

## **Multiklient Invest AS & TGS-NOPEC Geophysical Company ASA Offshore Seismic Program, 2024–2028**

### **General Comments**

#### **Biosecurity in Relation to Aquatic Invasive Species and the Movement of International Vessels**

Aquatic Invasive Species (AIS) are an increasing risk to the provinces native species, habitats, ecological structures and cultured fish. A coordinated approach is needed to prevent and mitigate the introduction and spread of harmful AIS. Both Fisheries, Forestry and Agriculture (FFA) and Fisheries and Oceans Canada (DFO) regularly encourage proponents to exercise best practices to help prevent the introduction and spread of AIS. To help mitigate the potential spread of AIS we should ensure that the proponent follows recommended best practices and guidelines.

Best practices to prevent the introduction and spread of AIS include:

- AIS awareness in waters frequented
- Taking precautions with respect to vessel traffic and gear movement between affected and unaffected areas to prevent introductions and spread
- Clean, drain and dry gear and ropes to prevent movement between areas by avoiding transportation of water from one location to another
- Routine vessel maintenance (i.e. cleaning the hull and using antifouling paint to prevent biofouling)
- Identifying and reporting any AIS to DFO

Additional information regarding AIS in the NL Region can be found on the Aquatic Invasive Species website. <https://www.dfo-mpo.gc.ca/species-especes/ais-eae/index-eng.html>

#### **Endangered North Atlantic Right Whale (NARW)**

There have been increased sightings of the endangered NARW, *Eubalaena glacialis*, in Newfoundland and Labrador waters in recent years. The NARW is particularly vulnerable to extinction, being that it is a slow growing species with only approximately 336 animals remaining worldwide. DFO and Transport Canada have implemented a number of protective measures in an effort to minimize interactions with NARWs. From an economic perspective, Canada is now required to demonstrate stringent efforts to protect marine mammals to meet the United States (U.S) Import Provisions under the Marine Mammal Protection Act so that Canada may continue to export fish and seafood to the U.S. While the proponent considers that NARWs and other marine mammals could be in the area during experimental trials, they should also be aware of the possibility that interactions with NARWs can affect Canada's ability to export seafood.

## **Draft Scoping Document Comments**

### **Section 5.1. Boundaries**

Boundaries section indicate that the proponent will consider the potential effects of the proposed seismic survey program within spatial and temporal boundaries that encompass the periods and areas during and within which the project may potentially interact with, and have an effect on, one or more VCs. These boundaries may vary with each VC and the factors considered.

FFA advises that the proponent be aware of the Federal Marine Bioregion (the Newfoundland-Labrador Shelves) within the project/study area. All available ecological information and data (including experiential/traditional knowledge) should be taken into consideration when forming boundaries between biogeographic units. Testing should consider these data sources.

### **Section 5.2.6 Species at Risk (SAR)**

SAR section indicates that the proponent will provide new or updated information to address any changes to the following:

- A description of critical habitat (as defined under the *Species At Risk Act (SARA)*), if applicable, to the Study Area;
- Monitoring and mitigation, consistent with recovery strategies/action plans (endangered/threatened) and management plans (special concern);
- A summary statement stating whether project effects are expected to contravene the prohibitions of SARA (Sections 32(1), 33, 58(1));
- Means by which adverse effects upon SAR and their critical habitat may be mitigated through design, scheduling, and/or operational procedures; and
- Assessment of effects (adverse and significant) on SAR and critical habitat, including cumulative effects.

FFA advises that the proponent be aware of the DFO Species at Risk Critical Habitats (Northwest Atlantic Fisheries Organization (NAFO) Divisions 3K, 3L, and 3Ps) within the project/study area (See Annex 1). Critical habitat is identified for species listed as Endangered or Threatened under SARA. Section 49(1)(a) of SARA requires that a species' Recovery Strategy/Action Plan include an identification of the species' critical habitat to the extent possible, based on the best available information, including information provided by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). It is important that the critical habitats be described and displayed in species recovery documents and action plans.

### **Section 5.2.6 Species at Risk (SAR)**

SAR section indicates that the proponent will provide new or updated information to address any changes to the following:

- A description of SAR as listed in Schedule 1 of the SARA, and those under consideration by COSEWIC in the Study Area, including fish, marine mammal, sea turtles, and seabird species. It is advised that the SARA Registry and COSEWIC website be referred to for the most recent information;

FFA advises that the proponent be aware of the DFO Aquatic Species at Risk Distribution (NAFO Divisions 3K, 3L, 3N, 3O, 3Ps, 4Vn, and 4Vs) within the project/study area (See Annex

1). The SAR Program is responsible for carrying out DFO's mandate under the SARA to protect, recover and conserve all listed aquatic SAR in Canada.

### **Section 5.2.7 Sensitive Areas**

Sensitive areas section indicates that the proponent will provide new or updated information to address any changes to the following:

- Sensitive Areas in the Study Area deemed important or essential habitat to support any of the marine resources identified;

FFA advises that the proponent be aware of the Ecologically and Biologically Significant Areas (EBSAs) (NAFO Divisions 3K, 3L, 3N, 3O, 3Ps, 4Vn, and 4Vs) within the project/study area (See Annex 1). EBSAs are areas within Canada's oceans that have been identified through formal scientific assessments as having special biological or ecological significance when compared with the surrounding marine ecosystem. Areas identified as EBSAs should be viewed as important areas where, with existing knowledge, regulators and marine users should be particularly risk averse to ensure ecosystems remain healthy and productive.

### **Section 5.2.8 Noise/Acoustic Environment**

Noise/Acoustic environment section indicates that the proponent will provide new or updated information to address any changes to the following:

- Disturbance/displacement of VCs and SAR associated with seismic survey activities;
- Means by which potentially significant effects may be mitigated through design, scheduling and/or operational procedures; and
- Effects of seismic activities (direct and indirect) including cumulative effects, on the VCs and SAR identified within the EA. Critical life stages should be included.

FFA advises that the proponent recognize that anthropogenic noise and vibration can cause auditory masking, leading to changes in individual and social behavior of marine species, hinder population recruitment and ultimately affecting the health of marine ecosystems. FFA recommends reduced vessel speeds as a method to reduce excess noise and vibration. Additionally, the proposed project area holds economic and ecologic value, FFA further encourages the establishment of a noise and vibration monitoring plan to monitor potential long term effects.

## **Project Description Comments**

### **Section 2.3 Mitigation and Monitoring for Marine Mammals, Sea Turtles and Seabirds**

Mitigation and monitoring section indicates that the proponent project mitigation measures will be detailed in the EA. The C-NLOPB's *Geophysical, Geological, Environmental and Geotechnical Program Guidelines* (C-NLOPB 2019) will be used as the basis for the marine mammal and sea turtle monitoring and mitigation program for the seismic surveys. MMOs will monitor for marine mammals and sea turtles and implement mitigation measures as appropriate. PAM Operators will also monitor for marine mammals.

FFA advises that although the proponent states that the airgun array ramp ups will be delayed if a marine mammal or sea turtle is detected within the appropriate safety zone (minimum of 500 m), there is concern that the size of the safe zone may not be sufficient in protecting marine mammals and/or sea turtles from the electromagnetic fields. It should be noted that research on the effects of electromagnetic surveys on the behavior of electrosensitive animals is still very limited.

### **Project Description – Section 2.2.8 Testing of Modified Airgun Activation Procedure**

Testing of modified airgun activation procedure section indicates that the proponent will test a modified activation procedure of the airguns called eSeismic. This technology involves the activation of individual airguns in a pseudo-random pattern every 200 ms or every 1–2 m along a seismic survey line. As such, only one airgun is activated at a time, but the airguns are activated on a near continuous basis versus every 10–12 seconds in a conventional seismic survey. In any given year, MKI may test eSeismic in an area ranging from 50–200 km<sup>2</sup>, which is estimated to require 7–21 days to conduct.

FFA advises that the proponent be aware airguns may have many types of effects on marine organisms, ranging in severity from short-term physical startle reactions to long-term behavioral changes. It should be noted that research on the effects of airguns is still very limited. The implementation of marine vibroseis over airgun surveying is recommended. Research shows that the decreased amount of decibels used for the process of marine vibroseis can reduce the interference with marine organisms in the vicinity.

### **Section 3.0 Environmental Assessment**

Environmental assessment section indicates that the proponent will closely follow previous assessments of seismic programs in the Newfoundland and Labrador offshore (e.g., LGL 2018). The primary issue of concern relates to the potential effects of underwater noise from the airgun arrays on marine fauna and the effects of the seismic survey on fisheries.

FFA advises that the proponent be aware that the project/study area for the Controlled Source Electromagnetic Survey overlaps with the Northeast Slope Marine Refuge, as well as additional Significant Benthic Areas for sea pens outside of the Refuge. The Northeast Slope Marine Refuge was created to protect slow-growing, fragile cold-water corals and sponges and is closed to bottom contact fisheries. Sea pens, which are thought to be the dominant species of coral in the area, have slow growth rates meaning that once a colony is destroyed or threatened it takes a considerable amount of time for sea pens to re-establish. Cold-water corals and sponges provide essential habitat for juvenile fish, including those that are commercially valuable.

### **Section 3.4 Consultations**

Consultation section indicates that the proponent will consult with the Fish, Food and Allied Workers (FFAW) to discuss the project. The Newfoundland and Labrador fishing industry is an important ocean stakeholder. To mitigate any potential negative impacts on the marine environment and local fisheries, FFA advises that the proponent must consult local fish harvesters, in all the NAFO Divisions within the project/study area, 3K, 3L, 3M, 3N, 3O, 3Ps, 4Vn, 4Vs, and 6H, for information regarding fisheries in the area and to notify harvesters of their plans to use said area. Harvesters can be consulted directly, by way of local Small Craft Harbour authorities or through FFAW. Engagement with fish harvesters must continue to be a top priority throughout the lifetime of the project.

The project/study boundary also extends just beyond the Exclusive Economic Zone (EEZ) where NAFO holds jurisdiction over commercial fishing activity in those areas. It is advised that the proponent seek to include data from NAFO on fishing activity that might occur during the summer and fall in the project area that extends just beyond the EEZ. In addition to domestic fishing fleets, there may also be international vessels actively fishing in this area during the timeframe of the project.

Annex 1:

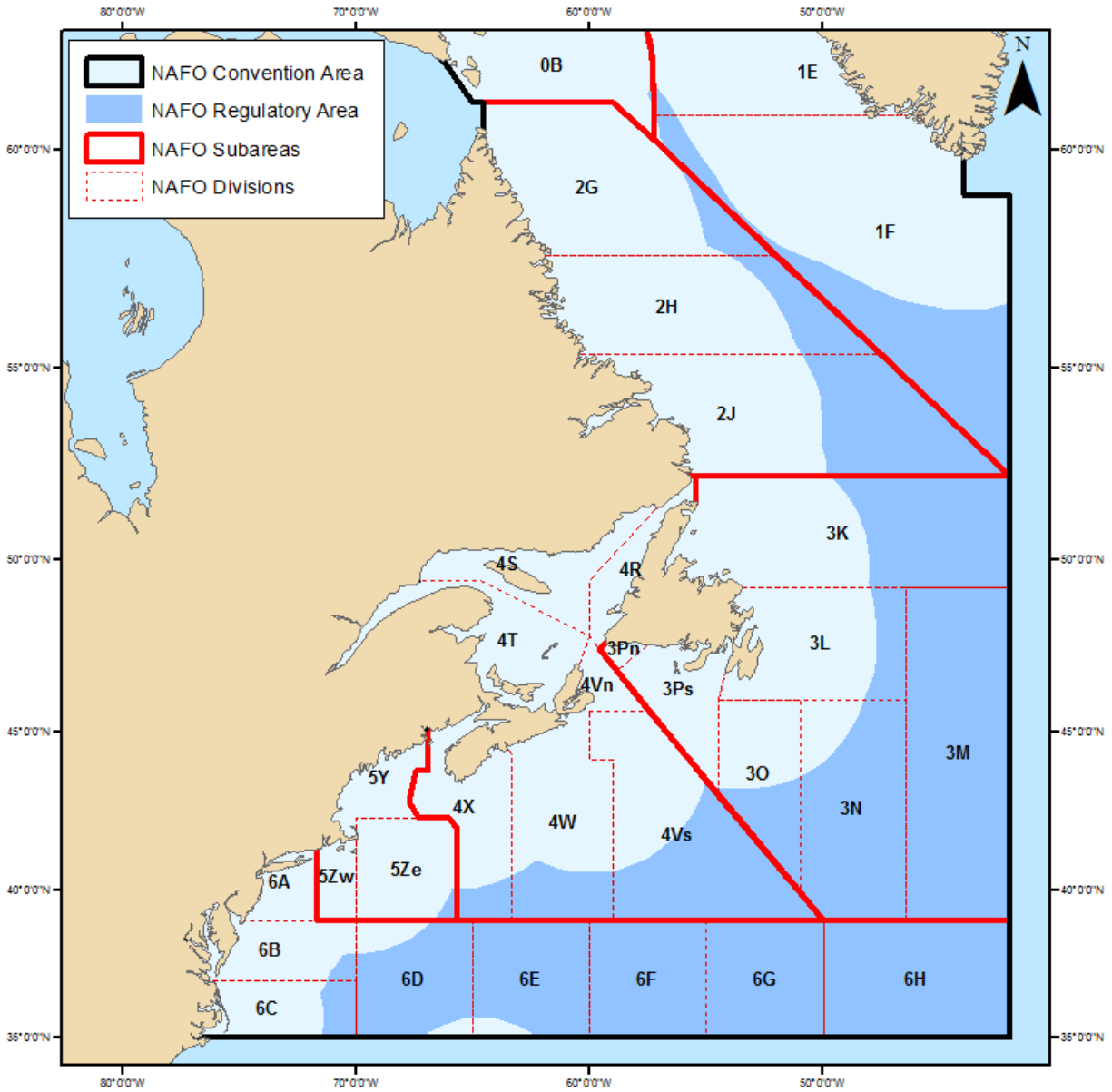


Figure 1: Northwest Atlantic Fishery Organization (NAFO) Regulatory Areas Map