

Annex XI

Provisional Implementation plan of RS training program on data analysis

1 Objective and Background

At the First CEARAC FPM held in February 2003, the capacity building on ocean remote sensing technology in the NOWPAP Region was accepted as one of the important issues to be discussed. Also, in the National Reports compiled in 2005, China and Russia have expressed the needs of the training programs on ocean remote sensing.

The objectives of this training program are to establish the framework that would enables mutual technical assistance for the marine environmental monitoring by remote sensing, and to provide capacity building assistance to improve technical capability in ocean remote sensing in the NOWPAP Region.

2 Details of the Training Program

1) Expected participants

The training program will be open to the following groups of people in the NOWPAP Region.

- Local government officers serving in environmental protection
- Young researchers
- Students

2) Contents

The training program will consist of lectures and practice sessions (refer to Appendix A for details), both conducted in English. At the end of the training program, participants will be requested to write an analysis report on a target sea area in the NOWPAP Region based on obtained knowledge and skills during the training program. The report will be submitted to CEARAC and will be used to publicize CEARAC activities, etc.

- Lectures - Satellite Oceanography, Sensor Characteristics
- Practice Sessions - Operation of remote sensing software, Case studies on open ocean and coastal environmental monitoring

By the end of the training, participants will acquire the following knowledge and skills.

- Utilization methods for the remote sensing data in the open ocean and coastal environmental monitoring
- Benefits and limits of the use of remote sensing in the open ocean and coastal environmental monitoring
- Utilization methods for the remote sensing data

3) Duration of the Training

Duration of the training will be 5 days.

4) Venue

The training will be held in one of the NOWPAP Members.

5) Class Capacity

The maximum number of the trainee will be around twelve.

6) Cost Tuition

Training will be provided free of charge, however, the cost for the transportation and the accommodation will borne by participants.

7) Application Procedure

Application procedure for the training will be as follows to ensure that the course meets the expectations of the prospective applicants.

- Applicant submits a document explaining future goals and expectations from the course.
- CEARAC Secretariat goes over the application documents, and selects the candidates.

3 What CEARAC will provide

1) Preparation

The following will be arranged by the Secretariat as preparation for the training.

- Training program
- Trainer
Trainer(s) will be selected based on the discussion by the WG4 members and experts.
- Equipments/Materials
Textbooks and computers will be prepared as required.
- Training room
Training rooms that satisfy the training requirements will be coordinated and secured in conjunction with the FP of the host country and the WG4 members.

2) Public relations activity

When all of the program details have been determined, the secretariat will notify the training program to the related organizations to invite applicants.

3) Implementation Support

While the training program is underway, the secretariat will support the trainers and the trainees to smoothly implement the training.

4 Items to be discussed

The following training plan details need to be sufficiently discussed among CEARAC Secretariat and WG4 members. Due to budgetary constraints for training implementation, practical cooperation by WG4 members for each of these items is essential.

1) Potential partnership with other organizations

Possibility of co-hosting with other related organizations should be considered to facilitate efficient and effective training environment.

2) Allocation of trainers

It is required to allocate trainers suited for syllabus.

3) Public relation activity

How to attract potential participant in effective means should be considered.

4) Review of the training syllabus and training text

Syllabus and training text should be carefully reviewed to maintain the quality of the training program.

Schedule

The schedule of organizing the training program is as follows (Figure 4.1).

End of Yr 2006

- Finalize Training Program (Discussions among WG4 using E-mail)

Yr 2007 Q1

- Finalize venue and timing of the training
- Notification of the Training Program (to participants and co-hosting partners)

Yr 2007 Q2

- Compilation of Training Manuals
- Arrange for trainers and venue

Yr 2007 Q3 (Late Summer to Fall)

- Implementation of the Training

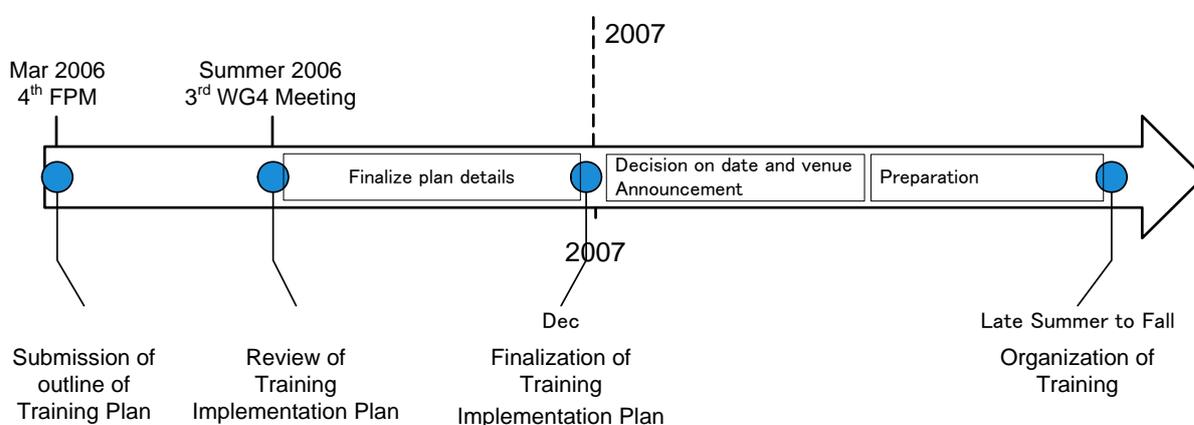


Figure 4.1 Schedule of RS training program.

5 Budget

The budgets for the training program are summarized in Table 5.1.

Table 5.1 Budgets for RS training program.

Item	Budget US\$
Preparation	
Textbook	3,000
Training room	3,000
Trainers	7,000
Miscellaneous expenses	2,000
TOTAL	15,000

Appendix A

Tentative Syllabus

Day 1 Introduction and basics	AM	Welcome address from the local host. Introduction to the training course and desired outcomes from CEARAC. Lesson 1: Introduction to Satellite Oceanography.
	PM	Lesson 2: Basics of digital image processing and analysis. Lesson 3: Availability of satellite data for monitoring and assessment of eutrophication. Lesson 4: Obtaining and displaying satellite images.
Day 2 Time series analysis of satellite data	AM	Lesson 5: Ocean Color Studies for monitoring and assessment of eutrophication in the Northwest Pacific Region (with introducing case studies of the NOWPAP RS guideline). Lesson 6: Time Series analysis of remotely sensed data using MODIS 1km (Creating monthly mean data).
	PM	Lesson 6: Time Series analysis of remotely sensed data using MODIS 1km (Creating monthly mean data). (continued)
Day 3 Validation of satellite data with existing in situ data	AM	Lesson 7: Validation of satellite data and its characteristic in coastal area.
	PM	Lesson 8: Comparison of satellite data with existing in situ data (Satellite Chl-a vs in situ Chl-a, SS, COD)
Day 4 Assessment of eutrophication with satellite data	AM	Lesson 9: Assessment techniques of eutrophication with satellite data. Lesson 10: Assessment of eutrophication with satellite data.
	PM	Lesson 10: Assessment of eutrophication with satellite data. (continued) Preparation of presentation for the next day (based on a defined format).
Day 5 Summary	AM	Presentation by each participant.
	PM	Discussion toward capacity building on the satellite oceanography in the NOWPAP Region.