations	WESTPAC has been providing a universally recognized regional platform for MS to share their research priorities and develop joint research programs on a regular basis.
	4.2 Developing national marine science management procedures and national policies	4.2.1 Assist Member States with the development of marine science management procedures and national policies	WESTPAC has been providing a universally recognized regional platform for MS to share their research priorities and develop joint research programs on a regular basis.
5. Visibility and awareness increased	5.1 Public Information	5.1.1 Promote the development of public information (communication) departments in ocean research institutions	Mainly through the WESTPAC Website, relevant flyers and brochures etc.
	5.2 Ocean Literacy	5.2.1 Foster development of an IOC ocean literacy programme as a community of practice to share experience within and across regions	Not a priority at this moment, given limited human and financial resources

Output	Activity	Action	Relevant actions taken by WESTPAC
6. Sustained (long-term) resource mobilization reinforced	6.1 In-kind opportunities	6.1.1 Fostering partnerships to increase in-kind support opportunities	WESTPAC receives a considerable amount of in-kind support from its MS for its program implementation.
	6.2 Financial support by Member States to IOC activities	6.2.1 Resource mobilisation from Member States, Institutional and Private Sector Partners	In cash resources for program and the operation of the WESTPAC Secretariat remain stable. Further resource mobilization is being hampered due to its understaffed situation.

17. From the exercise, the gaps exist with regard to following actions: 2.1.1 Establishing and maintaining a register of infrastructure to facilitate access; 3.1.1 Improve staffing of secretariat of regional sub-commissions; 3.1.2 Reinforcing budgeting of regional sub-commissions; and 5.2.1 Foster development of an IOC ocean literacy programme as a community of practice to share experience within and across regions.

18. In terms of action 3.1.1 and 3.1.2, it can be foreseeable to some extent it will be unlikely to be achieved even for the biennium of 2018-2019. For the action 2.1.1 and 5.2.1, unless extra budgetary sources will be sought, WESTPAC capacity development efforts will focus on:

- Development of “**IOC Regional Network of Training and Research Centers on Marine Science**” through the establishment of IOC Regional Training and Research Centers (RTRCs) in national marine research institutes and/or universities, and provision of regular trainings on the specialization focus of these Centers to young scientists mainly from developing nations within and outside the region;
- Conduct of a series of topic-specific trainings in Member States on a rotation basis;
- “**Training Through Research**” through the engagement of early career scientists into WESTPAC research programmes;
- Establishment of “**WESTPAC Best Young Scientist Award**” and “**WESTPAC Young Scientist Travel Grant**” to nurture young science leaders and facilitate international exposure of young scientists; and
- **Identification of the needs for capacity development and transfer of technology** in support of the Sustainable Development Goals (SDGs) and conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ).

19. The Sub-Commission is invited to review current WESTPAC capacity development efforts, identify gaps, and make actionable suggestions on how to scale up present efforts towards the attainment of the outcomes of IOC Capacity Development Strategy.