



Monday, 24 February 2020

Elana Mendelson
OES Bureau, Office of Marine Conservation
U.S. Department of State

Re; United Nations Draft Agreement relating to the Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction

Dear Elana,

Thank you for your recent correspondence and willingness to collate feedback on the United Nations Draft Agreement relating to the Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction. I am writing on behalf of the IAGC. Founded in 1971, the IAGC is the global trade association for the geophysical and exploration industry, the cornerstone of the energy industry. With more than 80 member companies in 50 countries, our membership includes onshore and offshore survey operators and acquisition companies, data and processing providers, exploration and production companies, equipment and software manufacturers, industry suppliers and service providers. The IAGC focuses on advancing the geophysical and exploration industry's freedom to operate. The IAGC engages governments and stakeholders worldwide on issues central to geophysical operations and exploration access, including prioritizing timely, accessible data acquisition throughout the life of the asset; providing predictability & competition; promoting regulatory & fiscal certainty and promulgating risk- & science-based regulations.

IAGC member companies play an integral role in the successful exploration and development of offshore hydrocarbon resources through the acquisition and processing of geophysical data. Geophysical surveys are undertaken to assist a broad range of clients in understanding the subsurface of the ocean in order to make decisions about resource development, the safe location of infrastructure and decisions relating to the delineation of Exclusive Economic Zones (EEZs).

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Marine Geophysical Surveys

By determining geological features below the sea floor, marine seismic surveys are a vital part of exploring for oil and gas. The survey is conducted by sending acoustic waves into the various buried rock layers beneath the sea floor and then recording the time it takes for each wave to bounce back while measuring the various characteristics of each returning wave. In water, the energy source is typically an array of different sized air-chambers, filled with compressed air. The source array is towed behind a seismic survey vessel and releases pressurized air into the water. The returning sound waves are detected and recorded by hydrophones that are spaced out along a series of cables.

Seismic surveys generate images below the surface of the earth tens of thousands of feet and accurately image the Earth's subsurface before a single well is drilled. Modern seismic imaging reduces risk by increasing the likelihood that exploratory wells will successfully tap hydrocarbons and decreasing the number of wells that need to be drilled in a given area. Seismic surveys also reduce associated safety and environment risks and the overall footprint of exploration. Because survey activities are temporary and transitory, they are the least intrusive and most cost-effective means to understanding where recoverable oil and gas resources likely exist.

Geophysical surveys have environmental benefits which reduce the overall impact of oil and gas exploration and extraction processes beginning with a reduction in areas to those with only the most prospectively. Any time a well is drilled, either when trying to find oil and gas or when developing a reservoir for production, geophysical technologies can reduce many risks. Images of the earth's subsurface that seismic creates can illuminate potential hazards for drilling to ensure it is as safe, reliable and efficient as possible. For example, analysis of a subsurface in advance of drilling is only available through seismic techniques and supports the design of well trajectories that can reach the oil or gas reservoir while avoiding any hazardous highly over-pressured zones that could cause potentially serious issues.

Before picking an exact drilling location, companies utilize geophysical technology to perform hazard surveys to look for geologic hazards on the sea bottom and in the shallow subsurface that could affect the drilling of a well. Features such as a steeply dipping or unstable sea bottom are hazardous and must be avoided in positioning rigs. Likewise, shallow gas pockets, faults, and/or abnormally pressured sands can cause severe problems during the drilling of a well if not known about in advance. To avoid these problems, high resolution seismic surveys are conducted. The resulting data pinpoints and enables the avoidance of potential hazards.

Geophysical technology enables oil and gas operators to accurately predict the fluid pressures and rock fracture pressures in the subsurface from 3D seismic data and offset well data before a new well is drilled. This information is critical for the safe drilling of wells with no environmental incidents so that unexpected surges of high-pressure fluids won't get into the well during drilling. Once oil or gas is found, and a reservoir is being developed and produced, seismic images increase the understanding of the reservoir and optimize development plans. More efficient oil and gas extraction requires fewer wells while increasing the production of hydrocarbons.

High resolution geophysical survey techniques are also used in the planning of stages for a variety of offshore infrastructure such as wind turbine generators and other marine renewable energy devices, liquid natural gas (LNG) terminals, as well as port facilities. All such infrastructure requires detailed knowledge both of the seabed

topography, and the subsurface in order to plan for the design and safe installation of foundations that maximise the lifespan of any infrastructure.

Geophysical techniques are also used to understand the seafloor in relation to continental shelf identification and EEZ delineation. Data is acquired in order to meet the requirements of Article 76 of the United Nations Law of the Sea (UNCLOS), which enables countries to make claims for the extended continental shelf and establish their maritime boundaries definitively.

UNCLOS Draft Agreement on the Conservation and Sustainable Use of Areas Beyond National Jurisdiction (ABNJ)

IAGC understands that the draft agreement is focused on four main areas;

1. Marine Genetic Resources

The work of IAGC Members is undertaken with good environmental stewardship at the heart of all operations. The seismic industry is committed to conducting its operations in an environmentally responsible manner, including compliance with environmental regulations, such as mitigation and monitoring guidelines relating to minimizing any potential impacts upon marine species such as cetaceans, sirenians, pinnipeds and turtles. There is unlikely to be any impact, other than short-term and highly localised disturbance on species, and therefore only a negligible or no impact upon marine genetic resources. By implementing standard mitigation and monitoring guidance¹, there is the potential to derive useful data about marine life within ABNJ, which could positively contribute toward marine scientific research, in line with Article 6 of the draft agreement relating to international cooperation and the promotion of marine scientific research.

More than four decades of worldwide seismic surveying and various scientific research indicate that the risk of direct physical injury to marine mammals is extremely low, and currently there is no scientific evidence demonstrating biologically significant negative impacts on marine mammal populations.

2. Area-based Management Tools

Industry supports a process of developing and implementing environmental protection measures that are based on assessing the level of risk or significant impacts on marine species. The use of area-based management tools such as the designation of different types of Marine Protected Areas (MPAs) is widespread, and acknowledged as being important for the conservation of a wide range of species. It is also acknowledged as requiring detailed baseline information about the underlying conditions, habitat types and species assemblages. Having an in-depth knowledge of the site aids with effective management, monitoring of any changes from the baseline as well as the establishment of appropriate linkages with other MPAs to create the desired coherent network. This is challenging and costly information to establish, and the IAGC notes that individual States often apply significant precaution in both designating MPAs based on incomplete data, as well as setting overly stringent management measures which

¹ Recommended Monitoring and Mitigation Measures for Cetaceans During Marine Seismic Survey Geophysical Operations; https://securisync.intermedia.net/us2/s/login?public_share=7SWSEdCR6mmB4Sxzj3HUTJ003d33b6

are not risk-based. The IAGC would encourage transparent consultations about any area-based management proposals, as well as the continued access for temporary, transient, and low-risk operations which have no physical impact, such as marine geophysical surveys. As an example, within the UK there is significant precedent for the continuance of a wide range of activities within MPAs of varying types, acknowledging that there may be additional mitigation measures required based upon any specific concerns relating to species within a given area.

3. Environmental Impact Assessments (EIAs)

The IAGC notes that there is a threshold relating to the requirement for EIAs, whereby “States need to have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to, or are likely to have more than a minor or transitory effect on the marine environment and ABNJ...” (Article 24). As highlighted in relation to marine genetic resources, geophysical surveys have not been shown as resulting in any direct physical harm or population level consequences to marine species. They are both temporary and transitory, and can be expected to have no more than minor, transitory effects. The potential impacts of geophysical surveys are both well understood, and well managed by standard mitigation practices already highlighted.

4. Capacity Building and the Transfer of Marine Technology

IAGC Members are widely involved with capacity building through partnerships with academic institutions, governments and cooperation with international projects. A relevant example would be the GEBCO Seabed 2030 project, whereby Member companies submit non-commercial ocean mapping data such as may be derived during transits between survey areas in order to contribute toward more accurate mapping of the ocean floor to the benefit of all ocean researchers. IAGC Members will continue to work towards the goals of capacity building and technology transfer where there is no consequence to the rightful ownership and protection of intellectual property and consequent commercial value.

Institutional Arrangements

It is acknowledged that the implementation of the Agreement requires the setting up of new institutions. Our primary concern with the creation of any new institution is that they operate with clear, transparent and expedient processes relating to the review of activities which may be undertaken within ABNJ. Stable and predictable regulatory frameworks are essential for the successful planning of activities for the benefit of all stakeholders. It is recommended that National Authorities form the interface with the UN, and the IAGC supports the notion of the sponsoring State having the authority of granting permission for proposed activities.

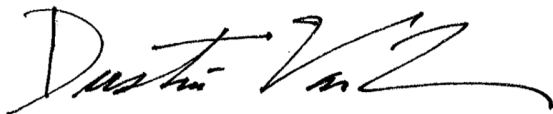
The IAGC would like to highlight the need for full, open and transparent stakeholder engagement with regard to the creation and conduct of relevant institutional bodies such as the Scientific and Technical Body. This is acknowledged as being intended to be composed of experts from relevant fields, and such that there is appropriate gender balance and geographical representation. As the only association focused on geophysical surveys, the IAGC

and our Members are recognized as being leading experts in all aspects of geophysical survey methods, technologies and environmental impacts. We would welcome the opportunity of participating at all appropriate levels to ensure that accurate information is provided to decision makers in relation to considering activities within ABNJ.

Summary

We would like to thank you for the opportunity of providing these comments to the State Department, and hope to engage further in the process. We remain at your disposal in order to answer any queries about our comments, or provide further details about our activities and the management of them.

Sincerely,

A handwritten signature in black ink that reads "Dustin Van Liew". The signature is fluid and cursive, with the first name "Dustin" being larger and more prominent than the last name "Van Liew".

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