



ICPC Recommendation

Recommendation No. 17

Submarine Cable Operations in Deep Seabed Mining Concessions Designated by the International Seabed Authority

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1. INTRODUCTION

This document recommends procedures for due diligence for submarine cable operations associated with laying and repair in concessions designated by the International Seabed Authority (ISA) for the exploration and/or exploitation of mineral resources in the Area. Under the United Nations Law of the Sea Convention (UNCLOS), the ISA has plenary authority to designate and regulate concessions for deep seabed mining in the Area. A mining Contractor awarded a concession by ISA has the exclusive rights to explore and exploit mineral resources in the concession. The Area is defined in UNCLOS as the seabed beyond areas of national jurisdiction (i.e. outside of the coastal State's Exclusive Economic Zone (EEZ) or extended continental shelf claim).

UNCLOS also provides for the freedom to lay and maintain submarine cables on the high seas which includes the water column over the Area. This freedom includes the operations incident to laying submarine cables such as cable route surveys and repair. The purpose of this Recommendation is to promote best industry practice with respect to exercising due regard and facilitate a good working relationship with the ISA, mining Contractors and other seabed users in the Area.

2. DUE DILIGENCE

In exercising the freedom to lay and maintain submarine cables on the high seas, UNCLOS provides that these freedoms shall be exercised with due regard for the interest of others in their exercise of the freedom of the high seas and also with due regard for the rights under the UNCLOS with respect to activities in the Area. UNCLOS requires that mining activities in the Area be exercised with reasonable regard for other activities and the marine environment. "Due diligence" and "reasonable diligence" are terms of art that are not defined in UNCLOS. According to ISA Technical Study No. 14, these diligence terms are understood to have two components. The first is notice of the activities involved, and the second is meaningful consultation by the activities involved with a view to minimizing conflict. Both are addressed below.

2.1. Notice - Submarine Cables

Notice of submarine cable locations is provided to other seabed users by actual notice or constructive notice. In waters of 2000 metre water depth or less, the International Hydrographic Office (IHO) guidelines recommend that national charting agencies (i.e. British Admiralty, NOAA/DMA, SHOM) show the position of submarine cables. NOAA has in some cases charted cables to depths greater than 2000 metre water depth. It is important to note that in deep sea bed mining concessions designated by the ISA the depths involved will greatly exceed 2000 metres with the result that the presence of submarine cables is generally not shown on nautical charts in those waters. While both the ICPC and the ISA are working with IHO to provide high seas charts for designated concessions, cable owners must rely on actual notice to the holders of mining concession license and vessels involved in deep seabed mining operations.

In practical terms, this means that the Route Position List (RPL) for the cable laid or proposed within a concession must be delivered to concession holders, Contractors and vessels involved in the

concession mining. It is important that official as-laid RPLs should be sought from the cable owner or Maintenance Authority and RPLs from other sources should not be relied upon.

While electronic delivery of RPL information can be effective, it is recommended that the RPL information also be sent by certified or registered mail or some other means to provide proof of physical delivery of the “as laid” RPL data to the mining concession holder. Failure to provide notice may defeat a claim against a mining concession holder or vessel that damages a submarine cable without notice.

2.2. Notice -Mining

The ISA publishes on its website (<https://www.isa.org.jm/>) the coordinates for all concessions awarded. The website also provides information on the concession holder and Contractors. Submarine cable ship operators, submarine cable installers, marine surveyors and cable owners should check this website before conducting operations in the Area.

ISA regulations for new concession license applications require the applicant to confirm it has carried out due diligence to determine if submarine cables are located in areas it is requesting be granted as a concession. ICPC Members should bear in mind that this new ISA requirement may lack compliance verification.

It should be noted that information on concession boundaries and license holders is only made public after the ISA awards the concession. The process of applying for a concession with the ISA is commercially sensitive and is not public. Accordingly, the ISA website should be checked when carrying out a desk top study, a marine cable route survey, and before the actual cable laying in order to be informed of the latest ISA public information available.

2.3. Meaningful Consultation

When Notice has been given and either the mining concession holder or Contractor or the cable system operator or installer is aware of the possibility of a conflict between mining and cable operations, meaningful consultations should be initiated to fully inform each other of intended plans, operations, and common procedures that can be adopted by the participants to avoid or reduce conflicts.

While each consultation will be different because of the mining and cable operations, geography, oceanography, and seabed and natural resources characteristics, both sides should meet, exchange relevant data on both in-service and out-of-service cables and mining operations, and work in good faith to agree if possible on mutually acceptable provisional and practicable arrangements and protocols, including those for effective ongoing communications and safety. Suggested considerations for these representative situations are provided below. The key element in meaningful consultation is that the engineers, project managers, and mariners from both sides should work together to reduce risks.

Under international law, there is no requirement that an agreement be reached before commencing mining or cable operations in the Area or on the high seas. The requirement is that each side must show due regard for the other exercise of its rights. Whether by a formal agreement or an informal

arrangement, both sides benefit from practical steps and procedures to reduce risk to each other's assets.

The ISA awards a concession in the Area over an existing submarine cable.

In this situation, providing the mining Contractor has notice of the cable system in the concession, it needs to conduct its operations in such a manner that it will not wilfully or through culpable negligence injure the submarine cable, normally surface laid and not buried. Failure to do so, unless actions were taken to avoid loss of life or a vessel, will be a violation of UNCLOS and general maritime law and may allow recovery of the costs to repair a cable damaged by mining operations.

A submarine cable is laid in an existing concession in the Area.

Active mining operations will likely involve major seabed excavation and disturbance by large equipment in contact with the seabed and pose risks to submarine cables. While both the mining Contractor and the submarine cable installer and owners can exercise their rights under UNCLOS, they need to do so with due regard to the rights of the other. If a submarine cable is planned to be laid in a concession in the Area where active mining operations are taking place, consideration should be given to rerouting to avoid the concession.

Alternatively, concessions are required under ISA regulations to have part of the concession set aside to remain untouched for comparative environmental monitoring of the impact of mining on the marine environment in the rest of the concession. Once this section of the concession is determined by the contractor, given the well-established benign or neutral impact of a surface laid fibre optic cable in the marine environment, the cable may be able to be routed through this area set aside from mining operations.

Finally, when a mining concession is awarded, another but separate section of the Area of roughly the same geographic size is set aside by the ISA as an area where no mining can take place (Areas of Particular Environmental Interest ("APEI")). APEI's may be another opportunity to locate an alternative cable route.

The criteria for a successful arrangement between the Contractor and the cable owner must take into account the mineral(s) in the concession, the equipment used to mine the resources, the physical seabed characteristics, water depth, historically predictable weather, the disturbance from mining operations to the marine environment, and the submarine cable's estimated location in the Concession and safety distances recommended for grappling during repairs (i.e. twice the water depth). Because these factors will vary significantly with each concession, there is no standard arrangement recommended. Rather, this will be the outcome of the consultation and the resulting practical arrangements by those involved. While not directly applicable, other ICPC recommendations may be useful to study to identify useful features for practical arrangements. These include ICPC Recommendation No. 3 [Telecommunication Cable and Oil Pipeline/Power Cable Crossing Criteria], ICPC Recommendation No. 7 [Offshore Civil Engineering Works in the Vicinity of Active Submarine Cable Systems], and ICPC Recommendation No. 13 [The Proximity of Off-shore Renewable Wind Energy Installations and Submarine Cables Installations in National Waters].

3. REPAIR AND REMOVAL PROCEDURES

Repairs to international submarine cables on the high seas are rare. For the period of 2008-2015, such repairs average only about four per year worldwide, mostly caused by natural phenomena like earthquakes and landslides under the sea. Because of the water depths involved, grappling is the primary means of recovery of damaged cable. For cable repairs that may be required in a mining concession, the same concerns of notice and meaningful consultation described above exist, especially in the case of a concession engaged in active exploitation. The notice and consultation should take place according to the protocol already established when the cable was laid, or if not, according to meaningful consultation initiated as soon as a fault occurs. When the repair is completed, the changes to the “as laid” RPL should be communicated as indicated in the Notice section above.

Following any cable repair in an ISA licenced concession area, consideration should be given to the direction in which the repair bight is laid out, giving due regard to any mineral extraction operations, because deep water repair bights are very large and could impinge on a significant area of seabed.

Recovery of out-of-service submarine cables requires similar notice and meaningful consultation. The owner, operator and/or salvor of the out-of-service cable system should check the ISA website to identify any mining concession that may exist on the route of the out-of-service cable in the Area. The location and status of any such concession should be taken into consideration in addition to the pre-decision factors listed in ICPC Recommendation No. 1 [Management of Redundant and Out-of-Service Cables]. If an out-of-service submarine cable is planned to be recovered in a concession where active mining operations are taking place in the Area, both sides should enter into a practical arrangement to avoid risks.

4. REFERENCES

Document Number	Title
Reference 1	<i>Submarine Cables and Deep Seabed Mining</i> , ISA Technical Study: No. 14, ISBN 9780976-8241-34-4, ISBN 978-976-8241 (2015)
Reference 2	<i>Submarine Cables The Handbook on Law and Policy</i> , Martin Nijhoff Publishers, Burnett, Beckman, Davenport, in particular chapters 3, 5 and 6 (2014)
Reference 3	<i>Submarine Cables and BBNJ</i> , ICPC submission to the Preparatory Committee established by General Assembly resolution 69/292: Development of an internationally binding instrument under the United Nations Law of the Sea Convention on the conservation and sustainable use of marine biological diversity of areas beyond annual jurisdiction (1 August 2016), in particular Section II and Annex B.

Document Number	Title
Reference 4	<i>International Submarine Cables and Biodiversity Beyond National Jurisdiction The Cloud Beneath the Sea</i> , Martin Nijhoff Publishers, Burnett and Carter (2017)
Reference 5	United Nations Law of the Sea Convention (1982) (“UNCLOS”), in particular articles 76, 87, 113, 114, 147, and 153.
Reference 6	ICPC Recommendation No. 1 - Management of Redundant and Out-of-Service Cables
Reference 7	ICPC Recommendation No. 2 - Cable Routing and Reporting Criteria
Reference 8	ICPC Recommendation No. 3 - Telecommunication Cable and Oil/Power Cable Crossing Criteria

5. DEFINITIONS

The following words, acronyms and abbreviations are referred to in this document.

Term	Definition
Area	The seabed outside of waters of national jurisdiction as described in Part XI of UNCLOS. Generally, this is the seabed beyond coastal State EEZ and legal extended continental shelf claims.
Contractor	A State or private entity that has been awarded exploration and/or exploitation rights for mining of mineral resources in a concession designated by the ISA.
High Seas	The high seas proper includes the water column over the legal extended continental shelf (beyond 200 nautical miles) and over the Area.
International Seabed Authority (ISA)	The organ created under UNCLOS in Part XI to administer the Area for purposes of exploration and exploitation of mineral resources from the seabed, including plenary authority to designate, regulate and award exclusive concessions in the Area to State or private entities to allow mining of mineral resources.