

## **Report of the Third Meeting of NOWPAP Working Group 4 (Toyama, Japan, 6-7 July 2006)**

### **Background leading to this meeting**

1. The 9th Intergovernmental Meeting (IGM) (Busan, the Republic of Korea, 2-4 November 2004) agreed on the workplan and budget of entire NOWPAP for the 2004-2005 biennium including the revised budget of US\$150,000 for the CEARAC activities (UNEP/NOWPAP/IG.9/5/1).
2. Based on the decision of the 2nd CEARAC Focal Points Meeting (FPM) , CEARAC also held the 2nd Meeting of NOWPAP WG3 (Qingdao, the People's Republic of China, 25-26 November 2004) and the 2nd Meeting of NOWPAP WG4 (Beijing, the People's Republic of China, 14-15 October 2004).
3. In WG3 and WG4, the meetings reviewed the preparation of the National Reports and discussed the contents of the Integrated Reports respectively. Moreover, WG3 reviewed the development of HAB reference database, and WG4 reviewed the development of RS information network system.
4. The 3rd FPM (Toyama, Japan, 15-16 September, 2005) reviewed the progress of CEARAC activities for the 2004-2005 biennium (UNEP/NOWPAP/CEARAC/FPM 3/4) and approved the draft CEARAC workplan and budget for the 2006-2007 biennium which was presented by CEARAC secretariat (UNEP/NOWPAP/CEARAC/FPM 3/12). All the reports were agreed to submit to the 10th IGM for adoption.
5. The 10th IGM (Toyama, Japan, 24-26 November, 2005) approved the workplan and budget of entire NOWPWP for the 2006-2007 biennium including the budget of US\$150,000 for the CEARAC activities (UNEP/NOWPAP/IG.10/8).
6. The 4th FPM (Toyama, Japan, 8-9 March, 2006) adopted the revised workplan and budget for the CEARAC 2006-2007 biennium activities

(UNEP/NOWPAP/CEARAC/FPM 4/8) and the Terms of Reference(TOR) for NOWPAP WG4 (UNEP/NOWPAP/CEARAC/FPM 4/7) with minor changes.

### **Agenda Item 1. Opening of the meeting**

7. The meeting was opened in Toyama, Japan, at 9:00 am on 6 July 2006 by the Director of CEARAC, Mr. Takeshi OGAWA. Welcoming remarks were made by NOWPAP Coordinator, Dr. Alexander TKALIN.

### **Agenda Item 2. Organization of the meeting**

8. The meeting elected Dr. Vladimir SHULKIN as to be the Chairperson for the morning session, and Prof. Mingjiang ZHOU for the afternoon WG3 meeting, Dr. Young-Sang SUH for the afternoon WG4 meeting held on the first day, Dr. Joji ISHIZAKA for the one on the second day, and Dr. Hak-Gyoon Kim as the Rapporteur for WG3 and Dr. Leonid MITNIK as the Rapporteur for WG4, in line with paragraph 5.2 of the Terms of Reference of the NOWPAP CEARAC Focal Points Meeting (UNEP/NOWPAP IG.8 7/1).
9. The meeting adopted its rules of procedures. It was proposed that, for purposes of this meeting, the rules used here be those of the Governing Council of UNEP, adjusted as appropriate to suit the nature of the meeting.
10. English was set to be the working language of the meeting.

### **Agenda Item 3. Adoption of the Agenda**

11. The Provisional Agenda (UNEP/NOWPAP/CEARAC/WG3 3/1) was introduced by the Secretariat with the Annotated Provisional Agenda (UNEP/NOWPAP/CEARAC/WG3 3/2). The meeting adopted the agenda.

12. Prof. MingJiang ZHOU proposed further reviewing agenda item 9 of WG3 due to lack of detailed discussions on this matter, and this was reviewed per request.

**Agenda Item 4. Report of CEARAC activities for the 2004-2005 biennium and Workplan and Budget for the 2006-2007**

13. The Secretariat reported CEARAC activities for the 2004-2005 biennium and the Workplan and Budget for the 2006-2007.

**Agenda Item 5. Report of the NOWPAP Working Group 3 (Harmful Algal Blooms) for the 2004-2005 biennium.**

14. The Secretariat reported activities of the NOWPAP Working Group 3 (Harmful Algal Blooms) for the 2004-2005 biennium.

**Agenda Item 6. Report of the NOWPAP Working Group 4 (Remote Sensing) for the 2004-2005 biennium.**

15. The Secretariat reported activities of the NOWPAP Working Group 4 (Remote Sensing) for the 2004-2005 biennium.
16. Dr. Hak-Gyoon Kim asked a question on the website on oil spill monitoring by RS in reference to MERRAC activities. The Secretariat replied that there is no overlapping or duplication with regard to MERRAC activities.
17. Dr. Ichiro ASANUMA pointed out the importance of statistical analysis of those who accessed the portal site. The Secretariat asserted the importance presented herein by Dr. Asanuma and mentioned the further refinement.

**Agenda Item 7. Report of the revised Terms of Reference for NOWPAP WG3 and WG4.**

18. The Secretariat reported on the revised TOR for WG3 and WG4 (3/INF4).

19. The meeting discussed the necessity of regular working group meetings as well as number of working groups.

**Agenda Item 8. Report of Workplan and Budget of NOWPAP WG4 for the 2006-2007 biennium.**

20. In accordance with decisions of this meeting, Dr. Suh served as the chairperson for Agenda item 8, 9 and 10 of WG4.

21. The Secretariat presented the work plan and budget of WG4 for the 2006-2007 biennium, which had been approved by the 4<sup>th</sup> Focal Point Meeting for NOWPAP CEARAC (Toyama, Japan, 8-9, March 2006).

**Agenda Item 9. Review and discussion on the preparation of Guideline for Eutrophication Monitoring by RS and RS training program on data analysis.**

**Agenda Item 9.1 Refinement of the “NPEC Guideline for Eutrophication Monitoring by RS” by the NOWPAP Members.**

22. The Secretariat presented the Workplan for the Refinement of the “NPEC Guideline for Eutrophication Monitoring by RS” by the NOWPAP Members, which had been approved by the 4<sup>th</sup> FPM of NOWPAP CEARAC (Toyama, Japan, 8-9, March 2006).

9.1.1 Report from Japanese expert

23. The Secretariat presented the NPEC Guideline for Eutrophication Monitoring by RS. Mr. Chuanqing WU, Dr. Sang-Woo KIM and Dr. Mitnik reported the result of interim review in China, Korea and Russia respectively.

24. Dr. Mitnik emphasized that the documents should clearly define whom, for what, and how the guidelines are to be utilized, particularly by bearing in mind that each agent/user has his/her own purpose of using the guidelines. He also suggested that each member be asking representatives who engage in monitoring activities, so as to receive feedback.
25. Dr. Asanuma expressed a concern that the first step should be taken to better serve the need of WG3 (HAB) projects but recognized a possibility of expanding the user community; in addition, the target group must be first set in order to facilitate the future success of the guidelines
26. The meeting discussed in detail the requirements of guideline users. The meeting acknowledged a perspective that the local governments will employ the guidelines suggested by the group, on a step-by-step basis; consequently, the current target of the guidelines should be placed on students and research institutions in the short term.
27. The Secretariat delivered a perspective that the local governments will employ the guidelines suggested by the group, on a step-by-step basis; consequently, the current target of the guidelines should be placed on students and research institutions in the short term.
28. As for the development of algorithms, Dr. Hiroshi KAWAMURA introduced the IOC/WESPAC Ocean Color Project, in particular the progress made by Chinese scientists to improve the accuracy in Chinese Case 2 waters. He stressed that WG4 need of collaboration work with IOC/WESTPAC Ocean Color Project, while WG4 will develop application for RS. Dr. Kawamura also mentioned that activities against eutrophication in others region presented in Appendix C should be introduced extensively in the introduction chapter of the guideline.
29. The meeting contended that the final goal of the guidelines is on extending them to the local governments and agreed to implement the activity for the guideline refinement work based on the procedure and timeline proposed by the Secretariat.

## **Agenda Item 9.2 RS training program on data analysis**

30. The Secretariat presented the workplan for implementation of RS training course on data analysis.
31. The meeting discussed eligible attendees of the training: Dr. Asanuma proposed adding HAB experts (especially WG3 members) to a list of eligible attendees. Mr. Wu also suggested that eligible attendees should be limited to “those who have backgrounds in RS” and/or “those who are interested in acquiring RS techniques”. The meeting agreed with these suggestions. Dr. Ishizaka added that the filtering process of the final attendees should be done carefully by the WG4 members in order to make the results successful.
32. Dr. Ishizaka then proposed that travel expenses should be provided to the trainees
33. Dr. Asanuma questioned if the secretariat have conducted a survey on implementation of a training course, especially on a point of budget management. He advised the Secretariat to learn from existing scientific training program possibly attending other RS training course. The Secretariat agreed with Dr. Asanuma’s proposal and promise to make best effort until the finalization of the training program.
34. The meeting agreed that obtaining financial support outside side of NOWPAP is necessary to support travel expense of trainees so that there would be more choices to determine the training venue and configuration of eligible attendees. The meeting agreed that advertising of the training programs through related international meetings or conferences are necessary.
35. The meeting to implement the activity for the RS training program based on the procedure and timeline proposed by the Secretariat.

**Agenda Item 10. Discussion on “Development of RS information network”**

36. The Secretariat presented the workplan for development of RS information network. Dr. Mitnik then presented the updated plan of the website on oil spill monitoring. Following Dr. Mitnik's presentation, the Secretariat explained the rationale for \$3,000 to be spent for updating the website on oil spill monitoring.
37. Dr. Kawamura pointed out a need to cooperate with space agencies to regularly obtain regional SAR images. Dr. Mitnik replied in reference to a case in the Baltic Sea, in which an oil producing company has expedited for obtaining SAR images from the European Space Agency.
38. The Secretariat then introduced other possible approaches to obtain the SAR images upon request through the international framework project, International Charter "Space and Major Disasters". The secretariat added that a possibility of obtaining SAR images upon request is being put in perspective while maintaining the contents of the website on oil spill that is useful for MERRAC activities.

**Agenda Item 11. Discussion for the future joint activities of NOWPAP WG3 and WG4.**

39. The Secretariat presented Mid-Term and Long-Term strategies of CEARAC and objectives of NOWPAP WG3 and WG4, to promote the discussion of the future joint activities of NOWPAP WG3 and WG4.
40. Dr. Tkalin referred that the Mid-Term in relation to CEARAC workplan would be the next biennium (2008-2009) and remarked that by the next biennium tools to assess and monitor the environment could be provided, and that the Long-Term might be in about 4-6 years.
41. The meeting discussed the Mid-Term and Long-Term future implementation structure of WGs proposed by the Secretariat. The meeting acknowledged the importance of collaboration between WG3 and WG4. Dr. Tkalin reminded the meeting that the IGM is the decision-making body for

42. The meeting also discussed the Mid-Term and Long-Term activities of WGs. The collective opinion from WG members was that the activities should be targeted on assessment of the marine and coastal environment, with simply focusing on one fixed target. The meeting confirmed the necessity of high-resolution data to forecast/assess the coastal environment.
43. The meeting stressed efficiency and effectiveness of activities of WGs, and suggested avoidance of duplication with other projects (e.g. NEAR-GOOS), the necessity of evaluating systems of the assessment tools as well as cooperation of the two WGs.
44. Since the opinions and inquiries on the Secretariat's presentation included various components, the meeting agreed that the Secretariat would propose a new idea based on opinions from the members and discuss on different occasions.
45. Dr. Hak-Gyoon Kim inquired about the current MALITA work and requested to introduce experts and/or documents on the matter. Dr. Tkalin replied that the Secretariat will distribute to the members official documents on the status of MALITA implementation.
46. The Chair suggested that all the members would provide opinions on the Mid-Term and Long-Term objectives of WG3 and WG4 to the Secretariat in the next few months.
47. The Secretariat, by referring to experiences of other regions (Appendix C of WG3/4/8/1), encouraged the members who attended the meeting to deliver practical suggestions for future activities of CEARAC.
48. (Add) The revised documents for Mid-Term and Long-Term strategies of CEARAC will be distributed to WGs members.



**Agenda Item 12. Other matters**

49. The meeting was invited to raise any other issues relevant to the NOWPAP/CEARAC activities.
50. Dr. Mitnik made a presentation about a Hokkaido Sea Bird Die-off case.
51. The Secretariat informed the workshop on Marine Remote Sensing in the Northwest Pacific Region to be held in Busan (UNEP/NOWPAP/CEARAC/WG4/3/Inf7).
52. Dr. Ishizaka announced that the successive project of the Red Tide Watcher project was approved: 'A Japanese, Korean and Chinese joint study on harmful algal blooms in the East China Sea' (July 2006-march 2009), and collaborative works of WG3 and WG4 were expected. This particular project focuses more on HAB in the East China Sea.
53. Dr. Kim announced that there would be a bio-invasion symposium prior to the workshop to be held in Busan at Pukyong National University. The Secretariat encouraged the members to participate in the workshop/symposium.

**Agenda Item 13. Adoption of the meeting report.**

54. The meeting report of WG3 and WG4 were prepared by the Secretariat respectively, and the Rapporteurs approved the contents of the reports. Each report was adopted by Working Group 3 and 4 experts respectively.

**Agenda Item 14. Closure of the meeting**

55. The meeting was closed in Toyama, Japan, at 5:00 am on 7 July 2006