ARCTIC SHIP TRAFFIC DATA PROJECT (ASTD)

Background and proceedings

1st Working Group Expert Meeting - Tromsö, Norway, September 2015

Hjalti Hreinsson
PAME
ASTD TIMELINE
PROGRESS TO DATE

- **2014**
  - Draft Project Plan Made
- **2015**
  - Inclusion in to the PAME 2015-2017 Work Plan
  - Expert group call sent to countries
  - First expert group teleconference
  - Unofficial meeting in Malmö
  - First face-to-face meeting!

- Winter
- February
- March
- June
- August
- September

2014 | 2015
THE ARCTIC COUNCIL

- High-level intergovernmental forum - Promotion of cooperation, coordination and interaction between the eight Arctic states

- Six working groups

- Mostly guidelines and soft law

  - Two legally-binding instruments

    ✔ Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic

    ✔ Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic

MEMBERS

USA
Canada
Iceland
Russia
Finland
Kingdom of Denmark (including Greenland and Faroe Islands)
Sweden
Norway

Permanent Participant (indigenous peoples groups) and Observers take part in PAME’s work
PAME

- Arctic Council focal point of activities related to the protection and sustainable use of the Arctic marine environment
  - The Working Group is a Forum for a wide range of activities in this regard
  - Participation from all 8 Arctic states, permanent participants & observers

- Measures include coordinated strategic plans as well as developing programs, assessments and guidelines on numerous activities:
  - Arctic Shipping
  - Marine Protected Areas
  - Arctic Offshore Oil and Gas
  - Ecosystem Approach to Management
  - Arctic Marine Strategic Plan 2015-2025
THE AMSA 2009 REPORT

• Comprehensive Arctic Shipping report

• 17 recommendations to policy makers under three themes:
  ‣ Enhancing Arctic Marine Safety
  ‣ Protecting Arctic People and the Environment
  ‣ Building the Arctic Marine Infrastructure

• Much of PAME’s work involves these recommendations
  • Including this one, of course
“That the Arctic states should support continued development of a comprehensive Arctic marine traffic awareness system to improve monitoring and tracking of marine activity, to enhance data sharing in near real-time, and to augment vessel management service in order to reduce the risk of incidents, facilitate response and provide awareness of potential user conflict. The Arctic states should encourage shipping companies to cooperate in the improvement and development of national monitoring systems.”
THE AMSA DATABASE

- One year data collection (2005) via electronic questioners
  - Not sustainable
- Six member states sent data
- This is the database that needs update

INFORMATION EXAMPLES

- Number of vessels operating in the states’ waters
- Type of vessels
  - Defined to categories
    - Government Vessels and Icebreakers, Container Ships, General Cargo, Bulk Carriers, Tanker Ships, Passenger Ships, Tug/Barge, Fishing Vessels & Oil and Gas Exploration Vessels.
- Cargo carried
- Operational routes
- Fuel burned
- Size of the vessels
- Date of operations
ASTD Structure

Proposed and Constructed by the Ship Traffic Data Expert Group in Tromsø, September 2015

DATA → PRODUCTS

PORTS, ICE & INCIDENTS

SHIP ACTIVITY & VESSEL DATA (Position reports, type of ship etc).

REPOSITORY
PRE-PROCESSING & ANALYSIS

Geospatial view

Menu
Timeline

Trend Analysis

Import
Feed
Export

USA
CAN
RUS
NOR
KoD
ICE
SWE
FIN

Data Import
ASTD PROJECT STRUCTURE
THOUGHTS FROM PAME SECRETARIAT

ARCTIC SHIP TRAFFIC DATA FROM COUNTRIES
USA | CANADA | RUSSIA | FINLAND | NORWAY | ICELAND | SWEDEN | KINGDOM OF DENMARK

DATA STREAM

ARCTIC SHIPPING DATA REPOSITORY

EXPORTS (TRENDS/PATTERNS)
QUESTIONS

1. ARCTIC SHIP TRAFFIC DATA FROM COUNTRIES
2. DATA STREAM
3. ARCTIC SHIPPING DATA REPOSITORY
4. EXPORTS (TRENDS)

- What information do we want? Should we make a “template” to “fill in”
  - (PAME has signified information that would be essential, but this could vary between what is available, what is existing etc.)
- What information do countries have available?
  - Do we need to collect the information we want specially or can we “stream” (RSS like) the data through existing measures?
- IALA & MSSIS initiatives
QUESTIONS

1. Arctic Ship Traffic Data from Countries

2. Data Stream

3. Arctic Shipping Data Repository

4. Exports (Trends)

- Should we send raw data? Or processed?
- How can the information be sent?
- How can we standardise the format?
- What format should be used?
- How often should the information be collected? Almost live? Or at specific time?
- How much information (volume) can we/should we send?
QUESTIONS

1. ARCTIC SHIP TRAFFIC DATA FROM COUNTRIES

2. DATA STREAM

3. ARCTIC SHIPPING DATA REPOSITORY

4. EXPORTS (TRENDS)

- Who should control the repository/database?
- Where should it be located?
- Do we need a service provider? Staff?
- Is there a day-today running cost we need to be aware of?
- Who should have access? E.g. the countries should all have access, but to what level?
QUESTIONS

1. Arctic Ship Traffic Data from Countries

2. Data Stream

3. Arctic Shipping Data Repository

4. Exports (Trends)

- Who can export?
- Would there be a standardised export format?
- Issues with data usage (copyright)
- PAME website to be used for products (maps, graphs, etc.)
ROLE OF THIS EG?
E-MAIL SENT TO HOD’S

• “PAME welcomes the Secretariat’s submission of the Arctic Shipping Data Service (ASDS) Draft Project Plan and requests that the Secretariat, in consultation with AIS technical experts identified by member governments, further develop the draft intercessionally for consideration at PAME II-2015. Member governments are invited to inform the Secretariat of their technical experts no later than 15 March. Please note that we are looking for technical experts with knowledge of how to work with, select and present raw AIS shipping data.”

• EG role is to discuss and developed the technological side
• PAME to work on policy issues
  • PAME Secretariat’s role in the project. Input from HoD, PAME meetings, shipping expert group etc.
• Logistics
• Etc.
NEXT STEPS

• Discussions this week
• Decide on actions items for each nominated expert/country
• Find timing for next workshop
  • Possibly around PAME I 2016 (February, location t.b.c)?
• Further develop project plan with PAME
  • To be presented at PAME I or II 2016
PAME
Protection of the Arctic Marine Environment
A Working Group of the Arctic Council