



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

**EIGHTH INTERGOVERNMENTAL SESSION
OF THE IOC SUB-COMMISSION FOR THE WESTERN PACIFIC
(WESTPAC-VIII)**

Bali, Indonesia
10–13 May 2010

EXECUTIVE SUMMARY

In accordance with Rule of Procedure 48.3, WESTPAC, as a primary Subsidiary Body of IOC, is required to report to a Governing Body on its sessions.

The IOC Executive Council at its Forty-Third Session will be invited to consider this Executive Summary.

For more detailed information on this session, please refer to the Summary Report of the Eighth Intergovernmental Session of WESTPAC.

- 1 The Eighth Intergovernmental Session of the IOC Sub-Commission for the Western Pacific (WESTPAC) was held in the Sanur Paradise Plaza Hotel and Suites, Bali, Indonesia, from 10 to 13 May 2010 with its agenda given in Annex I. The session was organized by the IOC Regional Secretariat for WESTPAC (WESTPAC Secretariat), and hosted by the Ministry of Marine Affairs and Fisheries (MMAF) and the Indonesian Institute of Sciences (LIPI) of the Republic of Indonesia. Some 80 delegates and representatives from 11 IOC/WESTPAC Member States and 5 international and regional organizations and programmes attended the Session. The Kingdom of Cambodia also sent their delegation to the session for the first time since the establishment of WESTPAC in 1989.
- 2 At the opening ceremony, Ms. Wendy Watson-Wright, Executive Secretary of IOC and Assistant Director-General of UNESCO, H.E Dr Ir. Fadel Muhammad, Minister for Marine Affairs and Fisheries, Indonesia, Dr Zhanhai Zhang, Chairperson of IOC Sub-Commission for the Western Pacific, Dr Gellwynn Jusuf, Chairman of Agency for Marine and Fisheries Research, MMAF delivered their opening and welcome remarks.
- 3 Two regional commemorative events for IOC's 50th Anniversary were organized during the Session. In order to enhance the awareness of the importance of regional collaboration in ocean scientific advancement, one Cruises Launching Ceremony of Indonesian GOOS (INAGOOS) was conducted on the first day of the Session through a teleconference between

the meeting venue and four research vessels of Indonesia and US with participation of scientists on board from Australia, China and East Timor and Indonesia. To demonstrate the value of the IOC and its WESTPAC's contribution to improving the regional capacity on oceanography, another ceremony took place on the second day of the Session for the signing of Agreement between the Intergovernmental Oceanographic Commission of UNESCO and the First Institute of Oceanography, State Oceanic Administration of China regarding the Establishment of a Regional Training and Research Center on Ocean Dynamics and Climate within the Framework of "UNESCO/IOC Regional Network of Training and Research Centers on Oceanography in the Western Pacific".

- 4 Throughout the Session participants in the WESTPAC-VIII believed the past two years represented another milestone in the implementation of WESTPAC revitalization strategy which generated positive outcomes and impacts, due to the increased joint efforts of the Member States and WESTPAC Secretariat.

WESTPAC Revitalization: Outcomes, Impacts and Constraints

- 5 **The Sub-Commission considered** that WESTPAC now has a systematic framework and process for Member States to concert the efforts, through the development of regionally-specific country driven projects, in addressing their common issues in the study and management of the coasts and oceans, which was exemplified by the WESTPAC Strategy and Programme Structure (2008–2013) (Rec. SC-WESTPAC-VII.4). **The Sub-Commission stressed** the importance of strategically planning the future of WESTPAC and initiated the development of WESTPAC Regional Ocean Research Priority Plan (RORP) which aims to identify the most compelling regional issues in the key areas of interaction between the society and the ocean, present research priorities and serve as a blueprint for WESTPAC to address the identified issues. WESTPAC has also put in place advisory and implementing mechanisms to rectify the deficiencies of WESTPAC activities and ensure the timely response of WESTPAC to the marine-related emerging regional/international issues, such as the Advisory Group (Rec. SC-WESTPAC-VII.1) for project review and quality control, and the Working Groups for dealing with scientific focuses, marine-related societal concerns and other international emerging issues which largely require marine scientific inputs, together with guidelines for their establishment (Rec. SC-WESTPAC-VIII.3).

- 6 **The Sub-Commission noted with appreciation** that WESTPAC has taken a significant step forward from programme conceptualization to operation, and from project planning to implementation, which fully embodies South-South and South-North cooperation with country commitments and national resources, as reflected notably through the implementation of WESTPAC scientific research, the development and operation of regional ocean observing systems and capacity development activities in the form of field studies, joint cruises, buoy deployment, international workshops, training courses, and exchange of scholars/students.

- 7 Examples in the field of marine science are:

- Project on Response of Marine Hazards to Climate Change in the Western Pacific conducted its first joint cruise from June 15 to July 4, 2009, using Chinese Research Vessel *Xiang Yang Hong No.9*, with data sharing among all participating members.
- Project on Fluvial Sediments to the South China Sea carried out several field studies to Investigate source and transport of fluvial sediment discharge to the South China Sea over the geological past, including a seismic cruise during 4-9 October 2009, on the southern Sunda Shelf off the Malay Peninsula in the southern South China Sea.

- Project on Coastal Biodiversity and Management established their research network, developed posters and has been editing the regional status on Marine Non-indigenous Species in view of the increasing threat posed by Marine Invasive Species to the marine ecosystems and economy.
- Project on Harmful Algae Bloom and Remote Sensing have shifted their focus from academic research to the application of scientific knowledge in order to generate more social benefit to the general public, etc.

8 In ocean observations and service, regional components of GOOS have been further developed and become operational. **The Sub-Commission has been informed** on the efforts made by all the NEAR-GOOS participating countries in respect of amount and types of data transmitted in both real time and delayed modes, data exchange network developed, data products made and the related services provided and the amount of uses benefitted. The Sub-Commission expected that NEAR-GOOS, as the first regional GOOS of IOC, would move towards its goal as a basic integrated ocean observing and operational forecasting system in the NEAR-GOOS area worthy of further support. **The Sub-Commission highlighted** the substantive progress has been made in the development of SEAGOOS, notably on the development of two pilot projects: (i) Monsoon Onset Monitoring over Andaman Sea and its Social & Ecosystem Impacts (MOMSEI) and (ii) Ocean Forecast Demonstration, which intend to showcase the value of observation to conserving marine ecosystems and to the society. These GOOS related activities catalyzed national initiatives that are consistent with GOOS objectives, such as the Indonesian GOOS (INAGOOS) initiative. **The Sub-Commission was informed** that INAGOOS (Indonesian National GOOS) is open to cooperation with all the Member States in research activities. **The Sub-Commission accepted** INAGOOS as a component of WESTPAC activities in the field of ocean service.

9 In the field of capacity development, **the Sub-Commission noted with appreciation** that most on-going WESTPAC projects contain strong and effective training components, e.g., workshops, training courses, study tours. In addition to subject-specific trainings, **the Sub-Commission highly appreciated** the WESTPAC Secretariat for the progress made on the implementation of “UNESCO/IOC Regional Network of Training and Research Centres on Oceanography in the Western Pacific” which could be taken as a milestone in WESTPAC endeavour to capacity development in marine science, observations and services.

10 With the approval by IOC on the establishment of a Regional Training and Research Center on Ocean Dynamics and Climate in the First Institute of Oceanic Administration of China, the Regional Network has become operational, with a prospect of further participation of other concerned national oceanographic research and education institutions in the region. These centres will provide regular training opportunities, within their areas of specialization, on a free-of-charge basis, to the young scientists from the developing member states in the region.

11 Another important aspect of revitalization is the increased commitments from the Member States and resources made available by them for the development and implementation of WESTPAC activities. **The Sub-Commission expressed its appreciation** to China for its annual donation of US\$ 70,000 since 2009 and the provision of research vessel, ship time and equipments for WESTPAC projects, Japan for her regular contribution from the Japanese Funds-in-Trust, and Republic of Korea for its yearly contribution of US\$ 50,000 since 2008, and various other contributions in cash and in kind by the Member States, to WESTPAC, as well as Thailand for her expansion of office space, facilities and staff for WESTPAC Secretariat and the provision of research vessel and ship time in support of WESTPAC activities.

12 As shown in Programme and Budget May 2010–May 2012 adopted by the Sub-Commission, the required funding for the next intersessional period totals US\$ 3.60 million, including US\$ 0.370 million from IOC regular source (secured, including one P4 post) and US\$ 0.452 million from IOC extrabudgetary sources (to be raised in cash), and US\$ 2.778

million from national and other international sources (to be raised either in cash or in kind), thus each US dollar from IOC regular source leveraging 8.7 US dollars from extrabudgetary sources, either in cash or in kind, for WESTPAC.

13 It is encouraging that some delegations considered WESTPAC achievements and their beneficial effects to the countries and the region as convincing enough to their countries to elevate their level of participation from merely attending meetings to mobilizing scientists and other stakeholders, even providing their research facilities, to participate in the implementation of WESTPAC projects.

14 Despite the significant progress made, WESTPAC further development will be hampered by the shortage of staff in its secretariat. **The Sub-Commission expressed its concern** that the Head of WESTPAC Secretariat (Mr Wenxi Zhu), as a single professional handling IOC-related matters and innovative marine science projects in the Bangkok Cluster countries, with administrative and financial assistance of Ms Nachapa Saransuth, is seriously overloaded with rapid expansion of WESTPAC activities. **The Sub-Commission encouraged** the Member States to consider seconding technical staff and/or associate experts to WESTPAC Secretariat.

15 **The Sub-Commission recognized** the need for IOC to strengthen the role of Regional Subsidiary Bodies, such as WESTPAC, in its global programmes, including the improvement of communication with WESTPAC. Improving communication helps not only the better understanding by the Member States in the region of their obligation in the implementation of Commission's global initiatives and efforts, but also the orientation of national delegations to the UN and other important global forums regarding the lead role that IOC is to play in the concerned fields, for example, the role of IOC in the implementing mechanism for GRAME to be further developed by the UN which depends very much on the voices of national delegations.

Other Intersessional Activities

16 **The Sub-Commission noted with appreciation** that all six recommendations adopted by the Sub-Commission at its last session have been fully implemented with the following actions taken:

- WESTPAC Advisory Group has been established and conducted its work early before the Session to review the first draft of WESTPAC Regional Ocean Research Priority Plan (RORP) and the new regional project proposals received from Member States.
- With close communications with WESTPAC Secretariat, the Government of Republic of Korea decided to host the Eighth WESTPAC International Scientific Symposium in Pusan, March 2011.
- To implement UNESCO/IOC Regional Network of Training and Research Centers in the Western Pacific, WESTPAC Secretariat has facilitated an evaluation by six international experts within and outside the region on the proposal from the First Institute of Oceanography, State Oceanic Administration of China, for establishing a Regional Training and Research Center on Ocean Dynamics and Climate. With the positive conclusions generated from the evaluation, an Agreement on the establishment of this center is ready for signature by IOC and the First Institute of Oceanography at the Session.
- Ten new project proposals were submitted to WESTPAC Secretariat from China, the Republic of Korea, Malaysia, Indonesia and Vietnam, in accordance with WESTPAC Strategy and Programme Structure (2008–2013) and forwarded to WESTPAC Advisory Group for review.

- In the implementation of WESTPAC Programme and Budget (2008–2010), most WESTPAC projects/activities have been progressing well, despite the limited regular budget from IOC, with active participation of Member States, their growing contribution and the increased extra-budgetary support.
- With the convocation of the Session, WESTPAC sessions' cycle has changed from once every three years to two years, thus falling in line with the IOC planning cycle.

17 WESTPAC Advisory Group reviewed the following on-going projects and congratulated Member States for the tremendous project achievements:

- Harmful Algal Bloom
- Ocean Remote Sensing
- Response of Marine Hazards to Climate Change
- Fluvial Sediments to the South China Sea
- Marine and Coastal Biodiversity and its Management
- Coral Reef under Climate and Anthropogenic Perturbations
- North East Asian Regional GOOS
- South East Asian Regional GOOS
- Marine Hazards Forecasting and Mitigation
- International Bathymetric Chart of the Western Pacific
- Ocean Data & Information Network for the Western Pacific
- UNESCO/IOC Regional Network of Training and Research Centers on Oceanography
- Enhancing the Regional Capability on Oil Spill Response and Restoration of Marine Ecosystems
- WESTPAC E-Bulletin

18 With respect to the regional contributions to the IOC's 50th Anniversary, WESTPAC Secretariat took an immediate step to implement the IOC Resolution EC-XL1.2 adopted at its 41st session, 24 June–1 July 2008, in designing a template and distributed it to all Member States of the Sub-Commission, for their submission of information on the national commemorative events. The inputs received have been collated in Document IOC/SC-WESTPAC-VIII/8. Apart from the commemorative activities at national level, the Sub-Commission has planned to celebrate the event through a variety of activities, such as joint cruises, training courses, summer schools, international workshops/symposia and production of advocacy materials. One Cruises Launching Ceremony for INAGOOS and one Signing Ceremony regarding the Establishment of a Regional Training and Research Center on Ocean Dynamics and Climate were planned and conducted in the Session.

19 **The Sub-Commission noted with appreciation** the efforts made by Member States in organizing various commemorative activities for the 50th Anniversary of IOC, and **encouraged** Member States to further disseminate this information as widely as possible in order to enhance awareness of the importance of collaboration and involvement in ocean science advancement at all levels of society.

Workplan and Budget May 2010–2012

20 With full recognition of the recommendations made by the WESTPAC Advisory Group, **the Sub-Commission decided** that:

- All the on-going projects be continued and the Sub-Commission officers and WESTPAC Secretariat assist in any way possible for development of these projects.
- The Project Leader on “Marine Hazards Forecasting and Mitigation in the Western Pacific” submit a project progress report on the intersessional activities no later than one month after the Session.
- All projects review the characters of IOC as an intergovernmental body and seek ways to fulfill them in their project implementation.
- All project leaders consider developing and strengthening interaction and collaboration among projects.

21 **The Sub-Commission also adopted** the following new WESTPAC projects:

- 1) Ocean Forecast Demonstration System to: (a) enhance understanding of oceanographic processes through the development of an ocean forecasting system and (b) facilitate the establishment of ocean numerical modelling groups and improve the numerical modelling capacity.
- 2) DNA Taxonomy and Recruitment Monitoring of the Coral Reef Marine Organisms to investigate the extent of marine biodiversity and its dynamics with a genetic tool called DNA barcoding.
- 3) Ensuring Seafood Safety from Toxic Marine Organisms to prevent poisoning caused by seafood containing natural biotoxins through the identification of these biotoxins and dissemination of scientific information to the general public.

22 **The Sub-Commission also adopted** the following:

- The Guidelines for the Establishment of WESTPAC Working Groups (Document IOC/SC-WESTPAC-VIII/13) as amended.
- The establishment of two working groups respectively on Asian Dust and its Impact on Ocean Ecosystem in the Western Pacific (WESTPAC-ADOES), and Regular Process for Global Reporting and Assessment of the State of the Marine Environment (GRAMME), in accordance with the adopted Guidelines (Rec. SC-WESTPAC-VIII.3).
- WESTPAC Work Programme and Budget for May 2010-May 2012 (Rec. SC-WESTPAC-VIII.4), covering all the approved on-going and new WESTPAC projects, as well as newly established WESTPAC Working Groups with an estimated budget of totaling US\$ 3.601 million, including US\$ 0.370 million from IOC regular budget (including one P4 post) and US\$ 3.231 million from extrabudgetary sources, either in cash or in kind.

23 Expressing its appreciation for the contributions made by the Member States for the celebration of the IOC's 50th anniversary, **the Sub-Commission encouraged** all the Member States to further disseminate information on the commemorative activities as broadly as

possible, and **instructed** WESTPAC Secretariat to provide any assistance in coordinating some of the national celebration activities in the region if requested by the concerned countries.

24 **The Sub-Commission noted with the satisfaction** the approval by IOC on the establishment of a Regional Training and Research Center on Ocean Dynamics and Climate; **invited** Member States to encourage their respective national oceanographic institutes and universities to actively participate in the Regional Network; and **requested** the Executive Secretary of IOC to take appropriate actions to promote this regional capacity building activity (Rec. SC-WESTPAC-VIII.2).

25 **The Sub-Commission re-elected**, by acclamation, Dr Zhang Zhanhai from China, Dr Yasuwo Fukuyo from Japan and Dr Nor Aieni Binti Hj Mokhtar from Malaysia respectively as Chairperson, the First Vice- Chairperson and the Second Vice-Chairperson.

26 **The Sub-Commission appreciated** the kind offer of the Government of Republic of Korea, and decided that

- The Eighth WESTPAC International Scientific Symposium be organized in Pusan, Republic of Korea, March 2011 (Rec. SC-WESTPAC-VIII.1).
- The Ninth Intergovernmental Session of the IOC Sub-Commission for the Western Pacific be convened in the second quarter of 2012, subject to the final endorsement of the relevant authorities (Rec. SC-WESTPAC-VIII.5).

27 With regard to a statement made by the Delegation of Indonesia concerning the transfer of IOC Headquarters, **the Sub-Commission reached an agreement** that this matter be considered in other bilateral and multilateral platforms, bearing in mind the opinions expressed by the Delegation of Indonesia.

ANNEX I

AGENDA

1. OPENING

- 1.1 OPENING REMARKS
- 1.2 CRUISES LAUNCHING CEREMONY FOR INAGOOS

2. ADMINISTRATION

- 2.1 ADOPTION OF THE AGENDA
- 2.2 DESIGNATION OF RAPPORTEUR FOR THE SESSION
- 2.3 CONDUCT OF THE SESSION

3. REPORT ON INTERSESSIONAL ACTIVITIES

- 3.1 REPORT ON INTERSESSIONAL ACTIVITIES
 - 3.1.1 Statement of the Chairperson
 - 3.1.2 Report by the Secretariat on Intersessional Activities and Budget Overview
 - 3.1.3 Operation of IOC Regional Secretariat for WESTPAC
- 3.2 RECENT DEVELOPMENTS WITHIN IOC, UNESCO RELEVANT TO WESTPAC

4. POLICY ISSUES

- 4.1 CONTRIBUTION OF SUB-COMMISSION TO THE 50TH ANNIVERSARY OF IOC
- 4.2 WESTPAC OCEAN RESEARCH PRIORITY PLAN
- 4.3 PROGRESS ON THE PREPARATIONS FOR THE EIGHTH WESTPAC INTERNATIONAL SYMPOSIUM IN 2011

5. REVIEW AND EVALUATION OF REGIONAL PROGRAMMES AND PROJECTS FOR MAY 2008 – MAY 2010

- 5.1 MARINE SCIENCE AND APPLICATIONS
 - Harmful Algal Bloom
 - Ocean Remote Sensing
 - Response of Marine Hazards to Climate Change
 - Fluvial Sediments to the South China Sea
 - Marine and Coastal Biodiversity and its Management
 - Coral Reef under Climate and Anthropogenic Perturbations
- 5.2 OCEAN OBSERVATIONS AND SERVICES
 - North East Asian Regional-GOOS (NEAR-GOOS)
 - South East Asian Regional-GOOS (SEAGOOS)
 - Indonesian GOOS (INAGOOS)
 - Marine Hazards Forecasting and Mitigation in the Western Pacific
 - International Bathymetric Chart of the Western Pacific (IBCWP)
 - Ocean Data & Information Network for the Western Pacific (ODINWESTPAC)

- 5.3 CAPACITY BUILDING AND PUBLIC AWARENESS
 - UNESCO/IOC Regional Network of Training and Research Centres on Oceanography in the Western Pacific
 - Enhancing the Capability on Oil Spill Response and the Restoration of Marine Ecosystems
 - E-bulletin
6. REVIEW AND APPROVAL OF NEW PROJECT PROPOSALS
7. GUIDELINE FOR THE ESTABLISHMENT OF WESTPAC WORKING GROUPS
8. REVIEW AND ADOPTION OF PROPOSED WESTPAC WORKING GROUPS AND THEIR TERMS OF REFERENCE
9. COOPERATION WITH OTHER ORGANIZATIONS
10. WESTPAC WORKPLAN AND BUDGET FOR MAY 2010–MAY 2012
11. OTHER MATTERS
 - 11.1 EXPO 2012 YEOSU, REPUBLIC OF KOREA
 - 11.2 CURRENT STATUS ON INAGOOS
12. ELECTIONS
13. DATE AND PLACE OF THE NEXT SESSION
14. ADOPTION OF SUMMARY REPORT AND RECOMMENDATIONS
15. CLOSURE

ANNEX II

ADOPTED RECOMMENDATIONS

- | | |
|----------------------------------|------------------------------------------------------------------------------|
| Recommendation SC-WESTPAC-VIII.1 | WESTPAC INTERNATIONAL SCIENTIFIC SYMPOSIUM |
| Recommendation SC-WESTPAC-VIII.2 | UNESCO/IOC REGIONAL NETWORK OF TRAINING AND RESEARCH CENTERS ON OCEANOGRAPHY |
| Recommendation SC-WESTPAC-VIII.3 | WESTPAC WORKING GROUPS |
| Recommendation SC-WESTPAC-VIII.4 | WESTPAC PROGRAMME AND BUDGET FOR MAY 2010- MAY 2012 |
| Recommendation SC-WESTPAC-VIII.5 | DATE AND PLACE OF THE NEXT SESSION |

Recommendation SC-WESTPAC-VIII.1

WESTPAC INTERNATIONAL SCIENTIFIC SYMPOSIUM

The IOC Sub-Commission for the Western Pacific,

Recalling the decision of its First Session that a major multi-disciplinary symposium should become a principal intersessional activity of the Sub-Commission,

Further recalling that WESTPAC International Scientific Symposium is the only scientific series to enhance exchange of marine scientific knowledge in the region,

Having reviewed the outputs and results of the previous symposia, particularly the Seventh WESTPAC International Scientific Symposium on the Natural Hazards and Changing Marine Environment in the Western Pacific, held in Kota Kinabalu, Sabah, Malaysia, 21–25 May 2008,

Expressing its great appreciation to the Government of Malaysia, through its National Oceanography Directorate, Ministry of Science, Technology and Innovation (MOSTI) for having hosted the Symposium,

Having formulated WESTPAC Programme and Budget for May 2010–May 2012,

Bearing in mind the need for presentation and exchange of scientific results in an interdisciplinary forum,

Appreciates the generous offer of the Government of Republic of Korea to host the next Symposium;

Decides that the Eighth WESTPAC International Scientific Symposium be organized in March 2011, Pusan, Republic of Korea;

Recommends that pertinent regional and international organizations be invited to support and participate in the Symposium;

Encourages all Member States for active participation and contribution to ensure the success of the Symposium;

Decides to establish an international scientific steering committee to provide guidance in the formulation of the Symposium Programme, including the scope, contents and structure, under the chairpersonship of the Second Vice-chairperson of the Sub-Commission.

Recommendation SC-WESTPAC-VIII.2

**UNESCO/IOC REGIONAL NETWORK OF
TRAINING AND RESEARCH CENTERS ON OCEANOGRAPHY**

The IOC Sub-Commission for the Western Pacific,

Recognizing the urgent need of Member States to provide high quality training in specialized fields of oceanography in the WESTPAC region,

Bearing in mind the IOC Principles and Strategy for Capacity Building adopted at the Twenty-third Session of its Assembly in 2005,

Recalling that the initiative of “UNESCO/IOC Regional Network of Training and Research Centers on Oceanography”, together with corresponding Guideline and Procedure was adopted by the Sub-Commission at its Seventh Intergovernmental Session, 26–29 May 2008 and subsequently endorsed by the IOC at the Forty-first Session of its Executive Council, 24 June–1 July 2008,

Noting that the regional network will be formed through the establishment of regional training and research centres within the national oceanographic Institutes and universities which are willing to provide regular training and research opportunities to the trainees from all WESTPAC Member States on a free-of-charge basis,

Appreciates the First Institute of Oceanography, State Oceanic Administration of China for the submission of a proposal on the establishment of a Regional Training and Research Center on Ocean Dynamics and Climate;

Notes with the satisfaction the approval by IOC has been made on the establishment of the Center;

Encourages Member States to take active part in the activities planned for the Center once it becomes operational;

Invites Member States to encourage their respective national oceanographic institutes and universities to actively participate in the Regional Network;

Requests the Executive Secretary of IOC to take necessary actions to further promote this regional capacity building activity.

Recommendation SC-WESTPAC-VIII.3

WESTPAC WORKING GROUPS

The IOC Sub-Commission for the Western Pacific,

Recognizing that the Sub-Commission has been instrumental in fostering regional cooperation through the development, coordination and implementation of the international/regional programmes on marine scientific research, observations and services and capacity building in the region,

Noting with appreciation the substantive progress made to revitalize the Sub-Commission by examining and correcting the present deficiencies, improving communications and interactions and initiating regionally-specific, country driven programmes in alignment with IOC High Level Objectives,

Further recognizing the need from Member States to establish a mechanism for attracting the leading scientists to deliberate on focused scientific topics, marine-related societal concerns and other international emerging issues,

Decides to establish WESTPAC Working Groups as the mechanism to deal with the above issues, with the Guidelines for the Establishment of WESTPAC Working Groups annexed to the Recommendation;

Requests Member States to widely disseminate this information and encourage their scientists to take part in this initiative.

Annex to Recommendation SC-WESTPAC-VIII.3

GUIDELINES FOR THE ESTABLISHMENT OF WESTPAC WORKING GROUPS

1. To further shape itself as one unique regional platform for sharing marine scientific knowledge and advancing marine scientific research in order to assist Member States in the study, protection and management of their coasts and oceans, WESTPAC would form, every two years, new working groups with life time of four years or less, aiming to attract leading scientists in the region to deliberate on specifically focused scientific topics, marine-related societal concerns and other international emerging issues which largely require marine scientific inputs. The groups are expected to hold up to one meeting per year over their life time to fulfil their terms of reference and develop a publication for the primary scientific literature, or a project proposal together with a detailed implementation plan, or a concrete action plan to be carried out within the framework of WESTPAC.

2. WESTPAC considers the proposals for new working groups every two years at its session, but at most three new groups can be funded after being adopted at each session, subject to WESTPAC's extra budgetary situation. The proposals shall be made by individual scientists and submitted, through his/her national focal point(s) of IOC, to the WESTPAC Secretariat at least six months prior to each WESTPAC session. Each proposal should contain the background for the focused topic and rationale for the establishment of WESTPAC working group, Terms of Reference for the group, and recommended members in the group, as well as expected outcomes from this working group.

Background

3. The proposal should provide a clear background on: (i) why the proposed topic is important to the society?; (ii) why the working group need to be established within WESTPAC framework and how the work of the proposed working group will contribute to the IOC and its WESTPAC's High Level Objectives and Strategy?; (iii) what preliminary scientific work has been done at global/regional level, and the relevance and link of the working group with those global/regional programmes and activities.

Terms of Reference

4. A set of terms of reference should be proposed to specify the main responsibilities of the working group. The terms of reference should be achievable within a four-year even less period, normally using a couple of meetings. It is possible that working groups could plan other activities than WESTPAC-sponsored meetings if additional funding could be sought from other sources. Among others, working group must provide written reports to WESTPAC each year, particularly upon the request of WESTPAC Secretariat in advance of WESTPAC sessions for evaluation by the WESTPAC on whether it merit continuation.

Working Group Members

5. Normally the proponent of working group should be the chair of the working group if it is approved and established. The proposed members of the working group should be listed and a few key words on their expertise should be provided to ensure the proposed Terms of Reference could be met. The working group shall consist of no more than 10 full members and other associate members, taking into full consideration of geographic representation and expertise needed. The meetings of the working group shall be open to all member states of

WESTPAC and self-funded scientists shall be welcomed as associate members. Due to budget restriction, WESTPAC is only able to provide USD 8,000-10,000 per meeting to support the travel of full members. To minimize the expenditure, working group is encouraged to arrange their meetings in conjunction with other meetings to share the cost, and the members should try to use alternative sources of funding for some or all of their travel if at all possible.

Expected Outcomes/Product

6. The proposal should specify the outcomes expected from the working group's activities. For each product, information should be given about what form it will take, the timeline for completion. All written products and webpages of WESTPAC Working Groups should acknowledge not only the sponsorship of WESTPAC, but also financial support from other sources that provide funding for this activity.

Recommendation SC-WESTPAC-VIII.4

WESTPAC PROGRAMME AND BUDGET FOR MAY 2010–MAY 2012

The IOC Sub-Commission for the Western Pacific,

Noting the reports of the Technical Secretary for IOC Sub-Commission for the Western Pacific on Intersessional activities and the WESTPAC Programme and Budget, contained in Documents IOC/SC-WESTPAC-VIII/6, 7 and 15,

Further noting the presentation of the IOC Programme and Budget for 2010–2011, through the IOC Resolution XXV-14,

Also noting the Recommendation SC-WESTPAC-VII.4 in 2008 on WESTPAC Strategy and Program Structure (2008–2013) which, among others, presents the strategic priorities and structures of the programmes of WESTPAC in the context of IOC High-Level Objectives, and Medium-term Strategy (2008–2013),

Acknowledging the importance of the IOC Regional Secretariat for WESTPAC for the success of the programme implementation,

Expressing its appreciation to the Royal Thai Government's continuing support for the WESTPAC Secretariat,

Decides that the WESTPAC Programme and Budget for May 2010–May 2012 shall be aligned with the High-Level Objectives of the WESTPAC Strategy and the priority areas detailed within the Strategy;

Adopts the Draft WESTPAC Programme and Budget for May 2010–May 2012 given in the Annex to this Recommendation;

Urges Member States:

- (i) To support WESTPAC programmes which are considered at the Executive Council and Assembly of IOC,
- (ii) To participate in the implementation of the proposed Programme, continue and increase their support to WESTPAC and its Secretariat through direct and in-kind contributions,

Requests the IOC and other organizations co-operating with the Sub-Commission to allocate necessary resources and assist in obtaining extrabudgetary funds from governmental and donor agencies.

Instructs WESTPAC Secretariat to communicate with Member States on the results of the Forty-third Session of IOC Executive Council, together with an analysis of implications for WESTPAC Programmes.

PROGRAMME AND BUDGET FOR MAY 2010–MAY 2012

Project/Programme	Activities	Objectives	Expected outputs	Date and place	Funding Required		Remark
					IOC (Regular and Extrabudget)	Other sources (national or international)	
POLICY AND COORDINATION							
Regional Ocean Research Priority Plan	Development Workshops on Regional Ocean Research Priority Plan	To identify the most compelling issues in the key areas of interaction between the ocean and society and provide a framework for the marine research and observations in the future	Regional Ocean Research Priority Plan	October 2010 March 2011 March 2012	USD 18K	/	
8th WESTPAC International Scientific Symposium	1. International Scientific Steering Committee meeting	Discuss and finalize the detailed program for the 8 th WESTPAC Symposium	Symposium Programme	July 2010	USD 8K	/	
	2. organization for the 8th Symposium	Improve governance and promote regional cooperation through the advanced scientific knowledge sharing on the current status of Western Pacific	Proceedings And /or new proposals for WESTPAC	21-25 March 2011, Pusan, Rep. of Korea	USD 15K (from IOC Regular budget)	USD 150K	
Operation of WESTPAC Secretariat	Development, coordination and implementation of WESTPAC activities; Raising fund and provide secretariat service	Ensure the full operation of the Sub-Commission, and implementation of workplan	New activities developed, and workplan implemented, quality service provided	May 2010-May 2010	USD 355K (from IOC Regular budget)	USD 30K (DMCR)	
WESTPAC Working Group	1. Asian Dust and its Impact on Ocean Ecosystem in the Western Pacific (WESTPAC-ADOES)	To focus on impacts of Asian Dust on Biogeochemistry and Productivity in Marine Ecosystem and Transport Path of Asian Dust and its Deposition Flux to the Western Pacific	Publications and improved scientific and implement plan of SOLAS	Late 2010 Late 2011	USD 16K	/	
	2. Establishment of WESTPAC Global Reporting and Assessment of the State of the Marine Environment (GRAMÉ)	To promote substantially implementation of GRAMÉ and improve capacity building of member states in WESTPAC region	1. WESTPAC regional GRAMÉ Strategy 2010-2015 2. Series of reports on the "Progress of GRAMÉ and its achievements"	Late 2010 Late 2011	USD 16K	/	
MARINE SCIENCE AND APPLICATIONS							
Harmful Algae Bloom (WESTPAC-HAB)	1. WESTPAC-HAB strategic meeting	review current status of HAB occurrence and HAB science in the region, and identify the priority activities for WESTPAC-HAB	Status of HAB research in the region and list of priority activities of WESTPAC-HAB	August 2010	USD 3K	USD 20K (JSPS)	
	2. Development of	Analyze scientific information on HAB and	Work plan of outreach	September 2010	USD 7K	USD 10K	

Project/Programme	Activities	Objectives	Expected outputs	Date and place	Funding Required		Remark
					IOC (Regular and Extrabudget)	Other sources (national or international)	
	WESTPAC-HAB outreach activities	develop awareness-raising materials for the general public	activities			(JSPS)	
	3. Publication of these awareness-raising materials in English and indigenous language	raise awareness of general public on the HAB, its impact and countermeasures	Publication of awareness-raising materials	March 2012	USD 5K	USD 10K (Univ.of Tokyo)	
Ensuring Seafood Safety from Toxic Marine Organisms	1. The First Project meeting	<ul style="list-style-type: none"> - To discuss and finalize project activity plan. - To collect information from each country members on toxic organisms and poisoning episodes. - To decide contents and methods to publish 	Project implementation plan	September or November 2010 at Institute of Oceanography Vietnam	USD 15K	/	
	2. Participation to a workshop on HAB	To discuss on potential linkage between ongoing HAB and present projects		TBD	/	TBD	
	3. The Second Project meeting	<ol style="list-style-type: none"> 1. To discuss and confirm progress and add necessary modification of the project, 2. To edit structure of report and pamphlets 	<ol style="list-style-type: none"> 1. Project progress report 2. Report on structure and content of pamphlet 	TBD in conjunction with the WESTPAC Symposium	USD 10K	/	
	4. Publication of a pamphlet in English	To get awareness on natural biotoxins and toxic marine organisms	200 hard copies and 1000 CD/DVD	September, 2011	USD 5K	/	
	5. Open webpage on the project achievement in WESTPAC website	To get awareness on natural biotoxins and toxic marine organisms	Webpage	February 2012	USD 5K	/	
Remote Sensing for Integrated Coastal Area Management (WESTPAC-ORSP)	1. Review the remote sensing methods for coastal habitats and aquaculture facilities	To have a current status of mapping methods of coastal habitats, and identify common method to be used in some identified areas	Collection of information about mapping methods	December 2010	USD 10K	USD 5K (Univ.of Tokyo)	
	2. Analyze initial mapping results of coastal habitat and aquaculture facilities	Analyze the results generated from Remote Sensing and overcome problems encountered in mapping coastal habitats	Elaboration of mapping methods are expected	November 2011	USD 10K	USD 5K (Univ.of Tokyo)	
	3. Dissemination of mapping products generated from remote sensing on coastal habitat	Dissemination of research results for local people and policy makers	Remote Sensing Products on coastal habitat	May 2012	USD 10K	USD 5K (Univ.of Tokyo)	

Project/Programme	Activities	Objectives	Expected outputs	Date and place	Funding Required		Remark
					IOC (Regular and Extrabudget)	Other sources (national or international)	
Response of Marine Hazards to Climate Change (WESTPAC-Rose))	1. Second cruise	To measure the ocean condition and air-sea fluxes related with marine hazards	Improve understanding of marine hazards in the Southern SCS	July-August 2010	/	USD 650K (FIO)	
	2. Third workshop	To change ideas on the evolution of marine hazards		November 2010	USD 10K	USD 5K (FIO)	
	3. Third cruise	To measure the ocean condition and air-sea fluxes related with marine hazards	Improve understanding of marine hazards in the Southern SCS and Northwest Pacific	June-July 2011	/	USD 850K (FIO)	
	4. Forth workshop	To change ideas on the evolution of marine hazards		November 2011	USD 10K	USD 5K (FIO)	
Fluvial Sediments to the South China Sea (WESTPAC-FluSed)	1. Fieldwork Rivers in Thailand	Collect surface sediments along the Chaophraya River	Identification of mineral and elemental contents of Chaophraya River sediments	October 2010	/	USD 10K (Tongji Univ.)	
	2. 3rd workshop hosted Philippines University, Manila	Exchange and communicate project approaches and scientific results, and discuss on further cooperation	Proceedings of oral and poster presentations, international publications	November 2010	USD 20K	USD 10K (Univ. of Philippines) USD 10K (Tongji Univ.)	
	3. Research cruise Sunda Shelf, Southern South China Sea	Organize a CHIRP seismic cruise on the Sunda Shelf to collect shallow stratigraphy profiles of bottom sediments	Tracking the paleo-channel distribution during the last glacial time and understanding the sediment transport	May 2011	/	USD 30K (Tongji Univ.) USD 30K (Univ. Malaysia Terengganu)	
	4. 4th workshop hosted by National University of Singapore	Exchange and communicate project approaches and scientific results, and discuss on further cooperation	Proceedings of oral and poster presentations, international publications	November 2011	USD 20K	USD 10K (National Univ. of Singapore) USD 10K (Tongji Univ.)	
	5. Fieldwork Rivers in Philippines	Collect surface sediments along Palawan rivers	Identification of mineral and elemental contents of Palawan sediments	March 2012	/	USD 10K (Tongji University)	

Project/Programme	Activities	Objectives	Expected outputs	Date and place	Funding Required		Remark
					IOC (Regular and Extrabudget)	Other sources (national or international)	
Marine and Coastal Biodiversity and its Management (WESTPAC-MCBM)	1. Rapid Assessment Workshop on Marine Non-Indigenous Species in the Western Pacific Region	<ol style="list-style-type: none"> gather historical and current occurrence data on marine native, introduced, and cryptogenic species in each country. share experiences and knowledge related to marine non-indigenous species issues and taxonomic identification in certain groups establish research collaboration among scientists in the Western Pacific region. 	<ol style="list-style-type: none"> List of marine non-indigenous species in the region. Increased knowledge of taxonomic identification in certain groups of marine organisms 	November 2010	USD 20K	USD 2K (DMCR and Chula Univ.)	
	2. Updating current status of marine non-indigenous species and publish posters and pamphlets related to marine biodiversity and effect of marine non-indigenous species	<ol style="list-style-type: none"> update the list of marine non-indigenous species in the WESTPAC region. raise public awareness on the importance of marine biodiversity and impact of marine non-indigenous species on marine biodiversity. 	<ol style="list-style-type: none"> Updated list of marine non-indigenous species in the region. Publishing of posters and pamphlets related to marine biodiversity and marine non-indigenous species. 	2011	USD 12K	USD 2K (DMCR and Chula)	
Coral Reef under Climate and Anthropogenic Perturbations (WESTPAC-CorReCAP)	1. First summer school on the "Impact of Sedimentary Dynamics and Biogeochemistry on Coral Reefs"	<ol style="list-style-type: none"> build capacity on the impacts of sediment on coral reefs for the WESTPAC member states; Establish an international research network in the field of sedimentary dynamics on coral reefs; Identify cooperative activities concerning impacts of sediment on coral reefs in the WESTPAC region; 	Teaching materials on sedimentary dynamics on coral reefs	June 2010	USD 13K	USD 6K (ECNU) USD 4K (Ramkham haeng Univ.)	
	2. Second workshop of IOC/WESTPAC-CorReCAP Project	<ol style="list-style-type: none"> discussion on the special issue of publication on coral reefs in the WESTPAC region, preparation of one synthesis document to assess the actual situation of coral reefs and to identify the hot topics of research in the region. 	Workshop proceeding Synthesis report	20-24 June 2010	USD 6K	USD 6K (ECNU)	
DNA taxonomy and recruitment monitoring of the coral reef marine organisms	1. First Planning Meeting	<ol style="list-style-type: none"> discussion on the project activities and planning the implementation procedures exchange of information on marine biodiversity in each participating country 	Document on project activities and the implementation plan	February 2011 Rep. Of Korea (KORDI)	USD 10K		

Project/Programme	Activities	Objectives	Expected outputs	Date and place	Funding Required		Remark
					IOC (Regular and Extrabudget)	Other sources (national or international)	
	2. Second Planning Meeting	1. selection of the organism groups to investigate and the project target sites 2. establishment of the methods for investigation	List of the organisms for investigation and the study sites; Protocol for the study	April 2011 Indonesia	USD 10K		
	3. Field Sampling	Sampling the organisms for DNA taxonomy	List of organisms sampled	May - July 2011	/	USD 120K (Rep. of Korea)	
	4. Building inventory	Cataloguing the diversity of coral reef organisms reported in each country	Catalogue of coral reef organisms	August 2011 - January 2012	/	USD 90K (Rep. of Korea)	
	5. DNA barcoding	Analysis of DNA barcodes for the sampled organisms	DNA barcode of coral reef organisms	November 2011 - March 2012	/	USD 40K (Rep. of Korea)	
	6. DNA barcode chip making	Designing the species-specific primers and probes for use of DNA barcode chip	List of species-specific primers and probes	March 2012 - April 2012	/	USD 30K (Rep. of Korea)	
	7. DNA barcode workshop	1. Exchange of information on DNA taxonomy of studied organisms 2. Training the use of DNA barcode chip	Report on DNA taxonomy for some selected organisms	May. 2012 Philippines or other places	USD 10K		
	8. Field sampling on Recruitment Monitoring	Sampling the larvae and fries for recruitment monitoring	List of samples, locations, and time	May - September 2012	/	USD 90K (Rep. of Korea)	
	9. Recruitment analysis	Identification of species for the sampled larvae and fries using DNA barcode chip	Species list for the larvae and fries	October 2012	/	USD 30K (Rep. of Korea)	
	10. Recruitment Monitoring Workshop	1. Exchange of information on recruitment monitoring 2. Discussion on the monitoring protocol	Report on recruitment of coral reef organisms	November 2012 Malaysia or other places	USD 10K		
	11. Final Meeting and Reporting	1. Summary of the project products: DNA taxonomy and recruitment monitoring 2. Planning the next stage activities	Report on the project outputs; Plan on the second stage	December 2012 Rep. Of Korea or other places	USD 10K		
	OCEAN OBSERVATIONS AND SERVICES						
North East Asian Regional-GOOS (NEAR-GOOS)	1. Workshop on new NEAR-GOOS products	improve oceanographic data products and services in the region	Identified new products to be developed;	March 2011, Busan, Korea	/	/	
	2. NEAR-GOOS pilot project on developing forecasting and reanalysis systems – planning meeting	develop operational forecasting products in NEARGOOS' area	Development plan for NEAR-GOOS forecasting system	March 2011, Busan, Korea	/	/	

Project/Programme					Funding Required		Remark
	Activities	Objectives	Expected outputs	Date and place	IOC (Regular and Extrabudget)	Other sources (national or international)	
	3. Training course on remote sensing data analysis (jointly with NOWPAP and PICES)	Enhance the utilization of remote sensing techniques for monitoring and assessment of marine and coastal environment of the IOC/WESTPAC member countries	capacity building	October 2011, Vladivostok, Russia	USD 10K	USD 20K	
	4. Status Report on the Northeast Asia Ocean Observing System	Assess the status of regional ocean observing system and identify the gap for the future improvement	Status Report		/	/	
South East Asian Regional-GOOS (SEAGOOS)	Monsoon Onset Monitoring over Andaman Sea and its Social and ecosystem impacts (MOMSEI)						
	• Summer school	To train the young generation scientists in region with the scientific focus on ocean-atmosphere interaction and climate dynamics with social & ecosystem applications		14-18 June 2010	/	USD 10K (FIO)	
	• Establishment of Project office	To coordinate the progress activities and enhance the outreach		September 2010	/	USD 5K (DMCR/FIO)	
	• Oceanographic survey and training in Andaman Sea	To understand the ocean response to monsoon forcing and collect necessary data for buoy deployment	Cruise report and data sets	November 2010	US\$ 10K (??)	USD 20K (DMCR/FIO)	
	• Annual meeting of MOMSEI	Review the annual progress and prepare the next year's working plan	Meeting report and final MOMSEI science plan	December 2010, Malaysia	US\$ 5K (IOC)	USD 10K (FIO)	
	• Summer school	To train the young generation scientists in region with the scientific focus on ocean-atmosphere interaction and climate dynamics with social & ecosystem applications		during summer period of 2011	/	USD 10K (FIO)	
	• Oceanographic Buoy deployed in Andaman Sea	To understand the ocean response to monsoon forcing and deploy the monitoring buoy		April 2011	/	USD 35K (DMCR/FIO)	
	• Annual meeting of MOMSEI	Review the annual progress and prepare the next year's working plan	Meeting report	2011	US\$ 5K (IOC)	USD 10K (FIO)	
	• Oceanographic Buoy service cruise in Andaman Sea	Buoy turnaround and oceanography survey	Cruise report and data sets	April 2012	US\$ 10K (IOC)	USD 25K (DMCR/FIO)	
	Ocean Forecast Demonstration System in the Southeast Asian Seas						
<u>BlueLink:</u>							
• The first workshop on Ocean Forecasting	To discuss the technical issue on development of BlueLink in SEAGOOS and			July 2010, Perth, Western Australia	/	USD 4K (IOC Perth)	Support 2 participants

Project/Programme					Funding Required		Remark
	Activities	Objectives	Expected outputs	Date and place	IOC (Regular and Extrabudget)	Other sources (national or international)	
	Demonstration Project for IOGOOS and SEAGOOS and Project Planning	IOGOOS region including the procedure, flamm work and work plan and cooperation between SEAGOOS and IOGOOS					from SEAGOOS
	<ul style="list-style-type: none"> The Second workshop on Ocean Forecasting Demonstration Project for IOGOOS and SEAGOOS 	To follow up the progress of the work and further development of project		2011	/	USD 4K (IOC Perth)	Support 2 participants from SEAGOOS
	<i>MASNUM (wave-tide circulation coupling model)</i>						
	<ul style="list-style-type: none"> First Planning Meeting 	Develop implementation plan for Peninsular Malaysia Shelf To plan how to conduct workshop and whom to involve	Project Implementation Plan Workshop plan	June 2010, Malaysia	USD 10K	/	
	<ul style="list-style-type: none"> Second Planning Meeting 	develop implementation plan for GOT	Project Implementation Plan Workshop plan	July 2010, Thailand	USD 10K	/	
	<ul style="list-style-type: none"> First implementation modeling workshop 	introduce MASNUM wave-tide-circulation model	Capability to use MASNUM model	September 2010, Malaysia/China	/	/	
	<ul style="list-style-type: none"> Second Implementation modeling workshop 	introduce MASNUM wave-tide-circulation model	Capability to use MASNUM model	November 2010, Thailand/China			
	<ul style="list-style-type: none"> Modeling work for ocean forecast system 	Actual development of forecasting model for both Peninsular Malaysia shelf and GOT	Forecast model for the areas	December 2010, Malaysia/Thailand,	/	USD 50K from national sources	
	<ul style="list-style-type: none"> Ocean Cruise (eastern coast peninsular Malaysia) 	collect oceanographic data to validate the model	Data collection	July/November 2011, Malaysia	/	USD 100K from national sources	
	<ul style="list-style-type: none"> Ocean Cruise (Gulf of Thailand) 	collect oceanographic data to validate the model	Data collection	August/December 2010, Thailand	/	USD 100K from national sources	
	<ul style="list-style-type: none"> First result ocean modeling workshop 	Workshop to discuss modelling results	Understanding of model capability	May 2010, Malaysia/China	USD 10K	/	
	<ul style="list-style-type: none"> Second Result ocean modeling workshop 	Workshop to discuss modelling results	Understanding of model capability	February 2011, Thailand/China	/	/	
	<ul style="list-style-type: none"> Final evaluation workshop 			May 2011, China	/	/	

Project/Programme	Activities	Objectives	Expected outputs	Date and place	Funding Required		Remark
					IOC (Regular and Extrabudget)	Other sources (national or international)	
Ocean Data & Information Network for the Western Pacific (ODINWESTPAC)	1. Working Group meeting of ODINWESTPAC	identify the capacity building needs and develop the strategy and working plan for the project.	Identification of Capacity build requirement	September or October 2010	USD 10K WESTPAC IODE	USD 15K (Host Center)	
	2. Training course for technical personnel on ODINWESTPAC	Build the capacity on oceanographic Data and Information collecting, processing , QC/QA and metadata description, data products making and upload and download data and information from the web of ODINWESTPAC	Capacity improved	Autumn of 2010	USD 20K IODE WESTPAC	USD 15K Host Center	
	3. Collection of cruise summary reports in the region from IODE histories ROSCOP report and member states; development of the metadata bases documenting available data in the region.	To provide the information services of the ROSCOP	Cruise summary reports collected Metadata based developed	Start from April 2009 and continue	/	In kind by Member States IODE Secretary	
	4. Preparation of a directory of ocean and coastal observations, research and management projects&Vprogrammes implemented in the region	To provide the information of the cooperation projects of international and regional to the users in the region.	Directory prepared	Start from April 2009 and continue	/	In kind by Member States	
	5. Preparation of a directory of marine libraries and Ocean publications, a directory of research institutions, experts and regional e-repository of scientific publications published by WESTPAC experts in the region.	To provide the directory and all information services to the users of member states in the region.	Directories prepared	Start from April 2009 and continue	/	In kind by Member States	
	6. Collection of marine data and information from member states, regional cooperation project and international project;	Promote cooperation with other projects in the region and continue to operational collect more data and information and provide good services to the users	Relevant information collected	Start from April 2009 and continue	/	Host Center and Member States in kind	

Project/Programme	Activities	Objectives	Expected outputs	Date and place	Funding Required		Remark
					IOC (Regular and Extrabudget)	Other sources (national or international)	
	develop data products; enhance cooperation with NEAR-GOOS, NOWPAC, SEAGOOS etc. and provide Data Management Guides.						
	7. maintenance of the ODINWESTPAC website	provide good services in the region	Website well maintained	Start from April 2009 and continue	/	Host Center Member States	
	8. provision of Data Management Guides	Provide guidance on the Data Management	Guidelines provided	End of 2011	/	In kind by Host Center	
International Bathymetric Chart of the Western Pacific (IBCWP)	1. Fifth Session of the EB-IBCWP	Review the progress made and provide solution to the existing problems which were not settled in the last session;	agreements reached on data sharing and services; consensus made on the annotation of the map sheets; capacity building needs discussed;	Late 2010 or early 2011	USD 9K	/	
	2. Mapping and compilation meeting for the technician of IBCWP	Submit the digital copy of all the sheets to Editorial Board of IBCWP for approval	All sheets ready for submission	Mid of 2011	USD 35K	/	
CAPACITY DEVELOPMENT AND PUBLIC AWARENESS							
UNESCO/IOC Regional Network of Training and Research Center	1. Capacity building (Training Course)	Improve the regional capacity on Ocean wave and circulation models		Late 2010	/	USD 30K (FIO)	
	2. Capacity building (Training Course)	Improve the regional capacity on Ocean Dynamic		Late 2011	/	USD 30K (FIO)	
Development of IOC/WESTPAC E-Bulletin	Development of IOC/WESTPAC E-Bulletin	Raising awareness on the activities of IOC/WESTPAC and advocate the latest scientific knowledge	Several issues developed and widely distributed	May 2010-May 2012	USD 10K	/	
Subtotal					USD 823K *	USD 2,778K	
Total					USD 3,601 K*		

*only USD 370K secured from IOC Regular Budget, including one P4 post and one general service staff, with USD 3,231K to be raised from different sources

Recommendation SC-WESTPAC-VIII.5

DATE AND PLACE OF THE NEXT SESSION

The IOC Sub-Commission for the Western Pacific,

Bearing in mind the need for a sufficient period of time between sessions of Sub-Commission to allow a reasonable implementation of its activities,

Recalling the Recommendation SC-WESTPAC-I.3 in 1990 to have a three-yearly time span between its regular sessions,

Further recalling the Recommendation SC-WESTPAC-VII.6, adopted at the Seventh Session of the Sub-Commission in 2008 which decides to reschedule the period between sessions from three years to two years beginning with the close of WESTPAC-VII, to be in phase with IOC planning cycles. Further, WESTPAC Sessions will be scheduled for the first quarter of the year so its decisions, recommendations, and reports can be forwarded to the IOC Executive Secretary in time for review and consideration by the Executive Council,

Appreciates the Government of Republic of Indonesia for hosting the Eighth Session on 10–13 May 2010, Bali, Indonesia and excellent arrangements made for the Session;

Accepts with appreciation the offer by the Government of Republic of Korea to host the Ninth Session in the second quarter of 2012, subject to the final endorsement of the relevant authorities.