REPORT OF THE TECHNICAL COMMITTEE ON DATA EXCHANGE

The meeting of the Technical Committee on Data Exchange Committee was held from 0900-1300 hours on October 25, 2000. The Chairman, Mr. Robin M. Brown, called the meeting to order and welcomed the partici-pants (*TCODE Endnote 1*). The Committee reviewed the draft agenda and it was adopted as after revision (*TCODE Endnote 2*).

Old business

The Chairman reported on the successful joint TCODE/WG 13/JGOFS NPTT Workshop held in Tsukuba, Japan, on October 20 and 21, prior to the main PICES meeting. Preliminary inventories of marine carbon data (especially pCO₂, Total CO₂ and Total Alkalinity) were

presented by Japan, U.S.A. and Canada. There were also some presentations demonstrating attempts to merge these diverse datasets to form a basin-wide database. The results from this work proved that datasets from different laboratories can be combined for basin-scale studies, if care is taken during the data assembly process.

WG 13 requests TCODE assistance in completing the inventories of these three data types for PICES nations. This inventory will be included in the WG 13 final report and could also be posted on the PICES web site. The following specialists (Table 1) volunteered to circulate the metadata requirements and collate the inventories from individual countries:

Table 1. List of contacts

Data type	Collator/Metadata Requirements	National Contacts
pCO_2	Alex Kozyr (CDIAC, U.S.A.)	Robin Brown (Canada)
		Richard Feely (U.S.A.)
		Sachiko Oguma (Japan)
Total	Andrew Dickson (SIO, U.S.A.)	Robin Brown (Canada
Alkalinity		Richard Feely (U.S.A.)
		Sachiko Oguma (Japan)
Total CO ₂	Andrew Dickson (SIO, U.S.A.)	Robin Brown (Canada)
		Dick Feely (U.S.A.)
		Sachiko Oguma (Japan)

Little progress on improvements and updates to the to TCODE Web pages on PICES Web site was reported. TCODE members will be asked to review the entries for accuracy and completeness and forward corrections/additions to the Chairman. The Committee agreed to place special emphasis on the Inventory of Long Time Series Data, given the prominent role these play in PICES scientific work. A representative from the Marine Birds and Mammals Advisory Panel expressed strong interest in contributing entries for their subject area. The Committee also agreed to incorporate some of the location maps and summaries prepared by the MONITOR Task Team. Dr. Igor Shevchenko

reported that a "mirror" of the PICES web site has been established in Russia at http://www.tinro.ru/pices.ios.bc.ca. Users in Russia should be able to access this "mirror" site at lower cost and with higher performance.

The Electronic Poster Session at PICES IX attracted little attention and interest. While the Committee strongly supports this concept, they also realized that this session needs additional promotion within PICES to raise awareness. The Committee also recognized that on-site facilities play an important role in the success of such a session. There is a strong demand for high-speed Internet access to demonstrate web

pages and web-based applications. The Chairman agreed to determine what facilities are available at the Victoria Conference Centre (venue for the PICES Tenth Annual Meeting) and circulate this to PICES members, prior to a final decision on a TCODE sponsored electronic poster session for PICES X. Drs. Toru Suzuki (Japan), Igor I. Shevchenko (Russia) and Thomas C. Royer (U.S.A.) agreed to play an active role in promoting and organizing the Electronic Poster Session for PICES X. The Committee recommended that a focus should be a "showcase" for National and Regional Data Centres in the PICES nations.

Sessions at future Annual Meetings

Electronic Poster Session at PICES X: Regional and National Data Centres. Convenors: Thomas C. Royer (U.S.A.), Igor Shevchenko (Russia) and Toru Suzuki (Japan).

Computer-based demonstrations of data management activities in the PICES area, focussing on the holding and capabilities of the various National and Regional Data Centres, but also including other project-based data management initiatives. The goal of the poster session is to improve awareness of data resources available in the PICES region. This will require high-speed Internet capability to provide interactive access to the web-sites.

Inter-sessional Workshops

The Committee agreed to co-convene the following inter-sessional workshops:

a. A 3-day WG 13/TCODE CO₂ Data Integration Test Workshop, January 2001, Sidney, B.C., Canada

This small workshop will assemble a small group of CO_2 data specialists to review sample datasets and assess and review the problems of data integration. The results from this workshop will be used to structure a larger workshop in Tokyo (May, 2001) where the datasets will be brought together.

b. A 3-day WG 13/TCODE CO₂ Data Integration Implementation Workshop, May 2001, Tokyo, Japan.

At this meeting, the datasets from three PICES nations will be assembled into a basin-wide dataset. This will require a larger group of scientists and CO₂ data specialists, but support for this workshop from Japanese funding sources is likely.

Requests for travel funding

Support is requested from PICES for 3 scientists (one from Japan, two from U.S.A.) to attend the CO₂ Data Integration Test Workshop, and for 2 scientists to attend the CO₂ Data Integration Implementation Workshop (in addition to funding provided by agencies in Japan).

Relations with other organizations, programs and projects

The Committee recommended that the EVOS (Exxon Valdez Oilspill) Trustee Counsil, which supports the GEM (Gulf Ecosystem Monitoring) Program and the Pacific Seabird Group be added to this list. GLOBEC, GOOS, JGOFS were identified as the highest priority program for cooperation.

Best Presentation Award

Due to the small number of submissions, no award is given for the TCODE session this year.

Science Board issues

Salmon and Climate Workshops (with NPAFC and other agencies)

The Committee had no comment on this proposal.

PICES X Anniversary Symposium

The Committee reviewed and accepted the proposed outline for PICES X Anniversary Symposium. Dr. Thomas Royer volunteered to act as the TCODE representative in the organization of this Symposium.

PICES X Science Board Symposium

The Committee reviewed and accepted the proposed outline for the PICES X Science Board Symposium on "Ecological processes in the marginal seas of the North Pacific".

PICES XI Theme

The Committee reviewed and strongly supported the proposed theme for PICES XI on "Technological advances in marine scientific research", but recommended announcement be expanded to include other topics such as data access, integration and visualization; numerical modelling, telemetry, Autonomous Underwater Vehicles etc. The Committee felt that the draft outline of this session shows a strong fisheries bias and might not attract contribution in these other areas.

Revisions to Handbook for Chairmen and Convenors

The Committee recommended acceptance of the proposed changes.

PICES Wooster Award

The Committee supported this proposal, but suggested that the area of achievement that is recognized should be broadened to "significant scientific contributions to North Pacific Marine Science".

Census of Marine Life Workshop

The Committee strongly supported this initiative and recommended that PICES use this venue to clarify the goals and objectives for ecosystem monitoring in the PICES region. It seems clear to the group that coordination of North Pacific

ecosystem monitoring is a key task for PICES over the next few years and we should take full advantage of this workshop.

NEAR-GOOS Forecasting Workshop

The Committee was unclear on the potential value of the requested travel support to PICES.

Science Board Strategic Plan

The Committee accepted the Strategic Plan as presented.

TCODE Work Plan for 2000/2001 (PICES IX – PICES X)

GLOBEC Data Management

The Committee will ensure that inventories of GLOBEC data from PICES nations are forwarded to the International GLOBEC Program Office. The TCODE Chairman will represent the PICES CCCC Program on the GLOBEC Data Management Task Team.

TCODE/WG 13 CO₂ Data Integration

The Committee will participate in the assembly of the data inventory (to be published in the WG 13 Final Report) and in two proposed intersessional CO_2 Data Integration workshops.

PICES Web Pages

TCODE will upgrade and improve the PICES Inventory of Long Time Series Data, with assistance from other groups.

Electronic Poster Session for PICES X

The Committee will organize an electronic poster session at PICES X (subject to scheduling and logistics restrictions).

TCODE Endnote 1

Participation List

Canada

Robin M. Brown (Chairman)

Japan

Toshio Nagai Muneharu Tokimura

People's Republic of China

Ling Tong

Republic of Korea

Hae Seok Kang

Russian Federation

TCODE Endnote 2

Agenda

Meeting dates:

October 20, 2000 in Tsukuba, Japan (Joint WG 13/NPTT/TCODE) October 25, 2000 in Hakodate, Japan (Annual TCODE meeting)

- 1. Introduction of members
- 2. Adoption of agenda (opportunity to add agenda items)
- 3. Review progress on 2000 Workplan
 - a. Joint TCODE/JGOFS NPTT/ WG 13 Workshop
 - b. Maintenance and improvements to TCODE web pages
 - c. MONITOR Task Team assistance with web pages
 - d. Electronic Poster Session at PICES IX
- 4. Updates on data management activities in PICES nations
- 5. GLOBEC CCCC Data Management
 - a. GLOBEC Program Office Data management activities
 - b. GLOBEC Data Inventory
 - c. GLOBEC Data Archival
- 6. Proposals with financial implications
- 7. Projects needing financial support from **PICES**

Igor I. Shevchenko

Thomas C. Royer

Yutaka Nagata (Japan)

Sachiko Oguma (Japan) Yoshioki Oozeki (Japan) Toru Suzuki (Japan) William Sydeman (U.S.A.)

Observers

Bernard A. Megrey (rapporteur)

- North Pacific Ecosystem Status Report
- b. International zooplankton monitoring program for the North Pacific
- c. Workshop/symposium series on "Effect of human and climate interactions on fish production"
- 8. New business (additional items added at the meeting)
 - a. Salmon and Climate Workshops (with NPAFC and other agencies)
 - b. PICES X Anniversary Symposium
 - c. PICES X Science Board Symposium on "Ecological processes in the marginal seas of the North Pacific"
 - d. PICES XI theme "Technological advances in marine scientific research"
 - e. Chairman's Handbook revisions
 - f. Proposed PICES Wooster Award for annual scientific achievement for "mature" researcher
 - g. High priority programs for cooperation
 - h. Census of Marine Life Workshop
 - **NEAR-GOOS** Forecasting Workshop
 - Science Board Strategic Plan
- 9. TCODE Workplan for 2001