



**IOC Circular Letter No 3060**  
(Available in English and French)

IOC/VH/KE/HE  
13 October 2025

To : Official National Coordinating Bodies for liaison with the IOC (IOC Member States)

C.c. : Permanent Delegations to UNESCO of IOC Member States  
National Commissions for UNESCO of IOC Member States  
IOC Officers  
Chair and Vice-Chairs of IOC Subsidiary Bodies (Scientific, Technical and Regional)

**Subject: Survey of existing national capacities across Africa for harmful algal bloom early warning systems that incorporate oxygen measurements**

The Norwegian Agency for Development Cooperation (NORAD) project “Enhancing early warning systems for supporting resilience in Africa: Safeguarding ocean and human health” is leveraging the Intergovernmental Oceanographic Commission of UNESCO's (IOC) expertise and global networks to build capacity in response to Harmful Algal Bloom (HAB)-related threats. It aims to assist Member States of IOC in establishing standardized systems for ocean observations, data management, early warning, and community notification. The project is intended to result in the creation of sustained systems beyond the project's lifespan, build interoperability with current national monitoring and disaster preparedness strategies, and contribute to achieving healthier and more resilient coastal communities in Africa.

This project reflects IOC's prioritisation of building capacity across Africa and the recommendations arising from the Eighth Session of the IOC Sub-Commission for Africa and Adjacent Island States ([IOCAFRICA-VIII](#)) on national observation systems, data systems, downstream services that meet end-user needs and improving early warning systems and building technical capacity. The project builds on IOC's pilot projects operating in Morocco and Namibia (2022–2025) and complements existing national efforts by aligning with early warning initiatives such as the Africa Multi-Hazard Early Warning and Early Action System (AMHEWAS) and the Early Warning for All in Africa Action Plan.

To facilitate the identification of potential partnerships with African countries for building skills and capacity in ocean observations, ocean data management and the building of HAB early warning systems that integrate environmental correlates, the project team are assisting IOCAFRICA in assessing the current state of national capacity for building and deploying such early warning systems.

#### Chairperson

Yutaka MICHIDA, Prof.  
Special Presidential Envoy  
for UN Ocean Decade  
The University of Tokyo (Atmosphere  
and Ocean Research Institute)  
Kashiwanoha 5-1-5  
2778564 Kashiwa  
JAPAN

#### Executive Secretary

Mr Vidar HELGESEN  
Intergovernmental Oceanographic  
Commission — UNESCO  
7 Place de Fontenoy  
75352 Paris Cedex 07 SP  
FRANCE

#### Vice-Chairpersons

Ms Allison D. REED  
Foreign Affairs Officer  
U.S. Department of State  
Office of Ocean and Polar Affairs  
Washington, DC  
USA

Dr Atanas PALAZOV  
Acting Director, Professor  
Institute of Oceanology  
Bulgarian Academy of Sciences  
40 Parvi May Str.  
9000 Varna  
BULGARIA

Capt Carlos ZUÑIGA ARAYA  
Director of the Chilean Navy Hydrographic and  
Oceanographic Service (SHOA)  
Casilla 324,  
Valparaiso, 237-0168  
CHILE

Dr Hansan PARK  
Principal Research Scientist, Korea  
Institute of Ocean Science & Technology  
(KIOST)  
Director general of the Korea–Indonesia Marine  
Technology Cooperation Research Center  
385, Haeyang-ro, Yeongdo-gu, Busan  
REPUBLIC OF KOREA

Prof. Amr Zakaria HAMOUDA  
President of Marine Hazards  
Mitigation Center (MHMC)  
National Institute of  
Oceanography and Fisheries  
(NIOF)  
Qaitbay, Al-Anfoshi  
Alexandria  
EGYPT

With this letter I invite IOC Member States to contribute information on the current monitoring of HAB events, associated ocean monitoring including of oxygen, and supporting infrastructure and capability across Africa via a survey designed by the project team with the assistance of ocean monitoring expertise supported by the IOC. In completing the survey, Member States are encouraged to use the most reliable and authoritative sources in their countries, including institutions and agencies undertaking observation programmes, monitoring, reporting and communicating HABs and low-oxygen events and developing and delivering early warning systems.

A pdf version of the questionnaire is attached to this circular letter and available via OceanExpert at <https://www.oceanexpert.org/document/37249> to give Member States quick access to the information being requested and to facilitate exchanges between the various institutions and data sources. Respondents can also access an online version of the survey at the following link, should they prefer to submit their responses digitally: [[FRENCH](#) / [ENGLISH](#)].

The project team would appreciate receiving submissions of the survey no later than 30 November 2025. Surveys can be submitted to Ms Yun Sun from the IOCAFRICA Secretariat ([yu.sun@unesco.org](mailto:yu.sun@unesco.org)) with copy to Ms Katherina Schoo ([k.schoo@unesco.org](mailto:k.schoo@unesco.org)) from the Ocean Science Section. For further information on the project and the survey, please contact the Head of the Ocean Science Section, Dr Karen Evans ([k.evans@unesco.org](mailto:k.evans@unesco.org)) with copy to Dr Henrik Enevoldsen, Head of the IOC Science and Communication Centre on Harmful Algae ([h.enevoldsen@unesco.org](mailto:h.enevoldsen@unesco.org)).

With the assurances of my highest consideration, I remain,

Yours sincerely,

*[signature]*

Vidar Helgesen  
Executive Secretary

Enclosure: 1/ Survey of existing national capacities across Africa for harmful algal bloom early warning systems that incorporate oxygen measurements  
*(available in English and French only)*