

Fugro - Offshore Seafloor and Seep Sampling Program (2017-2027) Environmental Assessment (Stantec June 28, 2017)

GENERAL COMMENTS

Fish, Food and Allied Workers (FFAW-Unifor)

The overall study area for this EA is quite large as is the temporal scale of the project (2017-2027). While fisheries data has been examined in the document it needs to be recognized by the proponent that there is a regime shift happening (from a shellfish dominated to groundfish dominated fishery) in our dynamic marine environment. Our fisheries will likely change over the span of this ten year project. Our fisheries science work is likely to change as well. *It is critical that effective and regular communication ensue with the fishing industry, as committed in the EA, throughout the EA lifespan so that the proponent is kept apprised of ongoing developments with fisheries in the vast project area.*

It is paramount that Fugro ensures that the equipment used for seabed sampling is safely secured. Failure to do so and losing the equipment would result in a hazard for fishing vessel towing gear on the seabed. This issue does not appear to be addressed fully in the document.

Environment and Climate Change Canada (ECCC)

Please note that ECCC comments on the Scoping Document and Project Description are still applicable.

SPECIFIC COMMENTS

Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB)

Section 1.3 Regulatory Context, pg 1 – The *Canada-Newfoundland Atlantic Accord Implementation Act* should be the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Act*.

Section 2.3.1, High-resolution Multibeam Sonar Data, 1st para, pg 5 – “Additional multibeam data may be acquired over other areas within the Project Area in subsequent years”. The maximum size of the area in which data may be acquired each year for the 2018 to 2027 time period should be provided.

Section 2.3.1, High-resolution Multibeam Sonar Data, 3rd para, pg 5 – Please define “normal” transit speeds. Also, provide the range of survey line spacing.

Section 2.3.3, Heat Flow Measurements, 2nd para, pg 6 – “Heat flow measurements are anticipated to be collected at up to 20 locations in 2017, with potential for additional sampling in 2017 or subsequent years”. How many additional sampling locations, besides the 20 identified, will be included in 2017. Also, provide the maximum number that may be obtained each year from 2018 to 2027.

Section 2.4 Vessels, pg 6 – “Survey vessels will be able to conduct MBES, SBP, heat flow and piston coring elements.” How many survey vessels will be operating during a program and what are their roles?

Section 2.7 Mitigation Measures, 3rd Bullet, pg 7 – Will one individual act as both the marine mammal observer (MMO) and the seabird observer?

Section 2.7 Mitigation Measures, 3rd Bullet, pg 8 – Will SIMOPS only be conducted in 2017?

Section 2.7 Mitigation Measures, Table 2.2 Commitment/Mitigation Measures, pg 9, Disturbance of Marine Mammals/Seabirds - As per the Geophysical, Geological, Environmental and Geotechnical Guidelines (C-NLOPB 2017), Operators are expected to implement a seabird and marine mammal observation program throughout all C-NLOPB authorized program activities. Such a program should involve designated observer(s) trained in marine mammal and seabird observations. The results of the marine mammal and seabird monitoring program should be included in the EA mitigation and monitoring report submitted to the C-NLOPB no later than **six (6) months** after termination of the

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fieldwork. Data on the marine mammal and seabird observations must be submitted to the C-NLOPB.

Section 2.7 Mitigation Measures, Table 2.2 Commitment/Mitigation Measures, pg 9, Interference with Fishing Activities – “There will be **MMO/bird observer** on board the vessel” to mitigate against interference with fishing activities. The duties of a FLO (not the MMO/bird observer) would normally assist in mitigating against interference with fishing activities.

Section 2.7 Mitigation Measures, Table 2.2 Commitment/Mitigation Measures, pg 9, Potential disruption to Post-season Trap Survey – It should be the Operator, not the FLO that establishes communications with industry and DFO regarding the post-season crab surveys. The FLOs role would be to communicate with fishers during program activities.

Section 2.7 Mitigation Measures, Table 2.2 Commitment/Mitigation Measures, pg 9, Potential conflict/damage to fixed gear – The commitment was previously made to consult with OO, FFAW-Unifor, OCI, and ASP with regard to fishing activities.

Section 2.8 Environmental Management, 1st sentence, pg 11 – Who will receive the plan developed by Fugro and what will be the timeframe for submission?

Section 2.8 Environmental Management, pg 11 – A copy of the compensation program should be submitted with the application to carry out geophysical activities.

Section 2.8 Environmental Management, pg 11 – Information and reporting requirements for incidents, including contact with fishing gear, can be found in the *Incident Reporting and Investigation Guidelines* (CNLOPB/CNSOPB 2012).

Section 3.4.2 Other Users Marine Shipping, pg 25 – Provide information on shipping lanes and marine traffic through the Study Area.

Section 6.1.4 Operation of Vessels, pg 43 – Please clarify the meaning of the “where possible” in the context of the sentence, “...to monitor and report on marine mammal and sea turtle sightings during vessel operation to avoid marine mammals or sea turtles (including SAR), where possible.”

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Fisheries and Oceans Canada (DFO)

Section 2.7 Key Mitigation Measures and Table 2.2, pgs 7 to 10 - Given the potential for impact of sound on marine mammals (including Species at Risk) from multi-beam echo sounder (MBES) and sub-bottom profiling (SBP) survey activities it is felt that the Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment should be, adhered to, and included in the list of key mitigation measures for the project. This section and table should be amended accordingly.

Section 3.2 Species at Risk, Table 3.1, pgs 14-15 - Regarding the Northern bottlenose whale (Scotian Shelf population) with footnotes B,E – E refers to “Management Plan anticipated in 2017” which should be changed to “Action Plan” which was recently posted on the public registry (see http://www.sararegistry.gc.ca/document/default_e.cfm?documentID=2940).

Regarding the Sowerby’s beaked whale with footnotes B,C – C refers to “Action Plan anticipated in 2017” which should be changed to “Management Plan” which was recently posted on the public registry (see http://www.sararegistry.gc.ca/document/default_e.cfm?documentID=2938).

A summary describing the presence/distribution/behavior/habitat of Species at Risk with potential to occur within the study area should be included.

Section 3.4.2 Other Users Offshore Oil and Gas, pg 25 - Production activities are mentioned in this section; however, other offshore oil and gas activities that overlap the study area should be included (e.g. exploratory programs, other geophysical/seismic programs).

Section 3.7 Sensitive Areas, pg 33 - A brief description and/or summary of the characteristics of sensitive marine areas within the study area should be included and Section 3.7 amended accordingly.

Section 5.3 Project Interactions, Table 5.2, pg 38 - The potential interaction of the use of MBES and SBP and Marine Fish and Shellfish (fish habitat) should be included. The Operation of vessels (e.g. lighting) has potential interaction with Species at Risk as well as Marine Fish and Shellfish (fish habitat) (e.g. attraction of marine biota to vessel lighting). This potential interaction should be included.

Section 5.3 Project Interactions, pg 38 - Standard environmental effects descriptors (e.g. magnitude, duration, extent, frequency, reversibility) should be included and described in this section of the EA Report.

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Section 6.0 Environmental Effects Assessment, pgs 40-44 - This section should include a table with a summary of the assessment of residual effects of the project activities with significance ratings and associated levels of confidence.

Section 6.1.1 Use of MBES and SBP, para 2, last sentence, pg 40 - Regarding the sentence "...since this Project will be operating in depths nominally less than 3,000 m, power levels will be lower than the maximum output." The maximum power level planned for use during this planned project and how it relates to levels that overlap and/or interact with marine fish, marine mammals and sea turtles should be provided and this section amended accordingly.

Section 6.1.2 Collection of Heat Flow Measurements and Core Samples, para 3, first sentence, pg 41 – There appears to be text missing from this sentence "The deployment of the corer and probe have the potential to interact with and Marine Fish and Shellfish."

Section 6.3 Cumulative Environmental Effects, pg 43 - The description provided is not adequate and requires additional details / information on other relevant ocean users (e.g. marine transportation traffic). It should include a consideration of environmental effects that are likely to result from the proposed project in combination with other projects or activities that have been or will be carried out. Only with this information, combined with a prediction of future activity, can the prediction of **not significant** be made.

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Section 2.7 Key Mitigation Measures, 3rd bullet, pg 8 - Quote “ *SIMOPS will be conducted with operators of other exploration activities (e.g., seismic survey proposed for the Orphan Basin in 2017)*”. The proponent should define SIMOPS.

Section 2.7 Key Mitigation Measures, Table 2.2 Commitment/Mitigation Measures, pg 9 - Disturbance of Marine Mammals/Seabirds. It is stated that bird observations will be made in transit, and that the observer will complete daily and weekly observation reports. The Canadian Wildlife Service of Environment and Climate Change Canada (ECCC-CWS) recommends that it be clearly stated that the Eastern Canada Seabird at Sea (ECSAS) protocol be used for observing and reporting seabirds on the vessel. ECCC-CWS can provide an updated blank database for ease of data entry. It is important that seabird observations are made according to the standardized protocol so that results from these surveys are comparable to other surveys and contribute to our broader knowledge of seabird abundance and distribution in Eastern Canada.

The ECSAS program can be cited as follow: Gjerdrum, C., D.A. Fifield, and S.I. Wilhelm. 2011. Eastern Canada Seabirds at Sea (ECSAS) standardized protocol for pelagic seabird surveys from moving and stationary platforms. Canadian Wildlife Service Technical Report Series No. 515. Atlantic Region. vi + 36 pp.

Fish, Food and Allied Workers (FFAW-Unifor)

Section 2.7 Key Mitigation Measures, Table 2.2 Commitment/Mitigation Measures, Interference with fishing activities, pg 9 - The table should read “there will be a FLO onboard the vessel”.