

Annex VIII

Development of the portal site on remote sensing

(Reviewed by the Second Meeting of NOWPAP WG4)

Development of the portal site on remote sensing

1 Background

Based on the consideration in 1st NOWPAP WG4 meeting (December 2003) and 2nd CEARAC FPM (February 2004), a Portal site development on marine environmental monitoring by remote sensing was adopted as a major activity of NOWPAP WG4 in 2004-2005. The progress of its activity will be reported in 2nd NOWPAP WG4 meeting (October 2004).

2 Objective

In present, the information and data on marine environmental monitoring by remote sensing are scattered in relating organization in each country. Such situation is not good for promoting common understanding and for sharing information in NOWPAP region. Thus, as an activity to share the information and data, a Portal site will be developed on marine environmental monitoring by remote sensing. The targets are eutrophication, red tide, and oil spill, which have recently become problematic in NOWPAP region.

3 Contents

3.1 Information to be Provided

Links to Websites, which show the following information on the monitoring of eutrophication, red tide, and oil spill will be provided. The links will be in English only mainly on NOWPAP region with some exceptions of Europe, US, and international organizations if they are highly useful.

- Monitoring examples
- Research and development situation of satellite, sensor, and algorithm
- Situation of product delivery and distribution
- Situation of *in situ* data arrangement
- Details of satellite and sensor
- Literature (for the time being, project reports opened in the Internet only)
- Relating organizations
- Information of workshops and symposiums, etc to be held

3.2 Methods to Use

The Portal site will have emphasis on effectively providing information on the present situation of marine environmental monitoring by remote sensing in NOWPAP region. The following functions will be freely opened to any users.

1) Search by Keywords

Three items including country, sensor, and used field are prepared as search items. By

selecting one key word from each item, links are searched. The search results will be shown categorized by use examples, research and development, delivery and distribution, literature, and others.

2) Free Search

Links are searched by free keyword also. The search results are the same as 1).

3) Browsing of Meeting Information

Users can browse meeting information such as workshops and symposiums.

3.3 Operating Environment

As one of the activities of NOWPAP WG3, literature database on HAB is under development. In the Portal site development, software and hardware resources to be procured in the activity will be utilized to reduce time and money necessary for the maintenance, relating work, etc.

Hardware	
Computer	Rental server

Software	
OS	Linux
Web Server	Apache High capability server which is usable free of charge regardless of commercial or noncommercial.
Web-DB Program	PHP Script language which make database service building in Web easier.
Data base System	PostgreSQL RDBMS (Relational Data Base Management System) which is usable free of charge regardless of commercial or noncommercial.

4 Schedule

The Portal site which is presently under development will begin its test operation when actions are taken to the considered issues of 2nd NOWPAP WG4 meeting and arrangement of link destinations provided by each country are completed. Comments from NOWPAP WG4 members during test operation will be reflected by the time of 3rd CEARAC FPM to be held in summer 2005. Then, the official operation will begin after reporting to the CEARAC FPM. The term 2004-2005 will be the initial version development phase. The development schedule is shown in the Figure 1.

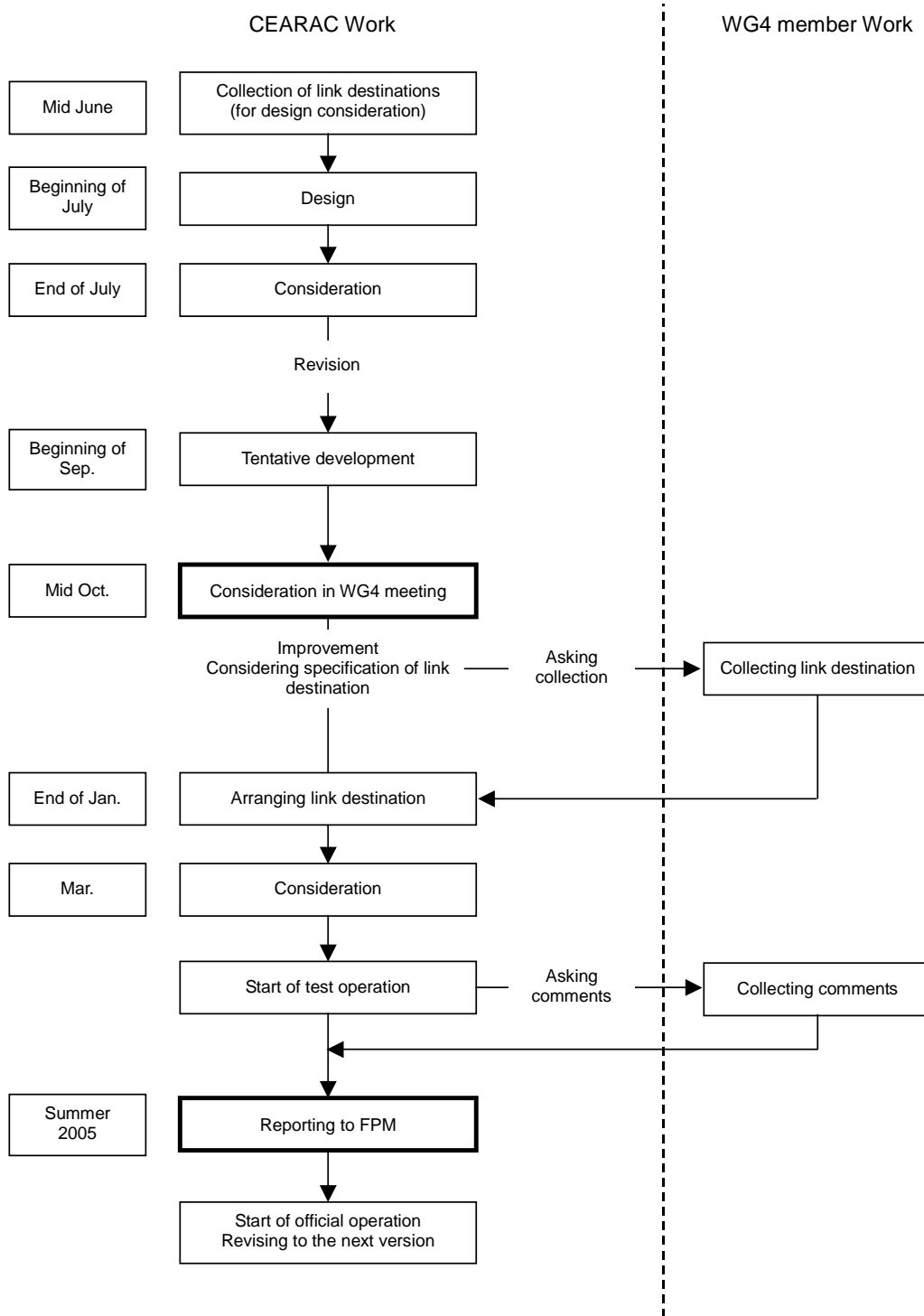


Figure 1. Schedule of Developing Portal site

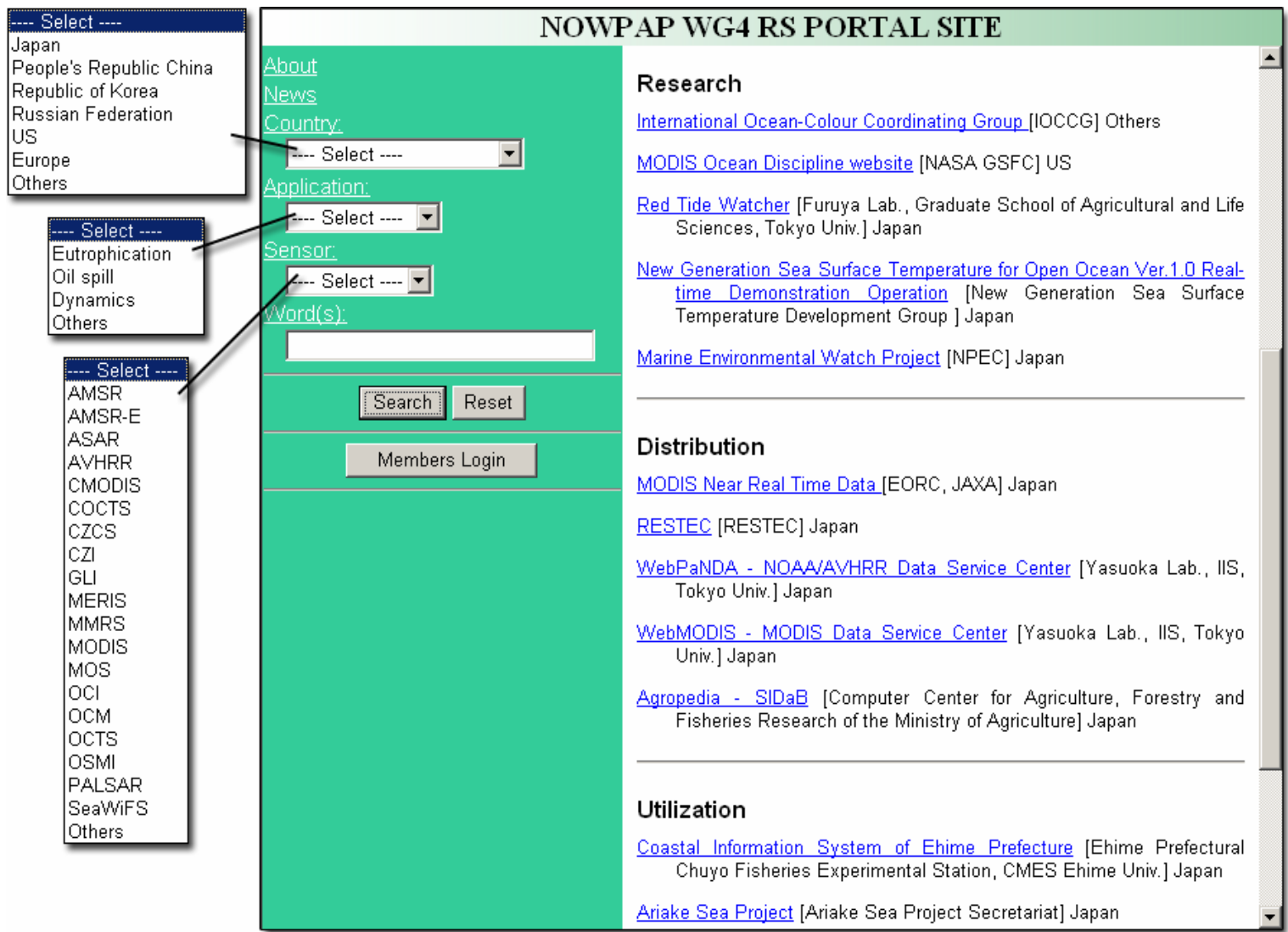


Figure 2. Sample Image of Portal site

Table 1. Sample List of URL for Portal site

Name	URL	Organization	Country	Category	Sensor	Application	Keyword
International Ocean-Colour Coordinating Group	http://www.ioccg.org/	IOCCG	Others	Others			
MODIS Ocean Discipline website	http://modis-ocean.gsfc.nasa.gov/	NASA GSFC	US	Research	MODIS	Eutrophication	CHLA, SST
SeaWiFS Project	http://seawifs.gsfc.nasa.gov/SEAWIFS.html	NASA GSFC	US	Operation	SeaWiFS		CHLA
Japan Aerospace Exploration Agency	http://www.jaxa.jp/index_e.html	JAXA	Japan	Operation			
Earth Observation Research and application Center	http://www.eorc.jaxa.jp/en/index.html	EORC, JAXA	Japan	Operation			
ADEOSWeb	http://kuroshio.eorc.jaxa.jp/ADEOS/	EORC, JAXA	Japan	Operation	OCTS		
AMSR/AMSR-E	http://sharaku.eorc.jaxa.jp/AMSR/index_e.htm	EORC, JAXA	Japan	Operation	AMSR, AMSR-E		
ADEOS-II Science Project	http://sharaku.eorc.nasda.go.jp/ADEOS2/	EORC, JAXA	Japan	Operation	GLI, AMSR		
ALOS@EORC	http://www.eorc.jaxa.jp/ALOS/	EORC, JAXA	Japan	Operation	PALSAR		Oil spill
Ocean Home GLI	http://suzaku.eorc.jaxa.jp/GLI/ocean/	EORC, JAXA	Japan	Research	GLI	Eutrophication	CHLA, SST
MODIS Near Real Time Data	http://kuroshio.eorc.jaxa.jp/ADEOS/mod_nrt/	EORC, JAXA	Japan	Distribution	MODIS		CHLA, SST
RESTEC	http://www.restec.or.jp/	RESTEC	Japan	Distribution			
WebPaNDA - NOAA/AVHRR Data Service Center	http://webpanda.iis.u-tokyo.ac.jp/	Yasuoka Lab., IIS, Tokyo Univ.	Japan	Distribution	AVHRR		SST
WebMODIS - MODIS Data Service Center	http://webmodis.iis.u-tokyo.ac.jp/	Yasuoka Lab., IIS, Tokyo Univ.	Japan	Distribution	MODIS		
Red Tide Watcher	http://fol.fs.a.u-tokyo.ac.jp/rtw/TOP/toppage.html	Furuya Lab., Graduate School of Agricultural and Life Sciences, Tokyo Univ.	Japan	Research		Eutrophication	Red tide, HAB
Coastal Information System of Ehime Prefecture	http://www8.ocn.ne.jp/~ehchusui/	Ehime Prefectural Chuyo Fisheries Experimental Station, CMES Ehime Univ.	Japan	Utilization	MODIS, AVHRR	Eutrophication	CHLA, SST
Ariake Sea Project	http://www-mri.fish.nagasaki-u.ac.jp/ariake/ariake.html	Ariake Sea Project Secretariat	Japan	Utilization	SeaWiFS, MODIS	Eutrophication	Red tide
Chlorophyll-a Image of Ariake Sea by MODIS	http://w3.fish.nagasaki-u.ac.jp/FISH/KYOUKAN/ISHIZAKA/MODIS/	Ishizaka Lab., Faculty of Fisheries, Nagasaki Univ.	Japan	Utilization	MODIS	Eutrophication	CHLA
New Generation Sea Surface Temperature for Open Ocean Ver.1.0 Real-time Demonstration Operation	http://www.ocean.caos.tohoku.ac.jp/~merge/stbinary/actvalbm.cgi?eng=1	New Generation Sea Surface Temperature Development Group	Japan	Research	AVHRR, MODIS, AMSR-E	Dynamics	Merged SST, SST
Marine Environmental Watch Project	http://www.nowpap3.go.jp/jsw/index.php?lang=en	NPEC	Japan	Distribution	AVHRR, MVISR, MODIS	Eutrophication	CHLA, SST, NDVI
Agropedia - SIDaB	http://www.affrc.go.jp/agropedia/	Computer Center for Agriculture, Forestry and Fisheries Research of the Ministry of Agriculture	Japan	Distribution	MODIS, AVHRR		CHLA, SST, NDVI