CANADA-NEWFOUNDLAND & LABRADOR
C-NLOPB
OFFSHORE PETROLEUM BOARD

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Multiklient Invest
Newfoundland Offshore Seismic and Environmental Data Collection Program, 2025–2029
Project Description and Draft Scoping Document – Consolidated Review Comments

Environment and Climate Change Canada (ECCC)
ECCC GENERAL COMMENTS
Please note that the following documents have been attached to this email for inclusion with the outgoing response:

a) ECCC-CWS Guidance for developing systematic stranded bird survey protocols for vessels and platforms
b) ECCC-CWS Stranded Birds Data Entry Form (Excel) 2022
c) Appendix 2 – Infographic and Reference Card – *What to do when you find a stranded bird?*
d) Appendix 3 – Seabird Identification Photo Card
e) *Procedures for handling and documenting stranded birds encountered on infrastructure offshore Atlantic Canada*

Applicable Legislation and Standard Recommendations
Migratory Birds Convention Act
The federal *Migratory Birds Convention Act* (MBCA) and its regulations protect migratory birds and their eggs and prohibit the disturbance, damage, destruction or removal of migratory bird nests that contain a live bird or a viable egg. Migratory birds are protected at all times; all migratory bird nests are protected when they contain a live bird or viable egg; and the nests of 18 species listed in Schedule 1 of the MBR 2022 are protected year-round. These general prohibitions apply to all lands and waters in Canada, regardless of ownership. For more information, please visit: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html.

For migratory birds that are listed as Endangered, Threatened or Extirpated on Schedule 1 of the *Species at Risk Act* S.32 (protection of individuals) and S.33 (protection of residences) apply to all land tenure types in Canada. For some migratory bird species listed under the *Species at Risk Act* (SARA), the residence prohibition will protect nests that are not active but are re-used in subsequent years (please note that the residence of a migratory bird may not necessarily be limited to their nest).

Section 5.1 of the MBCA describes prohibitions related to depositing substances harmful to migratory birds:

"**5.1** (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

(2) No person or vessel shall deposit a substance to be deposited in any place if the substance, in combination with one or more substances, result in a substance – in waters or an area frequented by migratory birds or in a place from which it may enter such waters or such an area – that is harmful to migratory birds."

The proponent is responsible for ensuring that activities are managed to ensure compliance with the MBCA and associated regulations.

- <u>Considerations Specific to Migratory Birds</u>
  In conducting the environmental assessment (EA), the vulnerability of individual species/groups of migratory birds to sampling programs must reflect a consideration of the following basic factors:
  - Distribution and abundance of species during scheduled project activities;
  - Impact pathways;
  - Mitigations;
  - Cumulative effects; and
  - Provisions for follow-up on assessment accuracy and mitigation effectiveness.

  The following impact pathways influencing migratory birds must be considered in the analysis of any seismic survey:
  - Noise disturbance from equipment including both direct effects (physiological), or indirect effects (foraging behaviour or prey species);
  - Physical displacement as a result of vessel presence (e.g., disruption of foraging activities);
  - Nocturnal disturbance from light (e.g., increased opportunities for predators, attraction to vessels and subsequent collision, disruption of incubation);
  - Exposure to contaminants from accidental spills (e.g., fuel, oils) and operational discharges (e.g., deck drainage, grey water, black water);
  - Attraction of, and increase in, predator species as a result of waste disposal practices (i.e., sanitary and food waste) and the presence of incapacitated/dead prey behind the vessel.

The proponent should refer to any applicable Strategic Environmental Assessments (SEA), where appropriate. For annual updates, the proponent is encouraged to contact ECCC-CWS to ensure that information listed in the SEA is still accurate.

Species at Risk

The *Species at Risk Act* (SARA) "General Prohibitions" apply to this project. In applying the general prohibitions, the proponent, staff and contractors, should be aware that no person shall:

- Kill, harm, harass, capture or take an individual;
- Possess, collect, buy, sell or trade an individual, or any part or derivative;
- Damage or destroy the *residence* of one or more individuals.

General prohibitions only apply automatically:

- On all federal lands in a province;
- To aquatic species anywhere they occur;
- To migratory birds protected under the *Migratory Birds Convention Act* (MBCA) 1994 anywhere they occur.

Section 33 of SARA prohibits damaging or destroying the residence of a listed threatened, endangered, or extirpated species. For migratory bird species at risk (SAR), the prohibition immediately applies on all lands or waters (federal, provincial, territorial, and private) in which the species occurs.

In federal environmental assessment (EA), ss.79(2) of SARA required that persons responsible for an EA: 1) identify adverse effects on all listed species; 2) if the project is carried out, ensure that measures are taken to avoid or lessen those effects; and, 3) monitor them. ECCC advocates a similar approach for non-federal forms of environmental assessment.

ECCC-CWS advises that all comments it provides concerning species at risk that are not migratory birds derive from federal recovery/management plans as posted on the Species at Risk Registry (https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html), and thus comments may not be comprehensive to the body of knowledge for the species. The Province of Newfoundland and Labrador's Department of Fisheries, Forestry and Agriculture - Wildlife Division holds expertise and authority regarding mitigations and management of birds that are not protected by the MBCA in Newfoundland and Labrador. For species which are not listed under SARA but are listed under provincial legislation only or that have been assessed and designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), it is best practice to consider these species in EA as though they were listed under SARA.

It should be noted that Section 79 of the *Species at Risk Act* states:

"**79.** (1) Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted, and every authority who makes a determination under paragraph 82(*a*) or (*b*) of the *Impact Assessment Act* in relation to a project, must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.

(2) The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans."

- Considerations Specific to Species at Risk
  If a migratory bird species is listed under Schedule 1 of SARA and could be affected by operations, steps must be taken to ensure compliance with both SARA and the *Impact Assessment Act* (2019).

  The following species at risk may be found near the project site: Ivory Gull (Endangered, SARA Schedule 1), Ross' Gull (Threatened, Schedule 1), Red-necked Phalarope (Special Concern), Leach's Storm-petrel (COSEWIC-assessed as Threatened). Species at Risk (SAR) sightings should be reported to ECCC-CWS.

  It should be noted that the SARA list may change through the life of the project. Species listed after project approval may require additional mitigations. The proponent is encouraged to annually update the list of SARA species potentially affected by the project.

General Recommendations

- The breeding season for most birds within the project area (Zone "D3-4") occurs between mid-April and mid-August in this region, however some species protected under the MBCA nest outside of this time period. Information regarding regional nesting periods can be found at https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods.html.

- Most migratory bird species construct nests in trees (sometimes in tree cavities) and shrubs, but several species nest at ground level (e.g., Common Nighthawk, Killdeer, sandpipers), in hay fields, pastures or in burrows. Some bird species may nest on cliffs or in stockpiles of overburden material from mines or the banks of quarries. Some migratory birds (including certain waterfowl species) may nest in headponds created by

beaver dams. Some migratory birds (e.g., Barn Swallow, Cliff Swallow, Eastern Phoebe) may build their nests on structures such as bridges, ledges, or gutters.

- One method frequently used to minimize the risk of destroying bird nests consists of avoiding certain activities, such as clearing, during the regional nesting period for migratory birds.

- The risk of impacting active nests or birds caring for pre-fledged chicks, discovered during project activities outside the regional nesting period, can be minimized by measures such as the establishment of vegetated buffer zones around nests, and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area. It is incumbent on the proponent to identify the best approach, based on the circumstances, to comply with the MBCA.

Further information can be found at: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html.

Fuel Leaks

The proponent must ensure that all precautions are taken by the contractors to prevent fuel leaks from equipment, and that a contingency plan in case of oil spills is prepared. Furthermore, the proponent should ensure that contractors are aware that under the MBR, "no person shall deposit or permit to be deposited oil, oil wastes or any substances harmful to migratory birds in any waters or any area frequented by migratory birds." Biodegradable alternatives to petroleum-based chainsaw bar oil and hydraulic for heavy machinery are commonly available from major manufacturers. Such biodegradable fluids should be considered for use in place of petroleum products whenever possible, as a standard for best practices. Fueling servicing of equipment should not take place within 30 metres of environmentally sensitive areas, including shorelines and wetlands.

Provisions for wildlife response activities should be identified in the Oil Spill Prevention and Response Plan to ensure that pollution incidents affecting wildlife are effectively and consistently mitigated. The document "Guidelines for effective wildlife response plans" is provided to offer guidance on the development of wildlife response plans. Documents can be downloaded from National Wildlife Emergency Response Framework - Canada.ca "Guidelines for wildlife response plans".

The following information should be included in any Oil Spill Prevention and Response Plan:

- Mitigation measures to deter migratory birds from coming into contact with the oil.
- Mitigation measures to be undertaken if migratory birds and/or sensitive habitat becomes contaminated with the oil.

- The type and extent of monitoring that would be conducted in relation to various spill events.

Noise Disturbance

Anthropogenic noise produced by construction and human activity can have multiple impacts on birds, including causing stress responses, avoidance of certain important habitats, changes in foraging behaviour and reproductive success, and interference with songs, calls, and communications. Activities that introduce loud and/or random noise into habitats with previously no to little levels of anthropogenic noise are particularly disruptive.

ECCC recommends the following best management practices:

- The proponent should develop mitigations for programs that introduce very loud random noise disturbance (e.g., blasting programs) during the migratory bird breeding season for their region.
- The proponent should, where possible, prioritize construction works in areas away from natural vegetation while working during the migratory bird breeding season. Conducting loud construction works adjacent to natural vegetation should be completed outside the migratory bird breeding season.
- The proponent should keep all construction equipment and vehicles in good working order and loud machinery should be muffled if possible

Lighting Attraction and Migratory Birds

Attraction to lights at night or in poor visibility conditions during the day may result in collision with lit structures, or with other migratory birds. Disoriented migratory birds are prone to circling light sources and may deplete their energy reserve and either die of exhaustion or be forced to land where they are at risk of depredation.

To reduce the risk of disturbance or harm to migratory birds related to human-induced light, ECCC recommends implementation of the following beneficial management practices:

- The minimum amount of pilot warning and obstruction lighting should be used on tall structures. Warning lights should flash and should completely turn off between flashes.
- The fewest number of site-illuminated lights possible should be used in the project area. Only strobe lights should be used at night, at the lower intensity and smallest number of flashes per minute allowable by Transport Canada.

Effects of Construction/Operations on Migratory Birds – Stranded Birds

Due to the propensity of seabirds from nearby colonies to be attracted to light, it is possible that migratory birds may be attracted to and potentially be stranded on the site. ECCC-CWS recommends that a site monitoring plan be developed for the migratory bird breeding season as well as the spring and fall migration periods and implemented while floodlights are being used during nighttime hours. A site monitoring plan could include protocols such as dusk and

dawn site inspections to look for stranded birds that may have landed on site, and/or inclusion of migratory bird searches into standard occupational health and safety daily inspections, etc. ECCC recommends, at minimum, daily searches during early morning hours, particularly during early September to late November, to search for migratory birds that may become stranded on-site.

Should birds become stranded on the project site, both during construction and operations phases, the proponent is recommended to adhere to *Procedures for handling and documenting stranded birds encountered on infrastructure offshore Atlantic Canada* (attached; it should be noted that this reference document has been developed for offshore vessels and may require modification for use on an onshore facility). ECCC-CWS should be notified if bird stranding incidents occur. A seabird handling permit will be required to implement the instructions in this reference document and the proponent must be advised that such a permit would have to be in place prior to the initiation of proposed activities. Please note that MBCA permit applications can be obtained from ECCC-CWS via email at scf-atlpermis-cws-atlpermits@ec.gc.ca.

If any birds are found stranded on-site, the proponent should immediately contact ECCC-CWS for further instructions. The contact is Sabina Wilhelm (ECCC-CWS Marine Issues Biologist) at sabina.wilhelm@ec.gc.ca or 709-764-1957.

ECCC SPECIFIC COMMENTS – PROJECT DESCRIPTION

Page 2:

ECCC recommends that Ross's Gull (Rhodosthethia rosea) should be added to the list of "Threatened" species and Red-necked Phalarope (Phalaropus lobatus) should be added to the list of "Special Concern" species on page 2.

Page 11:

Quote (page 11) "*In the unlikely event of an accidental release of hydrocarbons during the Project, the measures outlined in MKI's oil spill response plan will be implemented. The oil spill response plan will be filed with the CNLOPB. In addition, MKI will have an emergency response plan in place."*

ECCC recommends that the proponent's oil spill response plan include components related to wildlife response (included in a Wildlife Response Plan). At minimum, a Wildlife Response Plan should include the following information:

a) Information on the wildlife potentially at risk in the area;
b) Mitigation measure(s) to deter non-affected wildlife from affected areas;
c) Mitigation and response measures to be taken if wildlife and/or sensitive habitats become contaminated by the incident (including treatment of oil-affected wildlife), and

d) The type and extent of wildlife monitoring conducted during and following a pollution incident.

Guidance materials including "Guidelines for Developing Wildlife Response Plans" (ECCC, 2022) are available online at National Wildlife Emergency Response Framework - Canada.ca. The proponent should consult ECCC when developing Wildlife Emergency Response Plans.
Page 11:

Quote (page 11) "*In addition, the MMOs will conduct a monitoring and release program for seabirds which may strand on Project vessels. Seabird monitoring will include systematic counts based on protocols issued by the Environment and Climate Change Canada-Canadian Wildlife Service (ECCC-CWS). Likewise, mitigation measures and monitoring for stranded birds will follow established ECCC-CWS procedures.*"

ECCC advises that the area of the Project may be used by Leach's Storm-petrel (COSEWIC-assessed as Threatened in November 2020), particularly foraging Leach's Storm-petrel from important breeding colonies at Gull Island and Baccalieu Island, two of the larger colonies in Atlantic Canada. The project has the potential for increased interactions with Leach's Storm-petrel and other migratory birds, particularly with respect to attraction to artificial lighting and potential strandings on vessels and project infrastructure (per Gjerdrum et al. 2021, storm-petrels are the most commonly stranded species in NL (93%) based on reports from 1998-2018). The location and proposed timing of activities overlap with peak storm-petrel stranding period (mid-September to mid-November) when young Leach's Storm-petrel fledge and make their first flight offshore.

The prompt location of stranded birds through daily, systematic searches of vessel(s) increases the potential of reducing harm and/or mortality of stranded birds. Gjerdrum et al. 2021 states per reports, 98% of stranded storm-petrels found alive were successfully released back to the ocean.

ECCC recommends that the proponent develop and implement vessel-specific systematic search protocols for stranded birds that will be undertaken by trained, experienced observers, as per the recommendations outlined in the final report of the *Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador*. Additionally, ECCC-CWS advises that new guidance has been developed regarding the development and implementation of systematic stranded bird protocols. Guidance has been attached to the outgoing response for the proponent's consideration.

ECCC advises that the handling and subsequent release of stranded birds may require an CWS Scientific *Migratory Birds Convention Act* (MBCA) permit. Information on the MBCA permitting process can be found at scf-atlpermis-cws-atlpermits@ec.gc.ca.

Fish, Food and Allied Workers' Union (FFAW-Unifor)

FFAW-UNIFOR GENERAL COMMENTS

Seafood landed in Newfoundland and Labrador by the inshore fleet is processed in the province and exported internationally. Our industry relies heavily on global markets and is subject to profit fluctuations with market prices, fuel costs, and the value of the Canadian dollar. Seismic programs add an additional layer of complexity to fishing seasons. Harvesters have justified concerns surrounding reports of reduced catch rates immediately after a seismic vessel has entered an area where fishing is taking place in addition to uncertainty surrounding the long-term effects on fish and fish habitat due to seismic.

The area currently presented is extremely large in scope. It is therefore difficult to offer comment on the specific impacts to the fishing industry without knowing more spatial and temporal plans of proposed survey programs. Fishing seasons for each species are location and time specific and can vary from year to year. It is imperative that there is an effective flow of information between the fishing and seismic industries several months prior to the start of each seismic season and program, such that early engagement can occur, and plans can be adapted, if necessary.

FFAW contends that seismic surveys can directly impact economic return for harvesters. In 2022, the seafood industry was valued at $1.4 billion and as such, represents an incredibly important ocean stakeholder operating completely throughout the spatial scope of this offshore seismic project.

There is no mention within this report of the Northeast Marine Slope Refuge or other marine protection areas therefore it is not evident whether consideration has been given to exclude these areas. We question whether there will be additional mitigation measures put in place to ensure marine conservation targets are met. Marine conservation must be meaningful and consistent while acknowledging that the aforementioned refuge near the Orphan Basin is closed to all fishing activities. Heightened awareness and consideration in this region must be given to turbot, crab, and shrimp fishing areas and seasons as their spatial extent has already been greatly reduced.

Canada has committed to protecting 25% of its oceans by 2025 and 30% by 2030. Current protected marine areas make up approximately 14.7%. FFAW was notified in July by DFO that processes were underway to assess the feasibility of identifying "a number of new potential marine conservation areas in the Canadian-NL offshore" by way of proposing additional Marine Protected Areas (MPAs) and/or Marine Refuges. Preliminary mapping consultations are expected this fall and winter. The ocean has finite space; when we consider the cumulative impacts of offshore areas already allotted to oil and gas operators and fisheries closures by way of MPAs and Marine Refuges coupled with the dynamic

nature of commercial fisheries, it's inshore fish harvesters that feel the squeeze the most. The detrimental effects of further reducing fishing grounds offshore cannot be understated.

The fishing industry contends that critical data gaps exist in the research regarding seismic activity and behavioral changes of fish/shellfish. Increasing research has shown that seismic survey activity results in behavioral changes amongst commercial fish species. While these changes have been reported to be temporary, avoidance, startle responses and changes in swimming speed and direction, all have an impact on commercial activities taking places in finite times (ie. seasons) in finite spaces (ie. fishing areas). Moreover, research is limited on the far-reaching, long-term effects. Behavioral changes may affect migration and/or reproductive and spawning activities as well as the exploitable biomass in an area. This can impact catch rates for years to come and thus the viability of the fishing industry. While it is understood additional research was undertaken this past summer, Atlantic Canadian research on this topic is very limited. There has been minimal research conducted on impacts of seismic activity on important commercial species, including shrimp, crab, turbot, and Atlantic cod. Future studies need to include commercial catchability to substantiate concerns from harvesters in NL. Harvesters should be engaged and involved in this research.

The collaborative DFO-industry post-season crab survey has undergone changes in terms of the location and number of survey stations in recent years. The survey footprint has been increased with stations shifting from densely sampled regions to cover a broader snow crab habitat range. Fixed stations will remain the same for five years while random stations will change every year.

It continues to be FFAW's position that seismic work should NOT be conducted in the vicinity of survey stations until they have been sampled for the year. The post-season crab survey continues to be vital to the fishing industry as it informs decision making with regards to quotas for coming years. Our members rely on this survey to be completed each year, without interruption or potential effects from outside variables. It is understood that seismic planning around the survey stations is challenging.

The DFO-industry post-season crab survey is not the same as other DFO scientific surveys. We cannot support a move into an area of seismic interest that is also an open area for fishing until we have assurance that there will be no fishing activity in the area. We expect regular dialogue with the proponent to mitigate potential issues that could easily arise should there be crab gear in the water or should a harvester move to the area before the end of the extended season.

The importance of both the fishery and the post-season industry collaborative snow crab survey must be recognized across both industries

MKI is proposing to deploy one or more Floating Lidar Systems (FLS) buoys to acquire meteorological and oceanographic data. Given the associated instrumentation is to be moored to the seafloor, timely consultation with FFAW is expected. The ocean footprint, including coordinates, safety zones, and anchor or mooring patterns must be communicated effectively to FFAW membership.

Pre-planning is imperative to minimize potential conflicts and any negative impacts on fishing activity. It is increasingly important that adequate consultations and planning occur with supporting data that is accurate and up to date.

Climate change is increasingly affecting our ocean seascapes and migration patterns of commercial fish stocks. There is an expectation that effective and regular communication will ensue with the fishing industry throughout the project lifespan so that the seismic company is kept apprised of ongoing developments within our dynamic fishing industry.

Fisheries and Oceans Canada (DFO)

DFO GENERAL COMMENTS

- Points of information: activities are assessed on a case-by-case basis for OECMs; no oil and gas activity can occur inside the Laurentian Channel Marine Protected Area.

- ROVs are sometimes used to place OBNs on the seafloor in complex bathymetry or when water depth > 100 m. Will ROV be an option for portions of the seismic survey proposed to occur within OECMs?

- In the event of a FLS deployed in an OECM, use of ROV before or during placement of the seafloor mooring frame should be considered, in order to avoid areas of corals and sponges.

DFO SPECIFIC COMMENTS – PROJECT DESCRIPTION

Section 1.0: Introduction, page 1, Figure 1.1

Study area overlaps 4 Marine Conservation Areas in the NL Region:
NE NL Slope OECM
Division 3O Coral Closure
Laurentian Channel MPA
Funk Island Deep
Suggest adding polygons of these areas to Figure 1.1

Section 2.2.6: Seismic Energy Source Parameters, page 7, paragraph 2
This section of the project EA should include a description of how the "Gemini" configuration may differently affect pelagic and benthic fish, shellfish, species at risk, marine mammals and sea turtles, in comparison to standard configurations.

Section 2.2.7: Seismic Streamers and Ocean Bottom Nodes, page 7, paragraph 2, sentence 2 - "Nodes are placed in an orderly grid on the seafloor".

Throughout the EA process, recommend providing information on the following to facilitate DFO's assessment:

1) How will the ocean bottom nodes be deployed/recovered?
2) Is there any lateral movement expected for the nodes?
3) What is the benthic footprint of a node (including any lateral movement)?
4) What are the locations of node placement?
5) What benthic habitat and species (including species at risk) will or could be present in locations of node placement?
6) Does the number of 1000-3000 OBNs represent the entire 4 year program, 1 survey year, or for a single section/area being surveyed?
7) How many node placement locations will there be?

Section 2.2.8: Floating Lidar Systems, page 9, paragraph 1
Throughout the EA process, recommend providing information on the following to facilitate DFO's assessment:

1) How will the Floating Lidar Systems be deployed/recovered?
2) Is there any lateral movement expected for the seabed mooring frame?
3) What is the benthic footprint of a seabed mooring frame (including any lateral movement)?
4) What benthic habitat and species (including species at risk) will or could be present in locations of Floating Lidar System/seabed mooring frame?
5) What are the locations of the Floating Lidar System/seabed mooring frame placements?
6) What are the mitigations or measures to avoid entanglement of marine species (in particular species at risk) in the mooring lines of the FLS?
7) Is there a plan for FLS and seabed mooring frame recovery in the event of moor line breakage?

Section 2.3: Mitigation and Monitoring for Marine Mammals, Sea Turtles and Seabirds, page 9, paragraph 1

As there are components of the proposed project with a benthic footprint (nodes and seafloor mooring frames), this section of the project EA should include coral and sponges, special/sensitive areas, and methodologies to avoid sensitive species (in particular corals and sponges).

For the Laurentian Channel MPA, reference should be made to sea pens, smooth skate, Porbeagle shark, Leatherback sea turtle, Northen wolffish, black dogfish.

Section 3.3: Effects of the Project on VECs, page 10, paragraph 1

In addition to ocean bottom nodes, the EA should also examine potential effects of Floating Lidar Systems on marine fauna and benthic habitat.

VECs should also include corals and sponges, Atlantic cod, species in the Laurentian Channel MPA, and sensitive areas.

DFO SPECIFIC COMMENTS – DRAFT SCOPING DOCUMENT

Section 5.2.4: Summary of Potential Issues, Biological Environment: Marine Fish and Shellfish, page 6 -7

The potential effect and/or cumulative effect of Floating Lidar Systems on Marine Fish and Shellfish (in particular any potential effects on sensitive benthic habitat) should also be included in the EA.

Section 5.2.5: Summary of Potential Issues, Biological Environment: Marine Mammals, page 7

The potential effect and/or cumulative effect of Floating Lidar Systems on Marine Mammals should also be included in the EA.

Section 5.2.6: Summary of Potential Issues, Biological Environment: Sea Turtles, page 7

The potential effect and/or cumulative effect of Floating Lidar Systems on Sea Turtles should also be included in the EA.

CANADA-NEWFOUNDLAND & LABRADOR
C-NLOPB
OFFSHORE PETROLEUM BOARD

Government of NL Department of Fisheries, Forestry and Agriculture (FFA)
FFA SPECIFIC COMMENTS – PROJECT DESCRIPTION

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

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

Section 2.2.7 Seismic Streamers and Ocean Bottom Nodes
FFA advises the proponent to consider that streamer cables, particularly those towed over long distances, may interact with marine mammals and other marine life. Entanglement, displacement, and behavioral disruptions should be assessed. Research on the impacts of towed streamers is still emerging, and caution should be applied, especially in ecologically sensitive areas. The proponent may also want to explore potential noise mitigation measures, such as spacing adjustments, to minimize impacts.

Ocean Bottom Nodes (OBNs) may have localized environmental impacts when deployed on the seafloor. The footprint of each OBN and the deployment/recovery process may disturb benthic ecosystems and species, especially in areas with fragile habitats such as coral, sponges, or other sensitive seabed communities. It is recommended that the proponent conduct pre-survey seabed assessments to avoid or mitigate disturbances to critical habitats. Additionally, consideration should be given to the timing and location of the survey to avoid critical life stages of benthic species.

Section 2.2.8 Floating Lidar Systems
FFA advises the proponent that Floating Lidar Systems (FLS) systems should be strategically placed to avoid busy shipping lanes and areas of high marine traffic to reduce the risk of collision. It is recommended that the proponent monitors the impact of FLS deployment and mooring systems on local marine life. While the FLS buoy is largely stationary, the chain or rope moorings could pose entanglement risks to marine species,

particularly large whales and other migratory species. The use of whale-safe mooring designs or other mitigation measures should be explored to reduce the potential for entanglements. Additionally, the proponent should ensure that the deployment and retrieval processes of FLS are conducted in ways that minimize disturbances to sensitive marine ecosystems, particularly in regions of high ecological significance or near known critical habitats for endangered species.

Section 3.0 Environmental Assessment

FFA advises that the proponent be aware that the project/study area 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 consult local fish harvesters, in all the Northwest Atlantic Fishing Organization (NAFO) Divisions within the project/study area, 3K, 3L, 3M, 3N, 30, 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.

FFA SPECIFIC COMMENTS – DRAFT SCOPING DOCUMENT

Section 5.1. Boundaries

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 5.2.5 Marine Mammals

FFA advises that the proponent be aware of the 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. Fisheries and Oceans Canada (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.

Section 5.2.6 Species at Risk (SAR)

FFA advises that the proponent be aware of the DFO Aquatic Species at Risk (SAR) Distribution (NAFO Divisions 3K, 3L, 3N, 30, 3Ps, 4Vn, and 4Vs) within the project/study area (See Figure 1). The SAR Program is responsible for carrying out DFO's mandate under the *Species at Rick Act* (SARA) to protect, recover and conserve all listed aquatic SAR in Canada.

FFA also advises that the proponent be aware of the DFO Species at Risk Critical Habitats (NAFO Divisions 3K, 3L, and 3Ps) within the project/study area (See Figure 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 5.2.7 Sensitive Areas

FFA advises that the proponent be aware of the Ecologically and Biologically Significant Areas (EBSAs) (NAFO Divisions 3K, 3L, 3N, 30, 3Ps, 4Vn, and 4Vs) within the project/study area (See Figure 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

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.

Section 5.2.9 Presence of Seismic Survey Vessel(s)

FFA advises that the proponent be aware of biosecurity in relation to Aquatic Invasive Species (AIS) and the movement of international vessels. AIS are an increasing risk to the province's 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 FFA and 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 Newfoundland Region can be found on the Aquatic Invasive Species website. https://www.dfo-mpo.gc.ca/species-especes/ais-eae/index-eng.html

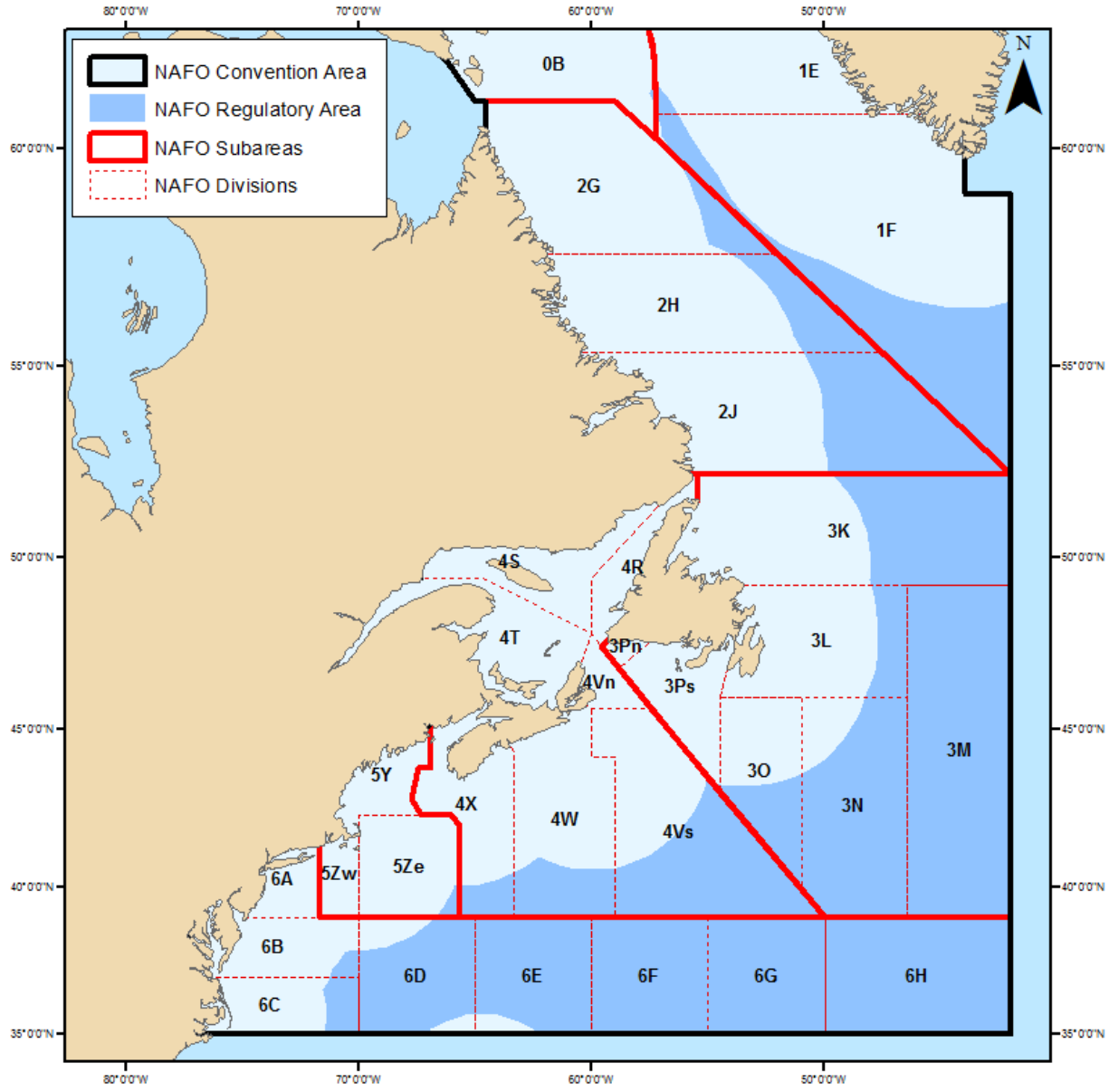


Figure 1: Northwest Atlantic Fishery Organization (NAFO) Regulatory Areas Map

Transport Canada (TC)

TC SPECIFIC COMMENTS – PROJECT DESCRIPTION

Subsection 1.1, Page 2:

- *Navigable Waters Protection Act* should be changed to *Canadian Navigable Waters Act* (CNWA). ***Please note***: the CNWA's jurisdiction applies up to the 12NM (the Territorial Sea).
- *Canada Shipping Act* should be *Canada Shipping Act, 2001*
- Suggest adding *Coasting Trade Act*. Depending on the origin (flag state) of the seismic vessels, as well as the support vessels, and crew being used, there may be licensing requirements under Canada's *Coasting Trade Act*.