

NOWPAP DINRAC

Northwest Pacific Action Plan
Data and Information Network Regional Activity Center

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Report of the 11th NOWPAP DINRAC Focal Points Meeting

DINRAC, Beijing, the People's Republic of China
24-25 July 2013

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THE REPORT OF THE ELEVENTH NOWPAP DINRAC FOCAL POINTS MEETING

(Beijing, People's Republic of China, 24-25 July 2013)

Background

1. The Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP) and three Resolutions were adopted at the First NOWPAP Intergovernmental Meeting (IGM) (Seoul, 14 September 1994) by the States in the Northwest Pacific region: People's Republic of China, Japan, Republic of Korea and Russian Federation (hereinafter referred to as China, Japan, Korea, Russia, respectively). Resolution 1 identified five areas of priority for implementation of the Action Plan, one of which was NOWPAP/1: Establishment of a Comprehensive Database and Information Management System.

2. In December 2000, the Data and Information Network Regional Activity Centre (DINRAC) hosted by the Environmental Information Centre of State Environmental Protection Administration of China (SEPA) was established in Beijing based on the Resolution 2 of the Fourth NOWPAP Intergovernmental Meeting. DINRAC was designated to function as the Secretariat for NOWPAP/1 and the NOWPAP/1 Coordinating Working Group (CWG) and took on the responsibilities as defined in its Terms of Reference.

3. The NOWPAP DINRAC Focal Points Meetings (FPM) have been held since its first meeting in Shanghai, China in 2002.

4. The Eleventh DINRAC FPM was held on 24-25 July 2013 in Beijing, China. The Meeting mainly reviewed the progress made in the intersessional period after the Tenth NOWPAP DINRAC FPM, discussed and approved the adjusted DINRAC work plan and budget for 2013 (UNEP/NOWPAP/DINRAC/FPM 11/8, ANNEX III) and proposed overall DINRAC work plan and budget for the 2014-2015 biennium (UNEP/NOWPAP/DINRAC/FPM 11/15, ANNEX VII), and agreed to submit the work plan and budget for the 2014-2015 biennium to the Eighteenth IGM of NOWPAP for final approval.

Agenda item 1: Opening of the Meeting

Agenda item 1.1: Opening and Welcome Statement

5. The Meeting was opened at 9:30 a.m. on 24 July 2013 in Beijing. Mr. Feng YAN, the director of DINRAC, opened the Meeting and welcomed all participants. Firstly, he introduced Mr. Yi LI, the representative of Ministry of Environmental Protection, to present a welcome speech. Mr. Yi LI thanked all participants for their attendance to the Meeting and appreciated NOWPAP Regional Coordinating Unit (RCU) and DINRAC Focal Points for their support and

contribution to DINRAC's activities in the past.

6. Mr. Feng YAN then introduced Mr. Bin PENG, the representative of China-ASEAN Environmental Cooperation Centre (CAEC), which is the hosting organization for the DINRAC Secretariat. Mr. Bin PENG presented a welcome statement as well by expressing gratitude to NOWPAP RCU, DINRAC Focal Points, experts, major partners and all participants of the Meeting.

Agenda item 1.2: Statements by Representatives of NOWPAP RCU and of the Participating Countries

7. Dr. Alexander TKALIN, NOWPAP coordinator, delivered an opening speech to the Meeting. He expressed appreciation to DINRAC for its implemented tasks in the past years, and also thanked the experts for their contribution. As for DINRAC's following work plan, he hoped that it could promote information sharing among the member states. And he wished a good outcome of the Meeting.

8. The DINRAC Focal Points of each member state made brief opening statements respectively.

Agenda item 2: Organization of the Meeting

Agenda item 2.1: Election of the Officers (Chairperson and Rapporteur)

9. According to the Terms of Reference for the NOWPAP DINRAC FPM, the Meeting unanimously elected Dr. Igor ROSTOV, the DINRAC Focal Point of Russia, as the Chairperson, and Dr. Kun LEI, the DINRAC Focal Point of China, as the Rapporteur respectively.

Agenda item 2.2: Organization of Work

10. Mr. Yihang JIANG from United Nations Development Programme (UNDP)/Global Environment Facility (GEF) Yellow Sea Large Marine Ecosystem (YSLME) Project enquired about the mechanism of DINRAC FPM. Dr. Alexander TKALIN made some explanation about working language, decisions to be taken by consensus, role of observers in discussions and decision-making process. He also explained that FPM role was an advisory one, before the NOWPAP IGM would make final decisions.

11. The Meeting agreed to apply the rules of procedures for the Meeting in line with the provision within the Terms of Reference of the NOWPAP DINRAC FPM. It was agreed that English would be the working language for the Meeting and decisions would be made by consensus.

Agenda item 2.3: Adoption of the Agenda

12. Upon the invitation of the Chairperson, the Director of DINRAC made a brief introduction to the Provisional Agenda (UNEP/NOWPAP/DINRAC/FPM 11/1) and the Annotated Provisional Agenda (UNEP/NOWPAP/DINRAC/FPM 11/2). Mr. Wenxi Zhu from the UNESCO/IOC Sub-Commission for the Western Pacific (WESTPAC) sought clarification on the Agenda Item 6.3 "Proposal for an Atlas of Climate, Oceanography and Marine Environment in the NOWPAP Region" with concern expressed over possible duplication of this work with those done by other organizations/programmes, such as the Intergovernmental Oceanographic Commission of UNESCO, particularly its regional GOOS in the Northeast Asian region, i.e. North East Asian Regional- Global Ocean Observing System (NEAR-GOOS) which has been promoting, developing and coordinating the oceanographic data sharing, enrichment and relevant databases establishment in North East Asian region. The chairperson replied and explained that there would be a presentation later as a response. After that all delegates agreed to proceed with the suggested Agenda.

Agenda item 3: Report of the NOWPAP Regional Coordinating Unit (RCU) on the Implementation of NOWPAP Activities since the 10th DINRAC Focal Points Meeting

13. Dr. Alexander TKALIN briefed the Meeting on the progress of the NOWPAP activities during the intersessional period since the Tenth DINRAC FPM, including the results of the Seventeenth NOWPAP IGM (UNEP/NOWPAP/DINRAC/FPM 11/3). He also briefly introduced the current activities of CEARAC, MERRAC and POMRAC, efforts made by RCU and RACs on building partnerships with other international mechanisms and programmes, raising public awareness, and the work under the Regional Action Plan on Marine Litter (RAP MALI).

14. Mr. Yihang JIANG made some comments on the report which expressed personal suggestions about the approaches to improve the work of NOWPAP. In particular, he provided an example of a successful collaboration between the YSLME project and World Wide Fund for Nature (WWF) Japan on biodiversity assessment (which could be of interest to NOWPAP Special Monitoring and Coastal Environmental Assessment Regional Activity Centre (CEARAC)). He also mentioned the Marine Protected Areas (MPA) network established about 3 years ago by the YSLME project and their annual meetings. Mr. Yihang JIANG indicated that within the GEF programmatic approach for the Seas of East Asia YSLME project would closely collaborate with Partnerships in Environmental Management for the Seas of East Asia (PEMSEA). As for NOWPAP, marine litter issue is of common interest and marine litter monitoring results to be generated by the second phase of the YSLME project could be reported to NOWPAP DINRAC marine litter database. Finally, he informed the Meeting that the second phase of the project had been approved by the GEF Council in this June and the project would hopefully start later this year (after submission of the Project Document).

15. Dr. Kun LEI expressed appreciation to the efforts made by RCU in implementing

Agenda item 4: Review of the Progress in the Implementation of DINRAC Work Plan for the 2012-2013 Biennium

Agenda item 4.1: Report on the Overall Implementation of DINRAC Activities and Budget since the 10th DINRAC Focal Points Meeting

16. Mr. Feng YAN presented the report on the Overall Implementation of DINRAC Activities and Budget since the tenth DINRAC FPM (UNEP/NOWPAP/DINRAC/FPM 11/4).

17. Dr. Alexander TKALIN then raised the concern about the activity “Summary of the Policies and Measures on the Prevention of Coastal and Marine Pollution in Member States” which is aimed to be implemented in the second half of 2013. Considering Memorandum of Understandings (MoU) of the activity which have been signed by China and Russia, he asked whether Japan and Korea were ready to sign the MoUs and to implement this activity. Mr. Feng YAN explained that necessary communication had been done with DINRAC Focal Points of Japan and Korea. The MoUs will be passed soon to these two member states after the Meeting and the activity should be conducted afterward and be accomplished by the end of 2013.

18. Mr. Yihang JIANG raised a question about the meaning and implication of the word ‘Record’ in the title of Table 2 (page 3 of the above document FPM 11/4). Mr. Feng YAN explained that the concrete essence of ‘Record’ here was not a specific numerical value but a comprehensive data package. Dr. Hee-Dong JEONG, the DINRAC Focal Point of Korea, supplemented that it meant in fact a clustering table of data with categories and numerical values. Dr. Alexander TKALIN proposed that this word might be changed somehow. The content of the data and information is more important. It was agreed by Mr. Yihang JIANG to share his suggestion personally with the DINRAC Secretariat after the Meeting. At last, Dr. Kun LEI expressed her wish to support DINRAC as always and hoped RCU could give more guidance as well.

19. After lengthy discussion, the Meeting adopted the report.

Agenda item 4.2: Progress Report on the Annual Summary of Major Marine Environmental Data Available in Member States since the 10th DINRAC Focal Points Meeting

20. Mr. Feng YAN presented the progress of Annual Summary of Major Marine Environmental Data Available in Member States since the Tenth DINRAC FPM (UNEP/NOWPAP/DINRAC/FPM 11/5).

21. Dr. Hee-Dong JEONG expressed the regret for the delay in process of the required data collection. Then he emphasized the importance of uniform data structure which may be quite helpful for data collection.

22. Mr. Akihiro SETA, the DINRAC Focal Point of Japan, pointed out a mistake in the report about the categories of data collected by Japan. This mistake was corrected at the Meeting.

23. Mr. Yihang JIANG raised a question about some items in the data sheets. Dr. Alexander TKALIN and Dr. Kun LEI made the explanation respectively. Dr. Alexander TKALIN emphasized the importance of this activity and expressed his understanding of the current situation which can be seen as a necessary procedure for DINRAC. And he expected that this activity could improve the data and information exchange more effectively in the future.

24. Dr. Hee-Dong JEONG mentioned that data formats were different in terms of summary or description which cannot help much to the end users. Dr. Vladimir SHULKIN from NOWPAP Pollution Monitoring Regional Activity Centre (POMRAC) expressed his doubt on how to continue collecting data published by related organizations.

25. After lengthy discussion, the Meeting adopted the report.

Agenda item 4.3: Progress Report on the Summary of the Policies and Measures on the Prevention of Coastal and Marine Pollution in Member States since the 10th DINRAC Focal Points Meeting

26. Mr. Feng YAN presented the progress of Summary of the Policies and Measures on the Prevention of Coastal and Marine Pollution in Member States since the Tenth DINRAC FPM (UNEP/NOWPAP/DINRAC/FPM 11/6).

27. Dr. Alexander TKALIN asked the reason why MoUs of Japan and Korea had not been signed yet. Mr. Akihiro SETA and Dr. Hee-Dong JEONG made the explanations. Mr. Feng YAN pointed out that this might be due to problems with the public e-mail address system.

28. After the discussion, the Meeting adopted the report.

Agenda item 4.4: Progress Report on Atlas of Marine Invasive Species in the NOWPAP Region since the 10th DINRAC Focal Points Meeting

29. Dr. Konstantin LUTAENKO, the leading expert for the activity, presented the progress of Atlas of Marine Invasive Species in the NOWPAP Region since the Tenth DINRAC FPM (UNEP/NOWPAP/DINRAC/FPM 11/7).

30. Mr. Yihang JIANG and Dr. Toru SUZUKI from the North Pacific Marine Science Organization (PICES) expressed the concerns on details of the atlas. Dr. Konstantin LUTAENKO gave the explanations. He also expressed wishes that the final comments on the atlas from member states should be submitted soon so that he could complete the final version for the publication. Dr. Alexander TKALIN expressed the willingness to support the printing expenses if it is necessary within some reasonable limits.

31. After lengthy discussion, the Meeting adopted the report.

Agenda item 5: Discussion on DINRAC Work Plan and Budget for 2013

32. Mr. Feng YAN presented a report of DINRAC work plan and budget for 2013 (UNEP/NOWPAP/DINRAC/FPM 11/8).

33. After a round of informal consultations, the plan was revised by the DINRAC Secretariat and the Meeting agreed to the adjusted work plan and budget for 2013, as shown in Annex III.

Agenda item 6: DINRAC Work Plan and Budget for the 2014-2015 Biennium

Agenda item 6.1: Proposal for Developing Visualized DINRAC Website

34. Dr. Alexander TKALIN made a presentation about DINRAC's position, responsibilities and role in the NOWPAP. These comments were suggested to be considered when evaluating new proposals.

35. Mr. Fang TIAN, a DINRAC Secretariat Staff member, made an introduction on the proposal for developing visualized DINRAC website (UNEP/NOWPAP/DINRAC/FPM 11/9), including the background, budget allocation, and schedule.

36. It was proposed at the Meeting that handling the issue of sensitive information should be considered at very first place. Dr. Yunyan DU, the GIS expert of China, proposed two solutions for this issue. One was that it could be done by compiling a vector map which serves as a base map. In this case, the vector map of each country should be provided by member states. The other was that it could be done by using a base map created by other organization which has been passed through by each member state. Dr. Igor ROSTOV expressed as the DINRAC Focal Point of Russia some concerns when collecting some required data format such as SHP files due to the large expenditure from the map producer. Mr. Akihiro SETA and Mr. Yihang JIANG both expressed the willingness and possibility of some technical support on the base map.

37. Dr. Alexander TKALIN proposed that DINRAC should be aware of the amount of end users

for the WebGIS system, which would directly demonstrate if it is worthy to pay the attention and resources to this activity. It was agreed by all DINRAC Focal Points. Mr. Feng YAN explained that DINRAC would carry out the traffic statistics to the Databases and the WebGIS system in the next biennium.

38. After a lengthy discussion about the technical issues of base map, it was decided to adjust this proposal when discussing the overall work plan for the 2014-2015 biennium.

Agenda item 6.2: Proposal for Annual Update of Existing Databases

39. Mr. Fang TIAN made an introduction on the proposal for annual updates of existing databases (UNEP/NOWPAP/DINRAC/FPM 11/10), including the background, budget allocation, and schedule.

40. Dr. Alexander TKALIN emphasized again the importance of traffic information to the existing databases which was agreed by the Meeting.

41. Dr. Alexander TKALIN pointed out that the current 8 categories of the Marine Environmental Data did not cover all data contents available in NOWPAP region. Mr. Feng YAN made an explanation that new categories would be designed to cover all the data contents which is aimed to be a core section in allocation of this activity.

42. After a lengthy discussion about the possibility of updating the existing databases annually, it was decided to adjust this proposal when discussing the overall work plan for the 2014-2015 biennium.

Agenda item 6.3: Proposal for an Atlas of Climate, Oceanography and Marine Environment in the NOWPAP Region

43. Dr. Igor ROSTOV, the DINRAC Focal Point of Russia, made an introduction on the proposal for an Atlas of Climate, Oceanography and Marine Environment in the NOWPAP Region (UNEP/NOWPAP/DINRAC/FPM 11/11), including the background, budget allocation, and schedule.

44. The Meeting agreed that this activity was a profound approach for DINRAC. Considering that it requires huge amount of work to reach the objective, and the difficulties when merging the data collected from different member state, as well as the quality assurance (QA)/quality control (QC), it was suggested to make a decision on this activity at a later stage.

45. Mr. Wenxi ZHU reminded that it might generate unnecessary duplications with other UN competent organizations, respectively for climate, and marine science. He further sought more clarifications on the difference of Atlas and database, and suggested more efforts to be made by DINRAC with its limited resources in the improvement of ongoing databases, data sharing and standardization. Dr. Igor ROSTOV explained that it was not for a database, but static layout or tabular presentation for displaying data.

46. After a lengthy discussion about the activity, it was decided to adjust this proposal when discussing the overall work plan for the 2014-2015 biennium.

Agenda item 6.4: Proposal for an Atlas and a Database of Endangered Species in the NOWPAP Region

47. Mr. Fang TIAN made an introduction on the proposal for an atlas and a database of endangered species in the NOWPAP region (UNEP/NOWPAP/DINRAC/FPM 11/12), including the background, budget allocation, and schedule.

48. Dr. Alexander TKALIN made a suggestion that the leading expert, who is very important in implementing this activity, should be chosen in advance. Mr. Yihang JIANG mentioned that feasibility review or study on the endangered species in the NOWPAP region was necessary before the implementation.

49. The Meeting raised concerns on how to define the endangered species and the geographic range of the species considered. Dr. Konstantin LUTAENKO, as the Russian expert of biodiversity, gave some explanations to the Meeting on this matter.

50. Dr. Alexander TKALIN mentioned that the similar work had been conducted by some organizations such as Intergovernmental Oceanographic Commission (IOC) and International Union for Conservation of Nature (IUCN). The “Red List” of endangered species has been published which contains very detailed information there. This should be considered when making the decision.

51. Mr. Akihiro SETA raised the possible problems when locating the endangered species because some over fishing places are usually not opened.

52. After a lengthy discussion about the activity, it was decided to adjust this proposal when discussing the overall work plan for the 2014-2015 biennium.

Agenda item 6.5: Proposal for a Database on Marine Environmental Quality Standards and Discharge Standards in Member States

53. Dr. Kun LEI made an introduction on the proposal for a database on marine environmental Quality standards and discharge standards in member states (UNEP/NOWPAP/DINRAC/FPM 11/13), including the background, budget allocation, and schedule.

54. Dr. Hee-Dong JEONG asked the definitions and categories of standards. Dr. Kun LEI made some explanations.

55. It was proposed at the Meeting that the difference between this database and the relevant work which has been carried out by POMRAC should be taken into account.

56. After a lengthy discussion about the activity, it was decided to adjust this proposal when discussing the overall work plan for the 2014-2015 biennium.

Agenda item 6.6: Proposal for Ferry Boat Monitoring in the NOWPAP Region

57. Dr. Hee-Dong JEONG made an introduction on the proposal for ferry boat monitoring in the NOWPAP region (UNEP/NOWPAP/DINRAC/FPM 11/14), including the background, budget allocation, and schedule.

58. Dr. Alexander TKALIN commented that this particular issue had not been enclosed in the DINRAC's responsibility, and that it was more reasonable for POMRAC or CEARAC to implement this activity.

59. Dr. Hee-Dong JEONG made some explanations about the mechanism and possible funding. The allocation of monitoring lines was also concerned by the Meeting because of the issue such as entry permit.

60. After a lengthy discussion about the activity, it was decided to adjust this proposal when discussing the overall work plan for the 2014-2015 biennium.

Agenda item 6.7: Overall DINRAC Work Plan and Budget for the 2014-2015 Biennium

61. Mr. Feng YAN made a presentation on the proposal for the overall DINRAC work plan and budget for the 2014-2015 biennium (UNEP/NOWPAP/DINRAC/FPM 11/15).

62. The proposals for "Developing Visualized DINRAC Website", "Annual Update of Existing Databases", "An Atlas of Climate, Oceanography and Marine Environment", "An Atlas and a Database of Endangered Species", "A Database on Marine Environmental Assessment Standards and Discharge Standards", "Ferry Boating Monitoring" were evaluated and commented adequately. After the final discussion and prioritizing by the DINRAC Focal Points, the Meeting decided to change the title of the proposal for "an Atlas and a Database of Endangered Species in the NOWPAP Region" into "Collection of Information on Endangered Species in the NOWPAP Region". And the Meeting decided to continue the "Annual Summary of Marine Environmental Data" in the next biennium. Dr. Alexander TKALIN emphasized that the data collection formats of both marine environmental data and endangered species should be discussed within 3 months after the Meeting. Finally, the following proposals were determined to be the targeted activities for the 2014-2015 biennium.

- 1) Developing visualized DINRAC website
- 2) Annual update of existing databases
- 3) Annual summary of marine environmental data

4) Collection of information on endangered species in the NOWPAP region

63. A new revised sheet for DINRAC work plan and budget for the 2014-2015 biennium was discussed taking into account the opinions of participants on original document (UNEP /NOWPAP/ DINRAC/FPM 11/15). The Meeting reached agreement on the revised proposal for DINRAC work plan and budget for the 2014-2015 biennium, and agreed to submit it to the Eighteenth NOWPAP IGM, as shown in Annex VII.

Agenda item 7: Arrangement of the Twelfth DINRAC Focal Points Meeting

64. The Meeting agreed that the Twelfth NOWPAP DINRAC FPM would be held in China in mid-May, 2014. Concrete date and venue of the meeting will be decided through consultation among DINRAC Focal Points by the DINRAC Secretariat in later stage.

Agenda item 8: Other Matters

65. Dr. Kun LEI asked for the support from RCU and each member state on the base map of the WebGIS system. Dr. Alexander TKALIN emphasized that more frequent communication in this regard between the DINRAC Secretariat and DINRAC Focal Points was necessary during the intersessional period. Dr. Choong-Ki KIM from NOWPAP Marine Environmental Emergency Preparedness and Response Regional Activity Centre (MERRAC) expressed the willingness for further collaboration on the web GIS system for Oil and Hazardous and Noxious Substance (HNS) spills. Mr. Yinfeng GUO from PEMSEA expressed gratitude to the RCU and the DINRAC Secretariat, also the wish to build up more collaboration with NOWPAP.

Agenda item 9: Adoption of the Report of Meeting

66. The draft report of the Eleventh NOWPAP DINRAC FPM with its annexes was prepared by the DINRAC Secretariat and the Rapporteur for consideration and adoption. After minor amendments, the report (UNEP/NOWPAP/DINRAC/FPM 11/16) was adopted by the Meeting as the record of its deliberation.

Agenda item 10: Closure of the Meeting

67. After the customary exchange of courtesies, the Chairperson declared the Meeting closed at 12:30 p.m. on Thursday, 25 July 2013.

LIST OF ANNEXES

Annex I	List of Participants
Annex II	List of Documents
Annex III	Adjusted DINRAC Work Plan and Budget for 2013
Annex IV	Proposal for Developing Visualized DINRAC Website
Annex V	Proposal for Annual Update of Existing Databases
Annex VI	Proposal for Collection of Information on the Endangered Species in the NOWPAP Region
Annex VII	Proposal for Annual Summary of Marine Environmental Data
Annex VIII	Overall DINRAC Work Plan and Budget for the 2014-2015 Biennium

Annex I

**List of Participants to the Eleventh NOWPAP DINRAC
Focal Points Meeting**

List of Participants to the Eleventh NOWPAP DINRAC Focal Points Meeting

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Annex II

**List of Documents for the Eleventh NOWPAP DINRAC
Focal Points Meeting**

List of Documents for the Eleventh NOWPAP DINRAC Focal Points Meeting

<u>Working Documents</u>	
UNEP/NOWPAP/DINRAC/FPM 11/1	Provisional Agenda
UNEP/NOWPAP/DINRAC/FPM 11/2	Annotated Provisional Agenda
UNEP/NOWPAP/DINRAC/FPM 11/3	Report of the NOWPAP Regional Coordinating Unit (RCU) on the Implementation of NOWPAP Activities
UNEP/NOWPAP/DINRAC/FPM 11/4	Report on the Overall Implementation of DINRAC Activities and Budget
UNEP/NOWPAP/DINRAC/FPM 11/5	Progress Report on the Annual Summary of Major Marine Environmental Data Available in Member States
UNEP/NOWPAP/DINRAC/FPM 11/6	Progress Report on the Summary of the Policies and Measures on the Prevention of Coastal and Marine Pollution in Member States
UNEP/NOWPAP/DINRAC/FPM 11/7	Progress Report on Atlas of Marine Invasive Species in the NOWPAP Region
UNEP/NOWPAP/DINRAC/FPM 11/8	Report on DINRAC's Work Plan and Budget for 2013
UNEP/NOWPAP/DINRAC/FPM 11/9	Proposal for Developing Visualized DINRAC Website (continue)
UNEP/NOWPAP/DINRAC/FPM 11/10	Proposal for Annual Update of Existing Databases
UNEP/NOWPAP/DINRAC/FPM 11/11	Proposal for an Atlas of Climate, Oceanography and Marine Environment in the NOWPAP Region
UNEP/NOWPAP/DINRAC/FPM 11/12	Proposal for an Atlas and a Database of Endangered Species in the NOWPAP Region
UNEP/NOWPAP/DINRAC/FPM 11/13	Proposal for a Database on Marine Environmental Assessment Standards and Discharge Standards in Member States
UNEP/NOWPAP/DINRAC/FPM 11/14	Proposal for Ferry Boat Monitoring in the NOWPAP Region
UNEP/NOWPAP/DINRAC/FPM 11/15	DINRAC Work Plan and Budget for the 2014-2015 Biennium
UNEP/NOWPAP/DINRAC/FPM 11/16	Report of the 11 th NOWPAP DINRAC Focal Points Meeting
<u>Reference Documents</u>	
UNEP/NOWPAP/DINRAC/FPM 11/Ref.1	Announcement of the 11 th NOWPAP DINRAC Focal Points Meeting
UNEP/NOWPAP/DINRAC/FPM 11/Ref.2	Logistic Information for the 11 th NOWPAP DINRAC Focal Points Meeting
UNEP/NOWPAP/DINRAC/FPM 11/Ref.3	List of Documents
UNEP/NOWPAP/DINRAC/FPM 11/Ref.4	List of Participants
UNEP/NOWPAP/DINRAC/FPM 11/Ref.5	Tentative Timetable
UNEP/NOWPAP/DINRAC/FPM 10/9	Report of 10 th NOWPAP DINRAC Focal Points Meeting
UNEP/NOWPAP IG. 16/10/1/Rev. 2	NOWPAP Medium-term Strategy, 2012-2017

Annex III

Adjusted DINRAC's Work Plan and Budget for 2013

Adjusted DINRAC's Work Plan and Budget for 2013

1. The 16th NOWPAP IGM has approved DINRAC work plan and budget for the 2012-2013, including the following main activities:
 - a) Organization of the 10th and 11th DINRAC Focal Points Meeting in 2012 and 2013.
 - b) Publication of the Atlas of Marine Invasive Species in the NOWPAP region
 - c) Internet application:
 - i) Maintenance and update of the website for NOWPAP DINRAC
 - ii) Collection and update of marine environmental data on sea water quality and major sea water pollutants, river and direct inputs of pollutants, waste dumping, atmospheric deposition of pollutants, bottom sediments quality and major pollutants, occurrence of Harmful Algal Blooms.
 - iii) Collection of data and information on marine environmental policies and measures in NOWPAP member states
 - d) Publication and reports:
 - i) Report of the 10th and 11th DINRAC Focal Points Meeting
 - ii) Atlas of Marine Invasive Species in the NOWPAP region
 - iii) Brief on Marine Environmental Policies and Measures in NOWPAP member states.
 - e) Communication and cooperation: cooperation and coordination with other RACs, RCU, UNEP and other relevant organizations, project and programmes.
 - f) Implementation of NOWPAP RAP MALI.

2. DINRAC has been continuing to carry out the following tasks as the workplan of 2013:

Activity	Timing	Output/Performance Indicators	Responsibility
Coordination with RCU, other RACs, UNEP and partners	Continuous Throughout in 2013	Coordination and cooperation with other relevant organizations and programmes	DINRAC, other RACs, RCU, UNEP
Organization of 11 th	July 2013	Reports of the Meeting	DINRAC, RCU

Focal Points Meeting			
Update, maintenance and enrichment of DINRAC website	Continuous Throughout in 2013	Maintenance of website interface and contents, update of NOWPAP data and information, news, etc.	DINRAC, RCU, other RACs
Publication of the Atlas of Marines in the NOWPAP Region	Nov. 2013	Printed Atlas of Marine Invasive in the NOWPAP Region	DINRAC, RCU
Annual summary of major marine environmental data available in member states	Dec.2013	Thematic marine environmental databases including sea water quality and major sea water pollutants, waste dumping, atmospheric deposition of pollutants, bottom sediments quality and major pollutants, occurrence of Harmful Algal Blooms.	DINRAC DINRAC FPs or experts Other RACs
Summary of the policies and measures for the prevention of coastal and marine pollution in member states	Dec. 2013	NOWPAP Marine Environmental Policies and Measure Database	DINRAC DINRAC FPs or experts

3. Work Plan and Budget of 2013:

No.	Activities	Actions	Up to	Budget	Expenditure
1	Update, maintenance and enrichment of DINRAC website	Update of relevant information Collection of news Developing new contents in WebGIS	1 July, 2013	6,000	2,000
2	Publication of the Atlas of Marine Invasive Species in the NOWPAP Region	Publication of the Atlas	1 July, 2013	4,000	0

3	Annual summary of major marine environmental data available in member states	Collection of thematic marine environmental databases, including sea water quality and pollutants, waste dumping, atmospheric deposition of pollutants, bottom sediments quality and major pollutants, occurrence of HABs.	1 July, 2013	4,000	4,000
4	Summary of the policies and measures for the prevention of coastal and marine pollution in member states	Organization and sub-contract with leading experts and experts from member states	1 July, 2013	16,000	3,000
5	Maintain and update marine litter data and information based on inputs by member states and RACs	Compilation of data Uploading data	1 July, 2013	1,000	1,000
6	DINRAC Focal Points Meeting	Organization of the 11 th Focal Points Meeting	1 July, 2013	27,210	0
7	Travel	Official travel	1 July, 2013	2,000	0
8	Miscellaneous	Communications	1 July, 2013	3,000	0
	Total			63,210	10,000

Annex IV

Proposal for Developing Visualized DINRAC Website

Proposal for Developing Visualized DINRAC Website

1. Background

The 13th IGM made the resolution 1 including DINRAC activities in 2010-2011. It was requested to develop a new activity such as GIS-based visualization of the marine and coastal data as a tool to analyze the marine environmental status, for example, the FAO website containing GIS-based coastal and marine environment data on the global scale. The importance of data and information sharing through the cooperation between RACs was also stressed.

Until now, through the efforts of FPs and national experts, DINRAC has established a WebGIS system on the website which makes the thematic data visible in the Base Map. Three thematic maps have been completed, namely, 'Marine Protected Areas', 'Oil Spill Accidents' and 'Hazardous and Noxious Substance Accidents' which are accessible.

To enrich the WebGIS system and make the website more effective, more thematic maps should be added. Thus DINRAC secretariat proposed the new activity - Developing Visualized DINRAC Website for the discussion and approval by the DINRAC 11th FPM

The objectives of this Activity are to make data and information in NOWPAP user-friendly and better maintaining of the established databases, to promote data and information sharing among NOWPAP member states, to promote public awareness and education.

2. Allocation of Work and Budget

The budget for leading expert of Atlas of MIS will be 1,000 USD in 2014. The budget for GIS expert will be 5,000 USD in 2014 and 3,000 USD in 2015. The budget for DINRAC secretariat will be 5,000 USD for two years. The total budget will be 14,000 USD as Table 1 shows:

**Table 1. The Work Plan and Budget for the Developing Visualized DINRAC Website
(continue) in the biennium 2014-2015**

Activities	Actions	Implemented by	Tentative Time	Budget (in USD)	
				In 2014	In 2015

1	Upgrade the WebGIS platform on DINRAC Website	█	█			█	█		
2	Establish the database of Marine Invasive Species	█	█						
3	Visualize the information of MIS database in WebGIS platform			█	█				

Annex V

Proposal for Annual Update of Existing Databases

Proposal for Annual Update of Existing Databases

1. Background

1.1 The Management of databases is one of the primary targets of DINRAC. In the Terms of Reference for DINRAC, 6 of 22 tasks are related to information/databases as followings:

- (g) *To connect the regional prototype homepage with information sources of other NOWPAP Regional Activity Centres;*
- (h) *To collect and compile inventory information on databases participating in NOWPAP/1 and GIS-type products, and to provide inventory information through the regional network;*
- (i) *To function as a switchboard to direct users of the network to appropriate databases connected with the regional homepage;*
- (m) *To maintain databases created by the Regional Activity Centre, such as Database on Marine Environmental Institutions and Scientists;*
- (q) *To collect information on technologies and leading-edge know-how in the field of environmental data and information management in the NOWPAP region and to transfer it to the members of the Coordinating Working Group;*
- (t) *To disseminate information and raise public awareness, in particular, that of populations directly concerned with information and data management on the marine, coastal and associated freshwater environment in the NOWPAP region;*

1.2 In the NOWPAP Medium-term Strategy 2012-2017, the Theme 6 Information Management was noted as the main task for DINRAC.

Theme 6. Information management

2012-2017 MTS Objectives	Suggested Activities	Expected accomplishments
6.1. To collate and record environmental data and information at the DINRAC website which will serve as a repository of all relevant available data and as a source of information for specialists, administrators, decision-makers and general public. <i>Objective (ii) from Action Plan, modified.</i>	<ul style="list-style-type: none"> ▪ Regular collection of data and information on major marine environmental issues ▪ Regular update of existing databases and maintaining links through DINRAC website 	NOWPAP member states, through DINRAC website, have free access to reliable information on coastal and marine environment in the NOWPAP region collected from members, NOWPAP RACs and other organizations and projects

1.3 The Statistics on Page Views of DINRAC Website during the Sept. - Dec. 2009 also showed that the databases are the major content to be accessed in the website. See the statistics as shown in table 1:

Table 1. Statistics on Page View of DINRAC Website (during Sept. - Dec.2009)

Page Views	Sub columns	Page View 2009-09	Page View 2009-10	Page View 2009-11	Page View 2009-12	Total Page View	Percentage of columns
Columns	About	670	1270	805	1331	4076	21.9%
	Marine Environment	158	308	262	378	1106	5.9%
	Marine Litter	713	1443	1077	1933	5166	27.7%
	NOWPAP Databases	486	1029	1059	2316	4890	26.2%
	NOWPAP Publications	150	265	178	293	886	4.8%
	NOWPAP Meetings	66	136	130	156	488	2.6%
	Related Orgs	64	120	110	146	440	2.4%
	Links	57	111	108	152	428	2.3%
	Contact Us	51	111	87	147	396	2.1%
	Feedback	41	108	91	142	382	2.0%
	SiteMap	46	108	88	135	377	2.0%
Pave Views for all columns		2502	5009	3995	7129	18635	43.2%
Homepage		2674	2885	1770	2478	9807	22.7%
Documents (download)		4068	5182	925	4510	14685	34.1%
Total Pave Views		9244	13076	6690	14117	43127	100.0%

2. Existing Databases

In order to accomplish its function on sharing and exchange of marine environmental data and information, NOWPAP DINRAC, through the efforts of its National Focal Points (NFPs) and national experts, collaboration with other RACs, has established 12 databases accessible in DINRAC website until now which cover the main activities and relevant information of NOWPAP.

Databases which were established in collaboration with other RACs are updated annually according to the results from those RACs.

- *Oil Spill Accidents (MERRAC)*
- *Hazardous and Noxious Substance (MERRAC)*
- *Harmful Algal Bloom events (CEARAC, under construction)*
- *Reference of Atmospheric Deposition (POMRAC)*
- *Reference of River and Direct Inputs of Contaminants (POMRAC)*
- *Reference of Integrated Coastal and River Basin Management (POMRAC)*

Databases which were established based on DINRAC activities need to be updated regularly.

In addition, the integrality is becoming a problem (See Annex I for detail information). Some databases are lack of concrete items due to the deficiency of designed collection form. The following table 2 shows the current situation of established databases:

Table 2. Records and Update Situation of Established Databases

Database\Country	China		Japan		Korea		Russia	
	Record	Last Update	Record	Last Update	Record	Last Update	Record	Last Update
MED	10	2012/9/25	4	2013/3/21	0		16	2012/9/5
IR	85	2008/10/15	37	2008/4/10	44	2009/5/19	115	2012/10/24
C&N	13	2010/12/1	8	2011/3/31	33	2008/5/9	16	2010/10/5
MPA	84	2011/12/15	99	2011/12/15	29	2011/12/15	65	2012/2/17
GIS&RS Datasets	17	2005/7/30	5	2005/6/30	7	2005/9/6	15	2005/6/29
GIS&RS Systems	7	2005/7/27	2	2005/7/8	6	2005/9/6	15	2005/6/29
GIS&RS Reports	7	2005/7/27	0		4	2005/9/1	13	2005/6/29
Institutions	64	2008/4/7	66	2008/2/13	22	2008/6/3	39	2008/2/19
Experts	394	2008/6/10	132	2008/7/29	268	2008/6/3	147	2008/4/1

MED – Marine Environmental Data

IR – Information Resource

C&N - Contaminants and Nutrients

MPA – Marine Protected Areas

3. Objective

In general, an annual update of existing databases is necessary for more efficient maintaining. DINRAC secretariat has proposed the Annual Update of Existing Databases, for the approval by the DINRAC NFPs at the 11th Focal Points Meeting.

The objectives of the Annual Update of Existing Databases are to make more efficient exchange of data and information in NOWPAP region and better maintaining of the established databases, to promote data and information sharing among NOWPAP member countries, to promote public awareness and education, thus to contribute to the activities of NOWPAP.

4. Allocation of Work and Budget

The annual budget for updating databases will be 1,000 USD for each member state and 1,000 USD for DINRAC for each year. The budget for the upgrade of IR database will be 2,000 USD. The budget will be 12,000 USD totally as shown in Table 3:

Table 3. The Workplan and Budget for the Proposal of the Annual Update of Existing Databases in the Biennium 2014-2015

Activities	Actions	Implemented by	Tentative Time	Budget (in USD)	
				In 2014	In 2015

Annual Update of Existing Databases	<ul style="list-style-type: none"> - Collection of the latest/new data records - Supplementation/update to the existing data - Update of the databases - Annual report - Upgrade of Information Resources - Annual publication of data inventory 	<ul style="list-style-type: none"> - FPs or Experts - FPs or Experts - DINRAC - FPs or Experts - DINRAC and FPs - DINRAC 	~ Dec., 2015	7,000	5,000
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5. Actions and Outputs

Action 1: Collection of the latest/new data records (2014, 2015)

Output 1: New filled data collection forms added to existing databases (2014, 2015)

Action 2: Supplementation/update to the existing data (2014, 2015)

Output 2: Updated data collection forms with better integrity of existing data (2014, 2015)

Action 3: Update of the databases (2014, 2015)

- Updated databases by DINRAC for output 1 and 2

Outputs 3: Updated databases (2014, 2015)

Action 4: Annual report on the progress to the FPM (2014, 2015)

- National Focal Points will make annual progress report to the FPM.

Outputs 4: Progress Reports to the 13th and 14th FPM including the latest data lists.

Action 5: Upgrade of Information Resources (2014)

The database of Information Resources, which consists of metadata, serves as a portal of NOWPAP through which the visitor can look for data and information available in the NOWPAP region that he/she may be interested.

The present database of IR does not cover all the metadata. Many databases and information that can be reached through the DINRAC website are not recorded in the IR database. The upgraded version will solve this problem and be the portal to any data and information that is available by visiting DINRAC website.

- Classify the present records in IR database by new categories (querying function).
- Add new records to the upgraded version of IR database.

Outputs 5: Upgraded version of Information Resources

Action 6: Annual publication of data inventory

- The data inventory will be published annually.

Outputs 6: Annual data inventory published on DINRAC website and in hard copies.

Appendix I

The Integrality Situation of MPA Database (by the end of 2011)

Table 1. Statistic on Integrality in Number and Content for MPA (277 records)

Item	Number	Percentage
No Longitude/latitude	2	1%
No SHP file	257	92%
No Basic Description	194	70%
No land area in Total Area	18	6%
No Supervising Authority	97	35%
No Protected Species	97	35%
No Endangered Species	225	81%

Table 2. Statistics by Status for MPA (277 records)

Country	Total	Established	Under Construction	Under Projection	Under Updating	Established Time
China	84	56	2	21	5	1980-08 - 2011-05-19
Japan	99	99	-	-	-	1934-03-16 - 2010-11-1
Korea	30	30	-	-	-	1965-04-07 - 2010-01-29
Russia	65	54	2	9	-	1916-10 - 2008-10-27

Table 3. Statistics by Category and Level of MPA Database (277 records)

Country	Category in the Country		Number	State Level	Provincial Level	City/County Level
China	C1	Nature Reserve	35	11	10	14
	C2	Marine Special Reserve	24	17	7	0
	C3	National Ocean Park	4	4	-	-
	C4	Fisheries Genetic Resources Reserve	21	21	0	0
	Sub_Total		84	53	17	14
Russia	R1	State Nature Reserves	7	7	-	-
	R2	State Nature Partial Reserve	18	1	17	-
	R3	Natural Park	5	1	4	0
	R4	National Park	3	3	-	-
	R5	Nature Sanctuaries	32	0	24	8
	Sub Total		65	12	45	8
Korea	K1	Coastal Wetland Protected Area	11	0	0	11

	K2	Marine Ecosystem Protected Area	5	0	2	3
	K3	National Park	4	0	0	4
	K4	Nature Reserve	6	0	0	6
	K5	Environment Conservation Sea Area	4	0	0	4
	Sub Total		30	0	2	28
Japan	J1	Natural Park/Quasi National Park	19	19	-	-
	J2	Natural Seashore Conservation Area	0	0	0	0
	J3	Nature Conservation Area	0	0	0	0
	J4	Wildlife Protection Area	3	3	0	0
	J5	Natural Habitat Conservation Area	0	0	0	0
	J6	Natural Monument	77	77	0	0
	J7	Protected Water	0	0	0	0
	J8	Coastal Fishery Resources Enhancement Area or Designated Marine Area	0	0	0	0
	J9	Various Areas Designated by Prefecture Governments, Fishery Cooperatives Groups of Local Fishers, etc.	0	0	0	0
	J10	Common Fishery Right Area	0	0	0	0
Sub Total		99	99	0	0	
Total			278	164	64	50

Note: Not all categories at all levels in some countries had been collected and detailed information is lack of about 70% for collected MPAs. Only a few MPA has the SHP files. Therefore, further activity to supplement the data in number and content as well as SHP file is necessary.

Appendix II**Upgrade Plan of IR system****1. Objectives**

- To make the upgraded version a portal through which all the data and metadata created by DINRAC can be found and queried.
- To form a unified entrance for the database users.
- The new version will cover the present IR system, Information Sources and other databases on DINRAC's website totally.
- To make the data uploading and updating easier.
- To strengthen QA\QC.

2. Upgrade Plan

The process can be divided into these parts as shown in Table 1:

Table 1. Work plan

No.	Actions	Target	Notes
1	Design the framework of the upgraded version	Unified entrance	Based on the IR system
2	Implementation on the website	Accessibility	Finished by web expert
3	Add the present IR data and Information Sources data	QA/QC	DINRAC
4	Add the present data in all the other DINRAC databases	QA/QC	DINRAC
5	Update the data in the upgraded version	Updating online	National FP or experts

3. Draft framework

The querying categories may consist of the followings:

- (1) Years
- (2) Countries
 - China
 - Russia
 - Japan
 - Korea
- (3) Data categories
- (4) Keywords

Each data record has 1 to 5 keywords for querying.

New data could be added online by using the adding function. Focal points/experts use the specific ID to add and edit data. Each ID can only edit data that added by itself. All the data added is designed to be checked by DINRAC secretariat or leading experts before the promulgation on the DINRAC's website.

Considering the diversity in parameters of each database, the new system will create metadata for all data records in the current databases on the website. This is for integration that all data could be queried from one portal webpage.

Annex VI

**Proposal for Collection of Information on the Endangered Species
in the NOWPAP Region**

Proposal for Collection of Information on the Endangered Species in the NOWPAP Region

1. Background

Biodiversity protection had been noted in the Medium-term Strategy of NOWPAP as a significant part of work.

In the past few years, some activities have been carried out on the Marine Invasive Species in NOWPAP region by the efforts of DINRAC FPs and national experts, which can be regarded as a beginning of the action of DINRAC. These activities have established a good foundation for the future action on biodiversity protection.

The Endangered Species is elementary for the protection of biodiversity. In fact, it is becoming an international issue rather than regional or sub-regional level.

The first step of protection for Endangered Species is the recognition. Thus DINRAC secretariat proposed Collection of Information on the Endangered Species in the NOWPAP Region, for the approval by the DINRAC NFPs at its 11th Focal Points Meeting.

The objectives of this activity are to make a better understanding of the situation of endangered species, to promote data and information sharing among NOWPAP member countries, to promote public awareness and education, and to contribute to the protection of biodiversity in NOWPAP member states.

2. Allocation of Work and Budget

The budget will be 2,000 USD for each member state, 1,000 USD for the Leading expert and 1,000 for the DINRAC secretariat. The total budget will be 10,000 USD as Table 1 shows:

Table 1. The Workplan and Budget for Collection of Information on the Endangered Species in the NOWPAP Region in the Biennium 2014-2015

Activities	Actions	Implemented by	Tentative Time	Budget (in USD)	
				In 2014	In 2015
Collection of Information on the Endangered Species in the NOWPAP Region	<ul style="list-style-type: none"> - Design of information collection form - Data collection 	<ul style="list-style-type: none"> - Leading expert - FPs or Experts 	~ Dec., 2014	10,000	0

3. Actions and Outputs

Action 1: Design of information collection form (2014)

- The leading expert will propose a designed information collection form, and collect comments from the Focal Points/Experts of DINRAC, RCU, etc.

Output 1: Data collection form for the Endangered Species information

Action 2: Data collection (2014)

- The data and information on endangered species in the NOWPAP region will be collected by leading expert and National Focal Points/experts in member states according to the form.
- The leading expert will be responsible for the overall quantity and quality of the data.
- Concrete arrangement of work will be decided by the leading expert together with national focal points or experts.

Output 2: Filled data collection forms in member states

Action 3: Report on the progress to the FPM

- DINRAC/Leading experts will present progress report to the FPM.

Outputs 3: Progress Reports to 12th and 13th FPM including the data lists

4. Schedule

Table 2. The Schedule for the Activity – Collection of Information on the Endangered Species in the NOWPAP Region in 2014

No.	Actions	Schedule of Work				
		2013	2014			
		9-12	1-3	4-6	7-9	10-12
1	Design of the data collection form					
2	Data collection					

Annex VII

Proposal for Annual Summary of Marine Environmental Data

Proposal for Annual Summary of Marine Environmental Data

1. Background

The activity - Annual Summary of Major Marine Environmental Data Available in Member States was proposed at the 9th FPM in 2011 and approved by the 16th IGM in the same year. For the purpose of collecting information of major marine environmental data, the 11th DINRAC FPM decided to continue this activity in the work plan of 2014-2015 biennium.

It was designed to be in 8 categories as shown in Table 1 for the data collection from the public/official documents in member states and other open sources.

Table 1. Categories for the Data Collection

No.	Data Category	Geographical Coverage of Data	Frequency of Update
1	Sea Water Quality and Major Sea Water Pollutants	Sea Areas in NOWPAP region	Annually
2	River Inputs of Pollutants		
3	Direct Inputs of Pollutants		
4	Waste Dumping		
5	Atmospheric Deposition of Pollutants		
6	Occurrence of Harmful Algal Bloom		
7	Bottom Sediments Quality and Major Pollutants		
8	Other relevant data		

According to the output of this activity in 2012, it was the fact that not all these categories of data could be collected in member states. So the form of categories above could mostly be regarded as a reference rather than request when collecting data. From this sense, it is necessary to investigate which categories are available in each member state before data collection.

At the 11th DINRAC FPM, Focal Points have discussed about which type of data should be collected. The present 'data' collected by most member states is not monitored numeral data which reflects the concrete situation of the marine environment. It can be seen as the textual descriptions about how the monitored numeral data match the relevant standards. Considering the difference between standards in different countries, these 'descriptions' seem to be less objective for the evaluation of marine environmental conditions.

Based on the previous data records, there are three types of information. In fact, it refers to be in different layers when processing the data as shown in Table 2:

Table 2. Layers of Data Records

Layer	Content	Example
1	Numeral data or annual average data The original monitored data	Korea
2	Grade/Benchmark under the standards Parameters of the standards	Japan
3	Textual Description based on the grade/Benchmark	China, Russia

For layer 1, the data can be seen as the numeral data or annual average data both are original monitored data which contains the detailed parameters.

For layer 2, the data is about the grade/benchmark under certain standards. The parameters of standards were given.

For layer 3, the information is about general situation based on the grade. The parameters of these standards were not given.

For the future work of this activity, it is encouraged to collect data by presenting like layer 1 which is more helpful to understand the exact situation of marine environment in the NOWPAP region with consideration of the accessibility of data. Data collection in layer 3 is the basic requirement, layer 2 would be more specific and layer 1 is plenary.

To uniform the data structure, the form for data collection on layer 1 should be designed. This would be completed by a leading expert.

2. Allocations of Work and Budget

In order to reach the objective, the work will mainly include the following contents:

- 1) Discussion and design of the Data Collection Form for layer 1 and detailed items of the data to be collected from the public/official reports and documents in the member countries.
- 2) Annual collection of data and information according to the designed Data Collection Form.
- 3) Organization of the data by different categories; uploading to the website of DINRAC in the form of database for public access and dissemination of the data in hard copies.

The work would be carried out on an annual basis. The total budget is estimated to be 16,000 USD. The budget for each member state will be 3,500 USD for biennium. The budget for the leading expert will be 1,000 USD. The budget for the DINRAC secretariat will be 1,000 USD.

3. Schedule

Table 3. Schedule of Work

No.	Contents of Work	Schedule of Work					
		2013	2014			2015	
			1-2	3-8	9-10	1-8	9-10
1	Discussion and design of the data collection form	→					
2	Signing MOUs		→				
3	Annual collection of data			→		→	
4	Upload data to the website and dissemination				→		→

Table 4. Investigation Table on the accessibility of each type of data for the 8 categories

No.	Data Category	Layer 1			Layer 2			Layer 3		
		Available	Not public	Lack	Available	Not public	Lack	Available	Not public	Lack
1	Sea Water Quality and Major Sea Water Pollutants									
2	River Inputs of Pollutants									
3	Direct Inputs of Pollutants									
4	Waste Dumping									
5	Atmospheric Deposition of Pollutants									
6	Occurrence of Harmful Algal Bloom									
7	Bottom Sediments Quality and Major Pollutants									
8	Other relevant data									

Note:

Available means these data can be collected and submitted to DINRAC.

Not public means these data exist but is not authorized to promulgate.

Lack means there is no such data in the country.

The 8 categories may be named differently depending on collected data.

Annex VIII Overall DINRAC Work Plan Budget for 2014-2015 Biennium

NO	Activities		Actions	Tentative Time	Budget (USD)			Total
					2014	2015	Sum	
1	Routine work of DINRAC secretariat	1.1 Update, Maintenance and Enrichment of DINRAC Website	Maintenance of the website system, including webpage interfaces, database system, etc.	2014, 2015	2,000	2,000	4,000	75,000
			Regular update of website contents, including news, events, publications, information resources, etc.					
		1.2 Website accessibility		2014, 2015	2,000	2,000	4,000	
		1.3 Traffic Statistical Analysis of DINRAC Website	Monthly report	2014, 2015	2,500	2,500	5,000	
		1.4 Organization of FPM	Organization of the 12 th DINRAC Focal Points Meeting	2014, 2015	25,000	25,000	50,000	
			Organization of the 13 th DINRAC Focal Points Meeting					
		1.5 Cooperation, communication of DINRAC activities	Coordination	2014, 2015	5,000	5,000	10,000	
			Travel					
			Meetings					
			Communication					
Publication								
1.6 Maintain and update marine litter data and information based on inputs by member states and other RACs	Maintain and update marine litter data	2014, 2015	1,000	1,000	2,000			
2	Developing Visualized DINRAC Website	Upgrade the WebGIS platform at DINRAC Website	2014, 2015	9,000	5,000	14,000	14,000	
		Visualize the database information of Marine Invasive Species						
3	Developing and Maintaining databases	3.1 Annual Update of Existing Databases	Upgrade of IR System	2014, 2015	7,000	5,000	12,000	28,000
			Annual publication of data inventory					
	3.2 Annual Summary of Marine Environmental Data	Data collecting formats	2014, 2015	8,000	8,000	16,000		
		Data collections and upload						
4	Collection of information on Endangered Species in the NOWPAP Region	Design of collection form	2014, 2015	10,000	0	10,000	10,000	
		Collection of information						
Total					71,500	55,500	127,000	127,000