

NSDI-CAP Interim Report

03 October 2006

Title: North Pacific Ecosystem Metadata Federation: Japan Component
Award Number: IA660110254

This report contains mainly information from our first MIRC-NPEM Metadata Federation organizational and planning meeting which took place August 14-15, 2006. It was held at the Alaska Fisheries Science Center, Bldg. 4, Rm. 2143, 7600 Sand Point Way NE, Seattle, WA 98115-6349, USA

Participants: Dr. Toru Suzuki, (MIRC), Mr. S. Allen Macklin, (NOAA/PMEL), Dr. Bernard A. Megrey, (NOAA/AFSC), and Ms. Kimberly Bahl, (UW/JISAO).

1. Introductions: Overview of NPEM and Isite. Bernard Megrey and Allen Macklin opened the meeting by introducing all participants and presenting a history and overview of the NPEM and PICES federation project. The overview was based on a presentation given at the annual PICES meeting in Vladivostok, October 2005. Two elements are needed for federation: metadata in a standard format and a common communication protocol. The PICES federation uses FGDC metadata standard and Z39.50 protocol.

Locating ongoing funding for NPEM and federation is a challenge. PICES has been very supportive but has limited resources. At present, NOAA funding is unlikely. We have been unsuccessful in attracting money from international funding organizations. There is a possibility that NOWPAP can provide support for federation. Also, a new 3-year funding cycle at MIRC will start next year.

2. MIRC's Data Overview and Metadata Needs. Toru Suzuki informed participants of the hierarchical structure of MIRC, JODC, and Japan Hydrographic Association (JHA). He then discussed the varied types of data holdings available through JODC. JODC's data holdings are extremely valuable to scientists working in the North Pacific. They maintain data from several million stations dating back to the early 1800s. Although there is no formal metadatabase, metadata information are extensive in the form of header records, etc.

3. Walking Tour of AFSC and PMEL. Toru Suzuki was introduced to leadership at AFSC and PMEL and viewed essential laboratory spaces.

4. FGDC and NPEM Websites: Overview and Search Demo. Kimberly Bahl introduced FDGC and NPEM websites and provided a live metadata search demonstration. Presently the NSDI Clearinghouse legacy search gateway fails to connect with the NPEM Clearinghouse node. The legacy search gateway is built with propriety software that is no longer maintained and supported by the vendor, Blue Angel Software. The legacy interface will eventually be replaced with GeoNetwork, a user-maintained and open-source solution with similar and enhanced capabilities compared to the legacy interface. The GeoNetwork gateway (beta version of the new search gateway that is in development) will be implemented in 6 months to a year. A demonstration of

GeoNetwork (via a demonstration sever) provided successful search results. NPEM will work with NSDI to determine the cause of the legacy search gateway failure.

5. FGDC Metadata Content Standard. Kimberly Bahl, who received training from FGDC last spring, introduced the FGDC metadata content standard and its sections and elements. This gave Toru Suzuki the metadata rules to write FGDC-compliant metadata records from MIRC information.

6. Metadata Creation and Validation Tools. Kimberly Bahl demonstrated several open source metadata creation and validation tools, Metavist 2005 and Metadata Parser (MP). These tools allow easy creation of individual metadata records in XML file format (required for any clearinghouse node) and validation that they are FGDC compliant. Participants used Metavist and MP to create and validate an XML metadata record from a JODC Cruise Summary Report. This completes the first requirement for federation: FGDC compliant metadata.

7. Isite Implementation. The second requirement for PICES federation is to supply a common communication protocol: Z39.50. Kimberly Bahl provided specific instructions of how to install and configure the Isite application that allows the use of Z39.50 protocol. The Isite software suite is a free, open-source application available from the FGDC website.

8. MIRC Metadata and Node Development Strategy. This year MIRC will request proposals for three-year projects to begin April 2007. Participants of this meeting will work with Toru Suzuki to develop a MIRC proposal to their funding agency, the Nippon Foundation. The proposal will provide support for ongoing MIRC participation in the PICES federation. A primary component will be development of a MIRC metadatabase. As soon as possible, MIRC will develop a demonstration site using Isite and the XML record created at this meeting. This will be a registered node of the PICES federation.

In addition we discussed the strategies for long term funding and progress reports on this project and overall PICES federation (see table below).

Priority	Task	NPEM	MIRC	Due Date
1	Develop proposal to Nippon Foundation to assist with metadata transcription and translation. Due end of September 2006.	x	X	Sept 30, 2006
1	MIRC to configure Isite server, register PICES-MIRC node with NSDI clearinghouse, and test sample XML record.		X	Oct. 1, 2006
2	Prepare project meeting minutes.	X		Sept. 1, 2006
2	Toru Suzuki will check with NOWPAP office in Toyama to see if UNEP has a program that could help fund federation.		X	Sept. 1, 2006
2	Check NODC and CDMP as possible sources of support.	X		Sept. 1, 2006
3	Prepare project report for PICES TCODE	X	x	Sept. 1, 2006
3	Prepare article for PICES Press after Tokyo meeting.	X	x	April 1, 2007
4	Determine proper Japanese affiliation (MIRC/ JHA, JODC)		X	Oct. 1, 2006

X – primary lead

x- secondary supporting role

9. Preparation for October Meeting. Participants developed the following draft agenda for the next meeting to bring MIRC into the PICES federation. The meeting will be held on Thursday and Friday, October 19th and 20th, in Yokohama and Tokyo, respectively. The agenda will be finalized at the PICES Technical Committee on Data Exchange (TCODE) meeting on Wednesday, October 18th.

Proposed Draft Agenda for Tokyo Meeting.

Thursday, October 19, 2006

<u>Start</u>	<u>End</u>	<u>Event</u>	<u>Participants</u>
12:00	13:00	Discussion of the MIRC-NPEM federation, including metadata mapping, node registration, etc.	MIRC-NPEM
13:00	14:00	Review progress on tasks	MIRC-NPEM
15:00	19:30	PICES TCODE Meeting	MIRC-NPEM

Friday, October 20, 2006

<u>Start</u>	<u>End</u>	<u>Event</u>	<u>Participants</u>
10:30	11:00	Introductions and Overview	MIRC-NPEM
11:00	12:00	Walking tour of MIRC/JODC	MIRC-NPEM
12:00	13:30	LUNCH	
13:30	15:00	MIRC metadatabase demonstration	MIRC-NPEM
15:00	16:00	Comment and discussion	MIRC-NPEM
16:00	17:00	Review progress on tasks	MIRC-NPEM
17:00	18:00	Draw up future plans	MIRC-NPEM
18:00	20:00	Dinner in Tokyo (Tsukiji)	
20:00		Train back to Yokohama	

Expenditures through 9/30/2006:Item	Amount
1. Temporary Personnel Salaries	
Kimberly Bahl (2 months @ \$3900/month)	\$7,800.00
2. Temporary Personnel Benefits	
Kimberly Bahl (26%)	\$2,028.00
3. Travel	
CAP Orientation Meeting (1 person)	
Denver	\$731.80
Technical Meeting, Tokyo (2 persons)	\$4,860.00
5. Supplies	
	\$422.65
6. Contracts, Consultants, Services	
Dan Klawitter (13 hours at \$68.95/hr)	\$896.35
7. Indirect Costs	
Kimberly Bahl (26% of salary and benefits for UW)	\$2,555.28
Kimberly Bahl (26% of travel costs)	\$705.91
Total Project Expenditures	\$19,999.99

All funds granted to this project were used during FY 2006. The U.S. National Oceanic and Atmospheric Administration, the Japanese Marine Information Research Center, and the North Pacific Marine Science Organization provided additional no-cost support to this project of \$38,732.23.

Prepared by:

Bernard A. Megrey
206-526-4147
bern.megrey@noaa.gov