

**PAME II-2019 –Agenda Item 6.7(b)
Arctic Shipping Status Reports (ASSR) Project**

References and Related Documents

- Arctic Marine Shipping Assessment (AMSA) Report, 2009
- Arctic Ocean Review (AOR) Final Report, 2013
- Arctic Ship Traffic Data (ASTD) Project
- PAME I-2019 RODs, Annex I (Projects for inclusion in the PAME 2019-2021 Work Plan)
- PAME Work Plan (2019-2021)

Background

A growing interest in Arctic shipping precipitated the Arctic Council Ministerial decision instructing PAME to develop the 2009 Arctic Marine Shipping Assessment (AMSA) Report. One of the AMSA Recommendations urged Arctic States to support the development of a comprehensive Arctic marine traffic awareness system to improve monitoring and tracking of marine activity, to enhance data sharing, and to augment vessel management services in order to reduce the risk of incidents, facilitate response and provide awareness of potential user conflict.

Pursuant to this AMSA Recommendation, PAME developed the Arctic Ship Traffic Data (ASTD) system to collect and distribute accurate, reliable, and up-to-date information on shipping activities in the Arctic.¹ PAME launched the ASTD system in February 2019² and since then has received and processed nearly 20 requests for access consistent with applicable ASTD rules and procedures.

Conscious of the valuable and ever-increasing data contained in the ASTD system, as well as the lack of easily accessible information on Arctic ship traffic, PAME and its Shipping Expert Group, expressed support for the issuance of periodic informational reports on various aspects of Arctic shipping.

PAME I-2019 approved for inclusion in its 2019-2021 Work Plan a project entitled “Arctic Shipping Status Reports“ (ASSR). As set forth in the project description, the ASSR project will illustrate ship traffic in the Arctic through maps, graphs, and tables with explanatory text, using selected data extracted from the ASTD system and other relevant sources. The project’s aim is to provide periodic snapshots of Arctic shipping, including for example, the number, type, size, and flag of ships sailing in the Arctic over a defined period and/or a defined area, shipping routes, distances traveled, aggregated air emissions, fuel types, and traffic destinations in the Arctic. The project will strive to produce the informational reports

¹ The ASTD system may be accessed via the website at <https://www.pame.is/index.php/projects/arctic-marine-shipping/astd>.

² Press release: PAME launches Arctic Shipping Database (7 February 2019) (<https://pame.is/index.php/shortcode/blog/item/67-press-release-pame-launches-arctic-shipping-database>)

in an illustrative way,³ *e.g.*, with Story Maps or by other graphical means.⁴ Factsheets like the [LME factsheets](#) could be another format. Once approved by PAME, and consistent with applicable Arctic Council policies,⁵ the reports will be uploaded to the PAME website, released to PAME's press list, and distributed on social media.⁶

Process for Developing ASSR Reports

The project co-leads propose the following process for developing an ASSR information report:

1. The Project co-leads circulate ASSR Report topic possibilities to the PAME Shipping Expert Group for feedback and solicit Report topic ideas from the PAME Shipping Expert Group.
2. The Project co-leads select a Report topic (*e.g.*, fuel use in Polar Code area).
3. The Project co-leads identify a project team to help prepare the draft Report.
4. The Project team liaises with experts as necessary and obtains the necessary data from the ASTD system and other relevant sources.
5. The Project team analyses the data with the assistance, for example, of a GIS expert if available.
6. The Project team develops the Report and circulates it to PAME (intersessionally if appropriate) for review and approval.⁷
7. The PAME Secretariat uploads the Report to the PAME Website and distributes it by means of traditional and social media consistent with applicable Arctic Council and PAME communication policies and practices.

Possible ASSR Project Topics

A non-exhaustive draft list of possible ASSR Report topics includes:

- Fuel use/HFO in the Polar Code area
- Shipping in the Northern Sea Route
- Shipping in the Northwest Passage
- Trade vessels in the Arctic (general cargo ships/container vessels)
- Cruise ships in the Arctic (in conjunction with the Arctic Tourism Project)
- Shipping within a certain LME
- Underwater noise incidentally generated from commercial shipping in the Arctic
- Search and Rescue in the Arctic – challenges, etc.

³ The [Arctic Council Communication Strategy \(2018\)](#) states that “Well-designed infographics can convey information quickly and engagingly and lend themselves to sharing via social media. Infographics should become a regular component of Council efforts to inform and engage target audiences.”

⁴ An example of a Story Map produced by NOAA may be found at <https://www.arcgis.com/apps/MapJournal/index.html?appid=7530f28f065c486ba0420ca8e26a13f4>. Other examples can be found at <https://oceanservice.noaa.gov/map-stories/>.

⁵ See [Arctic Council Communications and Outreach Guidelines \(2016\)](#), and [Arctic Council Communications Strategy \(2018\)](#).

⁶ See PAME, [Communication and Outreach](#).

⁷ Each ASSR Report will contain an appropriate disclaimer such as the one in the biannual AMSA Implementation Progress Reports (“Neither this Report nor the information it contains constitutes an assessment by any PAME member of the consistency with international law, including the Law of the Sea, of domestic laws, regulations or other measures or resolutions identified or referenced herein.”)

- Surviving in Cold Waters

ASTD System Capabilities

The ASTD system possesses extensive ship traffic data and sophisticated features that allow that data to be analyzed. Of relevance to the ASSR Project, the ASTD has data on

- Number of unique ships
- Distance sailed
- Fuel consumption
- CO2 emissions
- CO emissions
- NOX emissions
- PM emissions
- Operational hours
- Number of ships in ports

The ASTD system can focus on ship traffic data for specific geographic areas, such as:

- EEZs
- LMEs
- Search and Rescue areas
- The IMO Polar Code area

Recommendation to PAME II-2019 meetign:

The USA and the PAME Secretariat recommend that PAME adopt a ROD that invites the ASSR Project co-leads to:

- collect Report topic ideas from the PAME Shipping Expert Group by 1 October 2019; and
- develop a test report using the process set forth in this paper and circulate the Report for consideration and approval at PAME I-2020.