

## **Annex VII**

### **Review of the Guidelines for National Report and points of concern**

## Review of the Guidelines for National Report and points of concern

National Report gives basis for creating common understanding through reporting present situation of marine environmental monitoring by remote sensing in each country. Such common understanding forms a starting point of the argument to establish a cooperative monitoring system by remote sensing for marine environmental conservation, which is the final goal of NOWPAP WG4.

National Report is prepared by NOWPAP project of each country. And each country is responsible for the contents. Its major contents shall be applied fields of remote sensing, namely eutrophication and oil spill, that are causing serious damage to economic activity and natural environment, resulting in social problems. Other contents will be included depending on the importance of monitoring and technical feasibility.

1) Eutrophication

The major targets shall be monitoring of *chlorophyll-a* concentration, ocean primary productivity, red tide, etc by remote sensing.

2) Oil spill

The target shall be detection method of oil spill by remote sensing.

3) Others

Its table of contents shall follow the National Report Guideline. Its contents of each chapter should be prepared by taking account of the following points of concern as well as contributing to NOWPAP activity.

### 1 Status of Remote Sensing utilization in marine environment monitoring

- Introduction of the background towards the present situation shall be described briefly.
- Perspective view of the present situation shall be summarized.
- Review of sensor and satellite presently in use shall be described.

### 2 Case examples of RS application in marine environmental monitoring

- Examples of monitoring continuously operated now shall be described.
- Organization, purposes, products in use (including sensor and satellite), method, result, etc shall be described.
- Categorized description-level by country, local government, organization by this order shall be followed.

### 3 Status of Research and Development on remote sensing technology for marine environment

#### 3.1 Sensor and Satellite

- Sensor and satellite presently under research and development shall be described.
- Organization, purpose, specification, progress, expected result, etc shall be described.

### 3.2 Algorithm for Geo-physical Parameters

- Algorithm to estimate physical quantities or oil spill detection method presently under research and development shall be described. The physical quantities shall be SST, *chlorophyll-a*, ocean primary productivity, SS, CDOM, red tide, etc.
- Organization, method, progress, future prospects, literature, etc shall be described.

### 3.3 Validation of Geo-physical Parameters

- Accuracy verification results of present products, *in situ* data arrangement situation, etc shall be described.
- Targeted sea area, possessing organization, distribution policy, etc of *in situ* data shall be described as details as possible.

## 4 Introduction of latest findings

- The latest research results (including findings on eutrophication and oil spill) in each country shall be described.
- Organization, purpose, method, result, etc shall be described.

## 5 Strategies/Plans for RS related activities

- Domestic and international research cooperation including product delivery and distribution system, holding workshop, etc shall be described.
- Purpose, cooperative framework, progress, result, etc of domestic and international cooperation shall be described.
- Organization, delivery contents (products, free or non-free, etc) of product delivery and distribution system shall be described.
- Categorized description-level by country, local government, organization by this order depending on the progress shall be followed.

## 6 Challenges and Prospects

- Present issues and future perspective shall be described.
- The future perspective shall target the next decade.
- Observation plan under consideration (including sensor and satellite) shall be described in details here.

## 7 Suggested activities for NOWPAP Region

- Proposal to NOWPAP WG4 activity shall be described.
- The proposal shall include purpose, framework, schedule, etc targeting the next two or three years as concretely as possible.