

Call for Proposal (Institution/Organization)

**IOC Sub-Commission for the Western Pacific (WESTPAC)
Intergovernmental Oceanographic Commission of UNESCO**

**Type of Contract: Contract for Services
Duration: 01 October 2021 – 30 April 2022
Closing date: 17 September 2021**

Terms of Reference

Host Organization for National Training and/or Stakeholder Engagement Workshop on Ocean Acidification Research, Monitoring, and Impacts on Ocean Ecosystems in Indonesia, Malaysia, Thailand, the Philippines and Vietnam¹

1. Background

Ocean acidification is a direct consequence of increased human-induced carbon dioxide (CO₂) concentrations in the atmosphere. Since the industrial revolution, the ocean absorbs over 25 percent of the anthropogenic CO₂ emissions from the atmosphere, leading to an increase in seawater acidity, and reduction of carbonate ion concentration and saturation states of biologically important calcium carbonate minerals. This process was termed as ocean acidification. Ocean acidification is jeopardizing the ability of ocean ecosystems, including those calcifying marine organisms, to adapt themselves to an acidifying environment.

Despite the global increasing recognition on ocean acidification, and its threat to ocean-based food security, the awareness still remains rather limited and the ecosystem responses to ocean acidification are poorly understood in the region. To enable resource and fisheries managers, and policy makers to develop effective long-term mitigation and adaptation strategies, sustained research, monitoring and assessment are critically needed to develop meaningful projections on future impacts of ocean acidification on marine ecosystems in the region.

The IOC Sub-Commission for the Western Pacific (WESTPAC) strives to support our member states in the region preparing for and responding to ocean acidification, by improving research capacity, transferring marine technology, and advancing our understanding on ocean acidification and its impacts on ocean ecosystems.

To meet the demand of member states in the region, we are seeking workshop hosts to develop and conduct national training and/or stakeholder engagement workshop on ocean acidification research, monitoring and impacts on ocean ecosystems in the Western Pacific. Proposals must be submitted no later than **17 September 2021**.

2. Purpose

¹The institutions/organizations located in the listed countries are invited to submit the proposal for the workshop conducted in their home country.

The activity aims to enhance national capacities for ocean acidification research and monitoring, and to assist fulfilling the commitment to SDG 14: Life below water, in particular SDG-14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.

This activity also expects to enhance the awareness of key stakeholders on the ground, on ocean acidification and its impacts, so as to develop closer partnerships in support of the sustainable development of ocean, marine and coastal resources.

3. Target countries for the delivery of training are:

Indonesia, Malaysia, Thailand, the Philippines and Vietnam

4. Assignment

Under the overall authority of the Director of the UNESCO Regional Bureau for the Asia and Pacific and the direct supervision of the Head of the WESTPAC Office, the respective contractor in each target country shall act as a host for the delivery of national training and/or stakeholder engagement workshop, between October 2021 and April 2022, on ocean acidification research, monitoring, and impacts on ocean ecosystems. Specifically, the contractor will:

- identify subject areas in which national capacity need to be enhanced for monitoring ocean acidification and its impacts on coral reef ecosystems, and/or key stakeholder groups which shall be engaged in the activity;
- Design and develop activity program and materials, in close consultation with the IOC Sub-Commission for the Western Pacific;
- Advertise the training and conduct appropriate selection processes to sign up participants.
- Arrange lectures and practical demonstrations of methodologies (in field or laboratory or through Video training material) on ocean acidification monitoring for no less than 25 participants.
- Produce a video clip on the event, and video training materials such as seawater collection, sample preservation and handling, Total Alkalinity (TA) and pH measurement, Autonomous Reef Monitoring Structures (ARMS) and Calcification Accretion Units (CAUs) recovery and processing. All videos produced shall be of the highest quality to adequately represent the organization. The optimal standards are: 1080 25p/1080 29.97p or 30p.
- Collection of feedback and evaluation forms from the participants at the end of training workshop, and provision of the summary of such feedback and evaluation to the IOC Sub-Commission for the Western Pacific (WESTPAC)

Copyrights & utilization rights: The copyright of all video materials produced (raw and edited) taken during the assignment will belong to UNESCO and its IOC Sub-Commission for the Western Pacific (WESTPAC).

5. Deliverables and timeframe

All deliverables shall be submitted to IOC Sub-Commission for the Western Pacific (WESTPAC) in accordance with the timeline. Feedback will be provided to the contractor. To the

extent possible, the contractor shall reflect comments and suggested modifications submitted by the project team. The contractor is expected to submit following deliverables to WESTPAC:

No.	Deliverables	By
1	Proposed program and timetable for the training workshop	15 October 2021
2	Final report including evaluation results, video on hands-on exercises, photos and all training materials	15 April 2022

6. Qualifications, experience and competencies

- **Research institutions physically located in the following target countries: Indonesia, Malaysia, Thailand, the Philippines and Vietnam.**
- A good knowledge of ocean acidification and its research and monitoring methodologies.
- Engaged in international efforts in ocean acidification research and monitoring.
- Qualified human resources and adequate infrastructures, including on-site and/or online training facilities.

7. Application

Interested institutions/organizations are invited to submit no later than 17 September 2021 17:00 hrs Bangkok time (GMT +7:00) the application **only for the workshop to be conducted in their home country**. The application package will include the following:

- 1) A technical proposal, including institution profile, relevant experiences, reference of previous similar works, proposed methodology/approach and workplan
- 2) A financial proposal providing a breakdown per unit

to the attention of:

IOC Sub-Commission for the Western Pacific (WESTPAC)

UNESCO Bangkok Office

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