



## **NCWG9 – ACTION HSSC15/100 ICPC PROPOSAL TO NCWG FOR ADAPTING S-4 CHARTING SPECIFICATION (B443 & C408) FOR SUBMARINE CABLES TAKING INTO ACCOUNT DEEP SEA MINING**

### **1. Background**

Following ICPC participation at HSSC-15 in Helsinki, Finland, July 2023; HSSC noted the ICPC request for the NCWG to revise S-4 B-443 and C-408.1 to reflect charting of cables to full ocean depth and noted the ICPC commitment for submarine cables to be charted end-to-end and in all water depths. HSSC15 Action 100 invited NCWG to consider the ICPC request at NCWG9. This request has been tabled previously and while other revisions to S4 B443 have been made; the depth to which submarine cables should be charted remains 2,000m. The IHO-ICPC MoU states that while the IHO has a strong interest in achieving the greatest possible uniformity in nautical charting products such as nautical charts and in charting standards, safety at sea, and protection of the marine environment; the mission of the ICPC is the protection of submarine cable infrastructure and ensuring through peer reviewed research that submarine cable activities necessary to achieve that protection have zero to neutral impact on the marine environment. The ICPC believes that the security and safety of what many nations are defining submarine communications cables as critical infrastructure is consistent with the objectives set out in the IHO-ICPC MoU.

### **2. Discussion**

Any damage to the submarine cable infrastructure can have serious consequences for the economy and national security of states connected to affected cables. In the event of damage, such states may be forced to rely on satellite capacity where alternative subsea cable restoration paths are unavailable. Satellite communication is more expensive, lacks bandwidth, are less secure, and of lesser quality than communications via fibre optic submarine communication cables. Moreover, due to bandwidth constraints satellite capacity may be inadequate to fulfil the capacity needs of impacted states. Many communications and related economic activities would necessarily be curtailed until the cable was repaired, a process that could take weeks or months, depending on the nature of the damage, the location, the time of year, prevailing weather and sea conditions, and other factors.

### **3. Submarine Cable and Deep Seabed Mining**

The mining for mineral deposits in the deep ocean in Areas Beyond National Jurisdiction (ABNJ) poses a significant risk to submarine communications cables passing through or in close proximity to deep seabed mining tenement blocks. Deep seabed mining is regulated by the International Seabed Authority (ISA). The ICPC has an MOU with the ISA and is working with the Authority, Member States and deep seabed mining contractors to mitigate the risks posed by uncoordinated deep seabed mining activities. In particular the ICPC has been active at ISA Council sessions during the Draft Deep Seabed Mining Exploitation Regulations negotiations and has held two joint ICPC/ISA Workshops; side events at ISA Council meetings, and participated in ISA Mining Contractor meetings.

With the support of Member States, the Draft Deep Seabed Mining Exploitation Regulations currently being finalized, now contain important provisions for the protection of submarine cables in ABNJ where deep seabed mining activities will take place. The provisions that have been incorporated in the Draft Regulations require mining contractors to identify existing submarine cable infrastructure, and to demonstrate coordination with the submarine cable system operators/owners when preparing Plans of Work that are required to be submitted to the ISA Legal and Technical Commission (LTC) with extraction license applications.

Applications for deep seabed mining extraction licenses are confidential as is the application evaluation process by the LTC; only after an application has been approved, is the actual location of the licensed block known. Therefore, in order to comply with the regulations governing mining applications and plans of work; which require the identification of existing submarine cable infrastructure; while maintaining application confidentiality; mining contractors require positional information of submarine cables running through or proximal to the applicant's mining site location to be available. Such positional information of submarine communication cables needs to be available on navigation charts.

#### **4. Conclusions**

The criticality of the submarine telecommunication cable infrastructure is not adequately reflected in the current S4 Standards. While the current Standards reflected in S4-B443 and S4-C408.1 refer to submarine cables being charted to 2,000m, this standard is not adopted by all HOs and is inadequate for areas where deep sea mining is likely to take place as defined by ISA demarcated tenement blocks.

#### **5. Recommendations**

The ICPC respectfully recommends that S4-B443 and S4-C408.1 be revised to require that submarine communications cables be charted end to end and to full ocean depth

#### **6. Justification and Impacts**

The recommended actions proposed for amendments to S4 Standards as they pertain to submarine cables can be justified on the basis of the need for enhanced submarine cable awareness and protection to the criticality of this infrastructure to world finance, socio-economic development, defence, and the internet; and in particular the increasing risks to submarine cables in water depths greater than the current limit of 2,000m from deep sea mining activities.

#### **7. Action Required by NCWG**

The ICPC invite the NCWG to endorse these proposals and to implement ICPC recommendations for submarine communications cables be charted end to end and to full ocean depth taking into account deep seabed mining activity