

## Amendment of Environmental Assessment of Multiklient Invest Newfoundland Seismic Program, 2018-2023 – Review Comments

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### **GENERAL COMMENTS**

#### **Fisheries and Oceans Canada (DFO)**

1. MKI has indicated that the 7-day/30-km temporal/spatial buffer is operationally impractical; however, we note that the same mitigation measure is in place for other current seismic projects.
2. While MKI has committed to working cooperatively with the FFAW-Unifor and DFO through communication channels, the EA Amendment does not indicate whether the FFAW-Unifor is in agreement, only that, “the representative of the FFAW-Unifor acknowledged MKI’s description of the rationale behind the proposed modification to the mitigation measure.”

#### **Fish, Food and Allied Workers/Unifor (FFAW/Unifor)**

The unknown long-term effects of seismic activities continue to concern fish harvesters. While the research to date has not determined any direct mortality, of fish or shellfish, attributable to seismic activity. There may be behavioural changes, which could affect migration and/or reproductive and spawning activities as well as movement of the exploitable biomass in an area. This, in turn, can impact catch rates in a given fishing season, during a science survey and/or for years to come.

For many years, FFAW-Unifor has advocated for local research to be conducted on the impacts of seismic activity on important commercial species including shrimp, crab, turbot and Atlantic cod to address industry concerns and data gaps.

Recently, a first of its kind local study on snow crab catchability before, during and after seismic sound exposure was conducted on the Grand Banks, by Dr. Corey Morris with DFO. The results of this research provided scientific advice in support of a 2 week/30 km temporal/spatial buffer to be incorporated in to environmental assessments.

Field work, by Dr. Morris in 2017 saw a decrease in catch rates following 3D seismic activity, while field work in 2018 saw an increase in catch rates following 3D seismic activity. While the decrease/increase could be passed off as being attributable to natural variability, the report specifically states that the potential for 3D seismic surveying to affect catch rates cannot be ruled out. The data showed impact within a two-week period and less than 30 km radius from the test site. Therefore, the recommendation for the 2 week/30 km temporal/spatial buffer was made.

It is recognized that the 7-day/30 km temporal/spatial buffer that seismic companies have been using as a mitigation measure for several years is operationally challenging. FFAW-Unifor has also been consistently critical of this mitigation measure as you will recall. In fact, our membership has NOT been in support of any seismic activity being conducted over these stations prior to them being sampled for the year.

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With local science on the impacts of seismic sound and snow crab catchability, we strongly urge C-NLOPB to adopt the advice from Dr. Morris's research as a qualified mitigation measure rather than to completely dismiss any spatial or temporal mitigation method.

The importance of both the fishery and the post-season industry collaborative snow crab survey must be recognized across both industries. This post-season crab survey is 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, allowing confidence in the index and time series.

The collaborative DFO-industry post-season crab survey has undergone a number of changes in recent years in terms of the location and number of survey stations. It is also being proposed that the survey start mid-August in 2020 to avoid weather challenges often encountered later in the fall. While this is frustrating for planning all around, it continues to be FFAW-Unifor's position that seismic work should NOT be conducted in the vicinity of survey stations until they have been sampled for the year. We have been consistent in this position with all seismic activity and remain steadfast in our stance.

In the past, we have worked cooperatively with MKI on this issue and anticipate the same level of understanding going forward. We must ensure our members' concerns are heard and addressed, and we must also ensure that the importance of both the fishery and the post-season industry snow crab survey are recognized across each of our industries.

### **SPECIFIC COMMENTS**

#### **Fisheries and Oceans Canada (DFO)**

##### **Section 2.0 Modification to Mitigation Measure (paragraph 3, sentence 2)**

The Proponent states: "The rationale for the change is that the buffer is considered operationally impractical based on MKI's recent experience in the Project Area". Based on MKI's experience, what spatial and temporal buffers would be feasible for the post-season snow crab survey?

##### **Section 4.0 Conclusion (sentences 3 and 4)**

Although ongoing communication is an important mitigation, the Proponent should clarify that they intend to develop a temporal and spatial separation plan in collaboration with FFAW-Unifor and DFO, as noted in Section 3.0.