WORKSHOP REPORT

ARCTIC MARINE TOURISM PROJECT

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OSLO - NORWAY

PAME

Protection of the Arctic Marine Environment

THE ARCTIC MARINE TOURISM PROJECT

WORKSHOP REPORT

Norwegian Environment Agency, Oslo, Norway

Monday 3 February 2020

About the Project

The Arctic Marine Tourism Project workshop was held on 3 February 2020, immediately preceding the PAME Working Group Meeting (PAME I-2020) and a number of other associated meetings scheduled throughout the week of 3-7 February 2020. The workshop agenda is available as Annex I.

Workshop Objectives

The overarching aim of this workshop was to seek input and generate discussion on PAME's Arctic Marine Tourism Project, which is composed primarily of the following two complementary work packages:

Work Package 1 (WP1): Arctic Marine Tourism Knowledge and Information

The purpose of WP1 is to compile data on tourism vessel statistics in the Arctic using PAME's Arctic Ship Traffic Database (ASTD). More specifically, WP1 sets out to:

> i. Analyze trends in Arctic marine tourism based on information in the ASTD system, as well as through other relevant databases with respect to the number of cruise and recreational vessels, their size, area of operation, pollution information, etc.
>
> ii. Identify where gaps in data exist, and potential ways to address these gaps; discuss how best to frame and analyze data concerning tourism vessel operations throughout the circumpolar Arctic.

Work Package 2 (WP2): Review of Site Specific Guidelines

The purpose of WP2 is to take stock of existing site-specific guidelines for near-shore and coastal areas of the Arctic frequented by passengers of marine tourism vessels and pleasure craft. More specifically, WP2 sets out to:

   i.   Identify commonalities or best practices for the purpose of creating an aspirational template for subsequent site-specific guidelines to refer to.
   ii. Seek input from Permanent Participants and local communities who are impacted by the marine tourism industry.
   iii. Increase PAME dialogue with the marine tourism industry, including the Association of Arctic Expedition Cruise Operators (AECO)

Opening Remarks – Background and Workshop Objectives
Drummond Fraser (Canada)

Background: During Canada's Chairmanship of the Arctic Council (2013-2015), two marine tourism related workshops were convened, and resulting from these came the development of the [Arctic Marine Tourism Best Practice Guidelines](#) (AMTP 2015) – a suite of recommendatory measures aimed at Arctic States (and others) for improving sustainable tourism across the circumpolar Arctic. This initiative was an approved PAME deliverable at the 2015 Iqaluit Ministerial Meeting.

Workshop objectives: This current iteration of the Arctic Marine Tourism Project is a follow up on recommendations contained within the 2015 AMTP report. Canada, Iceland and the United Kingdom are the project co-leads responsible for facilitating the discussion and completing project plan deliverables (WP1 and WP2, referred to above) within Iceland's Chairmanship of the Arctic Council (2019-2021).

Application of the Arctic Ship Traffic Data (ASTD) System
Hjalti Hreinsson (PAME Secretariat)
[Link to presentation](#)

PAME's Arctic Ship Traffic Data (ASTD) project has been developed in response to a growing need to collect and distribute accurate, reliable, and up-to-date information on shipping activities in the Arctic. The ASTD System was launched in February 2019.

The purpose of the ASTD is to make available high-quality data for use by the Arctic Council, including Arctic States, Arctic Council Working Groups and subsidiary bodies, Arctic Council Observers, and professional organizations working on Arctic matters. The data is collected by satellites.

The geographic scope of the Arctic Marine Tourism Project includes the IMO Arctic Polar Code Area, *in addition* to both the Icelandic and Faroese Exclusive Economic Zones, given the propensity for passenger vessel traffic in these areas.

For the purpose of the Arctic Marine Tourism Project, cruise/passenger vessel trends are most important to discern from the ASTD. The project will analyse trends for the years 2013-2019. Data will be available for each month. ASTD also allows for data to be analysed on a ship-by-ship basis which will make calculations of passenger capacity available.

Calculation of Risk Related to Ship Traffic in the Arctic
Jon Arve Royset (Norway)

Although the number of passengers isn't specified in the ASTD database, there are two possible options available for determining passenger capacity:

1. SafeSeaNet data (European data system) can be connected to cruise vessels, but this restricted data cannot be shared with consultants. Data can be compiled to then be shared with external parties.
2. Using IMO numbers, maximum number of passengers for each vessel can be determined.

As PAME does not have access to SafeSeaNet, the second option is preferred.

Jon Arve also stipulated that there is a much higher risk of accidents in the summer months, owing to the higher amount of ships operating during this time.

The analysis currently only includes Norwegian waters, but it could be extended to other parts of the Arctic Region. Weather (including winds and currents), as well as age of the vessel and whether it has a pilot on board, are all parts of the system.

The main message is that cruise ships now operate throughout the year (including in the wintertime) and that systems/models are available to conduct an evaluation of risks.

Work Package 1 (WP1): Arctic Marine Tourism Knowledge and Information

Arctic Tourism – Data Analysis and Recent Trends
Louise Ireland (British Antarctic Survey, UK)

Task 1: Only minimal data analysis had been conducted in advance of the workshop on account of BAS only recently being in receipt. Data analysis of the trends using ASTD dataset for the 2013-2019 period is being conducted – they are preparing tourism vessels data (e.g. filtering noise).

Task 2: The number of ships in each category (11 total) will be analyzed to identify, *inter alia*, emission information, types of fuels used, age of vessel, number of passengers' onboard, flag, and ice class. BAS will categorize data by month and analyze all ship types for comparison.

Workshop participant suggestions on Task 2 include:

- Obtain IMO vessel information and cross reference the vessel names. This would provide a good sense of the data and background on each vessel. There may be special interest about trends or new vessels. This would provide a lot of clarity on what the vessel is doing.
- The ability to discern the number of ships vs. the number of voyages is critical.
- Mindful of the limited timeframe, could ice charts at a higher level be introduced for visual impact? – This may be introduced in Task 3; perhaps with a short time-lapse video.
- May want to add scrubbers in the grey water analysis (including the types of scrubbers used). Only a small percentage of vessels use scrubbers now, but there may be some in the future, as when vessels register through their class society, they specify whether they have scrubbers or not.
- International and national regulations should be considered. Some passenger ships use ballast in high seas, but they may have less or no ballast when they are near a coast.
- It would be interesting to include whether they have a Polar Ship Certificate.

Task 3: Create maps with comparisons based on the data. This will include a summary with initial data analysis.

Participant suggestions on Task 3 include:

- There may be an advantage to go into detail about trends on exponential growth – slight increase vs. exponential growth in specific areas.

Other Arctic Tourism Datasets
Troels Jacobsen (Association of Arctic Expedition Cruise Operators (AECO)
Link to presentation

AECO is an international association for expedition cruise operators operating in the Arctic. It has 70+ members and represents most of the industry. AECO develops guidelines to keep the industry safe, and measures to keep the natural environment safe at sea and on land.

The AECO has a cruise database, does vessel tracking and crowd sources bathymetry data for/from its members, particularly in areas that haven't been or are poorly charted. Its cruise database has been in operation since 2013 and lists all the vessels members use, and includes information on the engine and fuel used, oily water discharge, garbage (handling), water (fresh, grey, black), and ballast, among others. This is only for AECO members.

A key component is the sailing plan, which is entered on a first-come-first-served basis. The purpose is to ensure no one goes in the same place at the same time. This could be a disincentive for some companies, but by being a member, they can ensure that they have priority on choosing to go somewhere. Non-AECO members may not be able to go somewhere if an AECO-registered ship is already there.

AECO is considering moving towards a passenger limit, as it's currently self-imposed and reflects a precautionary approach.

AECO requires its members develop a post-visit report, which provides information on who they are, where they were and what they were doing. It includes the number of people on board – crew, passengers, and staff – and the number of persons on shore and their activities (i.e., kayaking, scuba diving, settlement visits).

AECO also provides AIS-based tools to its members in case of an emergency (i.e., where is the ship, ships in the vicinity). It is developing a risk-assessment tool so that any given landing can be tracked and if there's a polar bear, for example, it can be reported so that the next vessel that visits can see the note.

Marine Domain Awareness

Dominique Jolicoeur (Transport Canada)
Link to presentation

An overview of the Canadian reporting requirements for vessels both in the Arctic and generally was provided. Other complementary Transport Canada efforts, including the Enhanced Maritime Situational Awareness (EMSA) initiative, and Guidelines specific to passenger vessels operating in the Arctic were brought to the attention of the workshop participants.

Canadian Arctic specific reporting requirements can be found within the *Northern Canada Vessel Traffic Service Zone Regulations* (NORDREG) and the *Arctic Shipping Safety Pollution Prevention Regulations*.

Canadian non-Arctic specific reporting requirements can be found within the *Long-Range Identification and Tracking of Vessels Regulations*, the *Navigation Safety Regulations*, and the *Marine Transportation Security Regulations*. The size, tonnage, location, and types of reports required under each regulation were explained.

The EMSA initiative will enable coastal communities to be aware of vessel information from space-based satellite Automatic Identification Systems (AIS) data. There are one-year pilot projects that began in the spring of 2019. Two of these are in the Canadian Arctic – in Cambridge Bay and in Tuktoyaktuk.

Guidelines specific to passenger vessels operating in the Arctic provide operators and Designated Vessel Representatives with information on the various Canadian government departments and agencies that are to be contacted for approvals and advice while operating within the Canadian Arctic. They cover permits/requirements for all levels of government (e.g. federal, territorial, provincial, local/Indigenous).

Industry Association Perspective – AECO's Site-specific Guidelines

Edda Falk (Association of Arctic Expedition Cruise Operators (AECO)
Link to presentation

It was explained that traffic patterns inform guidelines developed by AECO. Some sites are vulnerable and are only accessible by helicopter or ship. Overarching principle is to leave no trace that you were there, which prevents disturbance of wildlife, vegetation and cultural remains during landings.

AECO and a group of experts map out features of the sites, after which detailed guidelines of 'dos and don'ts', as well as detailed instructions on how to communicate with a community you will be visiting for the specific sites are prepared. AECO currently has guidelines for 21 locations.

Currently, AECO is the only industry organization producing Arctic site-specific guidelines. The Russian Arctic National Park prepared its own guidelines for AECO. Furthermore, community-specific guidelines supported by Nordic Atlantic Cooperation were developed by local communities. Existing site-specific guidelines are only in Svalbard.. AECO has signed an MoU with the Government of Nunavut, and will be developing site-specific guidelines for Pond Inlet and Grise Fiord.

No guideline revisits have occurred, but AECO has a system to send information to operators with updated information (i.e., a mudslide has occurred).

Regional Perspective: Impacts of Marine Tourism on Local Communities – Managing Marine Tourism in Nunavut
Andrew Orawiec (University of Ottawa, Canada)
Link to Presentation

Marine tourism in Nunavut, Canada, was explained. Although comparatively there is not much cruise traffic, there is nevertheless a significant upward trend.

Nunavut has *Marine Tourism Regulations*, which include a Code of Conduct for Operators, and another for Passengers. These Codes of Conducts are not enforceable, but recommended practices.

In 2019, the CruiseNunavut.ca website was launched to streamline oversight and operation of marine tourism in Nunavut through the provision of a central point of contact for licencing, training, communication, stakeholder cooperation and information sharing. The goal is for this website to become a repository of information for tourism through and incentive-based consultations with communities.

Cruise Ready! Workshops, conducted with AECO's collaboration, were offered to communities. The main goals of these workshops were to: i) help communities assess the potential benefits of marine tourism; ii) prepare products and services for marine tourism; iii) develop legislation and preferred policy approaches that address the needs of marine tourism in Nunavut; and iv) address communication with the marine tourism sector.

Enhanced Maritime Situational Awareness (EMSA) is a space-based (satellite) Automatic Identification System (AIS) tool that tracks vessels in real-time. This allows for communication to other vessels when concerns (i.e., ice, pod of calving belugas) occur.

Within the Arctic Corridors and Northern Voices initiative there are three main objectives, which are to establish a 25+ year Arctic Shipping Spatial Trends Database; identify community concerns about increased shipping; and identify community recommendations for corridors.

Integrated Cruise and Yacht Routes (ICY Routes) – a management methodology currently under consideration – could potentially represent a framework to implement, inter alia, site-specific guidelines across Nunavut.

Regional Perspective: Impacts of Marine Tourism on Local Communities – Cruise Tourism in Iceland
Elías Bj. Gíslason (Icelandic Tourist Board)
Link to presentation

There has been a significant increase in tourism in Iceland – from 201,000 in 1998, to 2,350,000 in 2018. Cruise tourism has doubled every decade.

Expedition cruise ship passengers spend a lot more in communities than traditional cruise ship passengers do.

The Icelandic Tourist Board is currently working on a project with Nordic Atlantic Cooperation (NORA) for mapping of best practices for on-shore value adding and job creation in cruise tourism in Iceland, Greenland and the Faroe Islands.

Cruise ship guidelines exist for Reykjarfjörður, which include a limit of one ship per day (only in May and June – as July and August are reserved for trekking); a fixed price for all passenger vessels with a maximum of 250 visitors per ship; and if the visit is cancelled payment in full is still required.

Permanent Participant Perspective: Impacts of Marine Tourism on Local Communities: *Nicole Kanayurak and Frances Olemaun (Inuit Circumpolar Council)*

Inuit communities would benefit from being more engaged in pre-planning and in other marine tourism related activities. Indeed, rural and remote communities often depend on tourism economically. Equity is key when it comes to marine tourism; this includes through the development of guidelines, protocols, management organizations, and partnerships (i.e., Arctic Waterways Safety Committee).

Partnerships and collaboration with communities and Indigenous populations is required to assess the impact tourism will have. Learning from how marine tourism occurs in other parts of the world will be beneficial in informing how to proceed in the Arctic.

ICC noted that there is often a lack of communication regarding the arrival of cruise ships, and that they are often unaware of the fact that they are coming. There is no system to consult and engage with communities, and ICC feels it is the cruise ships' obligation to consult the communities. Each region has a unique regional organization set up, which are not necessarily governmental.

AECO's Community Guidelines could assist in the establishment of the best practices or good tools for the communities.

International Perspective: Polar Code 'Phase II' and Related Measures for Vessels Operating in the Arctic and Antarctic
Michael Kingston (International Maritime Organization (IMO) Consultant, UK)

An overview of the IMO was provided; there are 174 member states and three associate members. There are five committees that are supported by seven sub-committees.

Under SOLAS, pleasure craft not engaged in trade and fishing vessels aren't subject to the Polar Code.

The Navigation, Communication and Search and Rescue (NCSR) sub-committee was asked by the Maritime Safety Committee 101 (MSC.101) to look at the mandatory requirements of Chapters 9 and 11 of the Polar Code, and if/how they could be made applicable to non-SOLAS ships. The key point is that the measures have been assigned to a Correspondence Group to report to NCSR 8.

It is important to recognize that the guideline encourages ships to which the Polar Code does not formally apply, to apply it when travelling in polar waters.

Next Steps

Data analysis will be conducted by the British Antarctic Survey which will sign a ToR with the PAME Secretariat.

PAME members are invited to submit by 1 June 2020 any information on site-specific guidelines for marine-based tourism in the Arctic region.

The project co-leads (Canada, Iceland, and United Kingdom) will provide an update to PAME II-2020.

Background documents
[Workshop Agenda](#)

[List of Participants](#)

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