1. Background

- 1. The 15th CEARAC Focal Points Meeting (FPM) held on 29-30 August 2017 reviewed and discussed the draft workplan and two budget plans (140,000 US dollars and 180,000 US dollars without 6,000 US dollars for marine litter activities) for CEARAC activities for the 2018-2019 biennium which were developed by the Secretariat of CEARAC. After the discussion, the meeting requested some modification on the workplan and agreed to submit to the 22nd NOWPAP Intergovernmental Meeting (IGM) held in December 2017.
- 2. IGM22 approved the submitted the workplan of NOWPAP for the 2018-2019 biennium with the entire budget of 1,300,000 US dollars. Then, CEARAC would be allocated 185,000 US dollars for its planned activities with another 9,450 US dollars for its marine litter activities, by which all planned activities and additional activities of CEARAC are to be implemented after some modification are applied.

2. Workplan of CEARAC activities for the 2018-2019 biennium

3. Intersessional activities for CEARAC in the 2018-2019 biennium which were approved in the 22nd NOWPAP IGM is shown in Table 1 below.

Table 1. CEARAC activities for the 2018-2019 biennium

Organization of meetings

- 16th FPM (2018) and 17th FPM (2019)
- Expert Meeting on Eutrophication Assessment in the NOWPAP region (2018, 2019)

Maintenance of Websites

- Updating website contents regularly
- Upgrading Marine Environmental Watch System
- Reconstructing CEARAC websites using cloud computing technology

Specific projects

Development of the CEARAC Medium-term Strategy on marine biodiversity

- Identifying potential topics on marine biodiversity for future activities and reviewing their feasibility
- Organizing marine biodiversity workshop/meeting for development of the CEARAC Medium-term Strategy on Marine Biodiversity (MTS)
- Developing the CEARAC MTS

Development of a roadmap for Regional Action Plan for Marine and Coastal Biodiversity Conservation in the NOWPAP region

- Collecting information on marine biodiversity activities in other regional seas programmes and member states
- Organizing series of meetings to clarify responsibilities of CEARAC (and other

RACs) in potential activities on marine and coastal biodiversity conservation and to develop a roadmap for Regional Action Plan on Marine and Coastal Biodiversity Conservation (RAP BIO)

- Preparing a draft NOWPAP Marine and Coastal Biodiversity Activity

Development of a tool for mapping seagrass distribution in the NOWPAP region

- Updating field data/information on seagrass distribution
- Developing a tool for mapping seagrass distribution with satellite images using cloud computing technology
- Constructing of web-based service for mapping seagrass distribution (depending on availability of external funding)

Cooperation and coordination with other RACs and regional/international organizations

- Participating in meetings/events held by other RACs and/or NOWPAP partners
- Considering and co-organizing events, such as meeting, workshops and trainings with other RACs and/or relevant regional/international organizations

Marine Litter Activities (RAP MALI)

- Harmonizing/summarizing monitoring data submitted by the member states
- Developing a regional overview of national efforts to address microplastics
- Translating contents of the Northwest Regional Node into Japanese
- Helping NPEC and DINRAC to transfer responsibility of the Northwest Regional Node

2.1 Organization of Meetings (16th and 17th FPM and Expert Meeting)

2.1.1 Focal Points Meetings

4. The 16th and 17th CEARAC FPM will be held in Toyama, Japan in spring 2018 and fall 2019 respectively. CEARAC FPs will review the modified workplan and the progress of on-going CEARAC activities and give suggestions for smooth implementation and successful completion of them. In addition, in the 17th FPM, CEARAC FPs will discuss a draft workplan and budget of CEARAC activities for the 2020-2021 biennium.

2.1.2 Expert Meeting

5. At the First CEARAC Expert Meeting on Eutrophication Assessment in the NOWPAP Region (Oct. 2017), it was decided to continue organizing the expert meeting on eutrophication assessment at a regular base. So, the follow-on Expert Meeting will be held in 2018 and 2019. Since CEARAC updates satellite Chlorophyll-a (Chl-a) information on annual basis, the meeting participants will review the updated information and the developed WebGIS map.

2.2 Maintenance of CEARAC websites

- CEARAC will update its website contents regularly by adding new data/information
 and posting developed reports and annual newsletters to disseminate latest
 information to the website users and raise public awareness on the marine and
 coastal environment.
- 7. CEARAC also plans to use 'cloud computing' service in the near future, and will start moving existing websites and database to a cloud server for reduction of operation cost and ease of maintenance.

2.3 Specific Projects

8. CEARAC will implement following three specific projects in the 2018-2019 biennium.

2.3.1 Development of the CEARAC Medium-term Strategy on marine biodiversity

9. CEARAC has implemented several activities on marine biodiversity in the past and current biennia. However, information gap among the member states has hindered smooth implementation of the activities, and a clear direction of CEARAC marine biodiversity activities has not been set yet. Therefore, CEARAC will develop its Medium-term Strategy on Marine Biodiversity (MTS) in this biennium to set out a clear vision and direction of CEARAC's marine biodiversity activities in the future.

2.3.2 Development of a roadmap for Regional Action Plan for Marine and Coastal Biodiversity Conservation

- 10. NOWPAP Regional Action Plan on Marine and Coastal Biodiversity (RAP BIO) is necessary framework to clarify the role of RACs, RCU and member states for marine and coastal biodiversity conservation in the NOWPAP region, and to implement activities more efficiently.
- 11. Then, to clarify and establish its role and working areas on conservation of marine biodiversity, CEARAC plans to develop the CEARAC Medium-term Strategy on Marine Biodiversity for the 2018-2019 biennium, as mentioned in 2.3.1 above. Collected information through this project helps create common understandings for NOWPAP's future direction on marine biodiversity, so CEARAC will discuss the roadmap for developing RAP BIO with other RACs, RCU and member states. As an outcome of this project, draft NOWPAP Marine and Coastal Biodiversity Activity will be developed.

2.3.3 Development of a tool for mapping seagrass distribution in the NOWPAP region

12. By using cloud computing technology, CEARAC will start developing a tool for mapping seagrass distribution in the NOWPAP region with satellite images. This activity aims to provide updated information of seagrass distribution in the NOWPAP region by active involvement of relevant researchers and research groups/organizations, governments and interested local citizens. Depending on availability of external funding, CEARAC will also develop a web service by incorporating the developed assessment tool.

2.4 Cooperation and coordination with other RACs and regional/international organizations

- 13. CEARAC will continue participating in meetings, workshops and/or other events held by NOWPAP RCU, other NOWPAP RACs, NOWPAP partners and other relevant regional and international organizations to exchange/share information and data to increase regional capacity for conservation of the marine and coastal environment.
- 14. CEARAC also explores opportunities to co-organize meetings, workshops and/or training sessions with other organizations to strengthen collaborative actions, avoid unnecessary overlapping of activities, share existing knowledge/techniques and using limited resources in an efficient and effective manner as well as to increase visibility of CEARAC and NOWPAP in wider communities.

2.5 CEARAC activities on Marine Litter (RAP MALI)

- 15. CEARAC will continue harmonizing/summarizing monitoring data of the member states and submit to DINRAC to be added in its database. Then, CEARAC will collect information on national efforts to address microplastics and develop a regional overview as well as translate some information in the Northwest Regional Node into Japanese.
- 16. From 2018-2019 on, DINRAC will be responsible for the Northwest Regional Node (website on marine litter in the NOWPAP region), and CEARAC will help smooth transfer of its responsibility from the Northwest Pacific Region Environmental Cooperation Center (NPEC), host organization of CEARAC to DINRAC.

3. Budget for CEARAC activities for the 2018-2019 biennium

17. Based on the decision of the 22nd NOWPAP IGM held in December 2017, the Secretariat of CEARAC revised its workplan and budget as shown in Table 2.

Table 2 Revised Workplan and Budget for CEARAC Activities for the 2018-2019 biennium (US\$185,000)

Activity	Revised Budget (US\$)		
	2018	2019	Total
Organization of meetings			
- 16 th and 17 th FPM	27,000	27,000	54,000
- Expert Meeting			
Maintenance of Websites			27,000
- Updating web contents	6,000	6,000	21,000
- Upgrading Marine Environmental Watch System	in-kind	in-kind	In-kind
- Preparation for cloud computing service		15,000	III-KIIIU
Specific projects			
Development of CEARAC MTS on Marine Biodiversity			
- Collecting information on potential topics	1,000		
- Reviewing feasibility of potential topics	12,000		30,000
- Organizing workshop/meeting		15,000	30,000
- Developing CEARAC MTS on marine BD		2,000	
Development of a roadmap for Regional Action plan			
for Marine/ Coastal Biodiversity Conservation			30,000
- Collecting information on other RSPs	5,000		00,000
- Organizing series of meetings	4,000	21,000	
Development of a tool for mapping seagrass			
distribution in the NOWPAP region			40,000
- Updating information on seagrass distribution	15,000		10,000
- Developing a tool for mapping seagrass distribution		25,000	(external)
- Constructing web-based service for mapping seagrass		(external)	(CXtorrial)
distribution (external, if possible)			
Collaboration and coordination	2,000	2,000	4,000
Marine litter activities (RAP MALI)			
- Harmonizing monitoring data	In-kind	In-kind	
- Developing a regional overview		6,000	6,000
- Translating ML info. into Japanese		3,250	3,250
Grand Total	77,000	117,250	194,250