

1. Background

The 14th NOWPAP IGM (Toyama, Japan, 8-10 December 2009) approved CEARAC workplan for the 2010-2011 biennium with the budget cutdown to 107,000US\$. Following the decision on the budget cutdown, allocation of CEARAC budget to each specific project was revised by CEARAC and it was approved by CEARAC Focal Points through e-mail correspondence.

This document is a revised work plan for updating the Integrated Report on HAB for the NOWPAP Region.

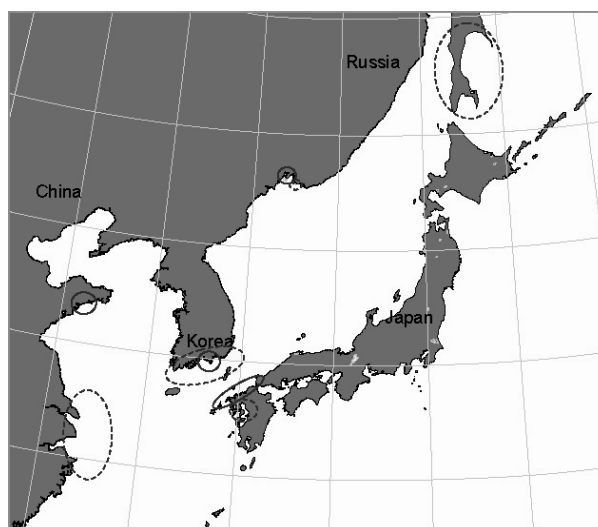
2. Objective

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 regularly.

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 are added based on the coordination with CEARAC FPs in each member state through e-mail in May 2010.



The target sea areas in 2008-2009 and new added/expanded target sea areas

Added or expanded target sea areas in each member state are as follows;

Country	Added or expanded target sea areas
China	Yangtze River estuary and adjacent area (tentative)
Japan	Ariake Sea
Korea	South coast of Korea
Russia	Vostok Bay and Sakhalin area

3.2 Submission of the updated HAB Case Study Report and data on HAB occurrences using the common format

CEARAC contracted with experts to update the HAB Case Study Report by adding the information on added/expanded target sea area and the latest data of HAB occurrence in target sea areas. Each expert submits the updated HAB Case Study Report and common format sheet by the end of 2010. Contracted experts are shown in following table.

China	Dr. Zhiming YU
Japan	CEARAC/Consultant
Korea	Dr. Yang Soon KANG
Russia	Dr. Tatiana Orlova

3.3 Updating the Integrated Report on HABs for the NOWPAP region

CEARAC together with consultant summarizes the updated HAB Case Study Report and the latest data submitted from each expert and revise the Integrated Report on HABs for the NOWPAP region published in 2005. The draft table of contents of the revised Integrated Report is shown in the Table 1. The revised report will be published in a digital format and provided from HAB Integrated Website. In parallel, CEARAC will update the HAB Case Study Database by adding the latest data on HAB occurrence in each member state.

4. Expected outcome

By adding or expanding the target sea area where HABs occur regularly, the more information will be able to share among NOWPAP member states. The information is expected to contribute to the countermeasures against HABs in member states. 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 on HAB in the Northwest Pacific region.

6. Schedule

Schedule of this activity and main body are as follows:

Time	Actions	Main body	
2010	Q2	Selection of the added/expanded target sea area	CEARAC FPs
	Q3	Construction of MoU for updating HAB Case Study Report	CEARAC and Experts in member states
	Q3 – Q4	Updating HAB Case Study Report	Experts
	13- 15 Sep. (8th CEARAC FPM back-to-back with Expert Meeting)	Report of Workplan for updating HAB Integrated Report	CEARAC, CEARAC FPs
	End of Q4	Submission of the updated HAB Case Study Report and the latest HAB occurrence data to CEARAC	Experts
2011	All year	Revising the Integrated Report on HABs for the NOWPAP region	CEARAC and Consultant
	Q2 – Q4	Collecting and summarizing information and data (as a regularly updating)	Experts
	Q3 (9th CEARAC FPM back-to-back with Expert Meeting)	Review of the draft revised 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. Challenging 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>