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 WG3 (UNEP/NOWPAP/CEARAC/FPM 4/6) 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. A 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. Dr. Mingjiang ZHOU proposed further reviewing agenda item 9 due to lack of detailed discussions on this matter, and this was reviewed per request.


14. The Secretariat reported activities of the NOWPAP Working Group 3 (Harmful Algal Blooms) 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 the NOWPAP WG3 Workplan for the 2006-2007 biennium.**

20. In accordance with decisions of this meeting, Prof. Zhou served as the Chairperson for Agenda 8, 9 and 10 of WG3.

21. The Secretariat presented the workplan and budget of WG3 for the 2006-2007 biennium, which had been approved by the 4th Focal Point Meeting for NOWPAP CEARAC (Toyama, Japan, 8-9 March 2006).

22. Mr. Xiaofeng KANG suggested the consideration of the possibility of translation of the booklet of countermeasures against red tides into the language of each country. The Secretariat explained there is no budget for translating to the language of each country.

23. The Chairperson suggested the content and title of this booklet be discussed in Agenda 9.

**Agenda Item 9. Discussion on the preparation of countermeasures against red tide.**

24. The Secretariat explained the activities related to countermeasures on red tides in the 2006-2007 biennium, which had been approved by the 4th FPM of NOWPAP CEARAC (Toyama, Japan, 8-9, March 2006).
25. The Secretariat explained the examples of countermeasures against red tides in Japan. Prof. Zhou, Dr. Kim and Dr. Tatiana ORLOVA reported on the current activities of China, Korea and Russia respectively.

26. Dr. Osamu MATSUDA made a presentation about proposal of some ideas essential for the preparation of countermeasures against red tides.

27. Dr. Yasuwo FUKUYO made a presentation on WESTPAC/IOC meeting for technical standardization of detection methods of toxin-producing plankton by ELISA kits.

28. WG3 members agreed to change the booklet title to “Countermeasures Against HABs”. In the decision, members confirmed that HABs refer to both red tides and toxin-producing algal blooms, and would like to follow this hereafter.

29. Dr. Fukuyo proposed to refer to the status of HAB monitoring in the NOWPAP Region, and the meeting agreed to add the new information on monitoring to Chapter 2-1.

30. The meeting agreed on the following revisions about content of the booklet: (1) Moving Chapter 3 “Countermeasures against red tides implemented in the World” to Chapter 2-4 (2) Adding the information on toxin-producing algal blooms into Chapter 3 as follows;

   3. Countermeasures against toxin-producing algal blooms in the NOWPAP Region
      3.1 Situation of toxic species in the NOWPAP Region and necessity of development of countermeasures
      3.2 Countermeasures against toxic species in the NOWPAP Region
      3.3 Countermeasures against poisoning by microalgal toxins
      3.4 Countermeasures against toxic species implemented in the world.

Agenda Item 10. Discussion on the activities of the “Cochlodinium Corresponding Group (CCG)”.

31. The Secretariat explained the activity of Cochlodinium Corresponding Group (CCG) for the 2006-2007 biennium.

32. The Secretariat asked WG3 members to translate the Cochlodinium pamphlet to the language of each Member country. WG3 members agreed on this work. The Secretariat will send the original file to each member within a week after the meeting, and WG3 members will send the translated file back to the Secretariat by the end of July. When members translate, please use easy wording targeted for public users including fishermen and students.
Agenda Item 11. Discussion for the future joint activities of NOWPAP WG3 and WG4.

33. 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.

34. 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.

35. 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 NOWPAP and that WG cannot establish or disband itself, but can make suggestions for decision making.

36. 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.

37. 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.

38. 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.

39. Dr. 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.

40. 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.

41. 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.

42. (Add) The revised documents for Mid-Term and Long-Term strategies of CEARAC will be distributed to WGs members.

**Agenda Item 12. Other matters.**

43. The meeting was invited to raise any other issues relevant to the NOWPAP/CEARAC activities.

44. Dr. Mitnik made a presentation about a Hokkaido Sea Bird Die-off case.

45. 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).

46. 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.

47. 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.**

48. 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.**

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