

## Agenda Item 3.4.5

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### Report

IOC-FAO/IPHAB-  
XVII/3s

Executive Summary Report of the 17th Session of  
IOC-FAO Intergovernmental Panel on Harmful  
Algal Blooms, UNESCO, 18–20 March 2025



**33rd Assembly**  
**25 June-3 July 2025**

**Item 3.4.5.**



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Harmful Algal Blooms:

XVIIth Session of IOC-FAO  
IPHAB,

18-20 March 2025

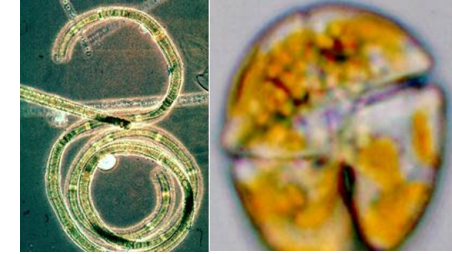
**Philipp Hess – Chair IPHAB**  
**27 June 2025**

# Harmful algal events...

## Natural marine hazards affecting almost all IOC

### Member States:

- Contaminate seafood and threatens public health and seafood industries
- Cause respiratory disease and dermatitis through direct exposure in seawater or on beaches
- Cause marine faunal mortalities and extensive ecosystem disruption
- Kill wild and farmed fish; aquaculture impacts are increasing with expansion of industry
- Threaten water supplies from desalination of seawater
- Cause globally increasing socio-economic impacts



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# IOC-FAO Intergovernmental Panel on HAB, IPHAB

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**Mission is to assess progress, decide on priorities, and identify funding sources and opportunities for implementation of the IOC-FAO HAB Programme**

**The HAB Programme is the only global intergovernmental effort to understand, manage and mitigate the harmful effects of algal blooms**



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# IPHAB activities are implemented in partnership / linked with:



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# Intergovernmental Panel on HABs(IPHAB)

GlobalHAB Research Programme	Task Teams	Working Groups	Regional Networks	Capacity Building	Communication & Data
Science Themes	Early Detection, Warning and Forecasting of HABs	ICES-IOC WGHABD	ANCA/IOCARIBE	Training Courses	Harmful Algae News (HAN)
1) Biodiversity & Biogeography	HAIS and GHSR	ICES-IOC-WMO WGBOSV	FANSA	Cooperative Research Projects	Web Site
2) Adaptive Strategies					
3) Toxins	Benthic Harmful Algae and Their Toxins	PICES S-HAB	HANA		Harmful Algae Event Database (HAEDAT)
4) Nutrients & Eutrophication					
5) CyanoHABs- Marine to FW systems	Harmful Algae & Desalination of Seawater		WESTPAC/HAB		Harmful Algae Information System(HAIS)
6) Benthic HABs					
7) HABs & Aquaculture	Biotoxin Monitoring, Management & Regulations				Global HAB Status Report
8) Comparative Approach					
9) Observation, Modeling & Prediction	Algal Taxonomy				
10) HABs & Human & Animal Health	Fish Killing Microalgae & Ecosystem Effects				
11) Economy					
12) Climate change & HABs	HAB Communication				



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**16 different groups:**

**8 IPHAB Task Teams**  
**4 Regional HAB networks and groups**  
**3 Expert Working Groups**  
**1 Steering Committee**  
**1 Project group**

**IOC Science and Communication  
Centre on HAB, University of  
Copenhagen, Denmark, 30 years  
1995-2025**

# IPHAB XVII: 11 Decisions

1. Regional HAB Programme Development
2. TT: Early Detection, Warning and Forecasting of Harmful Algal Events
3. TT: Development of the Harmful Algal Information System (HAIS) and the Global HAB Status Report (GHSR)
4. TT: Benthic Harmful Algae and their Toxins
5. TT: Harmful Algae and Desalination of Seawater
6. TT: Biotoxin Monitoring, Management and Regulations
7. TT: Algal Taxonomy
8. TT: Fish Killing Microalgae and Ecosystem Effects
9. TT: HAB Communication
10. New decadal plan for IOC-SCOR GlobalHAB beyond 2025
11. HAB training and capacity development



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# Decision IPHAB-XVII.2 TASK TEAM on Early Detection, Warning and

## Forecasting of Harmful Algal Events



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- **A strategic and advisory group for the establishment of guidelines, recommendations, and advancement of Early Warning Systems, ensuring the alignment with IOC Functions and UN Ocean Decade challenges, objectives and actions**
- **Pilot testing of the joint FAO-IOC-IAEA Technical guidance (published 2023) for the implementation of early warning systems for harmful algal blooms (Namibia and Morocco)**
- **Investigate (FAO led) the possibility to develop risk maps for high biomass harmful algal blooms**
- **Promote the presence of HAB observations in the Global Ocean Observing System and its regional components, and the consolidation of integrated multi-hazard Early Warning Systems**



# Decision IPHAB-XVII.3 TASK TEAM Development of the Harmful

## Algal Information System (HAIS) and the Global HAB Status Report (GHSR)

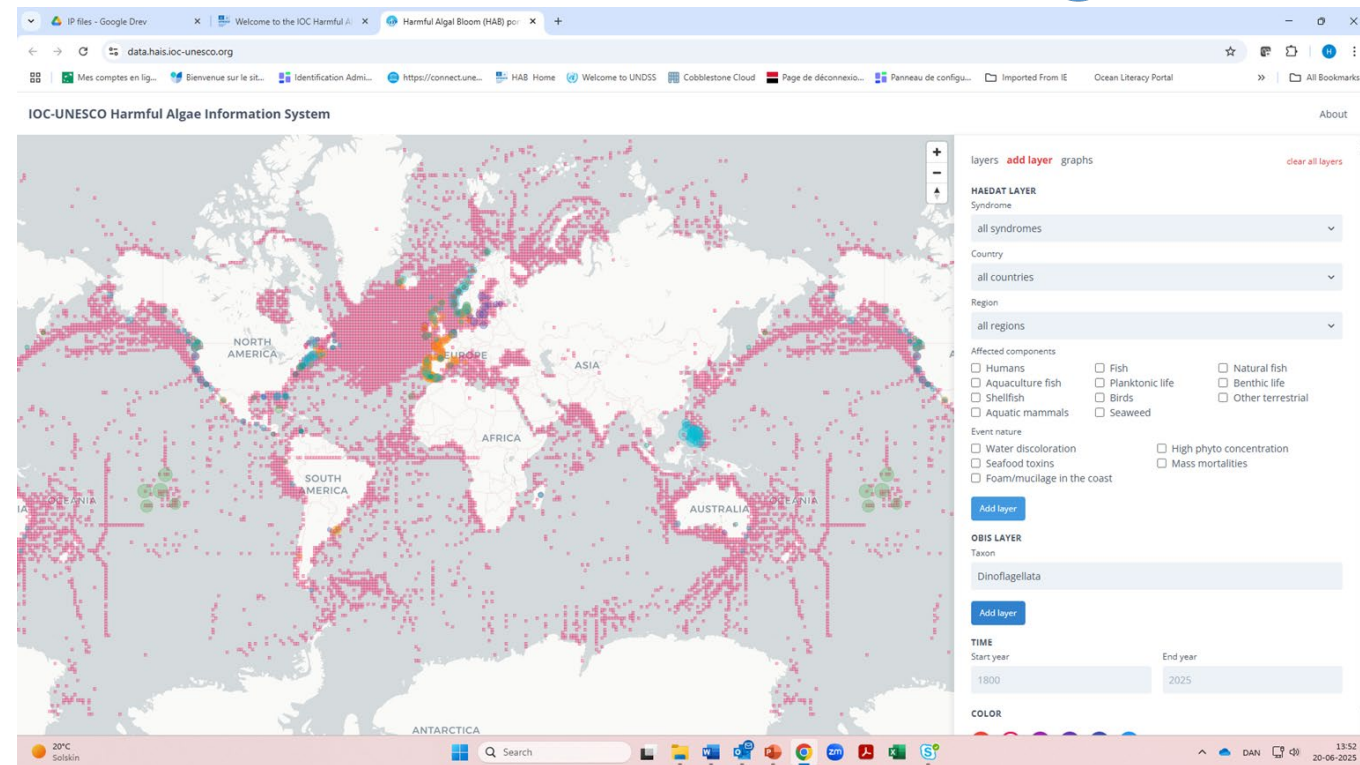


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- Advise the FAO and IOC secretariat/IODE Project Office and HAIS partners, to facilitate a proper upgrade of HAEDAT to ensure its functionality (ongoing)
- Develop a short and concise annual summary of HAEDAT with the view to submit such summaries annually to the FAO Committee on Fisheries (COFI) and the Subcommittee on Fish Trade (COFI-FT).
- Identify the focus of the second Global HAB Status Report, identify priority drivers and associated relevant global datasets.



HAIS screenshot showing overlaying OBIS and Harmful Alge Event Database (HAEDAT) data sets.

# Decision IPHAB-XVII.6 TT: Toxin Monitoring, Management & Regulations



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Contribute to the development of a Technical Guidance for the development and implementation of biotoxins monitoring and management to complement recent “Joint FAO-WHO Technical guidance for the development of the growing area aspects of bivalve mollusk sanitation programmes”;

Progress the development of the toxin database as a web-based tool for crosslinking knowledge on HAB organisms and toxins, e.g. through a physical workshop (□ ICHA 2025 Punta Arenas, Chile).

IPHAB Toxins Home Report

IOC-UNESCO Toxins database

Welcome to the IOC-UNESCO Toxins database. This database contains reference information about toxins - some of which are associated with Harmful Algal Events.

Toxin Progenitor or vector

Toxin name, or abbreviation

Search More filters Download JSON

19 Toxins

Azaspiracid 23 Toxins

Azaspiracid

Azaspiracid-1  
C47H71NO12

Azaspiracid-2  
C48H73NO12

# Decision IPHAB-XVII.10 New decadal plan for IOC-SCOR GlobalHAB beyond 2025



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- **Joint IOC-SCOR international science programme on Harmful Algal Blooms (GlobalHAB)**
- **Outline of Science Plan endorsed by IPHAB-XVII**
- **Community consultations in June at OOSC Town Hall\* and at ICHA October 2025**
- **Presentation to SCOR Annual Meeting in September 2025**



\* SCOR-IOC GlobalHAB Town Hall at OOSC, Nice, June 2025



# IOC-FAO IPHAB XVII

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*Dr Philipp Hess (France) was re-elected as Chair*

*Dr Begoña Ben Gigirey (Spain) was elected as Vice-Chair*

*Thanks to Dr. Maggie Broadwater (USA) for her active engagement as Vice-chair (2023-2025)*



# IPHAB XVI: 2 Recommendations

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## 1. IOC HAB Programme Work Plan 2026-2027

### 1. Operation of the IOC-FAO IPHAB



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# IPHAB-XVI Recommendation on the Work Plan for 2026-2027



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<b>Expected requested funding in known scenario (2026–2027) :</b>	<b>US\$140.000 from IOC Regular Programme (draft 43 C/5) *</b>
<b>To be identified from extra-budgetary resources and/or in-kind for full implementation</b>	<b>USD ~400,000 to be identified from extra-budgetary resources and in-kind for <u>full</u> implementation.</b>

\* Best case scenario for Regular Budget line “HAB & NIS Research & Monitoring”, pending the UNESCO General Conference

# The Assembly is invited to:

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- **Endorse the IPHAB-XVI Recommendations including the Work Plan for 2026-2027**
- **Ensure the necessary Regular Programme funding to allow operation of the HAB Programme core activities**
- **Assist in identifying extra-budgetary resources for implementation of the Programme 2026-2027**



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# THANK YOU



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