TRANSBOUNDARY TRANSIT PIPELINES: REFLECTIONS ON THE BALANCING OF RIGHTS AND INTERESTS IN LIGHT OF THE NORD STREAM PROJECT

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Abstract The Nord Stream project, which comprises two natural gas pipelines in the Baltic Sea, eminently illustrates several of the ambiguities that pertain to the ability of coastal States to regulate the laying and operation of transit pipelines in their exclusive economic zone and, conversely, the extent of the right of other States to carry out such activities. A highly significant issue is how seabed surveys undertaken in preparation for the laying of pipelines should be characterized, and thus regulated, under the United Nations Convention on the Law of the Sea. What is to be considered a 'reasonable measure' by a coastal State is another crucial issue which, together with the extent of the requirement for consent by the coastal State for any specific pipeline route, are decisive for defining the balance between potentially competing interests relating to submarine transit pipelines.

Keywords: marine scientific research, Nord Stream, seabed surveys, submarine pipelines, transit pipelines, UNCLOS.

I. BACKGROUND

Submarine pipelines play a pivotal role in the energy infrastructure of many States and regions. It is not uncommon for them to cross international borders. Important examples include those pipelines that connect production facilities on one State's continental shelf (CS) with the oil and gas markets of other States,¹ and those that connect land-based production facilities or grids to markets in other States.² In addition to existing pipelines there are a number of projects involving submarine pipelines which are currently in the planning or construction stages. These include the Trans-Caspian Gas Pipeline, which is to connect Turkmenistan with Azerbaijan through the Caspian See, and the high-profile South Stream, intended to transport gas from southern Russia through the Black Sea to Bulgaria and on to Greece, Italy and Austria. If carbon capture and

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¹ eg Norpipe and Europipe I, which both transport gas from the Norwegian CS to Germany.
² eg the Turkey–Greece gas pipeline and the Trans-Mediterranean Pipeline, the latter of

which—in its submarine part—connects Tunisia to Sicily and then to mainland Italy.

storage/sequestration (CCS)³ emerges as a large-scale climate change mitigation technology demand for submarine gas pipelines is likely to increase further.⁴

Experience shows that the laying and operation of submarine pipelines are not only technically demanding but can also be quite challenging from a political perspective. In addition there are inevitable legal dimensions of varying complexity. The most intricate from an international law point of view are those pipelines that connect the territories or maritime zones of two States but which, in doing so, pass through maritime zones of third States, ie transit pipelines. A pertinent and much discussed example is the Nord Stream pipeline project in the Baltic Sea, with pipelines that traverse the maritime zones of Finland and Sweden without entering their territories. While the original two pipelines are already operational the legal dimensions of pipeline laying have again been raised as a result of the decision in 2011 of Nord Stream AG, the company owning and operating the Nord Stream pipeline, to pursue the building of further gas pipelines through the Baltic Sea.

The main purpose of the present article is to contribute to the discussion concerning what rights coastal States have with respect to the laying and operation of transit pipelines in their exclusive economic zone (EEZ) and, conversely, the extent of other States' rights to lay and operate such pipelines. The division of competence regarding transit pipelines under international law is currently ambiguous. The analysis draws on the recent Nord Stream project to identify issues that pose particular challenges to the international legal framework for submarine pipelines, foremost in the form of the United Nations Convention on the Law of the Sea (UNCLOS). The project was politically controversial and met with significant opposition. However, the political dimensions will only be touched upon here in order to provide a context for the ensuing legal analysis. One international law dimension, namely that relating to environmental impact assessments (EIA) in a transboundary context, has been well discussed

- ³ CCS denotes a set of techniques and methods that allows CO₂ generated by combustion to be sequestered and thus prevented from reaching the atmosphere. See generally B Metz and others (eds), *IPCC Special Report on Carbon Dioxide Capture and Storage*, prepared by Working Group III of the Intergovernmental Panel on Climate Change (CUP 2005).
- ⁴ On pipelines for transport of carbon dioxide see ibid 29–31. Such a development would entail a need to employ industrial sized transport networks for pressurized carbon dioxide, often in a transboundary setting.
- ⁵ On the technical aspects see generally TO Miesner and WL Leffler, *Oil & Gas Pipelines in Nontechnical Language* (PennWell Books 2006). The political dimensions will be briefly addressed below.
- ⁶ See eg MM Roggenkamp, 'Petroleum Pipelines in the North Sea: Questions of Jurisdiction and Practical Status' (1998) 16 JERL 92, 95.
- ⁷ For the exact route of the Nord Stream pipelines see https://www.nord-stream.com/press-info/ images/european-gas-pipeline-system-2915/?q=&category=115&year=all&page=5&per_page=12>.
- ⁸ J Crowley, 'International and Coastal State Control over the Laying of Submarine Pipelines on the Continental Shelf The Ekofisk-Emden Gas Pipeline' (1987) 56 NordJIntlL 39, 40. A similar conclusion is drawn in Roggenkamp (n 6) 106.
- ⁹ United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 397 (UNCLOS).
- Regarding the different points of criticism directed towards the project see D Langlet, 'Nord Stream, the Environment and the Law: Disentangling a Multijurisdictional Energy Project' (2014) 59 ScandStudL 80.

elsewhere and will not be dealt with here. 11 Since this article deals with transit pipelines the rights of coastal States to regulate pipelines that enter their territorial waters will also not be discussed. The same applies to the regulation of pipelines that are constructed or used in connection with the exploration of a coastal State's own CS or exploitation of its resources or the operation of artificial islands, installations and structures under the coastal State's jurisdiction.12

II. THE NORD STREAM PROJECT

A. The Pipeline and the Company

The Nord Stream is a prime example of how pipelines can have significant transboundary implications. The submarine pipelines originate in the Vyborg area in Russia, then pass through the EEZs of Finland and Sweden before entering not only the EEZ but also the territorial waters of Denmark before finally landing in Lubmin, near Greifswald, in Germany. Despite initial plans for an intermediate compressor station in the Swedish EEZ, the final design allows the pipelines to operate without such an installation.13

The project comprises two parallel gas pipelines that have the combined capacity to transport 55 bcm of natural gas from Russia to Germany annually. The first pipeline started operating in November 2011, the second in October 2012.

The pipelines are owned and operated by Nord Stream AG, an international joint venture established for the planning, construction and operation of the pipelines. The ownership of the company is divided between Russian OAO Gazprom (51 per cent), German companies BASF SE/Wintershall Holding GmbH and E.ON Ruhrgas AG (15.5 per cent each), the Dutch gas infrastructure company N.V. Nederlandse Gasunie and the French energy company GDF SUEZ S.A. (9 per cent each).¹⁴

Nord Stream AG was incorporated in 2005 and is based in Zug, Switzerland, where the control centre from which the pipelines are monitored and operated is situated. It follows from this, in line with the reasoning of the International Court of Justice (ICJ) in

¹¹ See T Koivurova and I Pölönen, 'Transboundary Environmental Impact Assessment in the Case of the Baltic Sea Gas Pipeline' (2010) 25 IJMCL 151-81. See also S Wolf, Unterseeische Rohrleitungen und Meeresumweltschutz: Eine völkerrechtliche Untersuchung am Beispiel der Ostsee (Springer 2011) 323ff.

Such pipelines are generally exempted from the limitations of the coastal State's jurisdiction that are discussed in this article by UNCLOS (n 9) art 79(4), which holds that '[n]othing in this Part affects the right of the coastal State to establish conditions for cables or pipelines entering its territory or territorial sea, or its jurisdiction over cables and pipelines constructed or used in connection with the exploration of its continental shelf or exploitation of its resources or the operations of artificial islands, installations and structures under its jurisdiction'. Although the coastal State does not have jurisdiction over those parts of the pipeline that are outside its territory it nonetheless enjoys considerable influence on pipelines that enter its territory or territorial sea since the design and technical details are the same for the whole pipeline. R Lagoni, 'Cable and Pipeline Surveys at Sea' in HP Hestermeyer et al (eds), Coexistence, Cooperation and Solidarity: Liber Amicorum Rüdiger Wolfrum, vol 1 (Brill 2012) 933, 949.

¹³ The gas travels the full distance thanks to pressures of up to 220 bar generated by a landbased compressor station in Portovaya, Russia. General Background Paper on Nord Stream (5 November 2012) 5 https://www.nord-stream.com/press-info/library/.

14 Who We Are at https://www.nord-stream.com/about-us/.

the *Barcelona Traction Case*¹⁵ that Nord Stream AG is to be regarded as a national of Switzerland and subject to Swiss jurisdiction in accordance with the nationality principle. It also enables Switzerland to exercise diplomatic protection with respect to the company. Although establishing the nationality of a company for the purpose of diplomatic protection is not an entirely straightforward operation there should be little doubt that incorporation, headquarters and technical operation centre in Switzerland suffices to establish a requisite connection. Is

It may be noted that Switzerland became a party to UNCLOS in May 2009, just a few months before Denmark, Finland and Sweden decided on Nord Stream AG's permit applications regarding routes on their respective CS. UNCLOS was thus, by a close margin, applicable and any discussion on whether relevant provisions of the Convention would be applicable as customary law became superfluous. That all concerned States were Parties to UNCLOS also precluded application of the 1958 Convention on the Continental Shelf since UNCLOS prevails, as between States Parties, over the 1958 Geneva Conventions on the Law of the Sea. 19

B. The Pipeline in Context

The Nord Stream project is fundamentally about connecting Western European consumers with Russian natural gas fields. This is reflected in the inclusion of the Nord Stream project on the European Union (EU) list of Trans-European Energy Network Guidelines (TEN-E) and its designation as a 'project of European interest'. ²⁰

It has been questioned whether a pipeline project with Nord Stream's capacity can indeed be motivated purely by the need for physical distribution capacity.²¹ This is not the place for a discussion on the economic and political rational of the project.²² With respect to the particular offshore route chosen one must, however, consider that the existing land-based gas pipelines connecting Russia with Western European gas

¹⁵ Barcelona Traction, Light & Power Co Ltd (Belg v Spain), Second Phase, ICJ Reports (1970) 3

¹⁶ Roggenkamp (n 6) 98. The Finnish Government's decision regarding the laying of the pipeline in the Finnish EEZ explicitly refers to Switzerland as the applicant's domicile and notes that the country is party to UNCLOS. *Consent to Exploit Finland's Exclusive Economic Zone* (5 November 2009) 678/601/2009 (unofficial translation provided by the Ministry of Employment and the Economy) 22 http://www.envir.ee/orb.aw/class=file/action=preview/id=1105159/Soome_val_luba_NS.pdf.

¹⁷ For a definition of diplomatic protection see *ILC's: Articles on Diplomatic Protection*, annexed to GA Res 62/67 6 December 2007, art 1.

¹⁸ See on this matter J Crawford, Brownlie's Principles of Public International Law (8th edn, OUP 2012) 527.

¹⁹ UNCLOS (n 9) art 311. Convention on the Continental Shelf (adopted 29 April 1958, entered into force 10 June 1964) 499 UNTS 311.

²⁰ Decision No 1364/2006/EC laying down guidelines for trans-European energy networks and repealing Decision 96/391/EC and Decision No 1229/2003/EC, OJ 2006 L 262/1, art 8. A main priority for the EU with respect to trans-European gas networks is to develop natural gas networks in order to meet the EU's natural gas consumption needs and to control its natural gas supply systems. Ibid art 4(3).

See eg B Solum Whist, Nord Stream: Not Just a Pipeline (FNI Report 15/2008, 2008) ch 4.
 See instead R Götz, 'The Nord Stream Pipeline: The Energy Policy Background' (2009) 52
 GYIL 233; S Vinogradov, 'Challenges of Nord Stream: Streamlining International Legal Frameworks and Regimes for Submarine Pipelines' (2009) 52 GYIL 241; and Solum Whist (n 21).

markets have been affected by repeated controversies between Russia and transit States.²³ Nord Stream AG itself has held that:

The new pipelines provide a competitive additional option through which gas from Russia's reserves can be supplied to European customers. It is a state-of-the-art, high-quality pipeline with no intermediate compressor stations and subject to fewer taxes and transit fees, as most of its route is in the high seas [sic!] beyond territorial waters.²⁴

Even more frankly, Nord Stream AG has later asserted that the Nord Stream pipeline system and its planned extension offer a natural gas connection 'free from non-technical risks and free of interference of a commercial or non-commercial nature by third parties'.²⁵

A main attraction with a sea-based solution is hence that it largely avoids the jurisdiction that may be exercised by transit States. Maintaining an excess capacity in the regional distribution system may also strengthen the hands of natural gas exporters vis-à-vis transit States.²⁶

The project has had strong backing by the German and Russian Governments while being viewed much less favourably by several States affected either by the physical presence of the pipelines or by the change in control over gas distribution which the project entails.²⁷ The explanatory value of this economic and political context should not be disregarded when studying the application of relevant provisions of international law by the States concerned. But it obviously does not relieve States from the obligation to comply with applicable international agreements in good faith.²⁸

The Nord Stream project stands out from most other international submarine pipeline projects by not being governed by any agreement between the States concerned, including the so-called sending and receiving (Russia and Germany) States.²⁹ Accordingly, there is no specific regulation of, inter alia, the operation of the pipeline, the settlement of any disputes that may arise, or specifying how jurisdiction is to be

²³ See eg *Russia Shuts off Gas to Ukraine*, BBC NEWS (1 January 2009) http://news.bbc.co.uk/2/hi/europe/7806870.stm>.

²⁴ General Background Paper on Nord Stream (November 2013) 4 https://www.nord-stream.com/press-info/library/?pk=10.

com/press-info/library/?pk=10>.

25 Nord Stream Extension Project Information Document (PID), March 2013, Document No N-GE-PER-REP-000-PID00000-A, 15.

²⁶ Götz (n 22) 238. The EU Commission has also referred to the desirability of diversification of energy supply routes. EU Commission, Green paper: 'A European Strategy for Sustainable, Competitive and Secure Energy' (8 March 2006), COM(2006) 105 final, 18.

²⁷ Solum Whist (n 21) 18ff; Wolf (n 11) 55ff. The then Polish defence minister Sikorski even held in 2006 that the project echoed the 1939 Molotov–Ribbentrop Pact. *Nord Stream 'a Waste of Money'*, *says Poland*, EURACTIV (11 January 2010, updated 31 August 2011) http://www.euractiv.com/energy/nord-stream-waste-money-poland/article-188727.

²⁸ Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331, art 26.

²⁹ C Redgwell, 'Contractual and Treaty Arrangements Supporting Large European Transboundary Pipeline Projects: Can Adequate Human Rights and Environmental Protection Be Secured?' in MM Roggenkamp et al (eds), *Energy Networks and the Law: Innovative Solutions in Changing Markets* (OUP 2012) 111. This may be compared to oil and gas pipelines in the North Sea, which are mostly subject to bilateral treaties between 'sending' and 'receiving' States. Roggenkamp (n 6) 100. See, as an example, the 1973 Agreement Relating to the Transmission of Petroleum by Pipeline from the Ekofisk Field and Neighbouring Areas to the United Kingdom (1973 Ekofisk Treaty).

exercised beyond the territorial seas. Instead pertinent multilateral agreements and general international law apply.³⁰

III. LEGAL PREMISES

A. The High Seas

In the Baltic Sea, as in eg the North Sea and the Black Sea, there are no high seas. The EEZ and the CS are therefore the jurisdictional zones of foremost interest. But since the right to lay submarine pipelines in these zones is historically and functionally linked to the rules governing the high seas a brief look at some core legal features of that latter area is called for initially.

According to UNCLOS the so-called freedom of the high seas comprises, inter alia, the freedom to lay submarine pipelines and cables.³¹ More specifically this means that beyond the CS all States are entitled to lay submarine cables and pipelines on the bed of the high seas.³² This freedom also applies on the CS when this stretches under the high seas but it is then subject to rules on the CS in UNCLOS Part VI.³³ Part VII of UNCLOS on the high seas contains rules on breaking or injury of submarine cables or pipelines,³⁴ and on indemnity for loss incurred in avoiding injury to a submarine cable or pipeline.³⁵ These provisions are also applicable in the EEZ in so far as they are not incompatible with specific rules governing that zone.³⁶

B. The Exclusive Economic Zone

Turning now to the EEZ, defined as an area beyond and adjacent to the territorial sea,³⁷ it must initially be noted that it is subject to the specific legal regime established in Part V of UNCLOS. The EEZ, which may stretch a maximum of 200 nautical miles from the baseline,³⁸ has to be claimed by the coastal State. All the coastal States affected by the laying of the Nord Stream pipelines have claimed an EEZ.

In the EEZ the coastal State enjoys sovereign rights for the purpose of exploring and exploiting, conserving and managing the living as well as non-living natural resources. This applies to the waters superjacent to the seabed as well as to the seabed and its subsoil. The coastal State also has sovereign rights with regard to other activities for the economic exploitation and exploration of the zone.³⁹ Furthermore, and of particular significance for the present analysis, the coastal State has jurisdiction, as provided for in relevant provisions of UNCLOS, with regard to the protection and preservation of the marine environment; marine scientific research; and the establishment and use of

or pipelines already in position.

34 ibid arts 113–14.
35 ibid art 115.
36 ibid art 58(2).

³⁰ On the application of general principles of jurisdiction to submarine pipelines, see Roggenkamp (n 6) 96ff.

³¹ UNCLOS (n 9) art 87(1).

³² ibid art 112.

³³ ibid art 87(1). Even pipelines that are laid on the bed of the high seas beyond the CS are subject to one provision of Part VI, namely the requirement of art 79(5) to have due regard to cables

³⁷ Where geography allows the coastal State may claim a territorial sea that stretches 12 nm from the baseline. Here the coastal State in most respects exercises sovereignty in a way similar to what applies on its land territory. ibid arts 2–3.

ibid art 57. For a definition of 'baseline' see ibid, arts 5 and 7.

³⁹ ibid art 56(1)(a).

artificial islands, installations and structures. 40 Pipelines are not, however, installations or structures in this regard.⁴¹ They are instead subject to a distinct regulatory regime.

In the EEZ all States, and indirectly their citizens, ⁴² enjoy, with some exceptions and subject to UNCLOS, the freedom of the high seas. With respect to the EEZ this freedom comprises, inter alia, freedom of navigation and overflight and of the laying of submarine cables and pipelines, but also other internationally lawful uses of the sea related to these freedoms, such as those associated with the operation of ships, aircraft and submarine cables and pipelines. The activities carried out under this freedom must be compatible with other relevant provisions of UNCLOS.⁴³

C. The Continental Shelf

Pipelines are normally laid on the seabed, which, at least within 200 nautical miles from the baseline, 44 forms part of the CS. 45 Unlike the EEZ the CS does not have to be claimed but exists ipso facto and ab initio. 46 Since the CS extends seawards from the territorial sea the bottom of the EEZ will also by definition be the CS of the coastal State.⁴⁷ Without affecting the legal status of the superjacent waters, the coastal State exercises sovereign rights over the CS for the purpose of exploring it and exploiting its natural resources.48

According to UNCLOS, Article 79(1), all States are entitled to lay submarine cables and pipelines on the CS. Subject to its right to take reasonable measures for the exploration of the CS, the exploitation of its natural resources and the prevention, reduction and control of pollution from pipelines, the coastal State may not impede the laying or maintenance of such cables or pipelines.⁴⁹

This is in fact an expanded version of Article 4 of the 1958 Convention on the Continental Shelf.⁵⁰ Under that article a coastal State 'may not impede the laying or maintenance of submarine cables or pipelines on the continental shelf'. However, the

41 R Lagoni, 'Pipelines' in R Wolfrum (ed), Max Planck Encyclopedia of Public International Law (e-resource, OUP 2008, updated April 2011) para 10; Wolf (n 11) 191.

⁴² The freedom pertains to States, not individuals. But in practice the activities covered by the freedom of the high seas are overwhelmingly exercised by private parties. W Wiese, Grenzüberschreitende Landrohrleitungen und Seeverlegte Rohrleitungen im Völkerrecht ⁴³ UNCLOS (n 9) art 58(1). (1997) 210.

⁴⁴ There are two types of baselines, normal and straight, which are defined in ibid, arts 5 and 7, respectively.

In legal terms the CS of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance. ibid art 76 (1). The CS may extend even further under certain conditions which, however, are beyond the preview of this analysis.

⁴⁶ ibid art 77(3). In the words of the ICJ the CS is an 'inherent right'. North Sea Continental Shelf Cases (FRG/Den; FRG/Neth), ICJ Reports (1969) 3, para 19.

As the ICJ has succinctly noted: 'Although there can be a continental shelf where there is no exclusive economic zone, there cannot be all exclusive economic zone, there exclusive economic zone, and exclusive economic zone, are exclusive economic zone, and exclusive economic zone, are exclusive economic zone, and exclusive economic zone, are exclusive economic zone, there cannot be an exclusive economic zone without a corresponding

50 LDM Nelson, 'Submarine Cables and Pipelines' in RJ Dupuy and D Vignes (eds), A Handbook on the New Law of the Sea, vol 2 (Springer 1991) 977, 984.

⁴⁰ ibid art 56(1)(b).

article also provides for a right to take 'reasonable measures for the exploration of the continental shelf and the exploitation of its natural resources'. Compared to the 1958 Convention UNCLOS Article 79 more clearly affirms that there is a right for all States to lay submarine pipelines. It also adds an additional ground for 'reasonable measures' taken by the coastal State, namely 'prevention, reduction and control of pollution from pipelines'. Most significant, however, is the addition of a requirement for consent by the coastal State regarding the delineation of submarine pipelines in Article 79(3). It holds that '[t]he delineation of the course for the laying of such pipelines on the continental shelf is subject to the consent of the coastal State'.

D. The Exclusive Economic Zone and the Continental Shelf

As has been seen above, the laying of pipelines is regulated through the legal regimes for both the EEZ and the CS. What then is the effect of these areas in effect overlapping? The relationship between the legal regimes for the CS and that for the EEZ has been subject to extensive discussion.⁵¹ Since the regime for the CS predates that of the EEZ —which was fully recognized only by the adoption of UNCLOS in 1982—it has been argued that the latter would absorb the former.⁵² It has also, however, been eloquently argued that the better view is that the two regimes exist in parallel.⁵³ If they are to be regarded as distinct they are undoubtedly inextricably linked.⁵⁴ When addressing practical issues of jurisdiction relating to the seabed regard must be had to the totality of the two regimes, but also to the specific provisions that balance or establish a hierarchy with respect to certain activities. Importantly, UNCLOS Article 56, in the part on the EEZ, stipulates that the coastal State's rights to exercise jurisdiction in relation, inter alia, to the protection and preservation of the marine environment shall, with respect to the seabed and subsoil, be exercised in accordance with Part VI, ie the specific regime for the CS.

IV. THE RIGHT TO LAY SUBMARINE PIPELINES

A. WHAT RIGHT?

UNCLOS does not apply a consistent terminology when defining the right to lay submarine pipelines.⁵⁵ Article 87(1), in Part VII on the high seas, refers only to the 'freedom to lay' submarine cables and pipelines. With respect to the EEZ Article 58(1) talks of the 'laying of submarine cables and pipelines' but also of other internationally lawful uses of the sea such as those associated with 'the operation of ... submarine

⁵¹ The main arguments are accounted for in B Kwiatkowska, *The 200-Mile Exclusive Economic Zone in the New Law of the Sea* (Martinus Nijhoff 1989) 6ff.

⁵² DJ Attard, Exclusive Economic Zone in International Law (OUP 1987) 138; F Orrego Vicuña, The Exclusive Economic Zone: Regime and Legal Nature under International Law (CUP 1989) 68.

Attard (n 52) 139; Orrego Vicuña (n 52) 70 with further references.

The ICJ concluded already before the entry into force of UNCLOS that 'even though the present case relates only to the delimitation of the continental shelf and not to that of the exclusive economic zone, the principles and rules underlying the latter concept cannot be left out of consideration. As the 1982 Convention demonstrates, the two institutions – continental shelf and exclusive economic zone – are linked together in modern law'. *Continental Shelf* (Libya/Malta), ICJ Reports (1985) 13, para 33.

cables and pipelines'. Article 79(2), in Part VI on the continental shelf, posits that coastal States 'may not impede the laying or maintenance' of such cables or pipelines.

The main difference in how the rights of States other than the coastal State are defined in relation to pipelines is that the right in the EEZ includes uses of the sea associated with 'operation' of pipelines while the CS regime prevents the coastal State from impeding 'maintenance'. Although it is not clear why different language has been chosen for the two articles, there seems to be little if any substantive difference as to what activities are included in the right to lay pipelines. Uses associated with operation necessarily include maintenance since that is a prerequisite for operation over any significant period of time. ⁵⁶ On the other hand, laying and maintenance presupposes operation since those other activities are otherwise void of meaning. ⁵⁷ But how are activities that predate the actual laying of a pipeline, notably surveys of the seabed, to be viewed?

B. Seabed Surveys

The laying of pipelines is preceded by surveys of the seabed. The main purpose of such surveys is to identify a suitable pipeline route. Such a route will, inter alia, minimize the risk for harm to the future pipeline, and indirectly harm to the environment and human activities in the vicinity of the pipeline, and avoid conflicts with other uses of the seabed.⁵⁸ This inevitably raises the question of how surveys of the seabed in preparation of the laying of pipelines relate to the right to lay and operate pipelines?

This issue has gained particular relevance in relation to the Nord Stream project. In September 2007 Estonia rejected an application by Nord Stream AG to carry out a seabed survey, including drilling in the seabed in the Estonian EEZ. The Estonian Government justified its rejection with the fact that the results of drilling work would provide information about Estonia's natural resources and their possible utilization. The decision was not challenged either by the company or by any State. ⁵⁹

In August 2012 Nord Stream AG once more applied for a permit to carry out a survey in the Estonian EEZ, this time prompted by plans to add additional lines to the existing pipelines. Permit was again denied, this time citing the Estonian Economic Zone Act, which stipulates that

assent for research may be refused if the research provides information about the volume of natural resources in Estonia and the possibilities for their use or the research plan provides for drilling on the continental shelf, use of explosive materials, disposal of health damaging agents into the sea, or otherwise endangers the preservation of inorganic or organic natural resources.⁶⁰

The reference to 'research' implies that the Estonian decision is premised on seabed surveys carried out in order to assess the preconditions for the laying of pipelines constituting marine scientific research in the terminology of UNCLOS. The legal regimes for marine scientific research and for the laying and operation of pipelines would thus be functionally overlapping. Since surveys of the seabed are integral to the

Miesner and Leffler (n 5) 136.
 Lagoni (n 12) 933.
 Wiese (n 42) 198; Wolf (n 11) 85 and 104.
 Vinogradov (n 22) 261.

⁶⁰ Cabinet meeting decides to deny Nord Stream AG's request to conduct marine investigations in Estonia's exclusive economic zone, Government Communication Unit (6 December 2012) http://valitsus.ee/et/uudised/pressiteated/majandus-ja-kommunikatsiooniministeerium/73717.

laying of pipelines virtually all submarine pipeline projects would include an element of marine scientific research.⁶¹ This contention necessitates a closer look at the rules on marine scientific research in the EEZ and the CS.

C. Marine Scientific Research

As a general rule all States have a right to conduct marine scientific research, but it is subject to the rights and duties of other States as provided for in UNCLOS. ⁶² In the EEZ and on the CS marine scientific research requires the consent of the coastal State. ⁶³ In normal circumstances coastal States are to grant their consent for marine scientific research projects by other States or competent international organizations in their EEZ or CS. This presupposes that the research be carried out in accordance with UNCLOS, exclusively for peaceful purposes, and in order to increase scientific knowledge of the marine environment for the benefit of all mankind. ⁶⁴ However, in certain circumstances it is within the coastal State's discretion to withhold consent. Of relevance to the present analysis is that such discretion applies, according to UNCLOS Article 246(5), when a marine scientific research project

- (a) is of direct significance for the exploration and exploitation of natural resources, whether living or non-living; [or]
- (b) involves drilling into the continental shelf, the use of explosives or the introduction of harmful substances into the marine environment.

Any seabed survey which either involves drilling or the use of explosives, or which may generate data of direct significance for the exploration and exploitation of natural resources is thus subject to the coastal State's discretion. Whether such a de facto subjection of the pipeline regime to that for marine scientific research can have been intended begs the question.

For this subjection to occur it must be assumed that seabed surveys aimed at the laying of pipelines do in fact constitute marine scientific research. That is not a foregone conclusion. UNCLOS does not provide any definition of 'marine scientific research' and there is uncertainty as to exactly what activities fall within Part XIII regulating such research.⁶⁵ Related notions such as scientific research, exploration, and exploitation also lack a definition in UNCLOS.⁶⁶ As for seabed surveys they are not mentioned at all in UNCLOS and have also received very limited attention in the legal literature.⁶⁷

Several definitions of marine scientific research were discussed during the negotiations of UNCLOS but none met with sufficient support.⁶⁸ The need for a

⁶¹ Except for the technical necessity of surveying the seabed in order to optimise the construction of the pipeline it is also hard to see how a coastal State could dispense with its obligation to protect the marine environment without the knowledge generated by a seabed survey. This obligation is further discussed below.
⁶² UNCLOS (n 9) art 238.

 ⁶³ ibid art 246(2).
 64 ibid art 246(3).
 65 AHA Soons, 'The Legal Regime of Marine Scientific Research: Current Issues' in MH Nordquist et al (eds), Law, Science & Ocean Management (Brill 2007) 139, 151.

M Jacobsson, 'The Sea, Science and the Human Dimension' in D Vidas and PJ Schei (eds),
 The World Ocean in Globalisation (Brill 2011) 53, 59.
 Lagoni (n 12) 936.

⁶⁸ MH Nordquist, S Rosenne and A Yankov (eds), *United Nations Convention on the Law of the Sea 1982: A Commentary*, vol IV (Martinus Nijhoff Publishers 1990), Commentary to article 238, 440ff.

definition was also challenged by the view that the substantive provisions of the Convention establish the intended meaning sufficiently.⁶⁹ Recourse thus needs to be had to the relevant substantive provisions. It is clear from UNCLOS Article 244(1) that knowledge resulting from marine scientific research, as well as the objectives of major proposed research programmes, shall be made available by publication and dissemination through appropriate channels. Furthermore, coastal States shall grant their consent, in normal circumstances, for marine scientific research projects to be carried out on their CS in order to increase scientific knowledge of the marine environment for the benefit of all mankind. 70 These provisions point in the direction of marine scientific research, at least in the EEZ, being characterized by a free flow of results and the contribution to a shared body of scientific knowledge. Seabed surveys have a very different purpose since they are carried out in order to facilitate, or even enable, a specific technical, often commercial, activity. In this sense they resemble exploration of the CS. However, neither surveys nor the actual laying of submarine pipelines typically involves the exploitation of natural resources.⁷¹ This argues against seabed surveys aimed at the laying of pipelines being marine scientific research.

A perhaps more persuasive argument against subsuming these kinds of seabed surveys under the notion of marine scientific research is that it would seriously tilt the balance between coastal States and other States as established by UNCLOS Article 79. As has been seeen above, the consent of the coastal State concerned is not required for the laying of submarine pipelines as such, only for the delineation of the route. Were the seabed surveys necessarily preceding the laying of such pipelines to be considered marine scientific research as defined in UNCLOS Article 246(5) that would be tantamount to subjecting the laying of pipelines to the coastal State's discretion. Such an interpretation is hardly compatible with the delicate balance between the interests of coastal States and other States which Parts V and VI of UNCLOS aim to uphold.⁷² It would also de facto obviate the explicit distinction in Article 79 between the laying of submarine pipelines, which is a right pertaining to all States, and the delineation of the course of such pipelines, which is subject to the consent of the coastal State. If the necessary seabed surveys were typically subject to coastal State consent as marine scientific research under Article 246(5) a coastal State would be free to use this competence to prevent the laying of pipelines.⁷³ And such an act by a coastal State could not be successfully contested since the granting of consent for such marine scientific research projects is explicitly at the discretion of the coastal State. It follows from the general rule of interpretation laid down in the Vienna Convention on the Law of Treaties that treaties should be construed in such a way that a reason and a meaning

⁶⁹ ibid and Soons (n 65) 124.

⁷⁰ UNCLOS (n 9) art 246(3). Italics added here.

⁷¹ Lagoni (n 12) 935ff.

⁷² This balance is evident eg in UNCLOS (n 9) arts 56(2), 58(3), 59, 78(2), 79(2) and 300.

⁷³ For, as Vinogradov notes, without surveys 'the freedom to lay submarine pipelines cannot be realised in principle'. Vinogradov (n 22) 284. Wiese similarly finds that 'Der Kustenstaat kann für die Verlegung einer Rorleitung erforderligen Undersuchungen grundsätzlich nicht verhindern, da dadurch die Verlegung selbst entgegen Art 79 Abs. 1 SRÜ ausgeschlossen werden würde.' ['The coastal State cannot in principle prevent surveys necessary for the laying of a pipeline since that would preclude the laying itself contrary to UNCLOS art 79(1).'] Wiese (n 42) 261.

can be attributed to every part of the text.⁷⁴ This militates against an interpretation which in fact makes the distinction between UNCLOS Article 79(2) and (3) void.

If seabed surveys in preparation of the laying of pipelines were nonetheless to be regarded as marine scientific research, the only way to temper this disruptive expansion of coastal State jurisdiction would be if such surveys were generally to fall outside the conditions of Article 246(5), thus not making the granting of consent subject to full coastal State discretion. However, such a line of reasoning would hardly rectify the problem since it would likely open a Pandora's Box of opposing readings of 'direct significance for the exploration and exploitation of natural resources' and contested claims as to the aims and methods of planned surveys, not to mention the uses to which generated data may be put.

As shown by Lagoni, there are nonetheless several examples of States imposing a permit requirement that seems to cover seabed surveys aimed at establishing the preconditions for laying submarine pipelines.⁷⁵ But there is often little evidence of how these domestic laws, some of which were promulgated before UNCLOS was adopted, are applied in practice. It can therefore not be generally concluded that the States concerned apply the law in a manner that would seem to be inconsistent with UNCLOS, or that a consistent State practice has been established.⁷⁶

D. The Specific Case of Drilling

However, when it comes to drilling on the CS UNCLOS Article 81 is crucial. It grants the coastal State the exclusive right to authorize and regulate drilling on the CS 'for all purposes'. The explicit reference to all purposes, together with the fact that this provision occurs in Part VI on the CS, makes it untenable to hold that drilling related to preparatory work for the laying of pipelines would be excluded from this exclusive right of the coastal State.

E. Concluding Remarks on Seabed Surveys

In light of the above, it may be concluded that Estonia's rejection of Nord Stream AG's application for carrying out a seabed survey was justified to the extent that it was based on the planned survey involving drilling in the seabed. It should also be clear that surveys of the seabed for the purpose of charting the route of a submarine pipeline ought not to be considered marine scientific research and be subject to coastal State consent on that ground. The carrying out of such surveys should rather be seen as an integral part of the laying of submarine pipelines, 77 or, alternatively, as an internationally lawful use of the sea associated with the operation of submarine pipelines, as provided for by UNCLOS, Article 58(1). However this may not be taken as a *carte blanche* for engaging in any kind of activity under the label of seabed surveying. Activities that are not typically necessary for the routing of submarine pipelines and which a coastal State may reasonably consider detrimental to its legitimate interests in the EEZ and the CS should not be seen as intrinsic to the right to lay submarine pipelines.

O Dörr and K Schmalenbach, 'Article 31. General Rule of Interpretation' in O Dörr and K Schmalenbach (eds), Vienna Convention on the Law of Treaties: A Commentary (Springer 2012) 521, 539–40.
 Lagoni (n 12) 936ff.
 Wolf (n 11) 86.

V. GROUNDS FOR COASTAL STATE CONTROL

As noted above, the right to lay and operate submarine pipelines in the EEZ and CS is far from unrestricted. There are two distinct constraints applicable to any pipeline project in these zones. One is the right of the coastal State to take reasonable measures for the exploration of the CS, the exploitation of its natural resources and the prevention, reduction and control of pollution from pipelines.⁷⁹ The other is the necessity to obtain the coastal State's consent for the delineation of the course for the laying of pipelines on the CS.⁸⁰ In addition there is the general obligation, set out in UNCLOS Article 58(3), to have due regard to the rights and duties of the coastal State and to comply with the laws and regulations adopted by that State provided that they are not incompatible with UNCLOS Part V on the EEZ.

In the light of these powers of the coastal State it has been questioned whether the right to lay pipelines on the shelf should actually be termed a 'freedom' considering the accompanying conditions.81 But what level of control over the laying do these provisions actually enable a coastal State to legitimately exercise with respect to a prospective pipeline and any specific route?

Firstly, it must be reiterated that the laying of pipelines is not, per se, subject to coastal State consent despite the fact than some States purport to make the laying rather than the mere delineation—of pipelines, and even cables, subject to a consent requirement.⁸² A provision to this effect was in fact proposed by Denmark at the sixth session (1977) of the Third Law of the Sea Conference.83 This proposition was premised on separate regulation of cables, the laying of which on the CS was to be a right pertaining to all States, and pipelines, which were to be subjected to a coastal State consent requirement.⁸⁴ The Danish proposal did not, however, have any effect on the final wording of what eventually became UNCLOS, Article 79. That a national permit procedure may be put in place by a coastal State follows, however, from the requirement to obtain the consent of the coastal State for the delineation of any submarine pipeline. This gives the coastal State opportunity to assess any proposed project and decide on reasonable measures and delineation.

⁷⁹ UNCLOS (n 9) art 79(2). RR Churchill and AV Lowe, The Law of the Sea (MUP 1999) 174; Kwiatkowska (n 51) 218.

⁸⁰ ibid art 79(3).

⁸² Churchill and Lowe cite Cape Verde and São Tomé e Príncipe. Churchill and Lowe (n 81) 174. A pertinent example, not mentioned by Churchill and Lowe, is the Swedish Continental Shelf Act (1966: 314), which in section 15(a) stipulates that the laying of both submarine cables and pipelines requires a permit. However, the preparatory works to section 15(a) make it clear that the issuing of permits must be compatible with UNCLOS art 79 and that this means that there can be no total rejection of an application to lay cables or pipelines. However, a permit may be denied for a particular proposed route if laying along that route would threaten any of the interests listed in UNCLOS, art 79(2). Proposition 1995/96:140 sida 176 (Government Bill 1995/96:140, 176). On the situation under German law see W Wurmnest, 'The Law Applicable on the Continental Shelf and in the Exclusive Economic Zone: The German Perspective' (2011) 25 Ocean Yearbook

^{311, 328.} ⁶³ 'Denmark: Continental Shelf' (Article 67 RSNT II) [1977], reproduced in R Platzöder (ed), The Third United Nations Conference on the Law of the Sea: Documents, vol IV (Oceana Publications 1990) 470.

For a more thorough account of the Danish position see Crowley (n 8) 49.

A. Reasonable Measures

The fact that no clear guidance as to what is to be considered reasonable is provided in UNCLOS has been criticized. 85 However, it can be concluded that there is a broad and relatively open-ended competence vested with the coastal State. There are no prima facie restrictions on what kind of measure a coastal State may employ in exercising this right as long as they are reasonable. 86 However, any action must aim to protect one or more of the listed objectives. This means that it is impermissible to impose restrictions on the laying or operation of submarine pipelines for other reasons, such as security or energy policy considerations. 87 It may also be noted that emission of greenhouse gases into the atmosphere is not covered by the definition of 'pollution' in UNCLOS. 88 It would hence not be permissible to restrict the laying of an oil or gas pipeline due to the climate effects of fossil fuels.

In principle, it is also not for coastal States to question the need for, or the usefulness of, a pipeline. ⁸⁹ This may in some cases make it tempting to disguise eg security concerns in environmental or natural resources language. ⁹⁰ It is questionable whether that is compatible with a good faith application of UNCLOS. However, such ulterior motives may have a more positive flip side by prompting a more thorough assessment of the environmental consequences of a proposed pipeline and the available means by which they may be attenuated.

Obviously, for such an assessment to have a positive effect any measures that it prompts must not be unwarranted or unreasonably far-reaching in which case they may add unjustifiable time and cost to the execution of a project, or possibly make it untenable altogether. That could very well spur legal action at both national and international level.

Overall the extent of a coastal State's legitimate interests with respect to the exploration and exploitation of the CS may be relatively easier to define compared to its environmental interests. ⁹¹ The latter are often affected by scientific uncertainties and must also incorporate considerations of other States' rights with respect to the marine environment as a transboundary resource. According to UNCLOS Article 194(2) States are under a general obligation to take 'all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment'. Accordingly coastal States have a responsibility to consider the environmental consequences of pipelines even when their laying and

⁸⁵ Wiese (n 42) 214 with further references.

⁸⁶ Roggenkamp (n 6) finds that '[b]asically, all conditions which relate to infrastructures such as the route of the pipeline, safety and the environment seem to be acceptable under international law' 106. See also Vinogradov (n 22) 264.

⁸⁷ Koivurova and Pölönen (n 11) 179.
88 UNCLOS (n 9) art 1(4).
89 EJ Hollo, 'The Baltic Sea and the Legal Order on Placing Energy Pipelines' in B Egelund
Olsen and H Tegner Anker (eds), Festskrift til Ellen Margrethe Basse (Djøf Forlag 2008) 179, 190.
It is, however, wholly conceivable that the importance of the pipeline to other States than the coastal State could become a factor in the weighing up of opposing interests, as foreseen most explicitly in UNCLOS, art 59, but the logic of which arguably characterizes the EEZ and CS regimes in total.
90 This phenomenon is discussed in Solum Whist (n 21) 46–9.

⁹¹ In its decision granting consent to the Nord Stream pipelines the Finnish Government finds that it is impossible (and thus not called for) to have regard to all kinds of imaginary projects which may in the distant future be executed in the Finnish EEZ. *Consent to Exploit Finland's Exclusive Economic Zone* (n 16) 28.

operation occurs outside their sovereign control but where they still exercise jurisdiction and thus (some level of) control. There are also more specific obligations imposed upon coastal States in this regard both by UNCLOS and numerous regional conventions. ⁹² It must be concluded that coastal States are obliged to take necessary measures, within their competence under UNCLOS Article 79, to guarantee that pipelines do not cause harm to the marine environment beyond what is tolerated under applicable international law. ⁹³

With respect to the Nord Stream project the Finnish and Swedish governments found that the project could be carried out in an environmentally acceptable manner. Before coming to this conclusion, however, there had been modifications of the proposed route. A number of conditions were also set out, including, in the Finnish decision, an obligation to take all possible measures to prevent and minimize damage.⁹⁴

However, the right of coastal States to take measures is not directly related to international law obligations. Although some guidance as to what is reasonable may be gained from studying international agreements or customary law obligations the coastal State is not limited to implementing such standards.

So how should the reasonableness of measures be determined? In this situation recourse must be had to considerations of the balance between potentially competing interests. It seems safe to conclude that a measure that does not duly consider the legitimate interests of other States should not be considered reasonable, provided that it can in fact impede the exercise of those legitimate rights. ⁹⁵ Unfortunately this does not provide much clarity since the definition of reasonable then becomes contingent on the construction of various rights of other States, many of which can only be defined in relation to an opposing right of the coastal State. This makes the definition somewhat circular. However, this is not a problem particular to the issue of pipelines but rather characteristic of substantial parts of UNCLOS, based as they are on the objective of upholding a reasonable and functional balance between the interests of different categories of States.

In light of this balance it is not feasible to establish a general order of priority between the right of the coastal State to exercise control over the laying of pipelines on the CS and the right of other States to lay and operate them. ⁹⁶ To weigh up conflicting interests in the abstract is generally also not possible since the solution depends on the pertinent circumstances in each case. ⁹⁷ In relation to this inescapable balancing of interests in the individual case, consultations between the States concerned may be

⁹² See eg UNCLOS (n 9) art 208 and the Convention on the Protection of the Marine Environment of the Baltic Sea Area (adopted 9 April 1992, entered into force 17 January 2000) 1507 UNTS 167.

⁹³ Wiese refers to the 'Ordnungsfunktion' [function of upholding order] of the coastal State, to describe its responsibility to take measures to prevent or reduce pollution from activities under its jurisdiction. Wiese (n 42) 230.

⁹⁴ Consent to Exploit Finland's Exclusive Economic Zone (n 16), and Regeringsbeslut 15, 2009-11-05 [Decision by the Government, No 15, 5 November 2009]. On the national permit procedures and the conditions stipulated therein see Langlet (n 10).

⁹⁵ Wiese finds that 'Eine Massnahme ist also 'unreasonable', wenn sie andere Meeresnutzungen ungerechtfertigt beeinträchtigt.' ['A measure is therefore 'unreasonable' if it unjustifiedly interferes with other uses of the sea.'] Wiese (n 42) 214–15.

⁹⁶ ibid 219.

⁹⁷ Lagoni (n 12) 946. For a similar reasoning see Wiese (n 42) 220 and Crowley who finds that, since 'the circumstances involved in the laying of pipelines can vary so dramatically from one

a key instrument.⁹⁸ In this regard the carrying out of the transboundary EIA for the Nord Stream project can serve as a good example.⁹⁹

Despite the necessity for considering specific circumstances it should be possible to draw some conclusions of more general applicability. Stipulating security measures or technical standards that would in effect make the laying of a pipeline economically or technically unviable in the particular case is not precluded by UNCLOS, Article 79. The prohibition on impeding the laying of pipelines is *subject to* the coastal State's right to take reasonable measures. It should thus only be the reasonableness of the measures that determines if they are permissible, provided that they aim to protect one of the listed interests. The assessment of reasonableness must be carried out in good faith. 100 Arguably, this should lead to a comparison with how the coastal State has acted with regard to activities associated with similar risks. Even if good faith does not as such imply an obligation to treat all similar cases alike it should enable a State's substantive obligation to be interpreted in the light of its previous activities in a rather broad manner, particularly when, as here, there is a need for reconciling potentially conflicting rights. 101 Case law seems to support the view that good faith can prevent States from opposing activities by other States similar to those which they themselves have previously allowed or engaged in.102

If, therefore, a State takes a permissive attitude towards risks to the marine environment which it is in a position to control that are greater or equal to those associated with the laying and operation of a pipeline, that could be used to question the good faith of the State in taking restrictive measures against the pipeline. An illustrative example would be if a State, in its capacity as a coastal State or port State, accepts significant risks associated with ship transports of oil or other noxious substances although it falls within its competence to demand higher safety. If a significantly more restrictive approach is taken to risks associated with pipelines—particularly those transporting gas rather than oil, which would in itself imply a lower risk of environmental damage¹⁰³—it

region to another, it is not surprising that little progress has been made towards a comprehensive multilateral treaty dealing with pipelines'. Crowley (n 8) 58.

⁹⁸ Wiese (n 42) 222.

⁹⁹ Koivurova and Pölönen (n 11) 160 and 174. The parties to the Convention on Environmental Impact Assessment in a Transboundary Context (adopted 25 February 1991, entered into force 10 September 1997) 1989 UNTS 310 (Espoo Convention) engaged much deeper than they were obliged to by the Convention's minimum requirements. Also Russia, a non-party to the Espoo Convention, agreed to apply the Convention to the extent permitted by its national legislation. It should be noted that States bordering an enclosed or semi-enclosed sea like the Baltic Sea have a particular duty to cooperate in the exercise of their rights and in the performance of their duties under UNCLOS. UNCLOS (n 9) art 123.

This follows generally from the Vienna Convention on the Law of Treaties (n 28) art 26, but also from UNCLOS (n 9) art 300.

One of the indispensable functions of this principle has been found to be that '[t]he conflict of equal rights must be reconciled by the application of good faith'. JF O'Connor, Good Faith in International Law (Dartmouth 1991) 124.

¹⁰² In the River Meuse Case the Permanent Court of International Justice held that 'the Court finds it difficult to admit that the Netherlands are now warranted in complaining of the construction and operation of a lock of which they themselves set an example in the past'. Diversion of Water from Meuse (Neth v Belg), 1937 PCIJ, Series A/B, No 70, para 84. See also the reasoning on the application of good faith in such situations by Franck who draws, inter alia, on the River Meuse Case. TM Franck, Fairness in International Law and Institutions (Clarendon Press 1995) 51.

Wolf (11) 49.

may cast doubt on the State's good faith with respect to the imposition of environmental requirements to pipelines. However, when making such an assessment regard must be had to other factors that may prompt the coastal State to take a more restrictive approach to one particular risk than to another. This comparison of risk management should also not be taken too far since States are not under any general 'equal treatment' obligation.

If a measure is found to be too restrictive to pass the reasonableness test it is conceivable that the customary law principle of necessity could be used to preclude the wrongfulness of that measure. The applicability of the concept of necessity to environmental perils has been confirmed by the ICJ.¹⁰⁴ But in order to be successful such a claim would have to meet quite demanding standards. According to the ILC's Articles on State Responsibility,¹⁰⁵ necessity presupposes not only a 'grave and imminent peril' but also that the act relying on necessity 'does not seriously impair an essential interest of the State or States towards which the obligation exists.' ¹⁰⁶ Also in this context it is hence necessary to assess the significance of the interests affected. ¹⁰⁷ However, in practice it would normally not be necessary to consider the gravity of the interest of other States since the laying of a pipeline is unlikely to give rise to a grave and imminent peril that cannot be brought to acceptable levels by any lawful means.

B Delineation

The consent requirement for the delineation of submarine pipelines was introduced to the third Law of the Sea Conference by a 1973 proposal by China. The ILC, on the basis of whose draft Article 4 of the Convention on the Continental Shelf was based, had already in 1956 made clear that a coastal State may impose conditions concerning the route to be followed in order to avoid unjustified interference with the exploitation of the natural resources of the seabed and subsoil. 109

In relation to the Nord Stream project the issue has been raised whether a coastal State may require an entity wishing to place a pipeline on its CS to assess routes beyond the coastal State's EEZ and CS, and also whether such a State may, based on the availability of preferable, or perhaps merely unexploited, routing options beyond areas under its

Gabcikovo-Nagymaros Project Case (Hungary v Slovakia), ICJ Reports (1997) 7.

GA Res 56/83, 12 December 2001, Annex, as corrected by UN Doc A/56/49(Vol I)/Corr 4.

ibid art 25(1).

¹⁰⁷ In the words of the ILC the 'the interest relied on must outweigh all other considerations, not merely from the point of view of the acting State but on a reasonable assessment of the competing interests, whether these are individual or collective'. ibid Commentary to art 25, para 17 (footnote not included).

¹⁰⁸ The Chinese Working Paper held that '[t]he delineation of the course for laying submarine cables and pipelines on the continental shelf by foreign states is subject to the consent of the costal State'. *Working Paper on Sea Area within the Limits of National Jurisdiction*, A/AC.138/SC.II/L.34 (16 July 1973) 4.

¹⁰⁹ ILC, Report of the International Law Commission on the Work of its Eighth Session (23 April–4 July 1956) UN Doc A/3159, 299. Art 70 of the ILC's Articles concerning the law of the sea reads 'Subject to its right to take reasonable measures for the exploration of the continental shelf and the exploitation of its natural resources, the coastal State may not impede the laying or maintenance of submarine cables on the continental shelf' and was thus identical to art 4 in the Convention on the Continental Shelf adopted in 1958.

jurisdiction effectively prevent the laying of the pipeline on its own CS. 110 The potential impact of the Espoo Convention on Environmental Impact Assessment in a Transboundary Context, or other rules on transboundary EIA that may apply in a specific case is not addressed here. 111 What is at issue is whether UNCLOS enables the coastal State to deny use of its CS based on the existence of (potentially) preferable routes elsewhere? The general answer to that question must be 'no'. It should be obvious that a coastal State lacks the competence to consent—with any meaningful legal effect—to a pipeline routing beyond its own jurisdiction. Unless the right to consent to the route should be seen as a discretionary right to consent to the construction of the pipeline as such—and why this is not an acceptable interpretation has been discussed above—a general denial based on UNCLOS, Article 79(2) to use any route on the CS must be seen as an unjustifiable interference with the right to lay submarine pipelines on the CS. Otherwise, rejecting all proposed routes would be an easy way for a coastal State to obviate the right to lay pipelines. 112

If a coastal State considers the laying of a pipeline on its CS problematic irrespective of the route, UNCLOS provides the capacity to take reasonable measures to protect its interests, provided that they pertain to exploitation of the CS, extraction of its national resources, or the protection of the environment. Other interests are not recognized by UNCLOS even though they may de facto influence a coastal State's view on a proposed routing. As concluded above, coastal States are not in principle prevented from imposing conditions that make a pipeline project technically impracticable or financially unviable but they can do so only if the conditions are reasonable and pursue a legitimate aim. However, since reasonableness is contingent upon the weighing of opposing interests the existence of alternative options could affect the assessment of what constitute reasonable measures by a coastal State. If the prospective layer of a pipeline has neglected to explore reasonably available alternatives to a route that is considered undesirable by an affected coastal State that should make it harder to find conditions imposed by the coastal State unreasonable. If, on the other hand, a particular route has been shown to be the only practicable option a measure that severely hampers, or in effect precludes, the use of that route would, in order to be reasonable, have to be based on legitimate concerns of some gravity.

VI. CONCLUSION

The laying of two parallel gas pipelines in the Baltic Sea from Russia to Germany has raised a number of legal issues. In this analysis particular attention has been given to the way UNCLOS balances the right to lay and operate transit pipelines in the EEZ, and thus on the CS, against the interests of coastal States concerned. With respect to this specific project, it has been concluded that Switzerland could legitimately exercise diplomatic protection to further the interests of Nord Stream AG, ie the company responsible for laying and operating the pipelines.

Some conclusions of more general applicability have also been drawn. One is that the seabed surveys that necessarily precede the laying of submarine pipelines are not

Hollo (n 89) 194ff. On alternative routes—primarily land-based ones—discussed in relation to the Nord Stream project see Solum Whist (n 21) 18ff.

See instead Koivurova and Pölönen (n 11) and Hollo (n 89).

¹¹² Wolf (n 11) 255.

generally to be regarded as marine scientific research according to UNCLOS and thus not subject to consent by the coastal State. However, to the extent that such surveys involve drilling in the seabed consent is always required.

Although the laying and operation of pipelines on the CS are not per se contingent on the consent of the coastal State, the coastal State does have far-reaching powers to control any pipeline project. As long as the aim pursued is recognized by UNCLOS, any reasonable measure may be taken. Coastal States are even obliged to take necessary measures, within their comptence under UNCLOS, to prevent that transit pipilines cause harm to the marine environment. National security, energy and climate policy considerations are not among the legitimate grounds for taking restrictive measures. However, it should be emphasized that this conclusion applies to UNCLOS and does not rule out the possibility that such measures may find support elsewhere under international law, such as in the Espoo Convention, which has not been analysed here. What is considered reasonable is not defined in UNCLOS and ultimately hinges on an assessment of the interests concerned.

Unlike the laying as such, the delineation of the course of any pipeline is subject to coastal State consent. However, the coastal State may not use this prerogative to circumvent its obligation not to impede the laying of submarine pipelines for other than legitimate reasons. A proposed route may also not be rejected, by reference to UNCLOS, merely on the basis of there being (potentially) preferable routes elsewhere, if these alternative routes, or even alternative means of transport, are located outside the jurisdiction of the coastal State making the decision.