The ICPC and Submarine Cable Protection and Resilience

Kent Bressie

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International Cable Protection Committee ("ICPC")

- Founded in 1958, ICPC is the world's preeminent global organization for:
  - Advancing freedoms to install and maintain submarine telecommunications and power transmission cables, and
  - Mitigating risks of damage to those cables.
- ICPC has more than 180 private-sector and government members from more than 60 countries and:
  - Works with governments, other marine industries, international organizations, and NGOs to promote cable awareness, cable protection best practices, and effective international agreements;
  - Commissions peer-reviewed research on the environmental characteristics of cables; and
  - Promulgates recommendations for cable operators.
- In July 2021, ICPC launched its *Government Best Practices for Protecting and Promoting Resilience of Submarine Telecommunications Cables*; these address risks that cable operators cannot easily mitigate with system design or their own extensive protection measures during the operating phase

Threats and risks to submarine cables

Specific threats

- Commercial fishing
- Anchoring
- Dredging and dumping
- Energy resource development (oil, gas, renewables)
- Mining (seabed minerals, sand, gravel)
- Earthquakes, typhoons, tsunamis
- Underwater landslides, turbidity currents, and on-shore flooding
- Sea floor geology
- Weather and climate change
- Equipment theft
- Unexploded ordnance
- Malicious damage

Types of risk

- Direct disturbance/damage
- Impeded access to water column and seabed for repair, which can delay repair
- Clustering and route foreclosure, which can magnify risks

ICPC *Best Practices*: general principles

- Focus on **statistically-significant risks** where government action could have the greatest impact on risk reduction;
- Promote commercial and regulatory environments that encourage **multiple and diverse** domestic and foreign submarine cables connections;
- Promote **transparent regulatory regimes** that expedite cable deployment and repair according to well-established timeframes;
- **Consult with industry** to understand industry technology and operating parameters and to share data regarding risks;
- Complement existing **industry best practices**;
- Recognize that laws and government policies themselves can sometimes exacerbate risks of damage and reduce resilience; and
- **Promote high-seas freedoms** to encourage submarine cable deployment and repair;
- Engage with other states on a global and regional basis, as other states' actions can greatly affect an individual state's own connectivity.

Specific best practices (1)

- **Measures to reduce fishing and anchoring risks**, including spatial restrictions, designated anchorages, vessel identification technologies, and penalties for non-compliance
- **Default separation distances** between submarine cables and other marine activities, allowing closer proximity with direct coordination of affected parties
- **Policies promoting geographic diversity of routes and landings** to minimize risk that an incident will impair all communications on a particular route or to a particular country
- **Cable protection zones**—prohibiting and punishing specified activities posing risks to submarine cables within fixed geographic areas—governments should avoid requiring their use, as required use can reduce geographic diversity and resilience
- **Single point of contact in each government** for, for any submarine cable issues arising with respect to installation, repair, and protection
- **Appropriate regulatory frameworks** that expedite installation and repair, recognize high-seas freedoms, and use the best available science
- **Current nautical charts** to show all submarine cables

Specific best practices (2)

- **Effective cable protection laws** to ensure compensation of cable owners for damage and to deter future damage
- **Marine stakeholder consultations and marine spatial planning** to identify potential conflicts early and facilitate coordination
- **Avoidance of cabotage or crewing restrictions** on vessels engaged in installation or repair, whether in the territorial sea, archipelagic waters, or EEZ/continental shelf
- **Minimal customs duties, taxes, and fees on installation activities** (including EEZ transit) and reduce or eliminate them on submarine cable equipment.
- **Critical infrastructure designation**
- **Sharing of risk and incident data** between governments and submarine cable operators to identify gaps, improve resilience, and identify malicious acts by state and non-state actors
- Recognition that **activities of other states, bodies, and institutions far beyond a state's maritime boundaries can impair submarine cable repair and resilience**, including deep seabed mining, and environmental regulation on the high seas under the BBNJ treaty