

1. Background

WG3/CEARAC developed a common format to share HAB-related information among the NOWPAP member states based on the HAB Case Studies implemented by each member state in the 2008-2009 biennium. It is expected that the member states submit data annually and continuously, using this common format. The submitted information will be provided through HAB Integrated Website developed in 2009 and utilized for enhancement of countermeasures against HABs in each member state. CEARAC plans to provide such HAB-related information as one of its routine tasks from 2010.

Mid- and long-term strategies of CEARAC adopted at the 5th CEARAC FPM suggested to review and updated the Integrated Report in 2011, based on outcomes of the activities implemented, 5 years after the first issue of the Integrated Report.

2. Objective

Objectives of this activity are to summarize the status on HAB in the NOWPAP region during the last five years since the first publication of the Integrated Report and to provide the updates. In addition, CEARAC plans to expand the target sea areas in the updated report, where HABs occur frequently .

3. Main tasks

3.1 Selection of additional target sea areas

In HAB Case Studies implemented in the 2008-2009 biennium, each member state selected the following target sea areas: China - coastal area of Qingdao region; Japan - northwestern sea area of Kyushu region; Korea - southeastern coast of Korea; and Russia - Amurskii Bay. In order to share more data among the member states, new target sea areas will be added based on the discussion at the 8th CEARAC FPM held in March 2010.

3.2 Submission of information and data using the common format

Each member state submits HAB-related information and data in the target sea areas using the common format developed by HAB Case Studies.

3.3 Updating the Integrated Report on HABs for the NOWPAP region

CEARAC summarizes the submitted information and data from member states and updates the Integrated Report on HABs for the NOWPAP region published in 2005. The draft table of contents of the updated Integrated Report is shown in the Table 1. The updated report will be published in a digital format and provided from HAB Integrated Website.

4. Expected outcome

Updating the Integrated Report will contribute to HAB-related information sharing not only among the member states but also other international organizations. Regular update of the Integrated Report will be useful for understanding of current situations in the NOWPAP region. The objectives and goals of NOWPAP WG3 shown in mid- and long-term strategies will be achieved.

5. Potential partners

The information in the updated Integrated Report will be disseminated through the HAB Integrated Website, and this activity will enhance the cooperation with PICES and IOC/WESTPAC for sharing information and understanding the situation in the Northwest Pacific region.

6. Schedule

Schedule of this activity and main body are as follows:

Time	Actions	Main body	
2010	Q1	Approval of workplan and selection of additional target sea area(s) by e-mail correspondences	CEARAC and FPs
	March	Construction of MoU for collecting and summarizing of information and data in target sea areas	CEARAC and Experts in member states
	Q2 – Q4	Collecting and summarizing information and data	Experts
	Summer (8th CEARAC FPM back-to-back with Expert Meeting)	Review of the progress report	CEARAC, CEARAC FPs and experts of HAB
	End of Q4	Submission of the information and data to CEARAC	Experts
2011	All year	Updating the Integrated Report on HABs for the NOWPAP region	CEARAC and Consultant
	Q2 – Q4	Collecting and summarizing information and data	Experts
	Q3 (9th CEARAC FPM back-to-back with Expert Meeting)	Review of the draft updated Integrated Report on HABs for the NOWPAP region	CEARAC, CEARAC FPs and Experts of HAB
	Q4	Publication of the Updated Integrated Report in a digital format	CEARAC
After 2012	Voluntary submission of information and data using the common format	Each member state	

7. Budget

Contract	Timing	Output	To be completed	Counterpart	Budget (US\$)
Collecting and summarizing the information and data in target sea areas	2010 Q1	Common format sheet	2010 Q4	Expert of China	2,000
				Consultant in Japan	2,000
				Expert of Korea	2,000
				Expert of Russia	2,000
Updating the HAB Integrated Report on HABs for the NOWPAP region	2011 Q1	Updated Integrated Report	2011 Q4	Consultant	2,000
Total					10,000

Annex Provisional Contents of the updated Integrated Report on HABs
for the NOWPAP region

Integrated Report (2005)	Updated Integrated Report
<p>1. Introduction</p> <p>1.1 Definitions</p> <p>1.2 Natural environment of the NOWPAP region</p> <p>1.3 Social environment of the NOWPAP region</p> <p>2. HAB occurrence</p> <p>2.1 Current HAB occurrences in the NOWPAP region</p> <p>2.2 Common issues on HABs in the NOWPAP region</p> <p>3. Information on HAB monitoring</p> <p>3.1 Monitoring activities in the NOWPAP region</p> <p>3.2 Common issues on monitoring activities in the NOWPAP region</p> <p>4. Studies to cope with HABs</p> <p>5. Training activities to cope with HABs</p> <p>5.1 Training activities in the NOWPAP region</p> <p>5.2 Common issues on training activities in the NOWPAP region</p> <p>6. Suggested activities for HABs in the NOWPAP region</p> <p>6.1 National activities to cope with HABs</p> <p>6.2 Suggested future activities for HABs in the NOWPAP region</p> <p>Appendices</p>	<p>1. Introduction</p> <p>1.1 Definitions</p> <p>1.2 Natural environment of the NOWPAP region</p> <p>1.3 Social environment of the NOWPAP region</p> <p>2. HAB occurrence</p> <p>2.1 Current HAB occurrences in the NOWPAP region</p> <p>2.2 Common issues on HABs in the NOWPAP region</p> <p>3. Information on HAB monitoring</p> <p>3.1 Monitoring activities in the NOWPAP region</p> <p>3.2 Common issues on monitoring activities in the NOWPAP region</p> <p>4. Pioneering studies to cope with HABs</p> <p>4.1 Remote sensing techniques</p> <p>4.2 Molecular genetic techniques</p> <p>5. Capacity building to cope with HABs</p> <p>Appendices</p>