1. Background

In the past, CEARAC organized series of training courses on remote sensing data analysis for capacity building of the NOWPAP member states. The 1st course was jointly organized with IOC/WESTPAC in September 2007 at Nagasaki University, Japan. The 2nd course was organized at Cheju National University, Cheju, Korea under the cooperation with KORDI in November 2008. The 3rd course was jointly organized with PIECS, IOC/WESTPAC, IOCCG and Pacific Oceanological Institute, Far Eastern Branch of the Russian Academy of Sciences (POI FEB/RAS) at Far Eastern Federal University (FEFU) in Vladivostok, Russia in October 2011. 67 people in total (55 from the NOWPAP member states) received a 5-day intensive training course to learn how to analyze satellite data for monitoring and assessment of the marine environment in the past courses.

The Integrated Report on Ocean Remote Sensing for the NOWPAP Region: Towards Assessment of the Marine and Coastal Environment which was published in 2011 suggested organization of a technical training course to help capacity building. Then, the workplan and budget of CEARC activities for the 2012-2013 biennium including organization of the 4th NOWPAP training course on remote sensing data analysis was approved at the 16th NOWPAP IGM (20-22 December 2011, Beijing, China).

This document explains the workplan for organization of the 4th NOWPAP training course on remote sensing data analysis for the 2012-2013 biennium.

2. Objective

Objective of this activity is to provide opportunities for students, young researchers and coastal managers to help obtain useful skills and knowledge to utilize remote sensing data in monitoring and assessment of the marine environment.

3. Main tasks

Based on the experiences of the past training courses, CEARAC will conduct the 4th NOWPAP training course on remote sensing data analysis in an efficient manner. NOWPAP WG4 members are expected to coordinate organization of the training course in the following matters:

- Review of workplan
- Review of syllabus
- Nomination of lecturers
- Recommendation of potential trainees

4. Expected outcome

Implementation of the 4th NOWPAP training course on remote sensing data analysis is expected to contribute to capacity building of the NOWPAP member states for utilizing remote sensing data for the marine environment conservation. Materials used during the course are expected to be added in the NOWPAP Ocean Remote Sensing Portal for public use.

5. Potential partnership with other organization

In order to efficiently implement the training course, CEARAC will form a cooperative relationship with other organizations and conduct the training course effectively. CEARAC will look for potential partners that are capable of providing and/or sharing the following resources and materials.

- Lecturers
- Trainees
- Training texts
- Venue

As well as the past training courses, CEARAC will look for potential partners such as IOC/WESTPAC, PICES, IOCCG and other organizations in China, to jointly organize the 4th training course in the NOWPAP region. The Ocean University of Qingdao, the Second institute of Oceanography and DINRAC can be considered as potential partners to host the training course.

6. Schedule

The Proposed schedule is as follows.

Time		Actions	Main body
2012	Q2	• Review of the workplan and budget for the 4th NOWPAP training course on remote sensing data analysis	CEARAC and FPs
	Q3	• Determination of the venue and the local host	CEARAC and CEARAC FPs
	Q4	• Preparation of the draft training program	CEARAC
2013	Q1	• Review and approval of the draft training program • Announcement of the training course	WG4 experts
	Q2	• Finalization of the implementation plan (Conclusion of MoU with the local host)	CEARAC and local host
	Q2	• Selection of participants	WG4 experts, CEARAC FPs and CEARAC
	Q3	• Organization of the 4th NOWPAP training course on remote sensing data analysis	CEARAC, WG4 experts, national experts and local host

7. Budget

10,000 US$ is requested from the NOWPAP Trust Fund. Funding from external sources is necessary to maintain the quality for the training course.

Annex

Tentative outline of the 4th NOWPAP training course on remote sensing data analysis

The training course will consist of lectures and hands-on practices of computer analysis.

- Lectures - Satellite oceanography, introduction to ocean color remote sensing, availability of satellite data, case studies of red tide, monitoring of eutrophication, validation of algorithms, and monitoring of oil spill
- Hands-on practice sessions - Operation of remote sensing software; visualizing and verification of ocean color satellite data, and time series analysis of ocean color data
- Submission of case study report – Conducting a case study on specific subject

1) Timing and Duration of the training

Timing will be 2013 Q3

Duration of the training will be 5 days.

2) Venue

The training will be held in China.

3) Class capacity

The maximum number of the trainees will be around 25.

4) Cost and tuition

Training will be provided for free of charge; however, the cost for transportation and accommodations will be borne by participants. Limited scholarship will be available, depending on funds obtained inside/outside of NOWPAP, for some participants from overseas to help defray the cost of traveling and accommodations.

5) Application procedure

Those who are interested in attending the course should complete an application form prepared by the CEARAC Secretariat. Applicants are also requested to submit a statement (200-300 words) outlining their educational/professional backgrounds and expectation for the course. Those wishing to apply for a scholarship are requested to complete a scholarship application form prepared by the CEARAC Secretariat.

6) Language

Training course will be conducted in English.

7) Obligation of participants

All participants are requested to complete assignments during the class and fill out a questionnaire at the end of the course to improve the quality of future training courses.