



Resource Exploration and Development Expert Group (REDEG) pre-meeting

REDEG DRAFT Project proposals (PAME 2021-2023 Work Plan) – Sept. 18, 2020

Guidelines for Arctic Marine Oil and Gas Associated Noise

I. Project Title and Project Summary

Guidelines for Arctic Marine Oil and Gas Associated Noise

The continuation of Arctic marine oil and gas activities requires a better understanding of the sources of noise and the effects and potential effects of noise on marine mammals and fish. Of critical interest to Indigenous Peoples is how this noise affects or potentially affects their subsistence activities. Thusly, determining what the best practices are on how to avoid or mitigate these potential effects would be useful.

PAME has worked on noise in the Arctic Ocean from shipping and this can be utilized as a resource. However, there are other non-vessel sources of noise from offshore oil and gas operations that should be considered.

Arctic oil and gas activities contribute noise to the marine environment from the exploration through decommissioning phases with such possible sources as vessel traffic, seismic surveys, ice-breaker operations, trenching, drilling, production, and decommissioning operations.

PAME could consider publishing Guidelines for Arctic Marine Oil and Gas Associated Noise (GAMOGAN), which would provide guidance for accepted best practices to reduce potential effects on marine biota from noise associated with offshore oil and gas activities. These Guidelines would be based on an assessment of the existing and growing body of scientific knowledge and Indigenous Knowledge of effects on Arctic marine biota from noise, notably seismic surveying and ways to mitigate or avoid effects on marine mammals and fish.

II. Key Objective(s)

The rationale and key objectives for this activity:

Arctic Council Oil and Gas Recommendations

OGA R25. The Arctic countries should facilitate and cooperate on research to improve technology in relation to oil and gas exploration and development. In particular, research into less impacting drilling and seismic technologies should be continued.

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Technology and practices Where appropriate, real-time monitoring should be used to minimize disturbances and impacts on wildlife, and scientifically-based best practices used to avoid adverse effects on marine mammals during seismic operations.

AOOGG

3.5 Environmental Impact Assessment (EIA)

- an assessment of all associated sources of noise, including seismic or other testing equipment, vessels, aircraft, drill ships, drilling operations, and ice-breaking equipment and their potential effects on fish, marine mammals, and other wildlife including cumulative effects;

4.3 Standards and Practices for Environmental Monitoring

Monitoring standards and practices for environmental monitoring should be established for all phases of offshore petroleum activities, including offshore seismic operations and marine transportation.

AMSP 2015-2025 Strategic Actions relevant to this proposal.

7.1 Improve and Expand the Knowledge-base

7.1.1 Strengthen scientific cooperation and joint monitoring among the Arctic states, and with other states, organizations and stakeholders involved in Arctic research or traditional and local knowledge, with a focus on prioritizing research issues, filling knowledge gaps, and developing mechanisms to share and exchange observational data.

7.1.2 Improve, synthesize, and respond to emerging knowledge across all disciplines and sectors to include government, academic and industry information, and traditional and local knowledge.

7.1.3 Improve the understanding of cumulative impacts on marine ecosystems from multiple human activity-induced stressors such as climate change, ocean acidification, local and long range transported pollution (land and sea-based), marine litter, noise, eutrophication, biomass overharvesting, invasive alien species and other threats.

7.1.7 Continue the development and standardizing of data sharing and management at a circumpolar level.

7.2 Conserve and Protect Ecosystem Function and Biodiversity

7.2.1 Promote the implementation of the ecosystem approach to management in the Arctic through synthesis and application of the results of relevant work by the Arctic Council and associated efforts by relevant organizations.

7.2.2 Identify and assess threats and impacts to areas of heightened ecological and cultural significance and how such areas may be influenced in the future by climate change and other human induced changes and activities.

7.2.3 Identify and develop tools and methodologies for assessing cumulative impacts and risks for Arctic marine ecosystems and areas of heightened ecological and cultural significance with the aim of using them for integrated assessments.

7.3 Promote Safe and Sustainable Marine Resource Use

7.3.2 Improve the understanding of risks and risk reducing measures related to Arctic shipping and oil and gas exploration and development activities, including gap analysis and sharing of best practices related to oil spill prevention, preparedness and response to emergencies in the Arctic.

7.3.6 Advance continuous improvement of safety and environment protection performance and the use of best and most appropriate practices and technology for all marine activities.

7.3.12 Strengthen the dialogue with relevant business, industry and environmental stakeholders and Arctic inhabitants in order to foster conservation and sustainable use of the Arctic marine environment.

7.4 Strengthen Capacity to adapt to changes

7.4.1 Improve meaningful engagement of Arctic indigenous peoples and other Arctic inhabitants in relevant decisions, including through the consideration and use of traditional and local knowledge (TLK) in avoiding or mitigating negative environmental, subsistence, and cultural impacts, as well as in maintaining or increasing well-being and socioeconomic opportunities.

7.4.2 Facilitate coastal community exchanges between Arctic states to improve sharing of knowledge and experiences and to strengthen the dialog with relevant business and industry in the Arctic in order to foster the conservation and sustainable use of the Arctic marine environment.

7.4.4 In cooperation with the Permanent Participants, encourage engagement, as appropriate, with indigenous peoples organizations and bodies, that have specialized in traditional knowledge and that can inform the work of the Arctic Council in the protection of the marine environment and in enhancing the well-being and the capacity of Arctic inhabitants, including Arctic indigenous peoples to deal with a changing Arctic and increased activity.

III. Scope

The scope of these guidelines includes best practices for noise reduction or elimination covering all oil and gas operations offshore or nearshore in the Arctic. The activities of concern include noise from vessels (survey, supply, crew, ice management), ice breakers, drilling, dredging, coring, seismic (high resolution and exploration), piledriving, and decommission activities (explosives, manual deconstruction).

IV. Main Components and Implementation

List of Tasks/Activities

Hold a one or two-day workshop on noise from Arctic offshore oil and gas operations.
Frame the best practices and draft guidelines.

Timeline and Major Milestones

Budget

In-Kind

V. Main outcomes

A set of guidelines for best practices in reducing or eliminating marine noise associated with offshore oil and gas activities.

Report to the PAME Working Group 2023.

VI. Project Team Structure/Lead Countries

- US Lead (initial Discussions); Need a co-lead if it proceeds to Project.

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