

Challenges of the Changing Arctic

Continental Shelf, Navigation, and Fisheries

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The Delimitation of the Continental Shelf Beyond 200 Nautical Miles in the Arctic Ocean: Recent Developments, Applicable Law and Possible Outcomes

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Abstract

A large part of the Arctic Ocean is located beyond the 200-nautical-mile limit of the five coastal States: Canada, Denmark/Greenland, Norway, the Russian Federation and the United States. All of these States have a continental shelf beyond 200 nautical miles and are in the process of determining the outer limits of this continental shelf in accordance with the substantive provisions of Article 76 of the United Nations Convention on the Law of the Sea (LOS). Available information indicates that there is an extensive overlap between these continental shelves, requiring the delimitation between neighboring States. These delimitations are governed by Article 83 of the LOS and, in cases involving the United States, Article 6 of the Convention on the Continental Shelf. The main question in respect to this applicable law is whether it is the same for the continental shelf beyond 200 nautical miles and the continental shelf within that distance. This matter was considered by the International Tribunal for the Law of the Sea in *Bangladesh/Myanmar*. In its Judgment of 14 March 2012, the Tribunal concluded that there was no difference between the delimitation of the continental shelf within and beyond 200 nautical miles in this respect. It is submitted that this finding is based on a questionable legal basis. After a brief discussion of the judgment, the article turns to an analysis of the delimitation of the continental shelf beyond 200 nautical miles in the Arctic Ocean, assessing what delimitation methodology might be appropriate and what outcomes might result from this.

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1 Introduction

A large part of the Arctic Ocean is located beyond the 200-nautical-mile limit of the five coastal States: Canada, Denmark/Greenland, Norway, the Russian Federation and the United States. However, all of the Arctic Ocean coastal States have a continental shelf beyond 200 nautical miles and are engaged in determining the outer limits of this continental shelf in accordance with the substantive provisions of Article 76 of the United Nations Convention on the Law of the Sea (LOS).² Available information indicates that there is an extensive overlap between these continental shelves, requiring their delimitation between neighboring States. These delimitations are governed by Article 83 of the LOS and, in cases involving the United States, Article 6 of the Convention on the Continental Shelf.³ The main question in respect of this applicable law is whether it is the same for the continental shelf beyond 200 nautical miles and the continental shelf within that distance. In the latter instance the case law has held that the starting point for the delimitation in principle has to be an equidistance line. The justification for this approach is the linkage between this method and the basis of entitlement to the 200-nautical-mile zone: both are based on distance from the coast. On the other hand, entitlement to the continental shelf beyond 200 nautical miles is not based on distance from the coast. This raises the question whether the equidistance method should have the same role in the delimitation of this part of the continental shelf.

This paper will first consider the extent of the continental shelf beyond 200 nautical miles in the Arctic Ocean, focusing on the process of defining the shelf's outer limits. Determination of these outer limits allows assessing to what extent the continental shelves of neighboring States overlap and what questions might exist in relation to the delimitation of those overlapping entitlements. The next section briefly considers the judgment of the International Tribunal for the Law of the Sea (ITLOS) in *Bangladesh/Myanmar*.⁴ In its judgment of 14 March 2012, the Tribunal concluded that there was no difference between the methodology for the delimitation of the continental shelf within and beyond 200 nautical miles. It is submitted that this finding is based on

² Adopted on 10 December 1982; 1833 UNTS p. 396.

³ Adopted on 29 April 1958; 499 UNTS 311. Until the time the United States becomes a party to the LOS, Article 6 of the Convention on the Continental Shelf is the applicable law for the delimitation of the continental shelf between the United States and Canada.

⁴ *Dispute concerning delimitation of the maritime boundary between Bangladesh and Myanmar in the Bay of Bengal (Bangladesh/Myanmar)*.

a questionable legal basis.⁵ After setting out the reasons for that submission, this paper offers an alternative approach to the delimitation of the continental shelf beyond 200 nautical miles.

A final section of this paper turns to an analysis of the delimitation of the continental shelf beyond 200 nautical miles in the Arctic Ocean, focusing on three pending delimitations: between Canada and Denmark/Greenland, between those two States on the one hand and the Russian Federation on the other, and between Denmark/Greenland and Norway. This part of the paper assesses what delimitation methodology might be appropriate in light of the preceding analysis and what outcomes might result. The paper ends with some brief conclusions.

2 Current Situation of the Process of Defining the Outer Limits of the Continental Shelf⁶

A prerequisite for the delimitation of maritime zones between neighboring States is the determination of the extent of overlapping entitlements.⁷ In the case of the continental shelf beyond 200 nautical miles, for States parties to the LOSC—in the Arctic Ocean this concerns Canada, Denmark/Greenland, Norway and the Russian Federation—this will be known after they have complied with the Convention's Article 76. Article 76 sets out the

5 In a number of articles on the continental shelf in the Arctic Ocean that I published previously, I had actually adopted ITLOS's approach to assess the delimitations between neighboring States (A.G. Oude Elferink "The Continental Shelf in the Polar Regions: Cold War or Black-Letter Law?" 40 *Netherlands Yearbook of International Law* 2009, pp. 121–181; A.G. Oude Elferink "The Outer Limits of the Continental Shelf in the Polar Regions" in E.J. Molenaar, A.G. Oude Elferink, D.R. Rothwell (eds.) *The Law of the Sea and Polar Regions: Interactions between Global and Regional Regimes* (Leiden: Martinus Nijhoff Publishers, 2013), pp. 61–84).

6 This section in part is based on Oude Elferink, "The Continental Shelf," note 5.

7 However, in practice boundaries may be determined without full knowledge of the extent of the overlapping maritime zones. For instance, the arbitral award in *Guinea/Guinea-Bissau* provides that the maritime boundary extends to the outer limits of the maritime areas of the parties recognized by international law (*Affaire de la délimitation de la frontière maritime entre la Guinée et la Guinée-Bissau*, decision of 14 February 1985 (UNRIIA Vol. XIX), pp. 149–196, para. 130(3)(c)). As far as can be ascertained, the parties did not submit any information on their continental shelf beyond 200 nautical miles to the arbitral tribunal. In September 2014 both States together with Cape Verde, Gambia, Mauritania, Senegal and Sierra Leone made a joint submission to the Commission on the Limits of the Continental Shelf (CLCS) (available at <www.un.org/Depts/los/clcs_new/submissions_files/submission_wa7_75_2014.htm>).

substantive provisions for determining the outer limits of the continental shelf and requires that for outer limits beyond 200 nautical miles the coastal State makes a submission to the CLCS. Outer limits established by the coastal State on the basis of the recommendations of the Commission shall be final and binding. Article 76 is without prejudice to the delimitation of the continental shelf between neighboring States.⁸ In other words, outer limits established by the coastal State on the basis of the recommendations of the CLCS determine the extent of overlapping entitlements in relation to neighboring States, but the bilateral boundaries will have to be established by agreement between those States.

The United States is not a party to the LOSC, but has taken the position that it “has exercised and shall continue to exercise jurisdiction over its continental shelf in accordance with and to the full extent permitted by international law as reflected in Article 76, paragraphs (1), (2) and (3)” of the LOSC.⁹

The CLCS in its Rules of Procedure has made specific provision for submissions involving a dispute concerning the delimitation of the continental shelf between States with opposite or adjacent coasts or in other cases of unresolved land or maritime disputes.¹⁰ Paragraph 5 of Annex I to the Rules of Procedure provides that in the case of such disputes the Commission will only consider a submission with the prior consent of all the States that are parties to the dispute. In the case of pending bilateral delimitations, other States in general have given their consent to the consideration of the submission of a neighboring State. The coastal States of the Arctic Ocean conform to this trend. No Arctic Ocean coastal State has thus far invoked paragraph 5 of Annex I to the Rules of Procedure to block the consideration of the submission of a neighboring State.¹¹

8 LOSC, Article 76(10).

9 See policy statement attached to Memorandum from Assistant Secretary John D. Negroponte to Deputy Legal Adviser Elizabeth Verville of 17 November 1987 (State Department File No. 0140–0428); reproduced in J.A. Roach and R.W. Smith *Excessive Maritime Claims* (66 U.S. Naval War College International Law Studies, 1994) p. 125. The reference to Article 76(2), which refers to paragraphs 4 to 6 of Article 76, implies that the United States accepts all the substantive provisions of Article 76 as customary international law.

10 *Rules of Procedure of the Commission on the Limits of the Continental Shelf* (Doc. CLCS/40/Rev.I of 17 April 2008), Rule 46 and Annex I.

11 The most recent example is provided by the Executive Summary of Denmark/Greenland’s submission of December 2014 (*Partial Submission of the Government of the Kingdom of Denmark together with the Government of Greenland to the Commission on the Limits of the Continental Shelf; The Northern Continental Shelf of Greenland; Executive*

The process of determining the outer limits of the continental shelf is also relevant for the delimitation of the continental shelf between neighboring States because the coastal State may express its views on what should be the boundary with neighboring States in the context of this process. For instance, in making a submission to the CLCS a State may indicate a provisional boundary with a neighboring State or terminate the outer limits of its continental shelf at a point that has a bearing on the delimitation with neighboring States.¹²

At present, of the five Arctic Ocean coastal States only Norway has received recommendations from the CLCS that allow determining final and binding limits. Following the issuance of the recommendations in 2009, the Norwegian Minister of Foreign Affairs declared that they “provide a basis on which Norway can establish the limits of its continental shelf in the High North.”¹³ The

Summary (available at <www.un.org/depts/los/clcs_new/submissions_files/dnk76_14/dnk2014_es.pdf>). As Chapter 7 of the Executive Summary indicates, Denmark/Greenland has held consultations with its four Arctic neighbors concerning potential delimitations. All those States have given their prior consent. This cooperative approach to the determination of the extent of the continental shelf was also reflected in the 2008 Ilulissat Declaration adopted by the five Arctic Ocean coastal States (see further Oude Elferink, *Outer Limits*, note 5 at p. 67). For a statement to a similar effect by Russian foreign minister Lavrov after the Russian annexation of the Crimea and the international tensions over the eastern regions of Ukraine see *Interv'iu Ministra Inostrannykh del Rossii S.V. Lavrova MIA "Rossiia Segodnia", Moskva, 9 Dekabria 2014 Goda* (available at <www.mid.ru/brp_4.nsf/0/4B6A1101EB552C6CC3257DA90036A329>).

- 12 For an example of the former approach see the discussion of the Russian Federation's submission to the CLCS below. An example of the latter approach is provided by the Executive Summary of Viet Nam's submission for the North Area, which indicates that the terminus of the outer limit of the continental shelf beyond 200 nautical miles submitted to the CLCS is located on an equidistance line (*Socialist Republic of Viet Nam, Submission to the Commission on the Limits of the Continental Shelf pursuant to Article 76, paragraph 8, of the United Nations Convention on the Law of the Sea; Partial submission in respect of Viet Nam's Extended Continental Shelf: North Area (NMV-N); Executive Summary*), <www.un.org/Depts/los/clcs_new/submissions_files/vnm37_09/vnm2009n_executivesummary.pdf> p. 6. This concerns a point that seems to be equidistant between China's island of Hainan and Viet Nam's straight baselines along its mainland coast but ignores the Paracel Islands, which are in dispute between the two States.

- 13 *Extent of Norway's Continental Shelf in the High North Clarified* (Press release 15.04.2009 No. 025/09 of the Ministry of Foreign Affairs of Norway) (available at <www.regjeringen.no/en/dep/ud/press/News/2009/shelf_clarified.html?id=554718>). The website of the Division for Oceans Affairs and the Law of the Sea does not indicate that Norway has already filed information on its outer limits in accordance with Article 76(9) of the LOSC (see *Norway* <www.un.org/depts/los/LEGISLATIONANDTREATIES/STATEFILES/NOR.htm>).

continental shelf beyond 200 nautical miles of Norway in the Arctic Ocean is of limited dimensions, extending between some 10 and 40 nautical miles beyond the 200-nautical-mile limit of the Svalbard archipelago.

At the time Norway's submission was made, it was still engaged in delimitation talks with the Russian Federation. In its submission Norway identified a final outer limit point to the west of the boundary claims of both States and indicated that this outer limit point would subsequently be linked to a fixed point on the Russian side of the boundary.¹⁴ In 2010 Norway and the Russian Federation concluded a delimitation agreement.¹⁵ The boundary is a compromise between the positions of the two States. The approach of Norway's submission in relation to Denmark/Greenland was different. In this case, the outer limit extended up to the 200-nautical-mile limit of Greenland.¹⁶ The December 2014 submission of Denmark/Greenland indicates that the continental shelf of both States in this area does overlap.¹⁷

In 2001, the Russian Federation was the first State to make a submission to the CLCS. In the Arctic Ocean, the submission in part used the sector lines as set out in the Russian Federation's national legislation to define the outer limits of its continental shelf beyond 200 nautical miles.¹⁸ The executive summary of the Russian Federation's submission identifies the sector lines as a "provisional line of delimitation of the continental shelf of the Russian Federation with neighboring States; subject to more precise definition in the course of negotiations".¹⁹

14 *Continental Shelf Submission of Norway in respect of areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea; Executive Summary* (available at <www.un.org/depts/los/clcs_new/submissions_files/nor06/nor_exec_sum.pdf>), section 7.2.1.

15 Treaty between the Kingdom of Norway and the Russian Federation concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean of 15 September 2010 (English translation available at <www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/NOR-RUS2010.PDF>).

16 This difference may be explained by the fact that in 2006 it may not have been clear that the Greenlandic shelf extended beyond 200 nautical miles in this area (see further below).

17 For a further discussion of that submission see below.

18 Sector lines are meridians running from the land/territorial sea boundaries of the Russian Federation to the North Pole resulting in a wedge-shaped area that is also referred to as a sector.

19 This is the description in Russian in the legend and Map 2 annexed to the executive summary of the submission (translation by the author). The unofficial English translation of the executive summary refers to these lines as "the boundary to be agreed upon with neighboring states" (*Executive Summary*, p. 1). The executive summary and the map are available at <www.un.org/Depts/los/clcs_new/submissions_files/submission_rus.htm>.

The CLCS did not endorse the outer limits submitted by the Russian Federation. In 2002, the Commission recommended that the Russian Federation make a revised submission for the Arctic Ocean based on the findings contained in the recommendations.²⁰ It seems likely that the Commission took issue with the role of the Mendeleyev and Lomonosov Ridges in establishing the outer limits of the continental shelf of the Russian Federation. The submitted outer limits along the two ridges extended beyond 350 nautical miles. In other words, the Russian Federation considered that they were not submarine ridges in the sense of Article 76(6) of the LOSC, to which the constraint of 350 nautical miles applies. The Commission may have concluded either that the submission confirmed that the Mendeleyev and Lomonosov Ridges are submarine ridges in the sense of Article 76(6), that the two ridges did not form a natural prolongation of the land territory of the Russian Federation, or that it had not been provided with sufficient information to reach any firm conclusions.²¹

If the outer limits of the Russian Federation's continental shelf along the Mendeleyev and Lomonosov Ridges would be subject to the 350-nautical-mile constraint, they would fall well short of the outer limits contained in the Russian Federation's 2001 submission, which coincided with the limits of its Arctic sector. The largest distance between the sector lines and the 350-nautical-mile constraint is more than 200 nautical miles.²² Since receiving recommendations of the CLCS, the Russian Federation has been engaged in preparing a revised submission in relation to the Arctic Ocean and in this connection has gathered additional data in the area of the Mendeleyev and Lomonosov Ridges. The reported date of a renewed submission of the Russian Federation did not materialize a number of times.²³ Recently, the Russian minister of

20 See *Oceans and Law of the Sea—Report of the Secretary-General; Addendum* (Doc. A/57/57/Add.1 of 8 October 2002), para. 41.

21 These views have been expressed in commentaries on the Russian Federation's submission and the subsequent recommendations of the CLCS (see Oude Elferink, *The Continental Shelf*, note 5 at pp. 151–152). According to Kolodkin, the Commission in its recommendations pointed to the uncertainties in relation to the geological nature of the ridges. A.L. Kolodkin "Kontinental'nyi Shel'f Rossii v Arktike: Perspektivy Rasshireniia", *Morskoe Pravo* 2007, issue 4 (available at www.sea-law.ru/index.php?option=com_content&task=view&id=113&Itemid=76).

22 For a depiction of the two lines, see the map *Maritime Jurisdiction and Boundaries in the Arctic Region* (available at <<http://www.dur.ac.uk/resources/ibru/arctic.pdf>>).

23 For instance, in 2012 it was reported that a submission would be made by 2014 (*Obnavlennaia Zaiavka Rossii v Komissiiu OON po Granitsam Kontinental'nogo Shel'fa v Arktike*"; available at <www.ocean.ru/content/view/1606/41/>; and N.P. Laverov

natural resources and ecology indicated that a submission would be made by the spring of 2015.²⁴

Reports on the preparation of the Russian Federation's revised submission for the Arctic Ocean indicate that the additional work that has been done substantiates that the Mendeleyev and Lomonosov Ridges are not caught by the submarine ridges provision of Article 76(6) of the LOSC and that the outer limits of the continental shelf consequently can extend beyond the 350-nautical-mile constraint.²⁵ Although those involved in the Russian Federation's Arctic submission in general express their confidence in the Russian case, there recently have been some indications suggesting that the Commission in the end may not endorse the Russian views. In an interview with Valerii Kaminskii and Viktor Poselov of the Gramberg Institute, which has been involved in the preparation of the Russian submission, the latter hinted at the possibility that the Commission might conclude that the Lomonosov and Mendeleyev Ridges are not a part of the natural prolongation of the land territory of the Russian Federation.²⁶

As was noted above, the Russian Federation in its 2001 submission used sector lines to define the extent of its continental shelf. The Russian government has been criticized in academic circles for failing to claim the entire seabed

et al. "Bazovaia Model' Tektonicheskogo Razvitiia Arktiki kak Osnova dlia Podgotovki Obnovlennoi Zaiavki Rossii v Komissiiu OON na Ustanovlenie Vneshnei Granitsy Kontinental'nogo Shel'fa", *Arktika* 2012 No. 2 (6), pp. 4–19, at p. 4).

24 TASS *Minprirody: RF Podast Zaiavku v OON na Rasshirenie Granits Arkticheskogo Shel'fa Vesnoi 2015* (available at <itar-tass.com/politika/1540165>); see also Interv'iu, note 11.

25 See e.g. RIA Novosti *MID: Dorabotannaia Zaiavka po Granitsam Shel'fa RF v Arktike Pochti Gotova* (available at <ria.ru/arctic_news/20140117/989849591.html>); Interv'iu, note 11.

26 M. Golubkova "Zaiavku RF na Arkticheskii Shel'f Podgotoviat k Kontsu Goda" *Rossiiskaia Gazeta* (dated 30.6.2014; available at <m.rg.ru/2014/06/30/reg-szfo/arktika.html>). The 2013 Strategy for the Development of the Arctic Zone of the Russian Federation and the Guaranteeing of National Security for the Period until 2020 establishes that one of its goals for the period up to 2015 is guaranteeing "the international legal realization of the outer limits of the continental shelf of the Russian Federation in the Arctic Ocean, the inadmissibility of spatial loss and worse legal conditions for activities of the Russian Federation in comparison to other Arctic Ocean coastal States" (*Strategiia Razvitiia Arkticheskoi Zony Rossiiskoi Federatsii i Obespecheniia Natsional'noi Bezopasnosti na Period do 2020 Goda*, point V.29.g (translation by the author; available at <http://government.ru/news/432/>)). The rather opaque reference to no worse legal conditions than other Arctic Ocean coastal States in connection with the determination of the outer limits of the continental shelf might mean that the Russian Federation cannot accept that Canada and Denmark/Greenland would be able to extend their continental shelf along the Lomonosov and Mendeleyev Ridges while the Russian Federation itself could not.

within the Russian Arctic sector, and instead applied the criteria of Article 76 of the LOSC while relying on the procedure involving the CLCS.²⁷ That the Russian Federation's commitment to the LOSC is unwavering was recently confirmed by a statement of President Putin to the Security Council of the Russian Federation. While noting that the Russian Federation should fight for every part of its continental shelf in the Arctic, Putin recalled that it had successfully finalized its revised submission for the Sea of Okhotsk, receiving recommendations from the CLCS which were in agreement with the arguments of the Russian Federation.²⁸ President Putin was quoted as saying that the Russian experts should act in exactly the same way in the Arctic.²⁹

It seems likely that the Russian Federation will adhere to sector lines in preparing a revised submission to the Commission in view of its long-time commitment to this approach.³⁰ However, the recent submission of Denmark/Greenland, which defines outer limits along the Lomonosov Ridge up to the 200-nautical-mile limit of the Russian Federation, raises the question whether the Russian Federation could take a similar approach.³¹ In the latter case the Russian Federation may still advance sector lines in case there will be overlapping continental shelf entitlements between itself and Canada and Denmark/Greenland.

Interestingly, in the interview with Kaminskii and Poselov in the *Rossiiskaia Gazeta* referred to above, the former, in answering a question to whom the geographical North Pole would belong if the whole area would be delimited, indicated that Denmark had a certain basis—the geographical North Pole is well within the equidistance area of Greenland—but that if the sector principle

27 See A.G. Oude Elferink "Does Recent Practice of the Russian Federation Point to an Arctic Sunset for the Sector Principle?" in S. Lalonde and T.L. McDorman (eds.) *International Law and Politics of the Arctic Ocean; Essays in Honor of Donat Pharand* (Leiden: Brill Nijhoff, 2015) pp. 269–290 at pp. 278–280.

28 The submission in relation to the Sea of Okhotsk originally had been made together with the submission for the Arctic in 2001. The revised submission for the Sea of Okhotsk was made in February 2013 and the Commission issued its recommendations in March 2014.

29 Ria Novosti *Putin Potreboval Otstaivat' Kazhdyi Uchastok Shel'fa v Arktike* (dated 22.04.2014; available at <ria.ru/politics/20140422/1004992947.html>); ITAR-TASS News Agency *Putin Expects Experts to Actively Defend Russia's Right to Arctic Shelf* (dated 22.04.2014; available at <en.itar-tass.com/russia/729151>).

30 See further Oude Elferink, note 27.

31 See also *Kommentarii Departamenta Informatsii i Pechati MID Rossii v sviazi s Podachei Daniei Zaiavki na Kontinental'nyi Shel'f v Arktike* (available at <www.mid.ru/brp_4.nsf/newsline/C4533848E85A09A0C3257DB00053569C>).

would apply it would belong to the Russian Federation.³² However, Kaminskii then downplayed the significance of the geographical North Pole by noting that it has no economic interest whatsoever as there are neither fish nor minerals.³³

Canada submitted preliminary information on the outer limits of its continental shelf in the Arctic Ocean on 6 December 2013.³⁴ The preliminary information among others notes that the continental margin of Canada in the Arctic Ocean comprises the Lomonosov and Alpha Ridges and extends beyond the 350-nautical-mile constraint. The latter point signals that Canada considers that the two ridges are not submarine ridges in the sense of Article 76(6) of the LOSC, to which this constraint is applicable. The Canadian view implies that its continental shelf not only overlaps with that of Denmark/Greenland, but also with that of the Russian Federation.

According to an article in the Canadian daily *Globe and Mail*, it was originally envisaged that Canada would make a submission to the CLCS on its Arctic shelf at the end of 2013. Because of a last moment intervention by Prime Minister Harper, preliminary information was submitted instead.³⁵ A couple of days after the lodging of the preliminary information, the Canadian Minister of Foreign Affairs explained:

32 Golubkova, note 26.

33 Ibid. Kaminskii also made reference to a Canadian proposal to the Russian Federation to delimit their boundary in part by a median line and in part by a sector line—"obviously to its advantage" (ibid.; translation by the author). The equidistance line between Canada and the Russian Federation as a matter of fact straddles the Russian Federation's sector line, which indicates that such a proposal in principle would be possible. This author has not come across any other information corroborating the existence of this Canadian proposal.

34 *Preliminary Information concerning the Outer Limits of the Continental Shelf of Canada in the Arctic Ocean* (available at <www.un.org/Depts/los/clcs_new/submissions_files/preliminary/can_pi_en.pdf>). The possibility to submit preliminary information is not envisaged under the LOSC, but has been created by a decision of the Convention's Meeting of the States Parties (*Decision regarding the Workload of the Commission on the Limits of the Continental Shelf and the Ability of States, particularly Developing States, to Fulfil the Requirements of Article 4 of Annex II to the United Nations Convention on the Law of the Sea, as well as the Decision Contained in SPLOS/72, Paragraph (a)*) (Doc. SPLOS/183 of 20 June 2008). Preliminary information is not considered by the CLCS before a full submission is made, but results in complying with the 10-year time limit for making a submission contained in Article 4 of Annex II to the LOSC.

35 S. Chase "Harper Orders New Draft of Arctic Seabed Claim to Include North Pole" *The Globe and Mail* (dated 4 December 2013; available at <www.theglobeandmail.com/news/politics/harper-orders-new-draft-of-arctic-seabed-claim-to-include-north-pole/article15756108/>).

We have asked our officials and scientists to do additional and necessary work to ensure that a submission for the full extent of the continental shelf in the Arctic includes Canada's claim to the North Pole[.] [...] What we want to do is claim the biggest geographic area possible for Canada.³⁶

Comments on Canada's bid to the North Pole have focused on why Canada would be seeking to enlarge its claim—domestic politics being identified as the main explanatory factor.³⁷ What seems to have gone largely unnoticed is the fact that the project team working on Canada's Arctic submission in fact had not sought to include the geographical North Pole in the submission. This implies that the outer limit lines in this area were not formed by sector lines. Reports on the reconsideration of Canada's submission do not specify what lines had been proposed. One possibility would have been the use of equidistance lines. Those lines would give Canada a substantially larger area than covered by Canada's Arctic sector, but as opposed to the latter, equidistance lines place the geographical North Pole beyond Canada's continental shelf.³⁸

A Canadian position that its continental shelf has to extend to the geographical North Pole could lead to conflict with Denmark/Greenland. If the equidistance method were to be applied to determine their bilateral boundary—Denmark/Greenland has used the equidistance line in the past in connection with the preparation of its submission to the CLCS for the Arctic Ocean—the geographical North Pole would be located on Greenland's side of

36 S. Chase "Arctic Claim Will Include North Pole, Baird Pledges as Canada Delays Full Seabed Bid" *The Globe and Mail* (dated 9 December 2013; available at <www.theglobeandmail.com/news/politics/ottawa-delays-full-bid-for-claim-to-north-pole/article15824139/>).

37 See, e.g., "Canada to Claim North Pole as its Own" *The Guardian* (dated 10 December 2013; available at <www.theguardian.com/world/2013/dec/10/canada-north-pole-claim>); "Russia to Boost Military Presence in Arctic as Canada Plots North Pole Claim" *The Guardian* (dated 10 December 2013; available at <www.theguardian.com/world/2013/dec/10/russia-military-arctic-canada-north-pole>); H. Exner-Pirot, "Stephen Harper and the North Pole: Still Embarrassing Canadians in Arctic Policy" *Alaska Dispatch News* (dated 13 December 2013; available at <www.adn.com/article/20131213/stephen-harper-and-north-pole-still-embarrassing-canadians-arctic-policy>).

38 A preliminary study of Canada's continental shelf indicates that at least at that time equidistance lines were being used to limit Canada's continental shelf beyond 200 nautical miles in relation to Denmark/Greenland and the Russian Federation (see R. Macnab (ed.) *Canada and Article 76 of the Law of the Sea; Defining the Limits of Canadian Resource Jurisdiction beyond 200 Nautical Miles in the Atlantic and Arctic Oceans* (Dartmouth: Geological Survey of Canada; Open File 3209; 15 May 1994), p. 13).

the boundary.³⁹ A Canadian submission applying sector lines up to the North Pole would be in agreement with a revised Russian submission that is likely to employ sector lines to define the outer limits of the continental shelf and would imply that Canada might be pitched against Denmark/Greenland and siding with the Russian Federation on the issue of bilateral delimitation of the continental shelf.

Denmark/Greenland made a submission in relation the continental shelf in the Arctic Ocean in December 2014.⁴⁰ The Danish continental shelf project has had to face the same issue in relation to the Arctic Ocean as Canada and the Russian Federation. As information from the project pages indicates, the challenge for Denmark/Greenland was twofold:

Provided that it can be proven [...] that the Lomonosov Ridge is a natural prolongation of the Greenland landmass, and that it constitutes a submarine elevation it will be possible to extend the Greenland continental shelf beyond the North Pole since the 2500 meter depth contour runs along the Lomonosov Ridge.⁴¹

Denmark/Greenland's 2014 submission indicates that both challenges have been met. The outer limits contained in the submission are located on both sides of the Lomonosov Ridge and extend up to the 200-nautical-mile limit of the Russian Federation across the Arctic Ocean. That approach is markedly different from the one that was previously mentioned in information on the Danish continental shelf project, which indicated that equidistance lines had been used to define the extent of the area to be covered by Denmark/Greenland's submission in the Arctic Ocean.⁴² To the contrary, the submission does not implicitly endorse any view on the potential boundaries with

39 See further below.

40 Partial Submission, note 11.

41 *The Continental Shelf Project; The Area North of Greenland* (on the file with the author; previously available at <a76.dk/greenland_uk/north_uk/>). The information on this page has been updated after the submission of Denmark/Greenland in December 2014 and no longer contains this information.

42 See *ibid.*; C. Marcussen *Mapping of the Arctic* (available at <a76.dk/xpdf/christian_marcussen_london_11-march-2014.pdf>), slide 29. The latter presentation was made in March 2014 (see e.g. *Conference Report: Sustainable Arctic Shipping and Marine Operations* (available at <polar.se/en/conference-report-sustainable-arctic-shipping-marine-operations/>). Marcussen's presentation might seem to suggest that the change in approach was very recent.

neighboring States.⁴³ The four termini of the two outer limit lines included in it are located on the 200-nautical-mile limits of the Russian Federation (two termini), Canada (one) and Norway (one).

Another interesting feature of the Danish/Greenlandic submission is that it indicates that the Gakkel Ridge is considered to be a part of the natural prolongation of Greenland. Prior to the lodging of the submission, there was no indication in the public domain that this was considered to be the case. The information on the webpages of the Danish continental shelf project discussed above indicated that the Gakkel Ridge was not considered to constitute a part of the natural prolongation of Greenland. The submission refers to the Gakkel Ridge as an active seafloor spreading ridge.⁴⁴ On the Gakkel Ridge the 350-nautical-mile constraint has been applied to determine the outer limit of the continental shelf, although the constraint of 100 nautical miles beyond the 2500 meter depth line is seaward of it. In other words, the submission classifies the Gakkel Ridge as a submarine ridge in accordance with Article 76(6) of the LOSC.⁴⁵ The change in the Danish/Greenlandic approach may have been caused either by new information on the nature of the Gakkel Ridge and/or its relation to the Greenlandic shelf or because Denmark/Greenland considers that practice in the implementation of Article 76 allowed such a change.

Neither the Russian Federation nor Norway had treated the Gakkel Ridge as a part of the natural prolongation of their land territory in their submissions.⁴⁶ It will be interesting to see whether Denmark/Greenland's approach to the Gakkel Ridge will be followed by either Norway or the Russian Federation.⁴⁷

43 However, the submission's approach to the Alpha Ridge could be said to implicitly endorse a view on the delimitation of the continental shelf between Canada and Greenland (see further below).

44 Partial Submission, note 11 at p. 14.

45 Scientifically, the Gakkel Ridge is classified as a mid-oceanic ridge (see e.g. Alfred Wegener Institute *AMORE—Arctic Mid Ocean Ridge Expedition to Gakkel Ridge* (available at <www.awi.de/index.php?id=1389&type=123&L=0&filename=awi.pdf>)).

46 The information on the Russian Federation's submission did not include any reference to the Gakkel Ridge. The executive summary of Norway's submission refers to the Gakkel Ridge as an "active oceanic spreading ridge" (Continental Shelf Submission, note 14 at p. 14, para. 7.2). This explicit reference to the Gakkel Ridge as an *oceanic* ridge might suggest that Norway considered that the ridge fell under the second sentence of Article 76(3) of the LOSC, which provides that the continental shelf "does not include the deep ocean floor with its oceanic ridges".

47 Norway has received recommendations of the CLCS that would allow it to establish final and binding limits. However, Norway thus far does not seem to have done so and could still make a new or revised submission to the CLCS (see further text at note 13).

In this connection it may be noted that the Gakkel Ridge may be linked similarly to Greenland and the Norwegian territory of Svalbard, while the morphology in the case of the Russian Federation seems to be very different.⁴⁸

The Danish/Greenlandic submission does not use the Alpha Ridge to determine the outer limits of the continental shelf to the north of Greenland. However the submission indicates:

The Alpha-Mendeleev ridge complex and the Chukchi Borderland are morphologically continuous with the land mass of Greenland. However, the submitted data and other material in this Partial Submission do not provide for their classification as submarine elevations that are natural components of the Northern Continental Margin of Greenland.⁴⁹

The wording “submarine elevations that are natural components” is also contained in Article 76(6) of the LOSC, which provides that, notwithstanding the provision on submarine ridges, on such submarine elevations the constraint of 100 nautical miles beyond the 2500 meter depth line may be used.

The Danish/Greenlandic submission does not explain why the Alpha-Mendeleev ridge complex and the Chukchi Borderland have not been used in connection with the definition of the outer limits of the continental shelf to the north of Greenland. For one thing, this would have required the gathering of data for a very extensive additional area. In addition, it would seem to be unlikely that any part of this area would be located on the Danish side of continental shelf boundaries with its Arctic neighbors, making this effort to a large extent superfluous.⁵⁰ The language contained in the submission indicates that Denmark/Greenland considers that its natural prolongation extends beyond

48 Recent reporting on the Russian Federation's pending submission does not contain any reference to the Gakkel Ridge (for references see above).

49 Partial Submission, note 11 at p. 14. For the executive summary's description of the Alpha-Mendeleev ridge complex see also the paragraph preceding the quoted paragraph (*ibid.*, p. 14; cf. *Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf* (CLCS/11 of 13 May 1999), para. 7.3.1.b, which is concerned with submarine elevations).

50 It could be said that a similar reasoning might apply in the case of the Lomonosov Ridge, as a large part of this ridge in a delimitation between Canada, Denmark/Greenland and the Russian Federation—assuming that the ridge is the natural prolongation of all three States—will be attributed to the other two States. However, in this latter case the area concerned is more limited and the approach of Denmark/Greenland accomplishes that for the time being it does not have to commit itself to any specific line to limit the extent of its entitlement in relation to the other two States.

the outer limits it has currently submitted. This leaves open the possibility of making a further partial submission in the future or, alternatively, of arguing in bilateral negotiations that this entitlement is relevant for the determination of continental shelf boundaries.

The United States is not a party to the LOSC, but has taken the position that Articles 76(1) to (7) reflect customary international law.⁵¹ The United States has been carrying out research that should allow it to determine the outer limits of its continental shelf in accordance with these provisions.⁵² The continental shelf of the United States beyond 200 nautical miles in the Arctic Ocean comprises the Chukchi Cap and the Northwind Ridge. According to a preliminary study concerning the extent of the continental shelf of the United States, the outer limit in this area would mostly be determined by the constraint line of 100 nautical miles beyond the isobath of 2500 meters. This would imply that the continental shelf in this area might extend to approximately 600 nautical miles from the coast.⁵³ That continental shelf overlaps with that of the Russian Federation and of Canada.⁵⁴

The United States and the then Soviet Union concluded an agreement on the delimitation of their maritime boundary in 1990.⁵⁵ The agreement, which is provisionally applied, has not yet entered into force because the Parliament of the Russian Federation has not yet approved its ratification. The agreement delimits the entire continental shelf.⁵⁶ In the Arctic Ocean, the boundary is a meridian that was first employed in the 1867 Convention concerning the

51 See above text at note 9.

52 See, e.g., *Extended Continental Shelf Project* (available at <continentalsshelf.gov/>).

53 See L. Mayer, M. Jakobsson and A. Armstrong *The Compilation and Analysis of Data Relevant to a U.S. Claim Under United Nations Law of the Sea Article 76: A Preliminary Report* (Center for Coastal and Ocean Mapping/Joint Hydrographic Center University of New Hampshire Durham, N.H. May, 2002), pp. 55–57. More recent data indicate that the continental shelf in this area is probably more extensive than was estimated in this study (see *Extended Continental Shelf; Fact Sheet* (State Department; Bureau of Oceans and International Environmental and Scientific Affairs; March 9, 2009)). This is probably explained by the fact that better seafloor mapping has provided more data on the 2,500 meter isobath, resulting in the identification of more seaward points of the 2,500 meter isobath.

54 The December 2014 submission of Denmark/Greenland indicates that there also could be an overlap between the continental shelf of Greenland and that of the United States (Partial Submission, note 11 at p. 18).

55 Agreement between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary of 1 June 1990 ((1990) 29 ILM 941).

56 See *ibid.*, Article 1.

cession of Alaska between the United States and the Russian Empire to define the extent of the ceded territory.⁵⁷ This meridian coincides with the sector line the Russian Federation has employed in its national legislation.

The United States has not yet concluded a boundary treaty with Canada in the Arctic Ocean. Canada has taken the position that the bilateral boundary within 200 nautical miles is the meridian which constitutes the land boundary between Canada and Alaska. The United States has rejected the relevance of this line and maintains that the equidistance method is an appropriate method of delimitation. Interestingly, a large part of the area beyond 200 nautical miles is seaward of both lines.

3 Delimitation of the Continental Shelf: The Applicable Law in Light of *Myanmar/Bangladesh*

Article 83 of the LOSC provides the applicable law for the delimitation of the continental shelf beyond 200 nautical miles between four of the five Arctic Ocean coastal States. In view of the fact that Article 83 has been equated with customary law and Article 6 of the Convention on the Continental Shelf, an assessment of the implications of Article 83 is relevant for all Arctic Ocean coastal States.

To date, the implications of Article 83 of the LOSC for the delimitation of the continental shelf have been assessed in two international cases and an arbitration involving two of Canada's provinces.⁵⁸ Basically, the judges and arbitrators reached the same conclusion in all three cases, holding that there is no difference between the methodology to be applied to the delimitation within and beyond 200 nautical miles. In an article that was prepared in 2013, I discuss the reasoning the ITLOS employed to arrive at this conclusion in *Bangladesh/Myanmar*.⁵⁹ The findings of that article may be summarized as follows. First,

57 Adopted on 30 March 1867 (*United States Statutes at Large* Vol. 15, p. 539).

58 *Bangladesh/Myanmar*, judgment of 14 March 2012; *In the Matter of the Bay of Bengal Maritime Boundary Arbitration*, Award of 7 July 2014 (hereinafter *Bangladesh v. India*; available at <www.pca-cpa.org/showfile.asp?fil_id=2705>); Arbitration between Newfoundland and Labrador and Nova Scotia concerning portions of the limits of their off-shore areas as defined in the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act* and the *Canada-Newfoundland Atlantic Accord Implementation Act* (hereinafter *Newfoundland and Labrador and Nova Scotia arbitration*); Award of the tribunal in the second phase of 26 March 2002 (available at <[www2.unb.ca/lawlibrary/bound_aryarbitration/pdfs/Awards%20&%20Maps/PhaseII_Award_English\[1\]_opt.pdf](http://www2.unb.ca/lawlibrary/bound_aryarbitration/pdfs/Awards%20&%20Maps/PhaseII_Award_English[1]_opt.pdf)>).

59 A.G. Oude Elferink "ITLOS's Approach to the Delimitation of the Continental Shelf beyond 200 Nautical Miles in the *Bangladesh/Myanmar* Case: Theoretical and Practical

although the Tribunal is right in finding that Article 83 does not make a distinction between the continental shelf within and beyond 200 nautical miles, that article is silent on the substantive rules and only requires that the outcome of the delimitation has to be equitable. The attainment of this result may require applying different principles and rules within and beyond 200 nautical miles. Secondly, the article argued that the ITLOS linked the basis of entitlement to the continental shelf and its preferred method of delimitation (equidistance/relevant circumstances) in a way that was completely divorced from the view expounded in the case law in relation to areas within 200 nautical miles. Moreover, it was submitted that the Tribunal failed to explain what distinguished the relationship of the equidistance/relevant circumstances method to the Tribunal's very general definition of the basis for entitlement from the relationship of other possible methods of delimitation to that basis for entitlement. Finally, apart from these doctrinary problems attaching to the ITLOS's reasoning, the article demonstrated that the approach may be completely unworkable in practice. An equidistance line may be located outside the area of overlapping continental shelf entitlements beyond 200 nautical miles of the States concerned.

The article also considered what might be a possible alternative to the equidistance/relevant circumstances methodology adopted by the ITLOS in *Bangladesh/Myanmar* and concluded that a starting point in that quest might be the approach of the International Court of Justice to the delimitation of the continental shelf in the *North Sea Continental Shelf Cases*, which was decided in 1969.⁶⁰ What makes these cases of particular interest is that two of the parties vehemently argued that there was an intimate connection between the basis for entitlement to the continental shelf and the equidistance method. In its judgment the Court refuted this contention and instead held that entitlement was based on natural prolongation.⁶¹ In the light of that conclusion, the Court had to determine the applicable rules of delimitation. According to the Court in the cases before it:

Difficulties" R. Wolfrum, M. Seršić, T.M. Šošić (eds.), *Contemporary Developments in International Law; Essays in Honour of Budislav Vukas* (Leiden: Martinus Nijhoff Publishers, 2015), pp. 230–249. The reasoning in the *Newfoundland and Labrador and Nova Scotia* arbitration is also briefly discussed in this same article. The decision of the arbitral tribunal in *Bangladesh v. India* does not add any new arguments to those of the ITLOS in *Bangladesh/Myanmar*.

60 The present contribution further expands on the ideas that were set out in this earlier article.

61 *North Sea Continental Shelf Cases* (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands), judgment of 20 February 1969 [1969] ICJ Reports, paras. 43–46.

... delimitation is to be effected by agreement in accordance with equitable principles, and taking account of all the relevant circumstances, in such a way as to leave as much as possible to each Party all those parts of the continental shelf that constitute a natural prolongation of its land territory into and under the sea, without encroachment on the natural prolongation of the land territory of the other[.]⁶²

The Court's reference to natural prolongation might suggest that it intended that primacy should be given to geomorphology or geology to ascertain possible continental shelf boundaries. However, as a matter of fact no such primacy was given to these factors by the Court, which instead understood natural prolongation to be primarily a spatial concept defined by reference to the coastal fronts of the States concerned and their seaward projection.⁶³ The idea that it might be possible to discern continental shelf boundaries within overlapping natural prolongations on the basis of geology or geomorphology was reflected in Bangladesh's argument in *Bangladesh/Myanmar* that it had the "most natural prolongation". This argument was rejected by the ITLOS. The Tribunal held that the extent of natural prolongation had to be determined on the basis of the provisions of Article 76, in particular its paragraph 4. Once it is determined that entitlements overlap on the basis of these provisions there is no basis for concluding that one of the States concerned should be given a larger share of the overlapping entitlements because it has "the most natural prolongation".⁶⁴ This finding of the Tribunal is in line with earlier jurisprudence, which has consistently rejected the relevance of geological or geomorphological arguments for the determination of continental shelf boundaries."⁶⁵

62 Ibid., para. 101(C)(1).

63 For a discussion of this point see A.G. Oude Elferink *The Delimitation of the Continental Shelf between Denmark, Germany and the Netherlands; Arguing Law, Practicing Politics?* (Cambridge: Cambridge University Press, 2013), pp. 330–331. The Court did indicate that it could be useful to look at the geology of the shelf "to find out whether the direction taken by certain configurational features should influence delimitation because, in certain localities, they point-up the whole notion of the appurtenance of the continental shelf to the State whose territory it does in fact prolong" (*North Sea Continental Shelf Cases*, judgment of 20 February 1969 [1969] ICJ Reports, para. 95). The French text of this paragraph reads in part "en précisant en certains points la notion même d'appartenance du plateau continental à l'Etat dont il prolonge en fait le territoire", indicating even more clearly than the English text that geology is accessory to geography.

64 *Bangladesh/Myanmar*, judgment of 14 March 2012, para. 460.

65 See, e.g. *Continental Shelf (Tunisia/Libyan Arab Jamahiriya)* judgment of 24 February 1982 [1982] ICJ Reports, para. 66; *Delimitation of the Maritime Boundary in the Gulf of Maine Area*, judgment of 12 October 1984 [1984] ICJ Reports, paras 45–47.

The Court's general delimitation rule as expressed in the *North Sea Continental Shelf Cases* can be translated into a number of specific steps. The first step in a delimitation should be to determine the extent of overlap of the natural prolongations of the States concerned. A second step would be determining how the overlapping natural prolongation of each of the States concerned relates to its coast. Not all of the coast of a State necessarily is relevant to the delimitation of the continental shelf beyond 200 nautical miles. This may be illustrated by two examples derived from practice. In *Bangladesh v. India* the arbitral tribunal held that not only the northwestern part of the Indian mainland coast was part of the relevant coast, but that this relevant coast also included the northern part of the Andaman Islands, which are located in the eastern part of the Bay of Bengal.⁶⁶ The tribunal was able to reach this conclusion because India's natural prolongation extends beyond 200 nautical miles not only from its mainland coast, but also from the Andaman Islands. These natural prolongations meet and overlap in the center of the Bay of Bengal. Had there been no separate natural prolongation extending from the Andaman Islands, the conclusion would have been different; to wit they would not have qualified as part of the relevant Indian coast for the delimitation with Bangladesh.

An example of a different nature is provided by the delimitation of the continental shelf beyond 200 nautical miles between Iceland and Denmark/Greenland in the Irminger Sea.⁶⁷ Iceland's continental shelf in the Irminger Sea extends from its southwest facing coast along the Reykjanes Ridge.⁶⁸ There would seem to be little doubt that all of this coast of Iceland is part of the relevant coast in relation to this entitlement. However, if the area of overlapping entitlements is taken into account, a different picture emerges. Greenland's continental shelf beyond 200 nautical miles extends along more than 200 nautical miles of its 200-nautical-mile limit, but only extends some tens

66 *Bangladesh v. India*, award of 7 July 2014, para. 304. For a depiction of India's relevant coasts see *ibid.*, Map 4.

67 Denmark/Greenland and Iceland have reached a provisional agreement on the delimitation of this area (Agreed Minutes on the delimitation of the continental shelf beyond 200 nautical miles between Greenland and Iceland in the Irminger Sea of 16 January 2013 (on file with the author)).

68 See *The Icelandic Continental Shelf; Partial Submission to the Commission on the Limits of the Continental Shelf pursuant to article 76, paragraph 8 of the United Nations Convention on the Law of the Sea in respect of the Ægir Basin area and Reykjanes Ridge; Executive Summary of Iceland's* (available at <www.un.org/Depts/los/clcs_new/submissions_files/submission_isl_27_2009.htm>).

of nautical miles beyond that limit.⁶⁹ This implies that the area of overlapping entitlement is limited to this area adjacent to the 200-nautical-mile limit of Greenland. It would be difficult to maintain that for this area the entire southwest facing coast of Iceland would be relevant. At most, the relevant coast that frontally projects into the area of overlapping entitlements is located between the peninsulas of Sudurnes and Snæfellsnes. While the entire southwest-facing coast of Iceland measured along a straight line is around 290 kilometers, the coast between the two peninsulas measured along a straight line is about 125 kilometers. The relevant coast of Greenland that is directly facing the area of overlapping entitlements measures around 545 kilometers. The ratio between that coast and Iceland's relevant coast between the two peninsulas is 1:4.4. In the light of the case law such a difference in coastal lengths could well constitute a relevant circumstance for determining the continental shelf boundary. On the other hand, if the whole southwest-facing coast of Iceland would be taken into account the ratio of the relevant coasts would only be 1:1.9, a difference in coastal lengths that probably would not constitute a relevant circumstance.⁷⁰

After the area of overlapping natural prolongations and the relevant coasts have been determined two approaches could be taken. Adherence to the rule expressed in the *North Sea Continental Shelf Cases* might seem to imply that as a first step all relevant circumstances should be determined. However, the *dictum* of the Court in its judgment on the appropriateness of using the median line as the starting point for dividing the natural prolongations between States

69 See *Partial Submission of the Government of the Kingdom of Denmark together with the Government of Greenland to the Commission on the Limits of the Continental Shelf; The Southern Continental Shelf of Greenland; Executive summary* (available at <www.un.org/Depts/los/clcs_new/submissions_files/submission_dnk_61_2012.htm>).

70 The recent decisions in *Bangladesh/Myanmar* and *Bangladesh v. India* determined coastal length ratios of respectively 1:1.42 and 1:1.92, but did not find that such disparities constituted a relevant circumstance. In *Black Sea* the ICJ even concluded that a ratio of coastal lengths of Romania and Ukraine of approximately 1:2.8 did not constitute a relevant circumstance. However, the Court also concluded that "it cannot disregard the fact that a good portion of the Ukrainian coast which it considers as relevant projects into the same area as other segments of the Ukrainian coast, thus strengthening but not spatially expanding the Ukrainian entitlement" (Case concerning *maritime delimitation in the Black Sea (Romania v. Ukraine)*, Judgment of 3 February 2009 [2009] ICJ Reports, para. 168). If such double counting would not be taken into account in determining the ratio of the relevant coasts, it would rather seem to be somewhere in the range of 1:1.5 to the advantage of Ukraine.

with opposite coasts suggests that a different approach could also be entertained. As the Court observed:

The continental shelf area off, and dividing, opposite States, can be claimed by each of them to be a natural prolongation of its territory. These prolongations meet and overlap, and can therefore only be delimited by means of a median line; and, ignoring the presence of islets, rocks and minor coastal projections, the disproportionally distorting effect of which can be eliminated by other means, such a line must effect an equal division of the particular area involved.⁷¹

This observation indicates that under the rule expressed in the *North Sea Continental Shelf Cases* it would still be possible to first assess the outcome of the application of an equidistance line. If the equidistance line were to result in a broadly equal division of the area of overlap it could be adopted as a starting point. However, if that is not the case, a different method should be chosen that achieves a similar result. Alternatively, in this latter case it could be considered to refrain from determining a provisional delimitation line, but instead to move directly to the stage of balancing all relevant circumstances.

The delimitation of the continental shelf beyond 200 nautical miles between Iceland and Greenland in the Irminger Sea can be used to illustrate the approach set out above. As a first step it could be tested how an equidistance line would divide the overlapping natural prolongations. That equidistance line is located well beyond the area of overlapping natural prolongations and thus does not provide an appropriate starting point for this delimitation. An alternative delimitation method would be the drawing of a line that is equidistant between the 200-nautical-mile limit of Greenland and the outer limit of Greenland's continental shelf beyond 200 nautical miles in the Irminger Sea. These two limits define the outer envelope of the overlapping claims and an equidistance line between these two limits would divide this area of overlapping claims in equal halves between the parties. In the light of the Court's *dictum* on the median line cited above, this line could be said to form an appropriate starting point for effecting a delimitation in this specific case.⁷²

⁷¹ *North Sea Continental Shelf Cases*, judgment of 20 February 1969 [1969] ICJ Reports, para. 57.

⁷² It should be noted that the outer limit of the continental shelf of Iceland as defined in its submission to the CLCS in the area concerned in large part coincides with the 200-nautical-mile limit of Greenland (see *The Icelandic Continental Shelf*, note 68 at p. 11). It would have been possible for Iceland to extend its outer limit to within 200 nautical miles

The next stage of a delimitation would consist of an assessment of the relevant circumstances that might require a shift of the provisional equidistance line between the overlapping claims of Denmark/Greenland and Iceland in the Irminger Sea. As was mentioned above, one such relevant circumstance could be the difference in the lengths of the relevant coasts, that of Greenland being 4.4 times longer than that of Iceland. Another relevant circumstance could be the location and configuration of the area of overlapping entitlements. The area of overlapping entitlements beyond 200 nautical miles is adjacent to the Greenlandic 200-nautical-mile limit and extends for a large distance along that limit. A delimitation of this area by the provisional delimitation line results in Greenland's continental shelf not extending to the outer limit of Greenland's continental shelf. On the other hand, the area of overlapping entitlements could be said to be a peripheral area of the continental shelf beyond 200 nautical miles of Iceland. Even if the whole area of overlapping entitlements were to be attributed to Denmark/Greenland, Iceland's continental shelf would still extend along a broad front to the outer limits of that shelf, which is located a couple hundred nautical miles to the south of the area of overlapping entitlements. It could be argued that this difference constitutes a relevant circumstance in the sense that a delimitation dividing the area of overlapping entitlements equally would, to paraphrase the Court's judgment in the *North Sea Continental Shelf Cases*, not leave as much as possible to each party all those parts of the continental shelf that constitute a natural prolongation of its land territory, but would lead to an encroachment on the natural prolongation of Denmark/Greenland.

Finally, if the provisional equidistance line would have been calculated on the basis of the baselines along the coasts, the peninsula of Sudurnes could have been argued to be a relevant circumstance. However, since the provisional delimitation line is not based on distance from the coast—and the same applies to the extent of Iceland's continental shelf entitlement—there would not seem to be a justification for treating Sudurnes as a relevant circumstance.

of Greenland (see the argument of Myanmar to the contrary as reported in *Bangladesh/Myanmar*, judgment of 14 March 2012, paras 468–469. This argument was not accepted by the ITLOS, which effected a delimitation resulting in a continental shelf boundary that in part was within 200 nautical miles of Myanmar but beyond 200 nautical miles of Bangladesh (ibid., paras 471–476)). In this case, a provisional delimitation line could be an equidistance line between the outer limits of Iceland extending inside Greenland's 200-nautical-mile zone and the outer limit of Greenland's continental shelf beyond 200 nautical miles. Such a line could be justified on similar grounds as the provisional line that is proposed in the text.

4 Pending Arctic Ocean Delimitations in Light of the Applicable Law⁷³

At the moment there is uncertainty about the extent of the continental shelf of four of the five Arctic Ocean coastal States. That uncertainty complicates the assessment of pending delimitations. For that reason, the current analysis will focus on three delimitations, namely between the Russian Federation on the one hand and Canada and Denmark/Greenland on the other hand, between Canada and Denmark/Greenland, and between the latter and Norway. The former two delimitations will be assessed on the assumption that the Alpha, Lomonosov and Mendeleev Ridges are part of the natural prolongation of these three States and that they are not limited by the constraint of 350 nautical miles.⁷⁴ The uncertainty about the extent of the continental shelf in the Arctic Ocean likely has contributed to the absence of delimitation agreements between the Russian Federation and Canada and Denmark/Greenland.⁷⁵

In the case of the delimitation of the continental shelf beyond 200 nautical miles between the Russian Federation on the one hand and Canada and Denmark/Greenland on the other, a provisional equidistance line would at first sight seem to provide an appropriate starting point.⁷⁶ This delimitation

73 Apart from the currently pending delimitations, the case of the Russian Federation and the United States in the Arctic Ocean would seem to be of interest from the perspective of exploring the differences between the delimitation of the continental shelf within and beyond 200 nautical miles. The overlapping continental shelf entitlements of the two States are located in the area of the Chukchi Cap and the Northwind Ridge. An equidistance line on the side of the United States in part is determined from basepoints that could be argued to have a less direct connection to that shelf area because the line of shortest distance between these basepoints and the equidistance line first seems to cross the foot of the slope of the Barrow margin and then crosses the foot of the slope along the Chukchi Cap and the Northwind Ridge from seaward. That is, the frontal projection from these basepoints does run across the natural prolongation of the United States along the Chukchi Cap and the Northwind Ridge in its entirety.

74 As a matter of fact, if the 350-nautical-mile constraint would be applicable to these ridges, the Russian Federation would not share a continental shelf boundary with the other two States.

75 See, e.g., *Kommentarii*, at note 31.

76 In view of the Russian Federation's use of sector lines as provisional limits of its continental shelf beyond 200 nautical miles in relation neighboring to States in Arctic Ocean, it seems likely that the Russian Federation would invoke the relevance of these sector lines for a delimitation in relation to Canada and Denmark/Greenland (see further Oude Elferink, note 27 at p. 290). That article concludes that sector lines as such have no relevance in a legal determination of the maritime boundaries in the Arctic (*ibid.*,

is between opposite coasts implying that the natural “prolongations meet and overlap, and can therefore only be delimited by means of a median line [...]. [S]uch a line must effect an equal division of the particular area involved”.⁷⁷

Using the equidistance method between the Russian Federation and Canada and Denmark/Greenland raises a question about the selection of the relevant basepoints.⁷⁸ The equidistance line that is commonly depicted in this case is constructed using basepoints on Franz Josef Land and Severnaia Zemlia.⁷⁹ As the Russian Federation’s 2001 submission to the CLCS indicates, the natural prolongation of Franz Josef Land and Severnaia Zemlia extends a limited distance beyond 200 nautical miles, but is separated from the Lomonosov Ridge by an area beyond the outer limits the Russian Federation submitted to the CLCS. It is submitted that this circumstance disqualifies basepoints on these territories as relevant basepoints for constructing an equidistance line in the area of the Lomonosov Ridge.⁸⁰ It would imply using basepoints on the coast of the Russian Federation that are separated from the equidistance line by an area to which the Russian Federation has no entitlement.⁸¹ There obviously is no justification for using basepoints on coasts that do not contribute to generating the area of overlapping entitlements in constructing a provisional equidistance line to divide that area of overlap. It might be submitted that Franz Josef Land and Severnaia Zemlia, although separated from the Lomonosov Ridge by

pp. 280–282) and submits that recent Russian scholarship defending the use of the sector lines while rejecting the relevance of the law of the sea “degenerates into pure apology that is completely divorced from legal realities” (*ibid.*, p. 290; see also *ibid.*, pp. 278–284).

77 *North Sea Continental Shelf Cases*, judgment of 20 February 1969 [1969] ICJ Reports, para. 57.

78 I would like to thank Erik Molenaar for drawing my attention to this point as far as the basepoints of the Russian Federation are concerned.

79 See, e.g., the figure *Maritime jurisdiction*, note 22.

80 A similar situation may exist in relation to a part of the equidistance line between Canada and the Russian Federation. The equidistance line shown on *ibid.* in part is determined by basepoints on Canada’s Prince Patrick’s Island. In this instance, the line of shortest distance between the relevant basepoint(s) on the island may also pass through an area that may be beyond the outer limits of Canada’s continental shelf.

81 The December 2014 submission of Denmark/Greenland includes the Gakkel Ridge as part of its natural prolongation. As was pointed out above, this raises the question whether the Russian Federation would be able to do the same. If that were to be the case, the Russian Federation would have an entitlement to this area—subject to the review of its outer limits by the CLCS. However, it is submitted that this would not alter the situation. In this case there still would not be a uninterrupted natural prolongation extending from these basepoints to the equidistance line on the Lomonosov Ridge along a straight line (see also note 73 above).

an area that is not part of the natural prolongation of the Russian Federation, are linked to the Lomonosov Ridge because there is no discontinuity between their natural prolongation and that of the New Siberian Islands, whose frontal projection extends along the Lomonosov Ridge. However, rather than refuting the argument that basepoints on Franz Josef Land and Severnaia Zemlia should not be used for constructing a provisional equidistance line, this reasoning instead reinforces it. The distance of Franz Josef Land and Severnaia Zemlia to the Lomonosov Ridge measured by a line passing along the natural prolongation of the Russian Federation is at a greater distance from the Lomonosov Ridge than the New Siberian Islands.

An equidistance line not taking into account basepoints on Franz Josef Land and Severnaia Zemlia would diverge significantly from an equidistance line giving full weight to these basepoints. Viewed from the Russian coastline the two lines start to diverge at a point that is to the north of the New Siberian Islands.⁸² The divergence between the two lines increases gradually, moving west, and on the basis of a rough estimate is around 150 nautical miles at the point at which these two equidistance lines intersect the outer limits of the continental shelf along the Lomonosov Ridge contained in the 2001 submission of the Russian Federation.

The Russian Federation's small islands of Henrietta and Jeannetta, which are a considerable distance north of the main islands of the New Siberian Islands, in a delimitation on the basis of maritime delimitation law, likely would be treated as a relevant circumstance or might be disregarded in determining a provisional equidistance line. In this regard there would not be any difference in respect to these islands in comparison to a delimitation involving 200-nautical-mile zones.

At first glance, the delimitation of the continental shelf beyond 200 nautical miles between Canada and Denmark/Greenland might seem to be straightforward. A provisional equidistance line extends north up to the median line between both countries and the Russian Federation. Consequently, it could be argued that the equidistance line leaves both countries the areas that "constitute a natural prolongation of [their] land territory into and under the sea, without encroachment on the natural prolongation of the land territory

82 This concerns an equidistance line that gives full effect to the small islands of Henrietta and Jeannetta that are well north of the main islands of the New Siberian Islands. If these islands were to be given limited or no weight in a delimitation, the point at which an equidistance line giving no weight to Franz Josef Land and Severnaia Zemlia would start to diverge from an equidistance line giving full weight to these islands would be located further to the east.

of the other”.⁸³ However, if it is accepted that the Lomonosov Ridge is part of the natural prolongation of both countries, the same would apply to the Alpha Ridge.⁸⁴ In that case an equidistance line could be said to cut off Denmark/Greenland from a large part of its natural prolongation in the Arctic Ocean, while it does not have a similar effect on the natural prolongation of Canada. A full elaboration of this argument is beyond the scope of this article, but the following points may be noted. The general direction of Greenland’s coast is between northwest and north northwest and a perpendicular to this relevant coast is well to the west of the equidistance line. In the case of Canada it could be argued that a somewhat similar situation exists if only the northeastern part of Ellesmere Island is taken into consideration. However, the remainder of the northern coast of Ellesmere Island and the Sverdrup Islands also can be considered to be part of coast that is relevant for determining the general direction of Canada’s coast in relation to its natural prolongation along the Lomonosov and Alpha Ridges. A perpendicular to that general direction would be much closer to the equidistance line than the perpendicular to Denmark/Greenland’s relevant coast, suggesting that the equidistance line would not provide an appropriate starting point for the delimitation of the continental shelf beyond 200 nautical miles.

The continental shelves of Denmark/Greenland and Norway as defined in the former’s submission to the CLCS and the latter’s recommendations by the Commission overlap along a large part of the 200-nautical-mile limit of Svalbard in the Arctic Ocean. A provisional equidistance line would be located at the western edge of this area of overlap and would attribute almost all of that area to Norway. This indicates that the equidistance line is not an appropriate starting point for this delimitation. As an alternative, the method that was suggested in the discussion of the delimitation between Denmark/Greenland and Iceland in the Irminger Sea could be considered, i.e., an equidistance line related to the outer contours of the area of overlapping entitlements beyond 200 nautical miles. That line would divide this area equally between the parties. In view of the broad equality of the relevant coasts of the parties—Svalbard’s north facing coast and Greenland northeast facing coast—there would not seem to be any circumstances that would require an adjustment of this provisional line to arrive at a final boundary.

83 *North Sea Continental Shelf Cases*, judgment of 20 February 1969 [1969] ICJ Reports, para. 101(C)(1).

84 See also above text at note 49.

5 Conclusions

All five of the Arctic Ocean coastal States are still in the process of defining the outer limits of their continental shelf beyond 200 nautical miles. Only Norway has currently received recommendations from the CLCS that allow it to determine final and binding outer limits, but Norway is yet to take that step. The Russian Federation can be expected to make a revised submission to the CLCS, which will not end up in the current queue of submissions, but will be immediately considered. For the other Arctic Ocean coastal States getting to the stage of receiving recommendations from the CLCS is still a long way off. Some 40 submissions are waiting in line to be taken up by a subcommission before it will be the turn for the submission of Denmark/Greenland in relation to the Arctic Ocean. Canada is yet to complete its preliminary information by making a submission to the CLCS and the United States will only be able to make a submission if it will become a party to the LOSC.

There currently remains considerable uncertainty about the extent of the continental shelf beyond 200 nautical miles in the Arctic Ocean, in particular because of the complexity of the area involving the Alpha, Lomonosov and Mendeleyev Ridges. Although the three States with an interest in this area—Canada, Denmark/Greenland and the Russian Federation—are working on the assumption that these ridges are part of their natural prolongations and are not limited by the 350-nautical-mile constraint of Article 76(6) of the LOSC applicable to submarine ridges, there is bound to remain uncertainty in this respect until the CLCS has considered this matter.

The review of the implementation of Article 76 by the Arctic Ocean coastal States allows drawing a couple of conclusions as regards the delimitation of the continental shelf. The Arctic five fit in with the global pattern that States in general do not object to the consideration of submissions by the CLCS in the case of pending delimitations of the continental shelf between neighboring States. Secondly, although Article 76(10) provides that the implementation of Article 76 is without prejudice to the delimitation of boundaries between neighboring States, the practice of the Arctic Ocean coastal States illustrates that the future delimitation of the shelf is factored in in preparing submissions to the CLCS.

The present essay builds on an earlier article that argued that the conclusion of the ITLOS in *Bangladesh/Myanmar*, that the equidistance/relevant circumstances rule is equally applicable within and beyond 200 nautical miles, is theoretically unsound and may be impossible to apply in practice. An alternative to the approach of the ITLOS could be the ICJ's rule of delimitation formulated in the *North Sea Continental Shelf Cases*. That approach is further

explored in the context of the delimitation between Denmark/Greenland and Iceland in the Irminger Sea and subsequently in three pending delimitations in the Arctic Ocean between, respectively, Canada and Denmark/Greenland, these two States and the Russian Federation and Denmark/Greenland and Norway. Although it is only possible to provide an impressionistic image of these delimitations, it should be clear from these examples that the delimitation beyond 200 nautical miles is more complex than that within 200 nautical miles and that it can be concluded that one should avoid considering such delimitations exclusively through the prism of the equidistance/relevant circumstances rule developed in the context of the distance-based entitlement of the 200-nautical-mile zone.