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IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional - Global Ocean Observing System (NEAR-GOOS)

Eleventh Session
Bangkok, Thailand
18-19 January 2007

**IOC/WESTPAC Co-ordinating Committee
for the North-East Asian Regional -
Global Ocean Observing System
(NEAR-GOOS)**

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IOC/WESTPAC-NEAR-GOOS-CC-XI

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1. OPENING

1.1 WELCOME ADDRESSES

1 Mr. Takashi Yoshida, Chairperson of the IOC/WESTPAC Coordinating Committee for NEAR-GOOS, called the meeting to order at 9:00 A.M. on 18 January 2007. He welcomed all members of the Committee from the participating countries and invited experts to the meeting. While reviewing the development of the NEAR-GOOS, he emphasized that substantial progress has been made during the last intersessional period. Finally, he extended his appreciation to IOC/WESTPAC Secretariat for its hard work done to make this session possible and to the Department of Marine and Coastal Resources for its hospitality in organizing this meeting.

2 On behalf of the Government of Thailand, Ms. Nisakorn Kositratna, Director-General of the Department of Marine and Coastal Resources (DMCR), welcomed all the participants attending the 11th session of the NEAR-GOOS Co-coordinating Committee to Thailand and expressed the willingness and support of the Government of Thailand to the IOC/WESTPAC and its Secretariat. She further wished the success of NEAR-GOOS would provide assistance in the development of SEAGOOS. Finally, she highlighted the Ocean Data and Information Network could provide a platform for cooperation between NEAR-GOOS and SEAGOOS.

3 Mr. Wenxi Zhu, Acting Head of the IOC/WESTPAC Secretariat and Technical Secretary to NEAR-GOOS, on behalf of Mr. Patricio Bernal, Executive Secretary of IOC and all colleagues in the Secretariat, welcomed all participants to the 11th Session, and expressed his sincere thanks to DMCR of the Government of Thailand for hosting the meeting and continuous support to the regional secretariat and NEAR-GOOS. He highlighted the progresses made since NEAR-GOOS' inception 10 years ago, which included a functional two –mode distributed internet-based database structure, a regional database system, a free and open data policy and other relevant training activities. He expected that NEAR-GOOS could be strategically developed to deliver benefit and utility of its ocean data-gathering effort to its member states with the enthusiasm and wholehearted dedication from member states. Finally, he expected the meeting to produce outcomes that may lead NEAR-GOOS towards its goal in the next phase.

1.2 INTRODUCTION OF THE PARTICIPANTS

4 Participants were invited to introduce themselves, and the organizations that they represent. All participants are listed in Annex I.

2. ADMINISTRATIVE ARRANGEMENTS

2.1 ADOPTION OF THE MEETING AGENDA

5 The Chairperson invited participants to consider the Provisional Agenda (IOC/WESTPAC-NEAR-GOOS-CC-XI/ 1), and to propose any amendments.

6 Ms. Lin Shaohua proposed incorporating Agenda Item 4-report on related programmes in the NEAR-GOOS region into Agenda Item 3.3-report on national activities. Mr. Takashi Yishida suggested deleting the Agenda Item 6.1 and 6.2 due to the unavailability of Mr. Dong-young LEE, the resource person for these two Agenda Items.

7 Following the suggestions, the Committee adopted the agenda with minor modifications, which is attached to this report as Annex II.

2.2 DESIGNATION OF RAPPORTEUR

8 Mr. Takashi Yoshida nominated Mr. Zhi Chen, one of the members from China to be the Rapporteur for this session.

9 The Committee agreed to this nomination, and Mr. Zhi Chen was duly designated as the Rapporteur.

2.3 WORKING ARRANGEMENTS

10 Mr. Wenxi Zhu introduced the Provisional Timetable (IOC/WESTPAC-NEAR-GOOS-CC-XI/1.annex), documents prepared for the meeting, and provided information about the organization of the meeting.

11 The Committee agreed on the timetable proposed by the Technical Secretary, noting that it would be flexible depending on the time needed for each agenda item. The Committee also agreed that the meeting would be organized in plenary and sessional working groups would be formed for specific issues when necessary.

12 The meeting was conducted in English only.

3. STATUS OF NEAR-GOOS: REPORT ON THE OPERATION

13 Reports were presented on the current status of the whole NEAR-GOOS system, its activities and related programmes at national and regional levels.

3.1 REPORT OF THE CHAIRPERSON

14 Referring to document IOC/WESTPAC-NEAR-GOOS-CC-XI/ 5, Mr. Takashi Yoshida, Chairperson of the Coordinating Committee, presented his report, highlighting some progress made in NEAR-GOOS over the past year. He noted that, despite some problems in operation of national database, the NEAR-GOOS database system has been in normal operation without serious problems. Not only observational data but also various oceanographic products are available now through the NEAR-GOOS data bases. He also expressed his gratitude to the JODC for hosting the Eighth IOC/WESTPAC Training Course on NEAR-GOOS Data Management, which took place from 20 February to 3 March 2006.

15 He particularly remarked on the initiation of the two Working Group on New Generation Sea Surface Temperature (NGSST) and Data Management, through the organization of the two kick-off meetings in November 2006 and June 2006, respectively. The Committee was also informed of the replacement of Mr. Yu Zhouwen by Mr. Chen Zhi from China, and Mr. Minoru Odamaki by Mr. Masaru Okuno from Japan.

16 He acknowledged the efforts of the IOC/WESTPAC Secretariat in revitalizing the IOC/WESTPAC website and timely disseminating information on the NEAR-GOOS activities. He concluded his report by emphasizing the importance of appropriate collaboration with other existing ocean observing initiatives, in view of the limited resources and the overall goal of NEAR-GOOS. The Chairperson's report is attached as Annex III.

17 The Committee commended the Chairperson for his efforts in promoting the system, and highlighted the good cooperation among participating countries in the past and further emphasized the importance of more cooperation needed in the future. The Committee expressed its willingness to cooperate with other GOOS Regional Alliances (GRAs), and emphasized that NEAR-GOOS shall continue to be operated within the framework of IOC/WESTAPAC.

3.2 REPORT OF THE REGIONAL SECRETARIAT

- 18 Mr. Wenxi Zhu briefed the meeting on the progress made since he joined the regional secretariat in August 2006. He first extended his appreciation to the Government of Thailand for the secondment of 4 full-time administrative assistants and one half-time IT assistant to the regional Secretariat, which would be of help to better promote the NEAR-GOOS activities in the future.
- 19 He elaborated on the various activities undertaken by the Secretariat in support of NEAR-GOOS. These included the availability of all summary reports, and strategic plan of NEAR-GOOS, seeking support from the NEAR-GOOS member states. He also highlighted the newly established Partnership with YSLME and PEMSEA by informing the meeting that a Memorandum of Understanding with YSLME Project Management Office, and a Letter of Cooperation with PEMSEA Regional Programme office were signed at the 3rd Meeting of Project Steering Committee of YSLME in November 2006, and the Inaugural Partnership Meeting of the East Asian Seas Congress in December 2006, respectively. He finally invited the meeting to provide further considerations on some pending issues that had been adopted in the last two sessions. The Report of the Regional Secretariat is attached as Annex IV.
- 20 The Committee expressed its appreciation to the Department of Marine and Coastal Resources of Thailand for hosting the Secretariat and its generous support to NEAR-GOOS. The Committee also commended the Technical Secretary for the excellent work done within such a short period. In terms of the pending issues from the last two sessions, the Committee conducted extensive discussions and agreed upon the following Action Points.
- 21 **Action Point 1:** *Managers of RRTDB and RDMDB to prepare a concise Introduction on the use of RRTDB and RDMDB, respectively.*
- 22 **Action Point 2:** *Working Group on Data Management with Ms. Lin Shaohua, CC member from China, to consider an appropriate way of improving the quality control.*
- Action Point 3:** *Mr. Hee-Dong Jeong to provide the committee a formal proposal on the establishment of a Working Group on monitoring using drifters and buoys, specifying the kinds of buoys, who will do what, ToRs for the plans, budget, expected output, etc.*
- 23 **Action Point 4:** *An ad hoc Working Group, let by Mr. Vyacheslav Lobanov , to submit a modified Strategic Plan for follow-up among CC members by correspondence.*
- 24 **Action Point 5:** *An ad hoc working group, led by Mr. Vyacheslav Lobanov and consisting of one representative from each participating country , to draft a letter to remind member states of the status of NEAR-GOOS and request support for the implementation of its second phase*
- 25 **Action Point 6:** *IOC/WESTPAC Secretariat to continue to contact DPRK for its intention to participate in NEAR-GOOS*

3.3 REPORT ON NATIONAL ACTIVITIES

3.3.1 China

- 26 Ms. Lin Shaohua, CC member from China, presented a report on China's NEAR-GOOS Delayed Mode Database. She introduced that China NEAR-GOOS Delayed Mode Database has been in smooth operation in 2006. The amount of 20MB quality-controlled data has been uploaded into the China NEAR-GOOS Delayed Mode Database in 2006. She particularly remarked the linkage with other regional and international project, such as ARGO, GTSPP, JCOMM. She further emphasized the efforts needed to integrate the data generated from other international projects (programs), to improve the existing quality control methods and procedures, and to develop the data products for sharing.

27 Mr. Zhi Chen briefed the meeting on the current status of China's NEAR-GOOS Real Time Database. The database was modified and put into normal operation, recovering from the data uploading problem during August 2003-November 2006. Using the user name and password of USER, the database could be visited through the website: <http://www.nmefc.gov.cn>. Currently, Data from 14 coastal oceanic stations, one buoy (38.0°N, 123.5°E) and VOS (15~42°N, 105~130°E) are being displayed. He also introduced related projects with DPRK in the NEAR-GOOS region. Several joint activities have been carried out within the framework of Sino-DPRK cooperation. These includes the " Numerical Simulation and Application on the Air-Sea Interaction in the North-west Pacific Ocean", "Evaluation on the Improving Effect of the Forecasting System through data sharing of the North Yellow Sea between China and DPRK"...etc.

28 The Committee noted with appreciation that the China's NEAR-GOOS Real Time Database was put into service again after long-time out of service. In order to better publicize the NEAR-GOOS, the Committee requested all participating countries to submit to the IOC/WESPAC Secretariat the latest information of NEAR-GOOS, particularly the new website addresses.

29 **Action point 7:** *CC members to provide updated information on NEAR-GOOS activities and website to IOC/WESTAPC Secretariat as soon as possible.*

3.3.2 Japan, including RRTDB, RDMDB and the Training Course

30 Mr. Takashi Yoshida, the RRTDB manager, informed the meeting on the operations and in relation with RRTDB. The database has operated without serious problems. 105 users are registered as of 1 December 2006. 141 users have registered and 148 registrations have been expired since December 2005. The frequency of the access to the RRTDB web pages has been around 2,000 -6,000 hits/month, with an unusual peak of over 12,000 hits in July 2006, while the number of FTP access is up 10,000hits/month during January -March, 2006, 3,000-8,000 hits/month during April- December 2006. A recent addition to the website consisted of the historical Sea Surface Temperature (SST) Dataset, named COBE-SST. The COBE-SST provides a long-term homogeneous dataset with high spatial resolution (one-degree mesh), which is of great value for monitoring global climate change.

31 Mr. Yoshida also reported on the operation of RDMDB during the last intersessional period, on behalf of Mr. Kunikazu Nishizawa, the RDMDB manager. The total number of access to the top page in 2006 has been increased by almost 4,000 hits, compared with that of in 2005. 40 different types of data are being handled by RDMDB, 37 types of data from RRTDB and 3 types of data from other sources. The amount of 35GB of oceanographic/marine and meteorological data is available as of the end of December 2006, an increase of 10GB in comparison with the amount reported to the previous session.

32 Mr. Takashi Yoshida also presented a report on the Eighth Training Course on NEAR-GOOS Data Management, which was held from 20 February - 3 March 2006. In response to the question on the plan for the ninth training course, he informed the meeting of the intention of JODC to discontinue the current training course and to hold a new training course on remote sensing in cooperation with NOWPAP within the ODINWESTPAC Pilot Project, which is expected to launch in April 2007.

33 The Committee expressed its appreciation to JODC for hosting the Eighth training course from 20 February - 3 March 2006, Tokyo, Japan. The Committee also recognized the importance of the remote sensing techniques to improve the regional ocean observing capability and further invited JODC to continue the training course on NEAR-GOOS data management, including the subject on ocean remote sensing, with necessary assistance from other appropriate organizations.

34 The Committee adopted the Recommendation IOC-WESTPAC-NEAR-GOOS-XI.1. Attached as Annex V.

3.3.3 Republic of Korea

35 Mr. Hee-dong Jeong introduced the activities of KODC that fall under the responsibility of the NFRDI. Considering the multidisciplinary nature of the ocean development and its long term prospect, KODC has a project to develop and integrate oceanographic data and information network at the national level in order to increase the common use and easier access to the information. The homepage (<http://kodc2.nfrdi.re.kr:8001/home/kor/research/main.php>) has been set up to provide oceanographic information such as cruise summary, research organizations, oceanographer, research vessel etc. Within this system, Korea DMDB for NEAR-GOOS has been constructed successfully and now being serviced through http://kodc2.nfrdi.re.kr:8001/home/eng/projects/near_links.php

36 Mr. Kwang-Soon Park reported that Korea's Real Time Database has been established steadily, operating under MOMAF with technical support provided by KORDI. Fifty five real-time coastal and ocean monitoring stations are currently operating or are being constructed in the surrounding waters operated by NFRDI, NORI and KMA respectively. Currently, real-time data from 18 stations are provided for users at the Korean RTDB. In order to promote exchange of real-time data in NEAR-GOOS, KORDI will try to include into the RTDB the real-time data collected by NFRDI, NORI and KMA. KORDI will deploy a 10-m ocean data buoy in mid-Yellow Sea in the first half year and develop Yellow Sea Operational Oceanography System (YOOS). KORDI will operate a pilot YOOS for the marine forecasting in Yellow Sea in 2007.

37 In a response to the disconnection of Korea's RTDB with the RDMDB, Mr. Jeong explained that the link would be set up in the future.

3.3.4 Russian Federation

38 Mr. Vyacheslav Lobanov presented a report on the activities in Russian Federation related to the NEAR-GOOS. The National Real Time and Delayed Mode Data Bases continued their operation in 2006. FERHRI continued to maintain National Real Time Data Base (RTDB) for NEAR-GOOS in Russia (<http://rus.ferhri.ru/esimo/Projects/NEAR-GOOS/>). This Data Base includes operational and archived data from 3 coastal stations and ship cruise reports. The measured parameters include the water and air temperature, water salinity, waves, meteorological elements and others. This site also disseminates information on goals and plans of the NEAR-GOOS project in Russian .FERHRI is also developing linkage between a Far Eastern segment of ESIMO (Russian acronym, Unified Information System on the World Ocean) and NEAR-GOOS data bases for Russian users.

39 Mr. Lobanov introduced that the POI FEB RAS has been maintaining National Delayed Mode Data Base (DMDB) for NEAR-GOOS. The Data Base includes the data of historical oceanographic observation implemented by national and foreign organizations in the Northwest Pacific including NEAR-GOOS seas and the data set of POI, FERHRI and TINRO marine expeditions (hydrology, chemistry and biology). The information of all oceanographic resources is located on <http://www.pacificinfo.ru>. This site includes metadata on recent cruises of POI and TINRO with graphical data presented as well as additional information products prepared by POI.

40 Mr. Lobanov further introduced that DMDB for NEAR-GOOS has updated the archive of deep-water hydrographic measurements of temperature and salinity that carried out of national and foreign expeditions for period 1925-2006. This database contains the stations of temperature and salinity observations compiled from all available sources (Russia, Japan, Korea and USA). Additionally, GIS technologies for data base management (www.gis.poi.dvo.ru/) has been developed to allow prompt access and management with NEAR-GOOS data and other available oceanographic data. It is expected that links between GOOS, NEAR-GOOS and Russian national oceanographic monitoring and data management activities would be organized through Federal Programs "World Ocean" and its component "Unified Information System on the World Ocean" (Russian acronym - ESIMO). The objective of this program (ESIMO) is to create an information system based on the existing government subsystems and is aimed to

provide all kinds of information necessary for marine operations.

3.5 REPORT ON THE WORKING GROUP ON NEW GENERATION SST

41 Mr. Hiroshi Kawamura, Chairperson of the Working Group on the New Generation Sea Surface Temperature Project, presented the activities carried out in the last intersessional period. The Working Group on NGSST has been formally formed in March 2006 and had its kick-off meeting on 22 November 2006, Tohoku University, Japan, with 5 experts nominated from the operational agencies in each participating member states. The working Group reviewed the present status and future plans of ORSP/NGSST and present status of satellite application in the operational agencies, and finalized the NGSST user requirement from the NEAR-GOOS aspect.

42 In relation to the Distribution of the Strategic Plan of the NGSST-C development with technical/research information, Mr. Kawamura introduced that the Strategic Plan has been presented in several scientific symposiums and workshops in 2006. Brief introduction of the NGSST-C Strategic Plan was included in the summary report of NEAR-GOOS-CC-X, which is widely available through the WESTPAC web site (<http://westpac.unescobkk.org>).

43 The Committee took note of the progress, expressed its appreciation to Mr. Kawamura for his leading role in the development of NGSST-C.

44 The Committee also recognized the importance of the NGSST, and requested the IOC/WESTPAC Secretariat and Mr. Kawamura to make efforts to continue the work of the Working Group.

45 **Action Point 8:** *WG on NGSST to continue the R&D of NGSST-C along the direction of its strategic plan; and keep the network of NGSST-WG, and to hold its meeting if necessary*

3.6 REPORT ON THE WORKING GROUP ON DATA MANAGEMENT

46 Mr. Takashi Yoshida, Chairperson of the Working Group on the Data Management, presented the report on behalf of the group. He introduced that the Coordinating Committee, at its Ninth Session, decided to establish a Working Group on Data Management (DMWG) dealing with data management issues. The group was organized with the nominated six people: Ms. Fan Wenjing (NMDIS/China), Mr. Hirofumi Okano (JCG/Japan), Mr. Jeong Heedong (NFRDI/Korea), Mr. Igor Rostov (POI/Russia), Mr. Gennady Khen (TINRO-center/Russia) and Mr. Takashi Yoshida (JMA/JAPAN). In the Tenth CC session held, January 2006, Busan, the CC instructed the DMWG to review the data flow, existing data exchange policy and find the best way to include chemical and biological data in NEAR-GOOS databases.

47 It was recognized that some data centers had already made available some of their chemical and biological archives. To meet the increasing demand for in situ chemical and biological parameters and the integration with the Sea Surface Temperature (SST) Database, the working Group agreed to prepare an inventory of existing in situ chlorophyll a and sediment material data, and to draft a concept paper on an integrated real-time SST database pilot project.

48 The Committee endorsed the Report on the Working Group on Data Management, expressed its appreciations to the Working Group for the excellent work done, and further requested IOC/WESTPAC Secretariat to mobilize necessary fund in support of the Data Management activities.

49 The Committee emphasized the need to include the chemical and biological parameters into the NEAR-GOOS databases and welcome the actions to be taken by this Working Group.

50 **Action point 9:** *the Working Group on Data Management to make inventory of in situ Chlorophyll and total suspended materials (TSM) data from 1997 (obligation), as long as possible; and draft a concept paper on*

a pilot project to develop integrated real time SST dataset with the support from Mr. Kawamura, the Chair of Working Group on NGSST.

4. RELEVANT DEVELOPMENTS IN RELATED PROGRAMMES

4.1 RECENT DEVELOPMENT IN THE GLOBAL GOOS PROGRAMME

4.1.1 The 3rd Forum on GRAs and GOOS Regional Council (GRC)

51 Upon the suggestion of the 10th session, Mr. Takashi Yoshida, on behalf of the NEAR-GOOS Coordinating Committee, attended the Third GOOS Regional Forum which took place, 14-17 November 2006, Cape Town, South Africa. The goals of this forum were to promote development of GRAs that contribute to and benefit from the development of GOOS by partnering with existing regional programmes with common interests, and to initiate the establishment of a global network of GRAs that will enable regional development of coastal GOOS and oversee the establishment of the Global Coastal Network (GCN) as recommended in the Implementation Strategy for the Coastal Module of the Global Ocean Observing System. To achieve these goals, the forum recommended the establishment of the GOOS Regional Council (GRC) as a mechanism for linking up all GRAs and requested the I-GOOS and GOOS Project Office to work closely with the GRAs to revise in acceptable form the proposed Terms of Reference to be presented to I-GOOS at its next Session in 2007. Thus, the GRC will serve as global mechanism to (i) coordinate implementation of the coastal and global components of GOOS to enable interoperability among GRAs for data acquisition, exchange and analysis; and (ii) facilitate collaboration among other regional activities with common interests and interoperability among these programs and GRAs. Mr. Takashi Yoshida also mentioned that the revised Terms of Reference of the GRC would be submitted to I-GOOS for further considerations at its 8th session, 13-16 June 2006, Paris.

52 The delegate of China and Russia suggested that GRC be placed under I-GOOS. Specifically in this region, IOC/WESTPAC, as the regional intergovernmental body, should play a leading role in promoting the development of the Regional Ocean Observing System.

53 Mr. Hiroshi Kawamura suggested common variables be considered identifying in NEAR-GOOS and SEAGOOS.

54 The Committee took note of the development of GOOS, and emphasized the importance of cooperating with other GRAs, particularly with SEAGOOS, which is expected to be established this year.

55 The Committee further expressed their concerns with the relationship of GRC with I-GOOS due to the common nature of policy making in GOOS. The Committee requested Ms. Lin Shaohua, the second Vice Chairperson of I-GOOS to keep all members updated with the discussion on the ToRs of GRC at the 8th session of I-GOOS.

56 **Action Point 10:** *to keep all CC members informed of the progress to be made by the upcoming session of I-GOOS on the GRC.*

4.1.2 GSSC-X Scientific Workshop

57 Mr. Kwang-Soon Park, on behalf of Mr. Dong-young LEE, provided information on the GSSC-X Scientific Workshop, which will be held on March 13 2007, in conjunction with the Tenth Session of the Global Ocean Observing System Scientific Steering Committee (GSSC-X).

58 Mr. Park introduced that the Scientific Workshop will be organized in 3 sessions, aiming to address:
i. Coastal Observations, which includes new or improved technology in support of coastal observing systems; integration of techniques and platforms; boundary current observations; interfacing coastal and deep-ocean/global observations; application and practice in regions; ii. Data Management and

Assimilation, which includes Evaluation/analysis of observational data; data communications and data assimilation; performance and efficiency benchmarking; new systems and practices; application and practice in regions; iii. Regional Marine Environment and Ecosystem Modeling, which includes application of observational data for research and for environmental/ecosystem modeling; model development, regional application with a particular focus on the Asia/Pacific region, and capacity building.

59 The Committee thanked Mr. Kwang-Soon Park for the information provided and encouraged the attendance of participating agencies to the event.

4.2 SEAGOOS

60 The SEAGOOS Coordinator, Mr. Somkiat Khokiattiwong informed the meeting of the current status of SEAGOOS. Although a “Resolution on the Establishment of the SEAGOOS Coordinating Committee” was adopted at the 5th Session of IOC/WESTPAC, 9-13 September 2002, Fremantle, Australia, no more progress has been made. Several consultative meetings were held with some pilot project proposals. However, no follow-up was made on these project proposals largely due to lack of other national priorities to be fulfilled. He further appreciated the efforts of the Technical Secretary, Mr. Wenxi Zhu, in promoting the SEAGOOS, through the identification of a Consultant to draft a SEAGOOS strategy and requesting nominations for the SEAGOOS Coordinating Committee. Mr. Somkiat strongly expressed the hope that NEAR-GOOS could provide assistance in the development of SEAGOOS as NEAR-GOOS has been well developed for nearly 10 years.

4.3 OTHER PROGRAMMES

4.3.1 ODINWESTPAC

61 The Technical Secretary, Mr. Wenxi Zhu briefed the meeting on the development of Ocean Data and Information Network for WESTPAC. He highlighted the outcome of the Preparatory Meeting towards the Development of ODINWESTPAC in Tokyo, 5-6 December 2006. The meeting agreed on a proposal to initiate a pilot project of ODINWESTPAC, which will be submitted to the 19th Session of the IODE Committee (12-16 March 2007) for adoption. The pilot project is expected to develop a number of products in the fields of ocean observations, data and information management, and product/service delivery, and to prepare a formal proposal including objectives, deliverables, work plan, time table, budget and draft recommendation to establish an Ocean and Data information Network for the WESTPAC region (ODINWESTPAC).

62 In relation to the update of the WESTPAC cruise summary report, one proposed activity in the pilot project, Mr. Hee-dong Jeong strongly suggested the cruise summary reports be published by IOC/WESTPAC Secretariat.

63 The Committee took note of the progress that had been made towards the establishment of ODINWESTPAC, and expressed its support to the ODINWESTPAC pilot project.

64 The Committee adopted the Recommendation IOC-WESTPAC-NEAR-GOOS-XI.2. Attached as Annex V.

4.3.2 GODAR-WESTPAC

65 Mr. Takashi Yoshida reported on the 3rd International Workshop for GODAE-WESTPAC, 4-6 December 2006, Japan. The Global Oceanographic Data Archaeology and Rescue (GODAR) Project was established in 1993. The goal of GODAR was to increase the volume of historical oceanographic data available to climate change and other researchers by locating ocean profile and plankton data sets not yet in digital form, digitizing these data, and ensuring their submission to national data centers and the World Data

Center System. The IODE Committee approved the GODAR-WESTPAC as a regional sub-project of the GODAR at its 16th Session of the IODE Committee in Lisbon, November 2000.

66 Mr. Takashi Yoshida also expressed his appreciation to the Japan Oceanographic Data Center (JODC), as the project office, for organizing the 1st and 2nd International Workshop for GODAR-WESTPAC in Tokyo, Japan, 5-7 March 2002 and 10-12 November 2004, respectively.

67 He further introduced that the 3rd International Workshop for GODAR-WESTPAC was held in Tokyo, Japan, 4 to 6 December 2006. It was attended by more than 50 participants from 12 countries which are Australia, China, Japan, Republic of Korea, Malaysia, Russia Federation, Philippines, the United Kingdom, United States and Vietnam, including the representatives of IOC/WESTPAC, SEAFDEC and IOC/IODE. The workshop appreciated the achievements made on GODAR-WESTPAC, and recognized the need to continue the rescue activity. The workshop encouraged the member states continue its effort to rescue and archive historical oceanographic data. A follow-up activity to the GODAR-WESTPAC project was suggested as one of the activities of a pilot project of Ocean Data and Information Network for the Western Pacific region.

68 The Committee noted with appreciation of the progress made on GODAR-WESTPAC, and expressed its support to the follow-up activity after its completion in 2006, which was included in the pilot project of ODINWESTPAC.

4.3.3 YSLME

69 The representative of the YSLME Project, Ms. Connie Chiang, presented an overview of the Project, focusing on its data information management activity. The five year project aims to protect marine environment and sustainable use of marine and coastal resources, through preparation and development of the Transboundary Diagnostic Analysis (TDA), Strategic Action Programme (SAP), and pilot implementation of SAP. In this process, data and information on fisheries, biodiversity, pollutants and ecosystem structure and function were collected to provide the baseline assessment of Yellow Sea ecosystem's status. The collected data are being stored in a database, currently developed and hosted at the China-Korea Joint Ocean Research Center.

70 Ms. Chiang noted that some database users spent a lot of time to get the required data and information from various sources, as there are too many databases with different data formats in the region. She recommended that YSLME and NEAR-GOOS should explore how to link their two databases together. She further proposed "one-stop shopping", where data users could obtain all the required data from only one source. She also suggested that NEAR-GOOS could provide raw data for users to "cook" into the formats they wished, while YSLME Database, through the link to NEAR-GOOS, would provide data and metadata on the Yellow Sea and East China Sea. She concluded her report by expressing the willingness of YSLME Project to co-sponsor additional variables to be included in NEAR-GOOS.

71 In a response to the question of cooperation with YSLME Project, the Technical Secretary informed the meeting that cooperation with YSLME project, as provided in the Strategic Plan of NEAR-GOOS, had been established through a Memorandum of Understanding (MoU), which was signed at the Third Meeting of Project Steering Committee of YSLME on 23 November 2006. The MoU states that cooperation on the data and information link was agreed upon as one of the areas of common interests.

72 The Committee expressed its willingness to cooperate with YSLME on linking the two databases, and instructed the Working Group on Data Management to keep contact with YSLME and take necessary actions.

73 **Action point 11:** *the Working Group on Data Management to keep close contact with expert identified by the YSLME Project Manager, on the development of YSLME Database in order to make necessary contributions to and benefit from each other.*

4.3.4 PICES

74 On behalf of PICES, Mr. Vyacheslav LOBANOV presented a report on the Technical Committee on MONITOR of PICES and its GOOS-related activities. He introduced that a Study Group on GOOS was set up in PICES to identify and describe the major observing systems in the PICES region, and to provide a recommendation on whether or not PICES should propose a North Pacific GOOS pilot project to IGOOS.

75 The Study Group recommended that PICES should not propose a North Pacific GOOS pilot project to IGOOS at the moment but establish a coordinating body for North Pacific observing systems, which would provide a forum for representatives of the existing North Pacific observing systems in which a cross-GRA (international) observing projects, observing technologies, and data and information sharing protocols would be developed in cooperation with TCODE starting in 2007. This Study Group further recommended that the coordination role of PICES be placed on the agenda of the next GSSC meeting, March 13-17, 2007, Seoul, Republic of Korea, and contact be established with the relevant GRAs to explore ways in which PICES can enable their development and coordination with other North Pacific GRAs.

76 Mr. Lobanov further introduced the PICES Monitoring Program-Continuous Plankton Recorder Program (CPR), starting the routine survey in 2000 and continuing underway observations on physical and biological parameters including zooplankton and marine birds in the eastern North Pacific using commercial vessels. He also briefly introduced the North Pacific Ecosystem Status Report and other activities by MONITOR Committee of PICES. He envisioned that the MONITOR would provide continuous support for monitoring activities in the North Pacific, and to promote and coordinate North Pacific GOOS activities.

77 The delegate of China requested clarification on the recommendation of Study Group on no need for PICES to set up a North Pacific GOOS, Mr. Yoshida explained that coastal areas have been covered by GRAs, while open oceans have been monitored by some automated instruments, such as ARGO.

78 The Committee took note of the related activities in PICES.

79 **Action Point 12:** NEAR-GOOS Coordinating Committee to keep close contact with PICES on developing ocean monitoring in the North Pacific and its Marginal seas.

4.3.5 NOWPAP

80 Mr. Norio Baba, the representative from the NOWPAP was invited to provide information to the Meeting. He first introduced the structure and the activities of its four Regional Activity Centers, namely Monitoring and Coastal Environment Assessment Regional Activity Centre (CEARAC), Data and Information Network Regional Activity Centre (DINRAC), Marine Environmental Emergency Preparedness and Response Regional Activity Centre (MERRAC), and Pollution Monitoring Regional Activity Centre (POMRAC). He further introduced that NOWPAP is working on the finalizing of a Global Environment Facility project proposal to address land-based activities with focus on persistent toxic substances. NOWPAP welcomed and encouraged to establish cooperation and partnerships with relevant organizations, programmes and projects in the region.

81 Mr. Baba highlighted the importance of the long-term cooperation between NOWPAP and IOC/WESTPAC, particularly through the NEAR-GOOS Programme in view of the same membership and its geographical coverage. He expressed that further cooperation between NOWPAP and NEAR-GOOS would be expected in the future, specifically through the contributions of NEAR-GOOS in the scientific inputs to NOWPAP activities, enrichment of oceanographic observation data such as marine pollution data, real time sea surface data (currents, wind and temperature) for oil spill forecasting, and in situ data for remote sensing (Chlorophyll-a, Suspended Solid (SS) and Colored Dissolved Organic Matter (CDOM)). The other way around, contributions from NOWPAP could be made in information databases or portal sites of DINRAC

and CEARAC, getting access of NEAR-GOOS to the Remote Sensing database of Marine Environmental Watch Project, and the provision of training course on remote sensing.

82 The delegate of Korea suggested possible cooperation with NOWPAP be made on the data and information on biodiversity in order to avoid duplications. Mr. Baba clarified that there are only one activity to collect the information on biodiversity information and data management in the NOWPAP region.

83 The delegate of China emphasized the need of NOWPAP to invite the National Marine Data and Information Service to participate in the relevant meeting of NOWPAP. Mr. Baba informed the meeting that NOWPAP was trying to do so.

84 The Committee noted with appreciation that the cooperation between NOWPAP and IOC/WESTPAC, particularly through its NEAR-GOOS activities, has been made in the past and emphasized the cooperation should be continued.

85 The Committee took into considerations of the suggestions by NOWPAP, and instructed the Working Group on Data Management to further consider the possibility.

86 **Action Point 13:** *Working Group on Data Management is encouraged to consider the possibility of the enrichment of oceanographic observation data as requested by NOWPAP.*

87 **Action Point 14:** *NEAR-GOOS Database managers are encouraged to make link with the NOWPAP CEARAC database.*

5. DEVELOPMENT OF NEAR-GOOS AND FOLLOW-UP OF ITS STRATEGIC PLAN

5.1 PROMOTION OF NEAR-GOOS

88 Mr. Hiroshi Kawamura introduced the Agenda Item, referring to the Ocean Color Cooperation of the IOC/WESTPAC/ORSP with YSLME, NOWPAP and KJWOC.

89 Mr. Kawamura also highlighted the importance of the Ocean Color Remote Sensing as a key technology for monitoring regional marine environments. He mentioned that IOC/WESTPAC has its Ocean Color Project within its Ocean Remote Sensing Program, Ocean Color experts from Korea and Japan have been organizing a scientific meeting regularly, Korean/Japan Workshop on Ocean Color Remote Sensing (KJWOC). He further mentioned that NOWPAP WG 4 is planning to conduct a Remote Sensing Training Course on Data Analysis in 2007, and YSLME is planning to host a Remote Sensing Workshop on Validation of Ocean Color Algorithm.

90 Considering the expertise of NOWPAP, YSLME, IOC/WESTPAC, he emphasized that regional cooperation need to be further promoted on remote sensing. He also suggested IOC/WESTPAC could support the Remote Sensing Training Course on Data Analysis in co-sponsorship with NOWPAP.

91 The delegate from Russia requested the clarification on the sponsorship of the Training Course. He suggested no discussion be made as it goes beyond the ToRs of NEAR-GOOS Coordinating Committee if the Training Course will be jointly sponsored by NOWPAP and IOC/WESTPAC. No specific clarification was made due to the absence of the representative of JODC, who is the organizer for the Remote Sensing Training Course.

92 The Committee agreed that the recommendation has been made under the Agenda Item 4.3.1 if the Remote Sensing Training Course is the Training Course on NEAR-GOOS Data and Information Management, with new subject on Ocean Remote Sensing, as described in the Recommendation IOC-WESTPAC-NEAR-GOOS-XI.1.

6. OTHER ISSUES

93 The Chairperson invited the members to raise any other issues needed to be considered by this meeting.

94 Mr. Kwang-Soon Park, on behalf of the Dong-young Lee, provided information on the YEOS Project, Pre-operational Research for Operational Oceanographic System for the Yellow Sea and East China Sea. The purpose of YEOS is to strengthen the GEOSS cooperation between EU and other key GEOSS players, by a two-step, bottom-up approach.

95 Mr. Park introduced that the first step is to demonstrate benefits and build up confidence through a solid cooperation in national level (i.e., EU States-China-South Korea) and regional level (i.e., BOOS - Yellow Sea OOS). The second step is to enlarge the cooperation to EuroGOOS – NEAR-GOOS level. In practice the 2nd stage will be between GMES/GEOSS Projects in EU (e.g., MERSEA/ECOOP) and in Northeast Asia countries China-Korea-Japan-Russia. This includes, e.g., sharing satellite/in-situ data and best practice, and using MERSEA global forecast as boundary condition for NE Asia forecasting system etc. He finally mentioned that the kick off Meeting of the YEOS Project is tentatively planned for March 2007, Korea.

96 Mr. Takashi Yoshida informed the meeting that he, in the capacity as the Chairperson of the NEAR-GOOS Coordinating Committee, was invited to attend the nineteenth Session of the IODE Committee in Trieste, Italy, 12-16 March 2007. Considering the termination of his chairpersonship at this session, he requested further consideration from the Committee on the representation of NEAR-GOOS at the Nineteenth Session of IODE

97 The Committee thanked the IODE for inviting NEAR-GOOS to the Nineteenth Session of IODE in Trieste, Italy, 12-16 March 2007. The Committee further emphasized the need of NEAR-GOOS to attend the Session.

98 The Committee invited Ms. Lin Shaohua, on behalf of the NEAR-GOOS CC, to attend the IODE session, taking the advantage of her presence as the representative from China National Marine Data and Information Service.

7. ELECTION OF THE NEXT CC CHAIRPERSON

99 The Technical Secretary reviewed the rules and practical arrangements for the election of the Chairman of the Coordinating Committee as presented in the revised Terms of Reference for the NEAR-GOOS Co-coordinating Committee in the Resolution SC-WESTPAC-NEAR-GOOS-VII.1.

100 The Committee thanked Mr. Takashi Yoshida for his valuable contributions as Chairperson of the NEAR-GOOS Coordinating Committee.

101 The delegate of Korea nominated Ms. Lin Shaohua for the position of Chairperson of the Coordinating Committee. The delegate of the Russian Federation seconded the nomination. Ms. Lin was elected as the new Chairperson of the Coordinating Committee by acclamation.

102 Ms. Lin appreciated the support from the Coordinating Committee and promised to do her best to advance NEAR-GOOS.

8. DATE AND PLACE OF NEXT SESSION

103 The Committee did not reach conclusion on the date and place of the Twelfth Session, with the understanding that Russia, China and Technical Secretary will discuss and decide on this matter by

correspondence.

9. ADOPTION OF THE SUMMARY REPORT

104 The Committee discussed, amended and adopted the action points. The Summary Report with
Recommendations was adopted with minor modification by e-mail correspondence. The Committee also
instructed the Chairperson and Technical Secretary to submit the Summary Report with all
Recommendations therein to the Eighth Session of the IOC-WMO-UNEP Committee for the GOOS
(I-GOOS VIII, 13-16 June 2007, Paris) and the Twenty-Fourth Session of the IOC Assembly in June 2007.

10. CLOSURE

105 The Chairperson closed the Session at 15:00 on Friday, 19th January 2007.

ANNEX I

LIST OF PARTICIPANTS

CC-Members:

PEOPLE'S REPUBLIC OF CHINA

Ms. Shaohua LIN
Director-General
National Marine Data and Information Services
(NMDIS)
State Oceanic Administration
93 Liuwei Rd., Hedong District,
Tianjin 300171
CHINA
Tel: +86 22-2401 0801
Fax: +86 22 2430 4408
Email: shlin@mail.nmdis.gov.cn

Dr. Zhi CHEN
National Marine Environmental Forecasting Center
No.8 Dahuisi, Beijing 100081
CHINA
Tel: +86-10-62173598
Fax: +86-10-62173620
Email: chenzhi@nmefc.gov.cn

JAPAN

Mr. Takashi Yoshida
Forecaster
Office of Marine Prediction
Global Environment and Marine Department
Japan Meteorological Agency
1-3-4 Otemachi, Chiyodaku
Tokyo 100-8122
JAPAN
Tel: +81 3 3212 8341 ext 5128
Fax: +81 3 3211 3047
Email: tyoshida@met.kishou.go.jp

REPUBLIC OF KOREA

Dr. Hee-Dong Jeong
Director
Korea Oceanographic Data Centre
National Fisheries Research and Development
Institute
Shirang ri, Kijang up, Kijang gun

Pusan 619-900,
REPUBLIC OF KOREA
Tel: +82 51 720-2210
Fax: +82 51 720-2225
Email: hdjeong@nfrdi.re.kr

Dr. Kwang-Soon Park
Korea Ocean Research & Development Institute
(KORDI)
P.O. Box Ansan 29, Seoul 425-600
REPUBLIC OF KOREA
Tel: +82 31 400-6343
Fax: +82 31 408-5827
Email: kspark@kordi.re.kr

RUSSIAN FEDERATION

Dr. Vyacheslav Lobanov
Deputy Director
V.I. Il'ichev Pacific Oceanological Institute (POI)
Far Eastern Branch, Russian Academy of Sciences
43 Baltiyskaya Street, 690041 Vladivostok
RUSSIAN FEDERATION
Tel: +7 4232 312 377
Fax: +7 4232 312 573
Email: lobanov@poi.dvo.ru

Resource Persons:

Dr. Hiroshi Kawamura
Professor
Centre for Atmospheric and Oceanic Studies
Graduated School of Science
Tohoku University
Aramaki-Aza-Aoba, Aoba-ku,
Sendai, Miyagi 9808578
JAPAN
Tel: +81 22 217 6745
Fax: +81 22 217 6748
Email: kamu@ocean.caos.tohoku.ac.jp

Dr. Somkiat Khokiattiwong
Department of Marine and Coastal Resources
Phuket Marine Biological Center
P.O.Box 60, Phuket 83000
Thailand

Tel: +6676-391-128
Fax: +6676-391-127
E-mail: somkiat@e-mail.in.th;
pmbc@phuketinternet.co.th

Partners:

Northwest Pacific Action Plan (NOWPAP)
Mr. Norio Baba
Administrative Officer
Northwest Pacific Action Plan(NOWPAP)
of UNEP
Postal address: NOWPAP Regional Coordinating
Unit 5-5 Ushijimashin-machi, Toyama
930-0856
Japan
Tel: (81-76)-444-1611
Fax: (81-76)-444-2780
Email: norio.baba@nowpap.org

North Pacific Marine Science Organization
(PICES)
Represented by Dr. Vyacheslav Lobanov

UNDP/GEF Yellow Sea Large Marine Ecosystem
Project
Ms. Connie Chiang
Environment Officer
UNDP/GEF Yellow Sea Project
KORDI compound
1270, Sa-2dong, Sangnok
Ansan City, Gyeonggi Province 426-744
Republic of Korea
Tel: +82-31-400-7833
Fax: +82-31-400-7826
Email: connie@yslme.org

East Asian Seas Regional Coordinating Unit
(EAS/RCU)
United Nations Environment Programme

Dr. Srisuda Jarayabhand
Coordinator
Ratchdamnern-Nok Avenue, Bangkok 10200,
Thailand
Tel: 662-288-1905
Fax: 662-281-2428
Email: jarayabhand@un.org
Website: www.cobsea.org

Observers:

Ms. Fan Wenjing
National Marine Data and Information Services
(NMDIS)
State Oceanic Administration
93 Liuwei Rd., Hedong District,
Tianjin 300171
CHINA
Tel: +86 22-2401 0801
Fax: +86 22 2430 4408
Email: fanwj@mail.nmdis.gov.cn

Dr. Charoen Nitithamyong
Head of Department
Department of Marine Science,
Faculty of science, Chulalongkorn University
Phyathai RD., Patumwan, Bangkok 10330 Thailand
Tel: (66 2) 218 5396
Fax: (66 2) 255 0780
Email: c.nitithamyong@yahoo.com

Dr. Anond Snidvong
Director
Southeast Asia START Regional Center
Chulavit 1 Building, 3th floor,
Henri Dunant Rd., Bangkok 10330
THAILAND
Tel: (66 2) 218 9464
Fax: (66 2) 251 9416
Email: anond@Start.or.th

Dr. Wattana Kanbua
Director Marine Meteorological center
Thai Meteorological Department
4543 Sukhumvit Rd., Bang-na, Bangkok 10260
THAILAND
Tel: (66 2) 399 4561
Fax: (66 2) 366 9375
Email: watt_kan@hotmail.com
Watt_kan@yahoo.com

Mrs. Siriluk Prukpitikul
Acting Chief of Marine Information Sub-Division
Geo-Informatics and Space Technology
Development Agency
196 Phahonyothin Rd., Jatujak, Bangkok 10900
THAILAND
Tel: (66 2) 940 5657, 6421-9 ext.111

Fax: (66 2) 561 3035, 562 2042-9
Email: siriluk2000@yahoo.com

Captain Chaiwoot Nawikanjana
Director of Oceanographic Division
Hydrographic Department
222 Rintangrodfaikao Rd., Bang-na, Bangkok
10260
THAILAND
Tel: (66 2) 475 7018
Fax: (66 2) 475 7022
Email: Chaiwootn@yahoo.com

Mr. Adoon Wunapeera
Geologist
Department of Mineral Resources
75/10 Rama 6 Rd., Ratchathewi, Bangkok 10400
Thailand
Tel: (66 2) 202 3872-1
Fax: (66 2) 202 3851
E-mail: adoon@yahoo.com

Ms. Namphon Khampilang
Geologist
Department of Mineral Resources
75/10 Rama 6 Rd., Ratchathewi, Bangkok 10400
Thailand
Tel: (66 2) 202 3918
Fax: (66 2) 202 3927
E-mail: knamphon@hotmail.com

Mr. Monton Anongponyoskul
Assistant Professor
Department of Marine Science,
Faculty of Fishery, Kasetsart University
50 Phahonyothin Road, Chatuchak, Bangkok 10900
THAILAND
Tel: (66 2) 561 4288
Fax: (66 2) 561 4287
Email: ffismata@ku.ac.th

Mr. Kunjapong Anuratpanich
Meteorologist
National Disaster Warning Center
Rattanathibet Rd., Bang kra Sor,
Muang, Nonthaburi 11000
THAILAND
Tel: (66 2) 589 2497 ext. 18
Fax: (66 2) 589 6008
Email: PISNUPONG@Thaimail.com

Local host:

Dr. Cherdchinda Chotiyaputta
Marine and Coastal Resources Management
Specialist
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Rd.,
Samsennai, Phayathai, Bangkok 10400
THAILAND
Tel: (66 2) 298 2659
Fax: (66 2) 298 2659
E-mail: cherdchc@dmcr.go.th;
chrdchc@yahoo.com

Mr. Dhana Yingcharoen
Policy and Planing Analyst
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Rd., Samsennai, Phayathai,
Bangkok 10400
THAILAND
Tel: (66 2) 298 2592
Fax: (66 2) 298 2592

Ms. Saowalak Winyoonuntakul
Chife, Foreign Relations Sub-Division
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Rd., Samsennai, Phayathai,
Bangkok 10400
THAILAND
Tel: (66 2) 298 2588
Fax: (66 2) 298 2592
E-mail: saowiny@yahoo.com

Ms. Sansanee Pungthong
Foreign Relations Sub-Division
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Rd., Samsennai, Phayathai,
Bangkok 10400
THAILAND
Tel: (66 2) 298 2588
Fax: (66 2) 298 2592
E-mail: Sansanee@dmcr.go.th

Ms. Wiphasawan Arunotai
Foreign Relations Sub-Division
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Rd., Samsennai, Phayathai,
Bangkok 10400
THAILAND

Tel: (66 2) 298 2588
Fax: (66 2) 298 2592
E-mail: waonu@hotmail.com

Ms. Nisa Limbut
Marine Biologist
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Rd., Samsennai, Phayathai,
Bangkok 10400
THAILAND
Tel: (66 2) 298 2659
Fax: (66 2) 298 2659
E-mail: didy_999@hotmail.com

Mr. Sirichai Iamlaor
Policy and Planning Analyst
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Rd., Samsennai, Phayathai,
Bangkok 10400
THAILAND
Tel: (66 2) 298 2127
Fax: (66 2) 298 2592
E-mail: sirichai.iambj@hotmail.com

Ms. Suhatai Prisankul
Environmentalist
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND
Tel: (66 2) 298 2659
Fax: (66 2) 298 2659
E-mail: zuchan@hotmail.com

Ms. Ornuma Janyapiyapong
Administrative Officer
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND
Tel: (66 2) 298 2659
Fax: (66 2) 298 2659
E-mail: Jornuma@hotmail.com

Ms. Wiphasawan Arunotai Foreign Relations
Sub-Division
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND

Tel: (66 2) 298 2588
Fax: (66 2) 298 2592
E-mail: waonu@hotmail.com

Ms. Nisa Limbut
Marine Biologist
Department of Marine and coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND
Tel: (66 2) 298 2659
Fax: (66 2) 298 2659
E-mail: didy_999@hotmail.com

IOC/WESTPAC Secretariat:

Mr. Wenxi Zhu
Acting Head
Project Expert
IOC Regional Secretariat for the Western Pacific
(WESTPAC)
c/o Department of Marine and Coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND
Tel: (66 2) 298 2637
Fax: (66 2) 298 6313
E-mail: z.wenxi@unesco-bkk.org

Ms. Nachapa Saransuth
Administrative and Programme Assistant
c/o Department of Marine and Coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND
Tel: (66 2) 298 2637
Fax: (66 2) 298 6313
E-mail: s.nachapa@unesco-bkk.org

Ms. Laddawan Sangsawang
Marine Biologist
c/o Department of Marine and Coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND
Tel: (66 2) 298 2142
Fax: (66 2) 298 6313
E-mail: imjeep@hotmail.com

Ms. Alina Wangso

Research Assistant
c/o Department of Marine and Coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND
Tel: (66 2) 298 2142
Fax: (66 2) 298 6313
E-mail: alinaws@hotmail.com

Ms. Duangruethai Pitukwongsanon
Administrative Officer
c/o Department of Marine and Coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND

Tel: (66 2) 298 2142
Fax: (66 2) 298 6313
E-mail: noi_nui7@hotmail.com

Ms. Kanitta Sansuk
Administrative Officer
c/o Department of Marine and Coastal Resources
92 Soi 7 Phahonyothin Road
Samsennai, Phayathai, Bangkok 10400
THAILAND
Tel: (66 2) 298 2142
Fax: (66 2) 298 6313
E-mail: ka_tour@hotmail.com

ANNEX II

AGENDA

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- 1.1 WELCOME ADDRESSES
- 1.2 INTRODUCTION OF THE PARTICIPANTS

2. ADMINISTRATIVE ARRANGEMENTS

- 2.1 ADOPTION OF THE MEETING AGENDA
- 2.2 DESIGNATION OF RAPPORTEUR
- 2.3 WORKING ARRANGEMENTS

3. STATUS OF NEAR-GOOS: REPORT ON THE OPERATION

- 3.1 REPORT BY THE CHAIRPERSON
- 3.2 REPORT BY THE IOC/WESTPAC SECRETARIAT
- 3.3 REPORT ON THE NATIONAL ACTIVITIES
 - 3.3.1 **China**
 - 3.3.2 **Japan, including RRTDB, RDMDB and the training course**
 - 3.3.3 **Republic of Korea**
 - 3.3.4 **Russian Federation**
- 3.4 REPORT ON THE WORKING GROUP ON NEW GENERATION SST
- 3.5 REPORT ON THE WORKING GROUP ON DATA MANAGEMENT

4. RELEVANT DEVELOPMENTS IN RELATED PROGRAMMES

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 - 4.1.1 **The 3rd Forum on GRAs and GOOS Regional Councils**
 - 4.1.2 **GSSC-X Scientific Workshop**
- 4.2 SEAGOOS
- 4.3 OTHER PROGRAMMES
 - 4.3.1 **ODINWESTPAC**
 - 4.3.2 **GODAR-WESTPAC**
 - 4.3.3 **YSLME**
 - 4.3.4 **PICES**
 - 4.3.5 **NOWPAP**

5. DEVELOPMENT OF NEAR-GOOS AND FOLLOW-UP OF ITS STRATEGIC PLAN

- 5.1 PROMOTION OF NEAR-GOOS

6. OTHER BUSINESS

7. ELECTIONS

8. DATE AND PLACE OF NEXT SESSION

9. ADOPTION OF THE SUMMARY REPORT

10. CLOSURE

ANNEX III

REPORT OF THE CHAIRPERSON

Takashi Yoshida
Japan Meteorological Agency

1. Introduction

In the last intersessional period, there were several progresses of the NEAR-GOOS activities. Each participating organization made extensive efforts to strengthen the ocean observing capacity of the North-East Asian region. Thanks to the efforts of all participating organizations, the NEAR-GOOS database system was successfully operated without any serious problems. The 8th data management training course hosted by JODC was held in February-March 2006. The Working Group of New Generation SST and the Working Group on Data Management started their work, including the first sessions of both of the group. Brief summaries of those activities are described below while details are reported separately.

2. Topics during the intersessional period from January 2006 to January 2007

2.1 Operation of NEAR-GOOS data bases

Establishment of real time and delayed mode data bases was the major achievement of NEAR-GOOS in its initial phase. The bases are now fully operational. A steady number of web page accesses and volume of data retrieval from the Regional Real Time and Delayed Mode Data Bases show that the data bases have become an indispensable source of oceanographic data and information to various research and operational activities. Not only observational data but also oceanographic products such as sea water temperature charts, wave charts, current charts, tide forecast, and real time display of station observations are now become available through the NEAR-GOOS data bases. Efforts by the organizations which operate the data bases and/or provide their products and information are highly appreciated. Continuous commitment of those organizations is still priority.

2.2 Data management training course

The eighth IOC/WESTPAC Training Course on NEAR-GOOS Data Management took place from 20 February to 3 March 2006. Among eight trainees of the course, three trainees are from each NEAR-GOOS member country except the host country. Details of the course are in the Japanese national report.

2.3 Working Group on New Generation SST

The Working Group on New Generation SST was organized under Prof. Hiroshi Kawamura's leadership with five experts from the regional institutions who were nominated by each country. A kick-off meeting was held in November 2006 at Tohoku University in Sendai. At the meeting, the activities of the past ocean remote sensing activities carried out as WESTPAC ORSP/NGSST were reviewed. The group devoted the half of the meeting to refine NGSST user requirements from the NEARGOOS aspects to develop satellite-based coastal SST monitoring techniques.

2.4 Working Group on the NEAR-GOOS Data Management

The group started its work with six experts from all the four NEAR-GOOS countries. Mr. Takashi Yoshida has served as an ad hoc chairperson of the group. The working group met at its first session held in Tokyo, Japan, in June 2006, and reviewed practice of national data base management and international data management frameworks, such as JCOMM, IODE, NOWPAP, PICES/TCODE, Argo and NEAR-GOOS. The group focused its attention on the availability of existing biological and chemical data and an integrated Sea Surface Temperature (SST) database. As a result, the working group agreed to prepare an inventory of existing in situ chlorophyll a and sediment material data and to draft a concept paper on an integrated real-time SST database pilot project.

2.5 Replacement of the committee members and the Technical Secretariat

The chairperson was informed that Prof. Yu Zhouwen, the past chairperson of the committee, could no longer get involved in the committee activities, and Prof. Chen Zhi, National Marine Environmental Forecasting Center, State Oceanic Administration of the Peoples Republic of China, would take his position from the eleventh session of the committee. The chairperson expresses his sincere appreciation for Prof. Yu's great contribution to the development of NEAR-GOOS. Dr. Minoru Odamaki, Hydrographic and Oceanographic Department of the Japan Coast Guard, was replaced by Dr. Masaru Okuno due to a personnel change in the organization.

Mr. Zhu Wenxi, State Oceanic Administration of the People's Republic of China, arrived at his post in the IOC/WESTPAC in August 2006, while Dr. Miguel Fortes, the former head of IOC/WESTPAC, left in October 2006 due to termination of the contract. Mr. Zhu is now serving as the technical secretariat for NEAR-GOOS.

2.6 IOC/WESTPAC web site

During the intersessional period, the IOC/WESTPAC web site was revitalized. Timeliness of available information has been greatly improved.

3. A chairperson's perspective

In the past few years, the recognition of GOOS Regional Alliances (GRAs) as key players for the coastal module of the Global Ocean Observing System has grown under the I-GOOS framework. The main topic of the 3rd GOOS Regional Forum, held in Cape Town, South Africa, November 2006, in which three NEAR-GOOS CC members participated, was how to establish and enhance the networking of GRAs to implement the coastal GOOS. As one of the oldest GRAs, NEAR-GOOS can contribute to the development of such networking, with a wider view to develop the world wide ocean observing system from each region.

We are now well recognizing that there are several other ocean observing initiatives in the North-East Asian region. Considering the limited resources of the NEAR-GOOS participating organizations, collaboration with those existing ocean observing initiatives are vital to reach the overall goal of NEAR-GOOS, which is to develop and increase the regional ocean observing capability as a whole. The chairperson stresses that it is now important to implement and promote NEAR-GOOS, under appropriate collaboration with other national, regional and global ocean observing initiatives.

ANNEX IV

REPORT OF THE IOC/WESTPAC SECRETARIAT

Zhu Wenxi

The following is a succinct report of the work carried out by the Regional Secretariat for the Western Pacific during the intersessional period.

1. MAJOR ACTIVITIES

1.1 Report on the Secretariat office

Due to the contract termination of Dr. Miguel Fortes, Mr. Wenxi Zhu was appointed by Dr. Patricio Bernal, IOC Executive Secretary, as the Acting Head of the office on 9 October 2006 after he joined the Secretariat in August 2006. Upon the request of Secretariat in December 2006, Department of Marine and Coastal Resources kindly provided the Secretariat one half-time IT assistant and another two full-time staffs as administrative assistant. Secretariat would like to take this opportunity to express our sincere thanks to Dr. Cherdchinda Chotiyaputta and her assistant Ms. Ms. Saowalak Winyoonuntakul for their heartfelt and generous support.

1.2 Finalization of summary reports and development of public media

After the decision to hold the 11th session in Bangkok, Secretariat started to collect all summary reports and relevant documents of previous sessions. With the continuous effort of Mr. Takashi Yoshida, Chairperson of NEAR-GOOS Coordinating Committee, the summary reports of the last two sessions have been finalized. Till present, all summary reports, manual, Implementation Plan and Strategic Plan for its Second Phase (2004-2008) are available at IOC/WESTPAC Website. Meanwhile, the first E-information, including the 11th Session of NEAR-GOOS, was publicized on 21 November 2006, to all IOC staffs, UNESCO BKK staffs, IOC/WESTPAC officers, Programme Coordinators, delegations from IOC/WESTPAC member states, and other relevant organizations.

1.3 Support sought from Government of China and Japan

Considering the serious financial situation, more efforts have been made in seeking financial support from the Member States of NEAR-GOOS region. Taking the opportunity of the 3rd PSC meeting of YSLME on 23-24 November 2006, Mr. Wenxi expressed and exchange views with the Delegation of China, and China principally agreed to make some contributions as a support to IOC/WESTPAC activities, including NEAR-GOOS.

On 3 December 2006, Mr. Wenxi Zhu, together with Mr. Takashi Yoshida, visited two officials responsible for Japan Fund in Trust at the Ministry of Education, Culture, Sports, Science and Technology (MEXT). Mr. Wenxi Zhu briefly reported them on the IOC/WESTPAC activities funded by JFiT. Both sides exchanged views on many areas covering the visibility of IOC/WESTPAC, communications, financial situation and restrictions, and priorities for future cooperation. Finally, both sides agree to establish close communication on the implementation status of the JFiT-funded projects, and Secretariat was encouraged to define or prepare project proposals for submission.

1.4 Facilitate the kick-off meetings of the two Working Groups on New Generation Sea Surface Temperature (NEARGOOS/NGSST-WG) and NEAR-GOOS Data Management (NEAR-GOOS/DM-WG)

During the preparations for the kick off meetings of the two NEAR-GOOS Working Groups, IOC/WESTPAC has been keeping contacting UNESCO Bangkok Office for fund transferring, contract formulation, and etc.

The First Session of the Working Group on NEAR-GOOS Data Management was organized by Mr. Takashi Yoshida at the Japan Meteorological Agency Headquarters, Tokyo, Japan, 29-30 June 2006. The meeting was completed with the financial support from the Japanese Fund-in-Trust, which was utilized to cover the local organizing costs and travel costs for 5 participants from China, Japan, Republic of Korea, and Russian Federation.

The First Meeting of the Working Group on NEAR-GOOS New Generation Sea Surface Temperature (NEARGOOS/NGSST-WG) was organized by Dr. Hiroshi Kawamura on 22 November 2006 at the Graduate School of Science of the Tohoku University. Japanese Fund-in-Trust was used for the travel supports (air/ground transportations and lodgings) of 6 participants from China, Japan, Republic of Korea, and Russian Federation.

The meeting outcomes are reported in Agenda Item 3.4 and 3.5.

1.5 Partnership with YSLME, PEMSEA and NOWPAP

In accordance with the decisions of IOC/WESTPAC sessions and NEAR-GOOS sessions, a Memorandum on Understanding (MoU) was signed between IOC/WESTPAC Secretariat and YSLME Project Office on 23 November 2006, in which, inter alia, Both sides agree to promote the application of Marine Science and Service in the conservation and sustainable use of Marine and Coastal Environment in the Yellow Sea, in particular, to cooperate in the data and information sharing and management, with a view to developing a regional network on data and information management, to allow wide use of valuation data and information generated by the two organizations;

On 16 December 2006, a Letter of Cooperation (LoC) and Partnership Operating Arrangement were signed between IOC/WESTPAC Secretariat and PEMSEA Programme Office. Both parties are committed to forging a long-term stakeholder partnership for the implementation of the SDS-SEA. During this process, IOC/WESTPAC can provide scientific inputs to address critical uncertainties for the management of the coastal and marine environment and its resources in the Western Pacific region;

Additionally, possible cooperation with NOWPAP was sought on the activities of Remote Sensing. Dr. Kawamura, the leader of WG on NGSST, was entrusted to discuss with experts from NOWPAP. The details will be presented under agenda item 6.

2. Pending issues and future recommendations.

Though several activities have been carried out, some action points adopted in CC-9 and CC-10 still need more efforts. Following list including current status and recommendations will be reported for further considerations.

Action Points	Current Status	Recommendations
CC-9	Sendai, Japan, 3-5 November 2004	
Action Point 1: For IOC to upgrade the NEAR-GOOS webpage.	Some documents uploaded	More need to be done to improve, in terms of contents, activities.....
Action Point 2: WESTPAC Secretariat to draft an MOU and circulate to the members for comment and to each member state's approval.	Not yet	This action was followed up by the action 5 at CC10.
Action Point 3: Mr. Yoshida to prepare a concise Introduction on the use of RRTDB.	Not yet	Could be followed up by DM Working Group
Action Point 4: CC members and concerned individuals to provide the quality control procedures	Not yet	Could be followed up by DM Working Group
Action Point 5: Mr. Itoh to prepare a concise Introduction on the use of RDMDB.	Not yet	Could be followed up by DM Working Group
Action Point 6: All concerned to submit their contributions on time. The Secretariat to prepare and print the Strategic Plan.	Available for print	Fund
Action Point 7: Dr. Lee to provide the committee a formal proposal specifying the kinds of buoys, who will do what, ToRs for the plans, budget, expected output, etc.	Cancelled at CC10	A new proposal perhaps be made at CC11.
Action Point 8: WESTPAC Secretariat check first on the restrictions of surface drifters and buoys drifting into the EEZ of other countries.	Not yet	Discussion is being done at the Advisory Body of Experts on the Law of the Sea (IOC/LOS)
Action Point 9: For CC members to discuss further the subject intersessionally	withdraw	
Action Point 10: Dr. Kawamura to form the WG through consultation with the CC members and start its activities	Done	
Action Point 11: Mr. Yoshida to ask each CC member to nominate the working group members and start the working group activity.	Done	
Action Point 12: For NEAR-GOOS to continue contact with PICES on development of monitoring activities in the North Pacific and its marginal seas.	Done	Substantial activities need proposing
Action Point 13: NEAR-GOOS to continue interaction with NOWPAP in monitoring and data management in the region.	Done	Substantial activities need proposing
Action Point 14: For NEAR-GOOS CC members to establish contact with the	Done	No follow up

PEACE Program.		
Action Point 15: IOC/WESTPAC to investigate the intention of DPRK to participate in NEAR-GOOS.	Not yet	Continue?
CC-10	Busan, Korea, 16-18 January 2006	
Action 1: As soon as possible, WESTPAC should make available in the web, information on NEAR-GOOS, its activities, products, and the Strategic Plan.	Half done	More efforts are needed
Action 2: Each database manager to ensure updating of the database in time and ensure that network route is accessible.	Been doing	
Action 3: 1. Formation of the NGSST working group through consultation with the CC members (by the end of February 2006); 2. Distribution of the strategic plan of the NGSST-C development with technical/research information; and 3. Organization of the kick-off meeting (Spring-summer of 2006, Sendai).	Done	
Action 4: the Data Management WG to review the data flow, existing data exchange policy and find the best ways to include chemical and biological data in NEAR-GOOS databases.	Done	
Action 5: WESTPAC to circulate a letter to remind member states of the status of NEAR-GOOS and ask for their support for the implementation of its second phase. The letter should mention the past international agreement for the establishment of NEAR-GOOS.	Not yet	
Action 6: NEAR-GOOS to continue cooperation with other GRAs in GRAND and participate in their activities and in the GOOS Regional Forum.	Done	

ANNEX V

RECOMMENDATIONS

RECOMMENDATION IOC-WESTPAC-NEAR-GOOS-XI.1

TRAINING ACTIVITIES OF NEAR-GOOS

The Co-ordinating Committee for NEAR-GOOS,

Noting the existing “Training Course on NEAR-GOOS Data Management”, which has been carried out by JODC for ten years,

Recognizing the usefulness of ocean remote sensing technology for ocean monitoring and that the use of ocean remote sensing technology can greatly improve the regional ocean observing capability,

Acknowledging NOWPAP CEARAC’ intention to conduct a training activity on Ocean Remote sensing , including satellite data processing, in summer 2007;

Appreciating that the cooperation between NOWPAP and NEARGOOS on Ocean Remote Sensing has been carried out in the past;

Encourages all participating countries to make efforts on the training activities for NEAR-GOOS focusing on ocean remote sensing;

Invites JODC to continue the training course on NEARGOOS data management to include the subject on ocean remote sensing, with necessary assistance from appropriate organizations including JMA and Tohoku University, and the financial support from IOC, and with necessary collaboration with NOWPAP;

Requests the IOC/WESTPAC Secretariat to take necessary action for

- (i) finding resources for the training activity,
- (ii) inviting NEARGOOS member states to nominate trainees for the training activities.

RECOMMENDATION IOC-WESTPAC-NEAR-GOOS-CC-XI.2

A PILOT PROJECT OF OCEAN DATA AND INFORMATION NETWORK FOR THE WESTERN PACIFIC REGION (ODIN-WESTPAC-PP)

The Co-ordinating Committee for NEAR-GOOS,

Recalling:

- (i) the IODE Committee, during its 18th Session in 2005 decided to abolish the system of IODE Responsible National Oceanographic Data Centres and the system of IODE Regional Coordinators, and further requested that NODCs participating in Ocean Data and Information Networks (ODIN) would assume the functions of former RNODCs;
- (ii) the IOC Sub-Commission for the Western Pacific expressed its strong interest in developing an

ODIN for the WESTPAC region and adopted a resolution (SC-WESTPAC-VI.2) at its sixth Session in 2005 on the establishment of an Inter-sessional Working Group to provide, as appropriate, a project proposal for an Ocean Data and Information Network for the region including a possible work plan, deliverables, timelines and required resources;

- (iii) the Preparatory meeting toward the establishment of ODIN-WESTPAC, Tokyo, 5-6 December 2006, adopted a pilot project proposal of Ocean and Data Information Network for the WESTPAC region (ODIN-WESTPAC-PP), based on the work done by the Inter-sessional Working Group, for submission to the 19th Session of the IODE Committee (Trieste, Italy, 12-16 March 2007) for adoption;

Recognizing that ocean data and information related activities and networking of the participating organizations that carry out major NEAR-GOOS activities will further help the efficient development and improvement of ocean data and information capability in the region;

Requests the IOC/WESTPAC Secretariat to take necessary action for adoption of the pilot project proposal at the XIX session of the IODE Committee in Trieste, Italy, 12 - 16 March 2007;

Further requests the IODE Committee to approve this pilot project proposal;

Invites all NEAR-GOOS participating member states to take part in the pilot project when approved.

ANNEX VI

LIST OF ACRONYMS

BOOS	Baltic Operational Oceanographic System
CC	Coordinating Committee
CEARAC	Monitoring and Coastal Environment Assessment Regional Activity
CKJORC	China-Korea Joint Ocean Research Centre
COOP	Coastal Ocean Observation Panel
CREAMS	Circulation Research of the East Asian Marginal Seas
DMDB	Delayed Mode Data Base
DINRAC	Data and Information Network Regional Activity Centre
DPRK	Democratic People's Republic of Korea
ECOOP	European Conference on Object-Oriented Programing
ESIMO	Unified Information System on the World Ocean (Russian acronym)
FERHRI	Far Eastern Regional Hydro-meteorological Research Institute (Russian Federation)
FTP	File Transfer Protocol
GEF	Global Environment Facility
GEOSS	Global Earth Observation System of Systems
GIS	Geographic Information System
GMES	Global Monitoring for Environment and Security
GODAR	Global Oceanographic Data Archaeology and Rescue
GODAR-WESTPAC	GODAR project in the WESTPAC region
GOOS	Global Ocean Observing System
GRA	GOOS Regional Alliance
GRC	GOOS Regional Council
GSSC	GOOS Scientific Steering Committee
GTOS	Global Terrestrial Observing System
GTS	Global Telecommunication System
I-GOOS	Intergovernmental Committee for GOOS
IGOS	Integrated Global Observing Strategy
IOC	Intergovernmental Oceanographic Commission (UNESCO)
IODE	International Oceanographic Data Exchange (IOC)
ISIWO	Integrated System of Information on the World Ocean
JAFIC	Japan Fisheries Information Service Center
JCOMM	Joint IOC/WMO Technical Commission for Oceanography and Marine Meteorology
JCG	Japan Coast Guard
J-DOSS	JODC Data Online Service System
JMA	Japan Meteorological Agency
JODC	Japan Oceanographic Data Centre
KJWOC	Korean/Japan Workshop on Ocean Color Remote Sensing
KMA	Korea Meteorological Agency
KODC	Korea Oceanographic Data Centre
KODIS	Korea Oceanographic Data and Information Service System
KORDI	Korea Ocean Research and Development Institute
LME	Large Marine Ecosystem
MERRAC	Marine Environmental Emergency Preparedness and Response Regional Activity Centre
MERSEA	Marine Environment and Security for the European Area
MOMAF	Ministry of Maritime Affairs and Fisheries (Rep. of Korea)
MOST	Ministry of Science and Technology
NDMDB	National Delayed Mode Database
NEAR-GOOS	North-East Asian Regional GOOS
NFRDI	National Fisheries Research and Development Institute (Rep of Korea)
NGSST-P	New Generation Sea Surface Temperature Project

NMDIS	National Marine Data and Information Services
NOWPAP	North-West Pacific Action Plan
NOWPAP DINRAC	Northwest Pacific Action Plan Data and Information Network Regional Activity Center
ODIN	Ocean Data and Information Network
ORI	Ocean Research Institute (University of Tokyo, Japan)
ORSP	Ocean Remote Sensing Programme
PICES	North Pacific Marine Science Organisation
POI	Pacific Oceanological Institute (Russian Federation)
POMRAC	Pollution Monitoring Regional Activity Centre
QA	Quality Assurance
QC	Quality Control
RDMDB	Regional Delayed Mode Data Base
RRTDB	Regional Real Time Data Base
RTDB	Real Time Data Base
SEAGOOS	Southeast Asia Global Observing System
SOA	State Oceanic Administration (China)
SOOP	Ship of Opportunity Programme
TEMA	Training Education and Mutual Assistance
TINRO	Pacific Scientific Research Fisheries Centre (Russian Federation)
UNDP	United Nations Development Programme
VOS	Voluntary Observing Ship
WESTPAC	IOC Sub-Commission for the Western Pacific
WMO	World Meteorological Organisation
YEOS	Pre-operational Research for Operational Oceanographic System for the Yellow Sea and East China Sea
YSLME	Yellow Sea Large Marine Ecosystem Project