

## PROPOSAL FOR ESTABLISHMENT OF A NEW ILA COMMITTEE ON SUBMARINE CABLES AND PIPELINES UNDER INTERNATIONAL LAW

### OVERVIEW OF SUBMARINE CABLES AND PIPELINES

1. The phrase ‘submarine cables and pipelines’ is used on several occasions in the 1982 United Nations Convention on the Law of the Sea (UNCLOS), but like many terms in UNCLOS, is not defined. There are two main types of submarine cables: submarine communications cables used to transmit data communications and submarine power cables used to transmit electrical power. Submarine pipelines, on the other hand, are used for the transport of crude oil and natural gas resources. While all are designed for underwater use and are typically laid on or buried under the seabed, submarine communications cables, power cables and pipelines are different sizes, consist of different material, serve different functions and have varying degrees of importance to the international community.
2. *Submarine communications cables* consist of glass fiber optics encased in an electrical conductor, an internal steel core, and a protective sheath of high-grade marine polypropylene and its maximum diameter is 50 mm. They provide 95 % of international telecommunications and have been described as “critical communications infrastructure” and “vitally important to the global economy and the national security of all States.”<sup>1</sup> There are presently 213 cable networks laid on the seabed. The global cable network forms the backbone of the Internet, and consequently e-mail, social media, phone and banking services - services we now take for granted.
3. *Submarine power cables* can be as wide as 300 mm and are made out of copper or aluminium, insulation (usually made of mass impregnated paper or XLPE), a water-blocking sheath and armour.<sup>2</sup> Submarine power cables are increasingly being utilized in areas under national jurisdiction driven by the liberalisation of the world’s power markets.<sup>3</sup>
4. *Submarine cables are different from submarine pipelines which* are usually made of steel and consist of two primary categories.<sup>4</sup> First, there are the ‘intra-field’ pipelines which connect two or more installations within a single field or deposit and are considered part of an installation. Second, there are the cross-border pipelines which usually cross jurisdictions.<sup>5</sup> The use of submarine pipelines is also increasing as they are considered the most reliable way to transport large volumes of oil and gas internationally.<sup>6</sup>

### INTERNATIONAL LEGAL FRAMEWORK GOVERNING SUBMARINE CABLES AND PIPELINES

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<sup>1</sup> General Assembly Res. 65/37A, para. 112, U.N. Doc. A/RES/65/37A (Dec. 7, 2010).

<sup>2</sup> *Thomas Worzyk*, *Submarine Power Cables: Design, Installation, Repair, Environmental Aspects* 9 – 11 (2009).

<sup>3</sup> Amanda Hoel, *HVDC Systems Gotland: the HVDC Pioneer*, POWER ENGINEERING INTERNATIONAL (July 1 2004), <http://www.powerengineeringint.com/articles/print/volume-12/issue-7/features/hvdc-systems-gotland-the-hvdc-pioneer.html>

<sup>4</sup> See generally Sergei Vinogradov, *Challenges of Nord Stream: Streamlining International Legal Frameworks and Regimes for Submarine Pipelines* 52 GERMAN Y.B. INT’L L. 241 (2009).

<sup>5</sup> *Id.*, 275.

<sup>6</sup> *Id.*

5. The international legal regime governing submarine cables and pipelines consists of a patchwork of different conventions such as the (1) the 1884 Convention; (2) 1958 Geneva Convention on the High Seas;<sup>7</sup> (3) the 1958 Convention on the Continental Shelf;<sup>8</sup> (4) the 1972 International Regulations for Preventing Collisions at Sea (COLREGS); and (5) 1982 United Nations Convention on the Law of Sea (UNCLOS).<sup>9</sup> The 1884 Cable Convention is a stand-alone convention dealing solely with the protection of submarine telegraph cables, and applies now to submarine communications cables. The 1972 COLREGS contain rules on the navigation of cable and pipeline laying and repair ships so as to prevent interference from other ships. The 1958 Geneva Conventions and UNCLOS are broad-based law of the sea conventions which address both the protection of submarine cables (based on specific provisions of the 1884 Cable Convention) and the freedom to survey cable and pipelines routes, lay and repair cables and pipelines.
6. UNCLOS is the most comprehensive of all the aforementioned treaties and is the treaty with the most number of ratifications,<sup>10</sup> and is consequently considered the applicable international legal regime governing submarine cables and pipelines. UNCLOS places certain rights and obligations on States depending on the maritime zone in which the cable or pipeline-related activity is taking place.
7. In the high seas, Articles 113 – 115 of UNCLOS place obligations on States Parties to protect submarine cables and pipelines, including the obligation to adopt the laws and regulations necessary to provide that the breaking or injury of a submarine cable or pipeline beneath the high seas done wilfully or through culpable negligence by a ship flying its flag or by a person subject to its jurisdiction shall be a punishable offence. Article 87 (1) (c) and 112 of UNCLOS essentially recognizes that all States have the freedom to lay submarine cables and pipelines. This right is not unlimited however and is subject to the obligation to exercise due regard for the interests of other States in the high seas; due regard for activities in the Area; and due regard for cables and pipelines already in position, in particular ensuring that possibilities of repairing existing cables or pipelines shall not be prejudiced.<sup>11</sup> Similar rights and obligations apply to submarine telecommunication cables laid in the Area, i.e. the seabed seaward of the outer limit of the continental shelf.<sup>12</sup>
8. In the EEZ and the continental shelf, the freedom to lay submarine cables and pipelines is affirmed under Articles 58 and 79 of UNCLOS but has been modified to take into account the interests and rights of coastal States and non-coastal States in these maritime zones,<sup>13</sup> including the obligation to exercise due regard with respect to the rights and duties of the coastal State in these maritime zones;<sup>14</sup> and due regard to cables or pipelines already in position ensuring that the possibility to repair existing cables or

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<sup>7</sup> 1958 Convention on the High Seas, adopted 29 April 1958, 450 UNTS 11 (entered into force 30 September 1962).

<sup>8</sup> 1958 Convention on the Continental Shelf, adopted 29 April 1958, 499 UNTS 311 (entered into force 10 June 1964).

<sup>9</sup> United Nations Convention on the Law of the Sea, adopted 10 December 1982, 1833 UNTS 397 (entered into force 16 November 1994) (UNCLOS).

<sup>10</sup> UNCLOS presently has 168 State Parties.

<sup>11</sup> Article 87 (2), Article 112, UNCLOS.

<sup>12</sup> Articles 1(1), 138 and 147, UNCLOS.

<sup>13</sup> See generally, Articles 56, 58, and 79 of UNCLOS.

<sup>14</sup> Article 56, UNCLOS.

pipelines is not prejudiced. In addition, with regard to *submarine cables*, States conducting cable operations must comply with reasonable measures for the exploration of the continental shelf and exploitation of its natural resources (provided that such reasonable measures do not include the delineation of the course of the cable route).<sup>15</sup> Last, with regard to *submarine pipelines*, States conducting pipeline operations must comply with reasonable measures for the exploration and exploitation of the continental shelf; the prevention, reduction and control of pollution from pipelines; as well as consent requirements for the delineation of the course for laying of such pipelines on the continental shelf imposed by the coastal State.<sup>16</sup>

9. Pursuant to their sovereignty over territorial seas,<sup>17</sup> archipelagic waters<sup>18</sup> and straits used for international navigation,<sup>19</sup> coastal States, archipelagic States and strait States clearly have extensive authority to regulate ships engaged in cable operations. Coastal States also have the authority to protect submarine cables and pipelines in general, and can regulate innocent passage in order to protect submarine cables and pipelines,<sup>20</sup> but there is no obligation to do so. With regard to archipelagic waters, there is an express obligation on archipelagic States to “respect existing submarine cables laid by other States and passing through its waters without making a landfall,” and to permit maintenance and replacement of such cables upon receiving due notice.<sup>21</sup>
10. In addition to UNCLOS, submarine pipelines may also be subject to bilateral international agreements for specific pipelines (see for example, the variety of bilateral agreements that exist in the North Sea),<sup>22</sup> as well as multilateral agreements which govern the transit of energy materials and products such as the 1994 Energy Charter Treaty.

## ESTABLISHMENT OF AN ILA COMMITTEE ON SUBMARINE CABLES AND PIPELINES

### Rationale

11. The international legal regime governing cables and pipelines was drafted at a time when the legal regime established by UNCLOS (and other conventions), as well as the implementation by States of rights and obligations related to cables / pipelines is inadequate to address the myriad of challenges that States and cable / pipeline

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<sup>15</sup> See Article 79 (2), read with Article 79 (3) which only states that the delineation of the course for the laying of pipelines is subject to the consent of the coastal State.

<sup>16</sup> See Article 79 (2), 79 (3), UNCLOS.

<sup>17</sup> Part II, UNCLOS.

<sup>18</sup> Part IV, UNCLOS.

<sup>19</sup> Part III, UNCLOS.

<sup>20</sup> Article 21 (1) (c), UNCLOS.

<sup>21</sup> Article 51(2) UNCLOS. This provision was first introduced at the negotiations of the Third UN Conference on the Law of the Sea to take into consideration the concerns of States that the introduction of the concept of an archipelagic State would unduly hinder access to existing submarine cables in waters previously not under the sovereignty of States. It only applies to existing cables, and the laying of new cables is dependent on the consent of the archipelagic State.

<sup>22</sup> See Sergei Vinogradov and Gocke Mete, *Cross-Border and Gas Pipelines in International Law*, 56 GERMAN Y.B. INT'L L. 1, 3 – 5 (2013). See for example, Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway relating to the Transmission of Petroleum by Pipeline from the Ekofisk Field and Neighboring Areas to the United Kingdom, 22 May 1973, 885 UNTS 63.

companies face in the regulation and development of policies relating to submarine cables and pipelines, particularly given their extensive use. These challenges include:

- *Competing Activities:* The laying, repair and maintenance of submarine cables and pipelines have to be increasingly balanced with other activities such as shipping, fishing, oil and gas activities, seabed mining, and other new emerging uses of the oceans. Questions arise as to whether the due regard obligation<sup>23</sup> and the obligation not to cause unjustifiable interference<sup>24</sup> can be operationalized so as to give clear guidance on the principles and procedures that should be applicable in cases of conflicts.
- *Increasing Regulation of Cable & Pipeline Activities:* States are increasingly imposing regulations on submarine cables and pipelines which may not be consistent with the freedom to lay such cables in the continental shelf and EEZ. This raises questions on the legal grounds for such regulations, in particular, what are the parameters of the coastal State's authority to impose "reasonable measures for the exploration of the continental shelf and exploitation of its natural resources" and "reasonable measures for the prevention, reduction and control of pollution from pipelines," in the EEZ and continental shelf.
- *Interaction between Submarine Cables & Pipelines and the Marine Environment and Biodiversity:* Submarine cables and pipelines are increasingly being scrutinized by national and international regulators alike on their impact on the marine environment and biodiversity. There is a lack of clarity and agreement on the extent to which cables and pipelines can be subject to environmental regulations. In particular, this issue has come to the forefront at the negotiations for an internationally legally binding instrument on the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction as to whether environmental impact assessments should be required before cables and pipelines are laid or repaired in the high seas and Area. Similar issues are also raised in relation to the extent to which marine protected areas can restrict the laying and repair of cables and pipelines.
- *The Protection of Submarine Cables & Pipelines:* Submarine cables and pipelines are laid on the seabed and are vulnerable to a host of threats including fishing and shipping activity as well as natural hazards such as earthquakes. Further, since 9/11, there has been an increased concern that submarine cables and pipelines and related infrastructure (such as cable lading stations) are vulnerable to intentional interference by both State and non-State actors which can consist of either direct physical interference or virtual interference where network managements systems used by cable industries to operate cables can be hacked and data traffic diverted and disrupted. The applicable law on the protection of submarine cables and pipelines from both accidental damage (for example, through fishing and shipping) and intentional damage is a fragmented and patchwork collection of treaty provisions, customary international law, and

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<sup>23</sup> While the 'due regard' obligation is not expressly used in the territorial sea, it is applicable in the EEZ/continental shelf in relation to balancing the freedoms of all States recognized in the EEZ and coastal State rights (Article 58 (2), UNCLOS). The due regard obligation is also applicable in the high seas and the Area in relation to balancing competing freedoms of the sea and such freedoms with activities in the Area (Article 87 (2), UNCLOS).

<sup>24</sup> See Article 77 (2), UNCLOS.

national implementation, which arguably do not provide adequate protection for critical infrastructure such as cables and pipelines. Given the vital importance of both submarine cables and pipelines, the question is how current international frameworks for protection and national implementation of such frameworks can be improved.

The problems above are compounded by the fact that cables and pipelines are not registered in any State and are laid by private corporate entities. This means that they often do not have a State champion, nor do they have an international organization responsible for cables and pipelines. The International Cable Protection Committee (ICPC) is the only organization dealing with submarine cables. It is an organization, created in 1958, of submarine cable owners, submarine cable maintenance authorities, cable ship operators, submarine cable route survey companies, and governments. It was created to be the premier private international submarine cable authority providing leadership and guidance on issues related to submarine cable planning, installation, operation, maintenance, protection and retirement. It currently has 172 members from over 60 countries. However, it is not an intergovernmental organization having status under international law.

12. In light of these deficiencies in the international law on the regulation of submarine cables and pipelines, it is proposed that a new ILA committee be established to study international law and practice governing submarine cables and as necessary, pipelines, with the overall objective of identifying uncertainties and gaps in its application and implementation, and proposals to improve the situation, including whether a new or updated international legal framework is necessary to govern this critical infrastructure.

## **Mandate**

13. While the principal focus of the Committee will be on cables, the mandate of the Committee will be specified after discussion with the Committee Members. Initially, the Committee will identify the existing law on submarine cables and pipelines and assess whether there is a need for further clarification or development of the law. The Committee could examine:
  - The meaning and practical implications of the due regard obligation in relation to balancing competing activities and the laying and repair of cables and pipelines;
  - The extent to which UNCLOS permits marine environmental obligations to restrict freedoms to lay cables and pipelines;
  - Whether international regulation of submarine communications cables, power cables and pipelines warrant different treatment beyond that set out in UNCLOS;
  - The implications of the fact that private entities are laying cables and pipelines rather than States, although States are the actors which have been granted these rights;
  - The interaction between the agreements governing specific cables and pipelines and international law;

- The identification of the gaps in the protection of cables and pipelines which would include a study of the applicable bodies of law; the interaction with laws of war, the developing international law on cyber-attacks, the terrorism conventions, and whether a new international legal framework is necessary, and how national implementation could be improved.

### **Outcome**

14. The outcome would be a Final Report setting out existing law, highlighting gaps and setting out specific recommendations on how the international legal framework governing submarine cables, and, as necessary, pipelines should be improved.

### **Plan of Work & Provisional Timeline**

15. The proposed duration of the Committee is four years. The precise plan of work would be decided once a Committee is formed and Committee Members have the opportunity to contribute their own ideas. An initial phase would be to identify with greater precision the existing legal regime and perceived deficiencies leading to an initial report prior to the ILA Conference in Kyoto in August 2020.