

PAME I-2018: Agenda item 6.10(a)
Developing an Approach/Framework
for More Systematically Engaging with
Observers on PAME's Shipping-Related Work

1. *How are interested Observers, and particularly Observer States, currently engaging with PAME on shipping-related issues?*

By the same participants as in the regular PAME meetings. Indeed, there is a problem of specific competence.

2. *Consistent with the Arctic Council Rules of Procedure and the Observer Manual for Subsidiary Bodies, what types of involvement with PAME's shipping-related work are Observers most interested in undertaking? Are there specific shipping issues of interest to Observers?*

Italian shipping interests in the Arctic are mainly focused on:

a) **Shipping safety** (hydrographic survey and ice coverage)

Safety is of utmost importance both for vessels' operators and ship designers/builders, who should have adequate knowledge of the specific safety systems and procedures that provide the highest level of safety and security to people working and living in Arctic harsh conditions.

The Italian constellation of satellites COSMO-SkyMed constantly observes Earth, providing a day-and-night monitoring of weather conditions, ship position and ice coverage.

Furthermore, the National Institute of Geophysics and Volcanology (INGV), with its spin-off SET (Space Earth Technology), is leading together with ISMB (Istituto Superiore Mario Boella) the NARWHALS (Navigation in ARctic With gnss High Accuracy Low power Solution) project funded by the ESA Kickstart Activities within the thematic call "Arctic and sub-Arctic Regions" in the topic of "Preparing for future arctic shipping". Project's outcomes will be shared within the AC's Task Force on Improved Connectivity in the Arctic, in which Italy is represented by scientific researchers of the INGV's itself, while the Finnish Meteorological is among the institutions and/or companies that have expressed interest in the initiative.

b) **Prevention, preparedness and response to environmental emergencies and search and rescue operations**

Prevention, preparedness and response represent topics straightly interconnected with shipping activities. The Italian Navy represents Italy at EPPR WG, focusing on prevention, preparedness and response to environmental emergencies, as well as on search and rescue issues. From the experience gained, the correlation with PAME mainly concern environmental protection and maritime safety, including specific cartographic products and supports, inspired by a collaborative and transversal work at different levels.

Moreover, similar actions in support of PAME are going to be done by ARHC (Arctic Region Hydrographic Commission), in which the Italian Hydrographic Institute of the Italian Navy contributes as Associate Member. Specifically, ARHC through a Norwegian lead project aims to improve access to geospatial data for arctic marine and ocean areas in support of the work of the Arctic Council WGs (AMAP, CAFF, EPPR and PAME), using the existing Arctic SDI (Spatial Data Information) framework.

From an environmental perspective, oil spill detection could be improved using scientific technology, such as ENEA's lidar fluorosensor.

c) **Shipbuilding**

As mentioned above, safety is a fundamental priority for shipping builders, due to the fact that certain design features of vessels can negatively impact their performance in sub-zero temperatures, which in turn can have damaging effects on the safety of operations and consequently present a danger for the fragile Arctic environment. These effects should be studied and understood in order to avoid any kind of harm to people or the environment (e.g. pollution caused by accidents).

Therefore, it is recommended that safety at sea (systems and procedures for accident prevention, response in case of accident) be considered an extension of the protection of the environment and as such an important topic of discussion/study of the working group. Such discussions/studies should, ideally, lead to unified guidelines for the construction and operations of Arctic vessels accepted by all Arctic states.

3. Would Observers be more interested in identifying and pursuing opportunities for engagement that involve financial contributions, in-kind contributions, or other types of involvement?

It is always difficult to engage on financial contributions only in principal and before considering a specific project. Certainly, we could be interested in participating to research projects, that should be evaluated case by case.

4. Would Observers be more interested in partnering with a single Arctic State/Permanent Participant, multiple Arctic States/Permanent Participants, or does the format of a collaborative arrangement not make a difference? Are there examples of collaborative efforts between Observers and Arctic States/Permanent Participants that could serve as models for future collaboration?

Multilateral and bilateral arrangements can be considered on the basis of concrete proposals.

5. Would Observers find regular attendance of PAME meetings (e.g., Working Group and/or Expert Group meetings) useful to facilitate more systematic engagement with PAME's shipping-related work? If an Observer is not regularly attending PAME meetings, what is the impediment to attendance (e.g., cost, insufficient information, meeting location, lack of Observer-related agenda items, no commercial ships or research vessels currently using or anticipated to use Arctic waters, no national strategy or priority for Arctic shipping, improper Arctic shipping contact point)?

Irregular attendance is primarily due to costs, mainly incurred by research funds provided by national representatives institutions.

6. Would providing more specific identification of opportunities and solicitation for Observer assistance via Arctic Council publications be an effective way to engage Observers on shipping-related issues? What types of additional information would be useful for increasing Observer engagement?

Everything can be useful, but we do not think that this could be so important to improve works on the issue.

7. Given the current involvement of Observer experts in PAME shipping-related work, how could PAME more effectively integrate the knowledge and experience of these experts?

8. What kind of additional suggestions or ideas would be effective in encouraging Observer engagement in PAME's shipping-related work in the future?

Shipping is a subject involving different WGs. It is difficult to cover all the meetings with experts. A unique AC forum on shipping could facilitate.