2023 Report of Study Group on
Encouraging Data Awareness and Increased Transmission and Accessibility

The Study Group on *Encouraging Data Awareness and increased Transmission and Accessibility* (SG-DATA) meeting on September 12/13 was held virtually since many members were not able to attend the annual meeting this year. This was the 6th meeting of SG-DATA for 2023, although members of SG-DATA were only confirmed following our final meeting, so we have included both official and unofficial members below (*SG-DATA Endnote 1*).

AGENDA ITEM 1
Welcome and overview

The final meeting commenced with a warm welcome to participants and a brief overview, followed by initial updates by the SG Chair, Dr. Erin Satterthwaite (*SG-DATA Endnotes 2* and *3*).

AGENDA ITEM 2
PICES Data Strategy

The group thoroughly reviewed the current draft Executive Summary in the PICES Data Strategy document, laying the foundation for subsequent discussions.

AGENDA ITEM 3
Proposal for a working group

The interest of current members in continuing to work on the data strategy was assessed, and a deadline of September 22 was set for the submission of the WG proposal. Dr. Satterthwaite led the drafting and subsequent sharing of the proposal with the SG (*SG-DATA Endnote 4*)..

AGENDA ITEM 4
Presentation opportunities

Discussions centered on identifying programs that could benefit from the SG's presentation, with Jeanette Gann assigned to compile a slide from the group's output. Additionally, considerations were made for presenting at meetings of relevant groups such as the FUTURE SSC and AP-ECOP.

AGENDA ITEM 5
Review of EG achievements and requests/proposals

Fifteen minutes were focused on PICES business, evaluating the achievements of various groups against their Terms of Reference, and addressing requests/proposals to parent committees and Science Board.

AGENDA ITEM 6
PICES Data Excellence Award

The SG discussed establishing a PICES Data Excellence Award in honor of Dr. Igor Shevchenko, past Chair and member of SG-DATA's parent Committee, TCODE, who passed away July 15, 2023. The SG spent 10 minutes refining and finalizing the draft proposal for the PICES Open Data Excellence Award. Dr. Satterthwaite requested any final edits to the draft proposal by September 22.

AGENDA ITEM 7
Igor Shevchenko memories for Year in Review

A brief portion of the meeting was dedicated to collecting memories, quotes, and contributions for Dr. Shevchenko. These were curated and included in the Year in Review section, presented by the Science Board Chair, Dr. Sukyung Kang, at the Opening Ceremony.

AGENDA ITEM 8
Next steps

The meeting concluded with a discussion on next steps, particularly proposing an official working group for Science Board review, and defining new terms of reference for the proposed group. Discussions covered requests and proposals to parent committees and Science Board, addressing matters such as travel support fund, changes in members/chairs/TORs, extension of WG terms, planning of capacity development events, and new expert goup ideas. Action items were specified, including finalizing and editing proposals and documents by September 21, along with communication tasks assigned to Ms Gann.

SG-DATA Endnote 1

SG-DATA participation list

Members

Erin Vera Satterthwaite (USA, Chair)
Shelee Hamilton (Canada)
Brett Johnson (Canada)
Tim Van Der Stap (Canada)

Members unable to attend

China: Chunhua Han, Fangfang Wan
Japan: Daisuke Ambe, Daiki Ito
Korea: Cholyoung Lee
USA: Jill Prewitt

Observers

Jeanette Gann (USA, TCODE Chair)
Hernan Garcia (USA)

SG-DATA Endnote 2

SG-DATA meeting agenda

1. Welcome & overview of the meeting & initial updates
2. PICES Data Strategy
3. PICES Business
4. PICES Data excellence award - in honor of Igor
5. Igor memories to be included in section of the Year in Review, given by the SB Chair at the opening ceremony
6. Next steps & next meeting
7. Action items

SG-DATA Endnote 3

Proposal for a Workshop on
"*Co-creating a shared framework for ocean data management*"
at PICES-2024

Conveners: Erin Satterthwaite (USA), Naomi Boon (Canada), Jeanette Gann (USA)

Duration: 1 day

In an era of burgeoning ocean data, this workshop will bring together ocean professionals interested in and working with ocean data across a range of experience levels (e.g., early career professionals, data managers, researchers) to establish a unified framework and shared language for effective ocean data management. With data's pivotal role across marine disciplines, cultivating a harmonized approach becomes imperative. Through interactive discussions, the workshop will collaboratively construct a common vocabulary of key ocean data concepts, and establish a comprehensive data framework – from collection to utilization. Additionally, the workshop will explore next steps, such as effective strategies to share the resulting terminology and framework and the potential development of a training. In doing so, the workshop aims to lay a foundation for improved data management practices within and across PICES, UN Ocean Decade actions, and the broader marine science community. By creating a common understanding of key data science terminology and data frameworks, the workshop seeks to enhance science collaboration, streamline processes, and elevate data utilization.

SG-DATA Endnote 4

Terms of Reference for a Proposal for a Working Group on *Data Management*

Acronym: WG-DATA

Parent Committee: TCODE

Rationale and Goals

The PICES Data Management Working Group (WG-DATA) is established to address the need for an enhanced data, metadata, and information management and data sharing plan within the North Pacific Marine Science Organization (PICES). The WG-DATA will build upon the recommendations of the Study Group on Encouraging Data Awareness and Increased Transmission and Accessibility (SG-DATA) and provide a comprehensive strategy for modernizing and streamlining data and information management and sharing

practices within PICES. By aligning with international standards and promoting a culture of data sharing, PICES aims to enhance the accessibility, reach, and utility of its scientific data, fostering collaboration and advancing marine science in the North Pacific region.

Terms of Reference

1. **Revise and update the PICES Data Policy.** Revise and update the PICES Data Policy to align with international standards (UNESCO IOC and UN Decade of Ocean Science), incorporate FAIR and CARE principles, promote data sharing culture, and recommend data repositories and open data licensing options.

2. **Promote a culture of data sharing within PICES.** Promote a culture of data sharing within PICES such as by identifying and addressing data sharing barriers through an annual survey to PICES members and other related organizations, offering education and training resources, developing a data management road map, creating an inventory of data assets, identifying novel ways to incentivize data sharing, and encouraging 'data publications' adhering to open data licensing and DOI citation standards.

3. **Recommend data management platforms, standards, and technologies.** Identify, recommend and support data management platforms, standards, and technologies aligned with open data principles and internationally supported ocean data standards. Modernize PICES data management by developing accessible data management templates, facilitating report publication to repositories, evaluating the TCODE Catalog, promoting DOIs and data licensing, identifying collaborative word-processing tools, and establishing a PICES Data Stewardship Officer (DSO) for coordinated data management.

4. **Develop a data, metadata, and information (reports/pubs) flow diagram** from expert groups, PICES members, summer schools, and other associated initiatives across the PICES network to a final repository (*e.g.*, recommended databases, searchable catalogs, and metadata catalogs).