



Universiteit
Leiden

The Netherlands

Disagreements between the Commission on the Limits of the Continental Shelf (CLCS) and submitting coastal states

Woker, H.J.

Citation

Woker, H. J. (2024). Disagreements between the Commission on the Limits of the Continental Shelf (CLCS) and submitting coastal states. *The International Journal Of Marine And Coastal Law*, 39(2), 252-278. doi:10.1163/15718085-bja10165

Version: Publisher's Version

License: [Creative Commons CC BY 4.0 license](https://creativecommons.org/licenses/by/4.0/)

Downloaded from: <https://hdl.handle.net/1887/4150164>

Note: To cite this publication please use the final published version (if applicable).



Disagreements between the Commission on the Limits of the Continental Shelf (CLCS) and Submitting Coastal States

Hilde Woker | ORCID: 0000-0001-5960-5934

Grotius Centre for International Legal Studies, Leiden University,
Leiden, The Netherlands
h.j.woker@law.leidenuniv.nl

Received 20 February 2024 | Accepted 3 April 2024 |
Published online 28 May 2024

Abstract

Over the course of more than twenty years of operation, the Commission on the Limits of the Continental Shelf (CLCS) has made 40 recommendations to submitting coastal States regarding the outer limits of the continental shelf. Only 12 of these recommendations have been used to establish final and binding limits so far. The past practice of the CLCS demonstrates that not all coastal State submissions are simply accepted and that, in fact, various disagreements arise throughout the process. Based on a review of all recommendations issued by the CLCS, this article presents an overview of the various issues subject to disagreement between the CLCS and the submitting coastal State, discusses potential options and solutions for resolving these disagreements, and analyses those disagreements and the practice of the CLCS in light of the resilience of the United Nations Convention on the Law of the Sea.

Keywords

continental shelf – Commission on the Limits of the Continental Shelf (CLCS) – delineation – natural prolongation – test of appurtenance – law of the sea

Introduction

The continental shelf is an important example of a legal regime that was envisioned more than fifty years ago and that has developed over time, responding to developments in technology and new scientific knowledge.¹ The 40th anniversary of the 1982 United Nations Convention on the Law of the Sea (LOSC)² thus provides an opportunity to reflect upon this legal regime, and how its development can be characterised in terms of the resilience of the LOSC. The continental shelf is an important maritime zone for coastal States, giving access to a potentially vast area of (predominantly) mineral resources. The extent of a coastal State's entitlement to a continental shelf is determined according to Article 76 of the LOSC, which includes a procedure involving the Commission on the Limits of the Continental Shelf (CLCS). Although the legal regime for the continental shelf has experienced various legal developments over time, the focus of this contribution is placed on the situation in which a submitting coastal State disagrees with the CLCS when delineating the extent of its continental shelf.

Notable examples of disagreements between the CLCS and submitting coastal States include the case of Ascension Island and the Reykjanes Ridge. In both cases, the submitting coastal State, that is the United Kingdom and Iceland, asserted continental shelf entitlements to a much larger area than the CLCS eventually ended up recommending. However, as this contribution will demonstrate, there are numerous issues that have been subject to disagreement between the CLCS and the submitting coastal State, some more controversial than others.

After a summary of the legal regime for the continental shelf and the role, functions, and actions of the CLCS, this contribution examines the various (potential) issues of disagreement between the CLCS and submitting coastal States that have been identified on the basis of a review of the recommendations of the CLCS. Subsequently, potential options and solutions for resolving such disagreements are discussed. The contribution will conclude with some final remarks, reflecting on the extent to which disagreements between the submitting coastal State and the CLCS can be viewed in light of the resilience of the LOSC.

¹ The author would like to thank the editors of this special issue, Yoshifumi Tanaka and Bjørn Kunoy, for their support and insightful comments. This article builds upon a paper presented at the conference 'Resilience of the UN Convention on the Law of the Sea: 40 Years' held at the University of Copenhagen, 10 March 2023.

² United Nations Convention on the Law of the Sea (Montego Bay, 10 December 1982, in force 16 November 1994) 1833 *UNTS* 397 [LOSC].

The Continental Shelf and the Commission on the Limits of the Continental Shelf

The LOSC made a significant contribution to the development of the legal regime for the continental shelf. Although the legal concept of the continental shelf can be traced back to the Truman Proclamation in 1945,³ and subsequently the 1958 Geneva Convention on the Continental Shelf,⁴ the 1982 LOSC significantly developed the legal definition and delineation procedure. Article 76(1) of the LOSC defines the continental shelf as 'the seabed and subsoil of the submarine areas' extending beyond the territorial sea 'throughout the natural prolongation' of the land territory 'to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines' in cases where the outer edge of the continental margin does not exceed 200 nautical miles. Article 76(2)–(7) then introduces a definition of the continental margin, the technical formulae required to determine the outer edge of the continental margin, two constraint lines to the continental shelf, and specific rules for submarine elevations and ridges, and Article 76(8) introduces a procedure requiring the CLCS to make recommendations to coastal States 'on matters related to the establishment of the outer limits of their continental shelf'. A coastal State's outer limits established 'on the basis of' the CLCS' recommendations are 'final and binding'.⁵

The CLCS is one of the institutions established by the LOSC. The relevant provisions are Article 76(8), Annex II of the LOSC, the Rules of Procedure of the CLCS,⁶ and the Scientific and Technical Guidelines adopted by the CLCS.⁷ The CLCS consists of 21 members 'who shall be experts in the field of geology, geophysics or hydrography' elected by States Parties in light of equitable geographical representation.⁸ The functions of the CLCS are twofold: to consider the data submitted by the coastal State concerning its outer limits and make

3 US Presidential Proclamation No. 2667, Policy of the United States with Respect to the Natural Resources of the Subsoil of the Sea Bed and the Continental Shelf (28 September 1945).

4 Convention on the Continental Shelf (Geneva, 29 April 1958, in force 10 June 1964) 499 UNTS 311.

5 LOSC (n 2), Article 76(8).

6 Rules of Procedure of the Commission on the Limits of the Continental Shelf 2008 (CLCS/40/Rev.1) [CLCS Rules of Procedure].

7 Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf 1999 (CLCS/11) [CLCS Scientific and Technical Guidelines].

8 LOSC (n 2), Annex II, Article 2(1).

recommendations, and to provide scientific and technical advice if requested by a coastal State during the preparation of the data.⁹

When a coastal State submits information concerning the outer limits of the continental shelf to the CLCS and the relevant submission is next in line for consideration, a sub-commission is formed, composed of seven members.¹⁰ The submitting coastal State may send representatives to participate in the relevant proceedings, but do not have the right to vote.¹¹ In fact, it is common that representatives of the submitting coastal States present the submission for the CLCS before it considers how to proceed with the submission.¹²

Before proceeding with the main scientific and technical consideration of the submission, the sub-commission undertakes a preliminary analysis to determine, amongst other things, if the test of appurtenance is satisfied by the coastal State.¹³ The test of appurtenance is a test developed by the CLCS and 'consists in the demonstration of the fact that the natural prolongation of [a coastal State's] land territory to the outer edge of the continental margin extends beyond a line delineated at a distance of 200 nautical miles'.¹⁴ At this preliminary stage, in case the sub-commission determines there are matters that require clarification, the coastal State may provide such additional clarification, in the form of presentations and/or additional materials.¹⁵ Also during the main scientific and technical examination of the submission, the submitting coastal State may be requested to submit additional data, information or clarifications.¹⁶ At an advanced stage of the examination of the submission, the sub-commission provides a comprehensive presentation of its views and conclusions to the submitting coastal State.¹⁷ The coastal State will then have the opportunity to respond to these presentations, after which the sub-commission proceeds to prepare its draft recommendations to the plenary CLCS.¹⁸

Finally, the sub-commission will submit recommendations to the plenary CLCS, which may then approve the sub-commission's recommendations by a

9 *Ibid.*, Annex II, Article 3(1).

10 *Ibid.*, Annex II, Article 5. The practice of establishing sub-commissions applies '[u]nless the Commission decides otherwise'.

11 *Ibid.*, Annex II, Article 5.

12 CLCS Rules of Procedure (n 6), Annex III, Article 2(a).

13 *Ibid.*, Annex III, Article 5(1)(a).

14 CLCS Scientific and Technical Guidelines (n 7), Article 2.1.2. See also Article 2.2.

15 CLCS Rules of Procedure (n 6), Annex III, Article 6.

16 *Ibid.*, Annex III, Article 10(1).

17 *Ibid.*, Annex III, Article 10(3).

18 *Ibid.*, Annex III, Article 10(4–5).

two-thirds majority.¹⁹ After the sub-commission has presented its recommendations to the plenary CLCS, and before the CLCS considers and adopts those recommendations, the submitting coastal State is allowed to make a presentation on 'any matter related to its submission' to the CLCS.²⁰ The CLCS will then consider the recommendations in private, without participation of the coastal State. Lastly, the recommendations adopted by the plenary CLCS are submitted to the coastal State, upon which the coastal State shall establish their outer limits.²¹

In summary, the procedure of consideration by the CLCS of a coastal State's submission demonstrates the back-and-forth process between the submitting coastal State and the CLCS. At various stages in the examination of the submission, the coastal State is allowed to present and/or provide information and clarifications. At the same time, however, the actual examination of the submission occurs behind closed doors, without participation of the coastal State. In case of disagreement by the coastal State with the recommendations of the CLCS, Article 8 of Annex II stipulates that 'the coastal State shall, within a reasonable time, make a revised or new submission' to the CLCS.²²

Points of Disagreement

The procedure for establishing outer limits of the continental shelf is highly scientific and technical in nature and, since it relates to a coastal State's sovereign rights over resources, politically sensitive. Over the course of more than twenty years of operation, the CLCS has made 40 recommendations to submitting coastal States.²³ As of January 2024, only twelve of these recommendations have been used to establish the final and binding outer limits of the continental shelf.²⁴ When reviewing these recommendations, it becomes clear that there have indeed been many issues of disagreement between the submitting coastal State and the CLCS. Many of the CLCS recommendations are considered uncontroversial as any potential disagreement may have been resolved through the back-and-forth process described above. However, sometimes, a

19 LOSC (n 2), Annex II, Article 6.

20 CLCS Rules of Procedure (n 6), Annex III, Article 15(1bis).

21 For a schematic overview of the procedure, see the summary flow chart published in *ibid.*, Annex III, Section VII.

22 LOSC (n 2), Annex II, Article 8.

23 'Submissions to the CLCS' available at https://www.un.org/depts/los/clcs_new/commission_submissions.htm. All websites accessed on 12 January 2024, unless otherwise mentioned.

24 *Ibid.*

submitting coastal State remains in disagreement, even after the CLCS has issued its recommendations. Notable examples in this regard include the recommendations issued to the United Kingdom in respect of Ascension Island, and the recommendations issued to Iceland in respect of the Reykjanes Ridge.

Based upon a review of the CLCS recommendations issued as of January 2024, the focus here is on the various issues that have been subject to disagreement between the submitting coastal State and the CLCS, as well as some issues over which potential disagreement could arise in future interactions between the CLCS and the submitting coastal State. The issues of disagreement that have been identified are the test of appurtenance, the meaning of natural and submerged prolongation, the meaning and relevance of the deep ocean floor, the priority of morphology over geology, the identification of the foot of the continental slope, the determination of the admissible land mass for applying the 350 nautical miles (M) distance constraint, the identification of the 2,500-metre isobath, the classification of seafloor highs, so-called 'bridging lines', and other (potential) issues of disagreement such as the status of islands/rocks, access to the CLCS by a non-party, and the use and applicability of the Statement of Understanding on the Bay of Bengal.

Test of Appurtenance

A first issue of disagreement between the CLCS and the submitting coastal State relates to the (satisfaction of the) test of appurtenance, developed by the CLCS in its Scientific and Technical Guidelines, and applied by it as a preliminary step before continuing any further consideration of submissions. The test of appurtenance is the process by means of which the CLCS determines 'the legal entitlement' of a coastal State to delineate its outer limits of the continental shelf. In other words, if a coastal State is able to demonstrate that the natural prolongation of its submerged land territory to the outer edge of the continental margin extends beyond the 200-M distance criterion, the outer limits may be delineated with reference to paragraphs 4–10 of Article 76.²⁵ If a State is unable to demonstrate this, then the outer limit is automatically delineated up to 200 M.²⁶ In that case, the CLCS posits it is not 'entitled by the Convention to make recommendations on those limits'.²⁷ To determine whether the test of appurtenance is met, the CLCS uses the formulae lines in Article 76(4)(a)(i) and (ii) and the definition of the foot of the slope in Article 76(4)(b).²⁸

25 CLCS Scientific and Technical Guidelines (n 7), Article 2.2.3.

26 *Ibid.*, Article 2.2.4.

27 *Ibid.*

28 *Ibid.*, Article 2.2.6. The complete test of appurtenance is set out in Article 2.2.8.

A well-known example of disagreement between the submitting coastal State and the CLCS is the case of Ascension Island (United Kingdom). The United Kingdom had submitted that the natural prolongation of Ascension Island, a volcanic island situated on the Mid-Atlantic Ridge, extended onto the Mid-Atlantic Ridge, and submitted foot of the slope points accordingly.²⁹ The CLCS disagreed with the United Kingdom and determined that the submission in respect of Ascension Island did not satisfy the test of appurtenance.³⁰ A similar disagreement arose regarding Japan's submission to the CLCS. Japan had submitted information with respect to various regions, some of which did not satisfy the test of appurtenance according to the CLCS. For the Minami-Tori Shima Island Region, and the Mogi Seamount Region, the CLCS concluded the test of appurtenance was not met.³¹ Similarly, the CLCS found that Brazil's 2004 submission did not satisfy the test of appurtenance from the Northern Brazilian Ridge.³² The underlying considerations according to which the CLCS arrived at these conclusions are discussed in subsequent points of disagreement.

The Meaning of Natural and Submerged Prolongation

In the case of Ascension Island, one of the underlying disagreements between the CLCS and the submitting coastal State (the United Kingdom) related to the meaning of natural and submerged prolongation.³³ These terms are used in Article 76 to describe the continental shelf and the continental margin. The continental shelf extends beyond the territorial sea 'throughout the natural

29 'Summary of the Recommendations of the CLCS in Regard to the Submission Made by the United Kingdom of Great Britain and Northern Ireland in Respect of Ascension Island on 9 May 2008' (2010) [CLCS Ascension Island Recommendations].

30 *Ibid.*, para 50.

31 'Summary of the Recommendations of the CLCS in Regard to the Submission Made by Japan on 12 November 2008' (2012), paras 67, 81 [CLCS Japan Recommendations].

32 'Summary of the Recommendations of the CLCS in Regard to the Submission Made by Brazil on 17 May 2004 of Information on the Proposed Outer Limits of Its Continental Shelf Beyond 200 Nautical Miles' (2011), para 70 [CLCS Brazil Recommendations].

33 'Paper Summarising the Presentation by the United Kingdom of Great Britain and Northern Ireland to the Commission on the Limits of the Continental Shelf on Points of Legal Interpretation Made on 12 April 2010', para 1, available at https://www.un.org/Depts/los/clcs_new/submissions_files/gbr08/gbr_nv_11jan2011.pdf [Paper Summarising the UK Presentation]. See also A Serdy, 'Interpretation of UNCLOS Article 76 and the negative recommendation of the Commission on the Limits of the Continental Shelf on Ascension Island: Is the United Kingdom stuck with it' (2013) 2 *Cambridge Journal of International and Comparative Law* 591–611.

prolongation' of the land territory.³⁴ The continental margin 'comprises the submerged prolongation of the land mass'.³⁵

The sub-commission had determined the extent of natural prolongation of Ascension Island with reference to the formulae in Article 76(4).³⁶ However, the United Kingdom argued that the sub-commission had overlooked the requirement in Article 76(1) 'to first determine the extent of natural prolongation of the land territory'.³⁷ Rather than defining natural prolongation by applying the scientific formulae in Article 76(4), the United Kingdom submitted that natural prolongation 'can only be established by an assessment of all of the available geoscientific data as a whole'.³⁸ Although the United Kingdom had hoped to persuade the plenary CLCS to reconsider the sub-commission's draft recommendations, this was not successful. The CLCS adopted the sub-commission's draft recommendations. This has been considered to set a precedent, defining natural prolongation 'equal to the outer edge of the continental margin delineated by application of Article 76(4)'.³⁹

The Meaning and Relevance of the Deep Ocean Floor

According to LOSC Article 76(1), a coastal State has the entitlement to delineate its continental shelf to the outer edge of the continental margin. However, the continental margin 'does not include the deep ocean floor with its oceanic ridges or the subsoil thereof'.⁴⁰ The classification of seafloor highs will be discussed below, but a more foundational point of disagreement between the CLCS and submitting coastal States relates to the meaning and relevance of the deep ocean floor in determining the extent of a continental shelf entitlement.

34 LOSC (n 2), Article 76(1).

35 *Ibid.*, Article 76(3).

36 CLCS Ascension Island Recommendations (n 29).

37 Paper Summarising the UK Presentation (n 33), para 22.

38 *Ibid.*, paras 23, 25.

39 F Mørk, 'Classification of seafloor highs in accordance with Article 76 of UNCLOS – Consequences of the Commission on the Limits of the Continental Shelf recent modifications of its interpretations' (2018) 49(4) *Ocean Development & International Law (ODIL)* 368–392, at p. 385. The International Tribunal for the Law of the Sea (ITLOS) had already concluded something similar in the Bay of Bengal case, namely, that 'the notion of natural prolongation and that of continental margin under article 76, paragraphs 1 and 4, are closely interrelated. They refer to the same area'. *Dispute Concerning Delimitation of the Maritime Boundary Between Bangladesh and Myanmar in the Bay of Bengal (Bangladesh/Myanmar)*, Judgment, *ITLOS Reports 2012*, p. 113, para 434.

40 LOSC (n 2), Article 76(3).

In its recommendations to the United Kingdom concerning Ascension Island, the CLCS explained that the deep ocean floor in the sense of Article 76 'is the area seaward of the outer edge of the continental margin'.⁴¹ It then posited that the opposite also applies, namely, that 'the continental margin is the area landward of the deep ocean floor'.⁴² The CLCS concluded that the Mid-Atlantic Ridge (which the United Kingdom relied upon in its submission) belongs to the deep ocean floor. Although the CLCS recognised that islands like Ascension Island are, in theory, entitled to a continental shelf delineated by reference to the continental margin, it concluded that for this to be the case for a small oceanic island like Ascension, 'it would have to surmount a discrete seafloor high, that itself rises above the average "ruggedness" of the deep ocean floor'.⁴³

The United Kingdom rejected the approach of the CLCS on the basis of the rules for treaty interpretation enshrined in the Vienna Convention on the Law of Treaties,⁴⁴ and for taking a reverse approach when determining the existence and/or extent of the continental margin. The United Kingdom argued that terms and phrases in the LOSC which may be technical terms of art (such as 'deep ocean floor' or 'ridge') 'do not necessarily import a technical meaning for the purposes of the Convention'.⁴⁵ Rather, their interpretation 'is a matter of law'.⁴⁶ Furthermore, according to the United Kingdom, the continental margin should not be determined by first determining the extent of the deep ocean floor.⁴⁷ Instead, the United Kingdom submits, the LOSC 'requires a land-based approach'.⁴⁸ The approach taken by the CLCS has been deemed 'legally flawed' and in contravention to the principle that the land dominates the sea and the principle of natural prolongation.⁴⁹

The CLCS came to similar conclusions with respect to Japan's submission. It rejected Japan's claims of natural prolongation in various areas due to the relevance it placed on the deep ocean floor. In the Minami-Io To Island Region, the CLCS concluded that in areas 'having complex, unconventional margins with large changes in water depths, and a wide variety of features on the adjacent

41 CLCS Ascension Island Recommendations (n 29), para 23(iv).

42 *Ibid.*, para 23(iv).

43 *Ibid.*, para 44.

44 Vienna Convention on the Law of Treaties (Vienna, 23 May 1969, in force 27 January 1980), 1155 UNTS 331 [VCLT].

45 Paper Summarising the UK Presentation (n 33), para 14.

46 *Ibid.*, para 13.

47 *Ibid.*, para 15.

48 *Ibid.*, para 16.

49 Jianjun Gao, 'The seafloor high issue in Article 76 of the LOS Convention: Some views from the perspective of legal interpretation' (2012) 43(2) *ODIL* 119–145, at pp. 127–128.

deep ocean floor, such low relative relief is insufficient to justify the submerged prolongation of the relevant land masses'.⁵⁰ For the Minami-Tori Shima Island Region and the Ogasawara Composite High in the Ogasawara Plateau Region, the CLCS stated that the seamounts in question, 'not surmounted by islands, and their underlying basal swells and base-of-slope aprons are normal parts of the general deep ocean floor'.⁵¹ A saddle area in the Mogi Seamount Region was not considered 'substantial enough' to constitute submerged prolongation of the land mass when compared to the variations in the level of the base of the slope zone around the seamount, and was thus considered 'part of the normal variability of the deep ocean floor'.⁵² In other words, the CLCS again assessed the extent of the deep ocean floor for its consideration of the extent of the continental margin.

In its recommendations to France and South Africa in respect of the Crozet archipelago and the Prince Edward Islands, the CLCS had rejected the coastal States' assertion that there was submerged prolongation between the various features. The sub-commission concluded that 'since the portion' of the Southwest Indian Ridge between the Prince Edward and Discovery II fracture zones 'could not be distinguished from the adjacent [deep ocean floor]', it had to be 'regarded as part of the [deep ocean floor] as well'.⁵³ The coastal States disagreed with this conclusion, and argued that determining which features are part of the deep ocean floor would only be possible *after* establishing the foot of the slope envelope.⁵⁴ Ultimately, the CLCS was unable to come to a conclusion concerning the submerged prolongation, and thus recommended the coastal States make a revised submission to this part of the region.⁵⁵

Priority of Morphology over Geology

In the note verbale publicised by the United Kingdom in response to the CLCS recommendations in respect of Ascension Island, a final point of disagreement relates to the priority of morphology over geology and/or other scientific disciplines. According to the United Kingdom, the CLCS adopted morphological

50 CLCS Japan Recommendations (n 31), para 33.

51 *Ibid.*, paras 64, 95.

52 *Ibid.*, paras 75, 78, 80.

53 'Summary of Recommendations of the CLCS in Regard to the Partial Joint Submission Made by the French Republic and the Republic of South Africa in Respect of the Area of the Crozet Archipelago and the Prince Edward Islands on 6 May 2009' (2023), para 103 [CLCS Crozet Archipelago and Prince Edward Islands Recommendations].

54 *Ibid.*, para 104.

55 *Ibid.*, paras 116–117.

arguments to the exclusion of geology on a number of occasions.⁵⁶ Article 76, in defining the foot of the slope, recognises the potential relevance of other disciplines (by reference to ‘evidence to the contrary’⁵⁷), and membership of the CLCS also calls for a variety of scientific disciplines.⁵⁸ The United Kingdom thus considered that natural prolongation and the continental margin ‘can be defined by a combination of criteria – such as geology, geophysics and geochemistry – in addition to morphology’.⁵⁹ It is true that in various recommendations the CLCS has shown a strong tendency to place significant weight on morphology in establishing the foot of the slope envelope.⁶⁰

The Identification of the Foot of the Continental Slope

Coastal States may delineate the outer edge of the continental margin according to two scientific formulae, each of which requires determination of the foot of the continental slope. According to Article 76(4)(b), the foot of the continental slope ‘shall be determined as the point of maximum change in the gradient at its base’ in the absence of ‘evidence to the contrary’.⁶¹ According to the CLCS, this provides a ‘dual regime’ for the determination of the foot of the slope.⁶² The Scientific and Technical Guidelines elaborate on the various scientific disciplines and techniques that may be employed to determine the foot of the continental slope, either by means of the point of maximum change in gradient at its base, or by means of evidence to the contrary to the general rule.

In various situations the CLCS has disagreed with the point at which the submitting coastal State has located the foot of the continental slope. Examples include the 2023 recommendations to Russia,⁶³ the recommendations in respect of Ascension Island,⁶⁴ the recommendations to Japan,⁶⁵ the recommendations with respect to the joint submission of Mauritius and the

56 Paper Summarising the UK Presentation (n 33), para 26.

57 LOSC (n 2), Article 76(4)(b).

58 *Ibid.*, Annex II, Article 2(1).

59 Paper Summarising the UK Presentation (n 33), para 27.

60 H Brekke and P Symonds, ‘Submarine ridges and elevations of Article 76 in light of published summaries of recommendations of the Commission on the Limits of the Continental Shelf’ (2011) 42 *ODIL* 289–306, at p. 294.

61 LOSC (n 2), Article 76(4)(b).

62 CLCS Scientific and Technical Guidelines (n 7), Article 5.1.2.

63 ‘Summary of Recommendations of the CLCS in Regard to the Partial Revised Submission Made by the Russian Federation in Respect of the Arctic Ocean on 3 August 2015 with Addenda Submitted on 31 March 2021’ (2023), paras 70–72 [2023 CLCS Russian Federation Partial Revised Submission Recommendations].

64 CLCS Ascension Island Recommendations (n 29).

65 CLCS Japan Recommendations (n 31).

Seychelles,⁶⁶ and the recommendations to the Cook Islands,⁶⁷ Argentina,⁶⁸ and Ghana.⁶⁹ The identification of the foot of the continental slope may especially be subject to disagreement in cases where ‘evidence to the contrary’ is referred to, and/or for margins that are not the Atlantic-type continental margins with a typical shelf, slope, and rise structure.⁷⁰ In some instances, the disagreement was resolved throughout the back and forth interactions between the CLCS and the submitting coastal State, so that the submitting coastal State could provide further information and/or clarification.⁷¹

Admissible Land Mass for Applying the 350 M Distance Constraint

As a reflection of the package deal nature of LOSC, Article 76 establishes two constraints to a coastal State’s entitlement to a continental shelf: the depth constraint (100 M from the 2,500-metre isobath) and the 350 M distance constraint. More specifically, Article 76 provides that the ‘fixed points comprising the line of the outer limits of the continental shelf on the seabed, drawn in accordance with paragraph 4(a)(i) and (ii), either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500-metre isobath’.⁷² The CLCS has disagreed with submitting coastal States with respect to the use of both constraints. For the distance constraint, this disagreement mostly concerns the determination of the admissible land mass for applying the constraint. In other words, may any baseline be used to delineate this constraint line, or should this constraint only be applied in relation to land mass generating that particular outer continental shelf entitlement?

66 ‘Summary of the Recommendations of the CLCS in Regard to the Joint Submission Made by Mauritius and Seychelles Concerning the Mascarene Plateau Region on 1 December 2008’ (2011), para 30.

67 ‘Summary of Recommendations of the CLCS in Regard to the Submission Made by the Cook Islands in Respect of the Manihiki Plateau on 16 April 2009’ (2016), para 91 [CLCS Cook Islands Recommendations].

68 ‘Summary of Recommendations of the CLCS in Regard to the Submission Made by Argentina on 21 April 2009’ (2016).

69 ‘Summary of Recommendations of the CLCS in Regard to the Submission Made by Ghana 8 April 2009’ (2014).

70 PA Symonds and others, ‘Characteristics of continental margins’ in PJ Cook and CM Carleton (eds), *Continental Shelf Limits: The Scientific and Legal Interface* (1st ed., Oxford University Press, Oxford, 2000) 25–63, at p. 29.

71 See, for example, ‘Summary of the Recommendations of the CLCS in Regard to the Submission Made by Norway in Respect of Areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea on 27 November 2006’ (2009), paras 29, 50 [CLCS Norway Recommendations].

72 LOSC (n 2), Article 76(5).

In the case of France's submission in respect of the New Caledonia Region, France had invoked the distance constraint based on the basepoints of all the land territories of New Caledonia. However, the sub-commission suggested to France that 'the constraint line should be based only on base-points relevant to the natural prolongation into the area, i.e. the base-points relevant to the Chesterfield and Bellona Reef Islands'.⁷³

The Cook Islands' submission with respect to the Manihiki Plateau, too, had been rejected on this point. The Cook Islands had used the baselines of Penrhyn Island to determine the 350 M distance constraint. However, the sub-commission 'was of the view that Penrhyn Island was not located in the Manihiki Plateau complex ... and did not have an entitlement to a continental shelf beyond 200 [M]'; and thus, in 'a manner consistent with its past practice, the Commission does not recommend' the application of the 350 M distance constraint determined from Penrhyn Island.⁷⁴

The joint submission by the Federated States of Micronesia, Papua New Guinea, and Solomon Islands concerning the Ontong Java Plateau (OJP) was also subject to disagreement by the CLCS, and even disagreement between the sub-commission and the plenary CLCS. The three coastal States had used the combined distance constraint derived from the entire baselines of their respective land masses, including land masses beyond the foot of the slope envelope surrounding the Ontong Java Plateau. The sub-commission, however, was of the view 'that only those islands, that share the same [foot of the continental slope] envelope with islands located on the OJP, can contribute to the distance constraint, which is also in accordance with past practice of the Commission'.⁷⁵ Although the three coastal States had presented a number of (legal) arguments that, in their view, had demonstrated that Article 76(5) permits the application of the distance constraint from any baseline of the coastal State, the sub-commission did not agree. After having reviewed additional data, the sub-commission eventually concluded that the distance constraint should not be applicable with respect to Kosrae Island, but that it could

73 'Summary of the Recommendations of the CLCS in Regard to the Submission Made by France in Respect of French Guiana and New Caledonia Regions on 22 May 2007' (2009), para 64.

74 CLCS Cook Islands Recommendations (n 67), para 62.

75 'Summary of Recommendations of the CLCS in Regard to the Joint Submission Made by the Federated States of Micronesia, Papua New Guinea and Solomon Islands Concerning the Ontong Java Plateau on 5 May 2009' (2017), para 69 [CLCS Ontong Java Plateau Recommendations].

be applicable for Pingelap Atoll and the Duff and Anuta Islands.⁷⁶ However, the plenary CLCS was 'unable to support the determination and application of the distance constraint from the baselines of Duff and Anuta Islands' because it could not support the 'morphological and tectonic continuity' between the two islands and the relevant area for the entitlement of the outer continental shelf.⁷⁷ A similar disagreement may also be expected to arise in the consideration of Russia's revised partial submission with respect to the Gakkel Ridge in the Arctic Ocean.⁷⁸

The Identification of the 2,500-Metre Isobath

The second constraint is the depth constraint: 100 M from the 2,500-metre isobath. With respect to this constraint, the Scientific and Technical Guidelines of the CLCS stipulate that if there are multiple or complex 2,500-metre isobaths, the CLCS may recommend using the first 2,500-metre isobath that conforms to the general configuration of the continental margin.⁷⁹ However, the CLCS has amended this rule through practice in the recommendations, by requiring that *each* 2,500-metre isobath conform to the general configuration of the continental margin, and has furthermore rejected 2,500-metre isobaths because they did not lie landwards of the foot of the slope. This has led to confusion between the CLCS and submitting coastal States, and this approach 'does not appear to be consistent with the wording of Article 76(5–6)' of the LOSC.⁸⁰

In the recommendations to Norway's submission in respect of areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea, the CLCS disagreed with Norway concerning the identification of the 2,500-metre isobath. The CLCS first concluded that because all isobaths measured from mainland Norway were landward of the foot of the slope, they were 'considered to conform to the general configuration of the continental margin', and '[t]herefore', the application of those isobaths was in accordance with the Scientific and Technical

⁷⁶ *Ibid.*, paras 71–73.

⁷⁷ *Ibid.*, para 76.

⁷⁸ For discussion, see B Kunoy and W Roest, 'Seafloor high shopping: (Mis)Applying Article 76 of UNCLOS?' (*EJIL: Talk!*, 18 January 2024) available at <https://www.ejiltalk.org/leapfrogging-for-purposes-of-using-the-350-nautical-miles-distance-constraint-in-regard-to-the-establishment-of-the-outer-limits-of-the-continental-shelf/>; accessed 19 January 2024.

⁷⁹ CLCS Scientific and Technical Guidelines (n 7), Article 4.4.2.

⁸⁰ B Kunoy, MV Heinesen and F Mørk, 'Appraisal of applicable depth constraint for the purpose of establishing the outer limits of the continental shelf' (2010) 41(4) *ODIL* 357–379, at p. 368.

Guidelines.⁸¹ Conversely, for Jan Mayen, the CLCS rejected the use of the 2,500-metre isobaths proposed by Norway, as 'the Commission cannot verify that the isobaths [in question] are landward of the foot of the continental slope, and therefore conform to the general configuration of the continental margin'.⁸² According to Kunoy et al., the isobaths from Jan Mayen seem 'simple', and thus, according to the Scientific and Technical Guidelines, there would be no need to assess whether they conform to the general configuration of the continental margin.⁸³ In the recommendations to the Cook Islands, the CLCS sub-commission determined that the method employed by the Cook Islands 'did not meet the provisions of the Guidelines', and 'insisted' that the Cook Islands would have to demonstrate that the 2,500-metre isobaths 'would conform to the general configuration of the continental margin, as stipulated in paragraph 4.4.2 of the Guidelines'.⁸⁴

Classification of Seafloor Highs

Another point of disagreement between the CLCS and submitting coastal States relates to the classification of seafloor highs. How a specific seabed feature is classified influences whether and to what extent that feature may contribute to the delineation of the continental shelf. Article 76 introduces three types of seafloor highs: oceanic ridges that are part of the deep ocean floor, submarine ridges, and 'submarine elevations that are natural components of the continental margin'.⁸⁵ Oceanic ridges that are part of the deep ocean floor are not part of the continental margin, whereas the other two are. The difference between the latter two lies in the application of the constraint lines. Submarine elevations that are natural components of the continental margin may be subject to either constraint line (whichever is more advantageous to the coastal State), whereas on submarine ridges only the 350 M distance constraint may be applied (even if the 2,500-metre isobath would otherwise be more advantageous). The relationship between these three terms has been subject to debate.⁸⁶ In any event, the classification of seafloor highs is an important aspect of the delineation of the continental shelf.

81 CLCS Norway Recommendations (n 71), para 73.

82 *Ibid.*, para 74.

83 Kunoy, Heinesen and Mørk (n 80), at p. 367.

84 CLCS Cook Islands Recommendations (n 67), paras 64–65.

85 LOSC (n 2), Articles 76(3), 76(6).

86 See KA Baumert and L Mayer, 'Submarine ridges and submarine elevations under the Law of the Sea Convention: A further look' in T Heidar (ed), *New Knowledge and Changing Circumstances in the Law of the Sea* (Brill/Nijhoff, Leiden, 2020) 264–288; B Kunoy, 'Classification of seafloor highs in the Central Arctic Ocean' in Heidar (ed) *ibid.*, 308–323; Mørk (n 39).

Although the first recommendations of the CLCS to the Russian Federation have not been made public, the summary in the recommendations in regard to the partial revised submission implies that there had been disagreement between the CLCS and the Russian Federation concerning the classification of the Lomonosov Ridge and the Alpha-Mendeleev Ridge Complex, and that their status as submarine elevations had been rejected.⁸⁷ In its February 2023 recommendations to Russia, the CLCS concluded that the Lomonosov Ridge (amongst other features in the Arctic Ocean) was in fact a submarine elevation.⁸⁸ The classification of the Gakkel Ridge, on the other hand, was subject to disagreement as the CLCS concluded that it could not be classified as a submarine ridge in accordance with Article 76.⁸⁹ Other recommendations demonstrating disagreement between the CLCS and the submitting coastal State concerning the classification of seafloor highs include those to Brazil,⁹⁰ Australia,⁹¹ Norway,⁹² France,⁹³ the Cook Islands,⁹⁴ and Iceland.⁹⁵

The case of Iceland and the Reykjanes Ridge is an example in which the sub-commission of the CLCS and the plenary CLCS disagreed on several accounts, most notably on the classification of the Reykjanes Ridge. The sub-commission had originally agreed (although not unanimously) with Iceland that the Reykjanes Ridge was a submarine elevation that is a natural component of the continental margin, and had approved the use of the depth constraint.⁹⁶ Some members of the plenary CLCS agreed with assessment, although others disagreed and considered the data and information to be inconclusive, thus rejecting the use of the depth constraint.⁹⁷ The reasons why the members disagreed do not become clear from reading the text of the recommendations. The plenary CLCS considered the sub-commission's draft recommendations

87 2023 CLCS Russian Federation Partial Revised Submission Recommendations (n 63), para 3.

88 *Ibid.*, para 89.

89 *Ibid.*, para 73.

90 CLCS Brazil Recommendations (n 32), paras 90–93.

91 'Summary of the Recommendations of the CLCS (CLCS) in Regard to the Submission Made by Australia on 15 November 2004' (2008), paras 50, 138 [CLCS Australia Recommendations].

92 CLCS Norway Recommendations (n 71), para 76.

93 'Summary of the Recommendations of the CLCS in Regard to the Partial Submission Made by the Republic of France in the Respect of the Areas of the French Antilles and the Kerguelen Islands on 5 February 2009' (2012), para 87.

94 CLCS Cook Islands Recommendations (n 67), para 88.

95 'Summary of Recommendations of the CLCS in Regard to the Submission Made by Iceland in the Aegir Basin Area and in the Western and Southern Parts of Reykjanes Ridge on 29 April 2009' (2016).

96 *Ibid.*, paras 75, 77.

97 *Ibid.*, paras 76, 78.

over a period of two years, during which Iceland was not invited to participate. Iceland did not agree with the amendments to the draft recommendations adopted by the plenary CLCS, and stated its intent to continue working on the basis of the sub-commission's recommendations.⁹⁸ In fact, Iceland submitted a revised partial submission in 2021 with additional scientific information that, according to Iceland, 'confirm[s] that Reykjanes Ridge classifies as a submarine elevation that is a natural component of the continental margin'.⁹⁹ As of January 2024, it is currently still under consideration.¹⁰⁰

'Bridging Lines'

Article 76 introduces a twofold definition of the continental shelf: either by reference to the outer edge of the continental margin, or to a limit of 200 M. In various submissions to the CLCS, coastal States have included so-called 'bridging lines', that is, ways to connect these different portions of their continental shelf entitlements. The first situation in which this came up was in Australia's submission. Australia believed it possible to use lines not more than 60 M in length (Article 76(7)) to join fixed points on the formula line beyond 200 M to any fixed point on the 200 M line. However, the CLCS was of the view that this last segment of the outer limits of the continental shelf 'shall be established either by the intersection of the formula line ... and the 200 [M] limit from the baselines ... or it shall be determined by the line of shortest distance between the last fixed formula point and 200 [M] limit'.¹⁰¹ For eight of the regions in the submission and recommendations, the CLCS repeated this statement and rejected the use of the bridging lines proposed by Australia. In other words, the CLCS considered the Australian approach inappropriate because it connected the shelf within 200 M with that beyond by a line (not more than 60 M in length) connecting points on a formula line with *any* point on the 200 M line. This line was not the 'shortest distance' between the formula point and the 200 M line. The reason why it did not agree with Australia's proposed lines was because 'this method creates area of continental shelf that falls outside of the continental margin as defined in article 76, paragraph 4 and 7'.¹⁰²

98 H Guðmundsdóttir, 'The case of the Reykjanes Ridge' in Heidar (ed) (n 86), 289–307, at p. 296.

99 'The Icelandic Continental Shelf: Revised 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 Reykjanes Ridge (Executive Summary) (31 March 2021)' 6, available at https://www.un.org/Depts/los/clcs_new/submissions_files/submission_isl_rev2021.htm.

100 Progress of Work in the Commission on the Limits of the Continental Shelf: Statement by the Chair (59th Session, 2023), CLCS/59/1.

101 CLCS Australia Recommendations (n 91), para 8.

102 See, for example, *ibid.*, para 19.

Serdy, however, points out that this is 'simply the inevitable result of the way paragraph 7 is drafted' and that this 'geological purism' is not convincing.¹⁰³ The CLCS thus recommended Australia replace specific points and lines with points and lines 'that conform to the outer edge of the continental margin'.¹⁰⁴

In its recommendations to South Africa, the CLCS also rejected the use of the coastal State's bridging lines. The CLCS recommended that South Africa replaced its proposed bridging lines with points and lines not exceeding 60 M in length 'that conform to the outer edge of the continental margin', although no reference was made to the requirement of 'shortest distance'.¹⁰⁵ The recommendations in regard to the joint submission by the Federated States of Micronesia, Papua New Guinea and Solomon Islands also rejected proposed bridging lines because it was not the shortest distance.¹⁰⁶ Such bridging lines were also rejected by the CLCS in its recommendations to France in respect of La Réunion Island and Saint-Paul and Amsterdam Islands, and in the recommendations to France and South Africa in respect of the Crozet archipelago and the Prince Edward Islands.¹⁰⁷

Other (Potential) Points of Disagreement

In addition to the points of disagreement discussed above, future interactions between submitting coastal States and the CLCS could amount to other points of disagreement. For example, the legal status of islands/rocks for the purpose of LOSC Article 121(3) could be subject to disagreement between States, which may affect the recommendations of the CLCS. In the case of Japan, the CLCS was prevented from having to engage in such a consideration with respect to Oki-no-Tori-Shima in the Southern Kyushu-Palau Ridge Region. Although Japan included the Southern Kyushu-Palau Ridge Region in its submission, the People's Republic of China and the Republic of Korea objected to this and claimed there was a dispute regarding the legal status of Oki-no-Tori-Shima as to whether or not the maritime feature has an exclusive economic zone or

103 A Serdy, 'The Commission on the Limits of the Continental Shelf and its disturbing propensity to legislate' (2011) 26(3) *International Journal of Marine and Coastal Law (IJMCL)* 355–383, at pp. 374–375.

104 CLCS Australia Recommendations (n 91), para 19.

105 'Summary of Recommendations of the CLCS in Regard to the Partial Submission Made by the Republic of South Africa in Respect of the Area of the South African Mainland on 5 May 2009' (2017), para 69.

106 CLCS Ontong Java Plateau Recommendations (n 75), para 90.

107 'Summary of the Recommendations of the CLCS in Regard to the Submission Made by France in Respect of La Réunion Island and Saint-Paul and Amsterdam Islands on 8 May 2009' (2020); CLCS Crozet Archipelago and the Prince Edward Islands Recommendations (n 53).

continental shelf.¹⁰⁸ In accordance with Rule 46(2) and Annex I of the Rules of Procedure of the CLCS, the CLCS decided not to issue recommendations with respect to this region.¹⁰⁹

Secondly, how would the CLCS receive a formal submission by a coastal State not party to the LOSC? There has been speculation whether the United States might try to submit its outer continental shelf limits to the CLCS in order to receive recommendations. However, the United States is not a party to the LOSC, while it considers itself to be bound by most rules of the LOSC reflecting rules of customary international law.¹¹⁰ In its recent notification of the outer limits of the continental shelf, the United States stated its intention to submit its information to the CLCS upon accession to the LOSC, but it has also expressed openness to filing its submission to the CLCS as a non-party.¹¹¹ If that were to happen, it would be interesting to see how the CLCS were to receive that submission, and how other coastal States would respond to the United States making use of that forum as a non-party.

A final point of disagreement might be the use and applicability of the Statement of Understanding on the Bay of Bengal (SoU). As an exception to the rule of delineating the outer edge of the continental margin, the SoU provides another alternative, namely, at the point where 'the thickness of sedimentary rock is not less than 1 kilometre'.¹¹² The SoU was developed to apply to the southern part of the Bay of Bengal, and specifically to address Sri Lanka's concerns during the negotiations of the LOSC. However, the special circumstances described in the SoU may also be present in other areas, and it is questionable whether those coastal States are also allowed to refer to the SoU to determine the outer edge of the continental margin. The last paragraph of the SoU only instructs the CLCS to take the SoU into account when making recommendations concerning the 'Southern part of the Bay of Bengal', not concerning other areas.¹¹³ However, LOSC Annex II provides that the functions of the CLCS shall be to make recommendations in accordance with Article 76 and the SoU.¹¹⁴

108 CLCS Japan Recommendations (n 31), paras 17–18.

109 *Ibid.*, para 20.

110 US Department of State, *The Outer Limits of the Extended Continental Shelf of the United States of America: Executive Summary* (2023) 6, available at <https://www.state.gov/shelf>.

111 *Ibid.*

112 'Final Act of the Third United Nations Conference on the Law of the Sea, A/CONF.62/121', *Official Records of the Third United Nations Conference on the Law of the Sea, Volume XVII (Plenary Meetings, Summary Records and Verbatim Records, as well as Documents of the Conference, Resumed Eleventh Session and Final Part Eleventh Session and Conclusion)* (1982), Annex II.

113 *Ibid.*, Annex II.

114 LOSC (n 2), Annex II, Article 3(1)(a).

The submission of Kenya, for example, relies upon the SoU.¹¹⁵ Although Sri Lanka had issued a communication with respect to Kenya's submission, it had not explicitly objected to its consideration.¹¹⁶ The Commission concluded that 'there was a difference of views as to the interpretation and applicability' of the provisions relating to the implementation of the SoU among States, but acknowledged that States, not the CLCS, interpreted the Convention.¹¹⁷ Therefore, the CLCS instructed the sub-commission to consider Kenya's submission 'on a scientific and technical basis under the provisions of article 76 of the Convention and the Statement of Understanding'.¹¹⁸ The recommendations conclude that Kenya fulfils the five scientific and technical requirements in the SoU and include positive recommendations in that regard.¹¹⁹ It is, however, still unclear whether States outside of the Bay of Bengal would be entitled to establish the outer edge of the continental margin on the basis of the SoU from a legal perspective.¹²⁰

Options and/or Solutions for Resolving Disagreements?

The above review of disagreements between the CLCS and submitting coastal States demonstrates that there have been many points of disagreement over the past years of operation. Most of these disagreements are not controversial, and most disagreements are in fact resolved in the interactive process during consideration of the submission by the CLCS. However, when disagreement remains, after the publication of the final recommendations, what options exist for resolving such disagreements?

A Revised or New Submission

According to LOSC Annex II, 'in the case of disagreement by the coastal State with the recommendations of the Commission, the coastal State shall, within a

115 Republic of Kenya, 'Submission on the Continental Shelf beyond 200 Nautical Miles to the Commission on the Limits of the Continental Shelf (Executive Summary) (April 2009)', available at https://www.un.org/depts/los/clcs_new/submissions_files/ken35_09/ken2009_executivesummary.pdf.

116 'Summary of Recommendations of the CLCS in Regard to the Submission Made by the Republic of Kenya on 6 May 2009' (2023), paras 8, 10.

117 *Ibid.*, para 27.

118 *Ibid.*, para 27.

119 *Ibid.*, paras 75–128.

120 It could also be said that the lack of strong reservations from third States might imply the acceptance of this practice, given that the outer limits on the basis of CLCS recommendations, once established, will be 'final and binding'. LOSC (n 2), Article 76(8).

reasonable time, make a revised or new submission to the Commission'.¹²¹ New or revised submissions go to the head of the queue of submissions awaiting consideration by the CLCS.

The disagreements described above relate either to scientific and technical issues, or to the legal interpretation of certain provisions in Article 76 and/or the SoU. The possibility of making a revised or new submission with respect to disagreement about scientific and/or technical issues can offer the coastal State an opportunity to resolve such disagreement by providing additional (and more favourable) data and information. However, disagreements about legal interpretation are more difficult to resolve this way, as arguments to that effect would have been extensively shared during the interactive process between the coastal State and the CLCS. In these circumstances, 'it is difficult to see what the submitting State stands to gain by a new or revised submission' since those interpretative arguments would remain the same.¹²²

This option is not without its problems. The possibility to keep submitting new or revised submissions in case of disagreements has the potential to create an endless back-and-forth process with never-ending disagreement.¹²³ It is not a 'conclusive settlement procedure'.¹²⁴ This creates additional expenses, both for the CLCS as well as the submitting coastal State, it creates a delay in the consideration of other submissions, and it creates uncertainty about the legal status of the continental shelf in the presence of recommendations but in absence of established outer limits.¹²⁵ As of January 2024, there are eleven revised submissions, six of which have already received recommendations.¹²⁶

¹²¹ *Ibid.*, Annex II, Article 8.

¹²² A Serdy, 'Annex II, Article 8' in A Proelss (ed), *United Nations Convention on the Law of the Sea: A Commentary* (Beck/Hart/Nomos, Munich, 2017), para 4. See also Serdy (n 33), at p. 606.

¹²³ However, Oude Elferink suggests that soon a 'stalemate' will emerge. See AG Oude Elferink, 'The continental shelf beyond 200 nautical miles: The relationship between the CLCS and third party dispute settlement' in AG Oude Elferink and DR Rothwell (eds), *Oceans Management in the 21st Century: Institutional Frameworks and Responses* (Brill | Nijhoff, Leiden, 2004) 107–123, at p. 113. Cavnar suggest that 'ping-ponging results in a narrowing-down of differences ... that checks States' interpretations but never infringes on their right to set outer limits'. A Cavnar, 'Accountability and the Commission on the Limits of the Continental Shelf: Deciding who owns the ocean floor' (2009) 42(3) *Cornell International Law Journal* 387–440, at p. 403.

¹²⁴ B Kunoy, 'Legal problems relating to differences arising between recommendations of the CLCS and the submission of a particular State' in CR Symmons (ed), *Selected Contemporary Issues in the Law of the Sea* (Brill/Nijhoff, Leiden, 2011) 305–338, at p. 307.

¹²⁵ SW de Herdt, 'Transparency in the process of implementing Article 76 of the UNCLOS: Peering inside' (2022) 53(2–3) *ODIL* 166–179, at pp. 172–173.

¹²⁶ 'Submissions to the CLCS' (n 23).

CLCS to Seek (Legal) Advice

Especially in case of disagreements of a legal character, the CLCS could consider seeking scientific and/or legal advice. Although the possibilities for requesting an official advisory opinion are limited,¹²⁷ the CLCS may request advice from specific bodies or institutions. According to LOSC Annex II, the CLCS 'may cooperate, to the extent considered necessary and useful', with various international organisations (such as the International Hydrographic Organization) 'with a view to exchanging scientific and technical information which might be of assistance' in discharging its responsibilities.¹²⁸

The CLCS could also benefit from seeking (legal) advice from the Division for Ocean Affairs and the Law of the Sea (DOALOS). The UN Legal Counsel has already issued several legal opinions relevant to the CLCS,¹²⁹ and this mandate could perhaps be expanded to include legal advice on more substantive issues under consideration, such as the legal status of islands/rocks, access to the CLCS by non-parties, or from which baselines the distance constraint may be measured. However, it seems that States Parties may have 'strong reservations' to DOALOS taking on a more active interpretative role.¹³⁰ Various recommendations stipulate that CLCS sub-commissions have requested and received 'support' from DOALOS, although it is usually not made clear what that support consists of.

Nullifying CLCS Recommendations

Although there is no formal procedure to appeal or overturn CLCS recommendations other than to make a revised submission as discussed above, it has been suggested that coastal States in disagreement with the CLCS could seek to nullify the recommendations. For example, a coastal State could raise the argument that extensive legal interpretations by the CLCS could be beyond its mandate and thus *ultra vires*, or, in the case of Iceland, Iceland could argue that the amendments proposed by the plenary CLCS 'are null and void based on them having been rendered *ultra vires*.'¹³¹

127 See Kunoy (n 124), at pp. 313–315. See also G Eiriksson, 'The case of disagreement between a coastal State and the Commission on the Limits of the Continental Shelf' in MH Nordquist, JN Moore and TH Heidar (eds), *Legal and Scientific Aspects of Continental Shelf Limits* (Brill/ Nijhoff, Leiden, 2004) 251–262, at pp. 259–260; Guðmundsdóttir (n 98), at pp. 302–307.

128 LOSC (n 2), Annex II, Article 3(2).

129 V Jares, 'The work of the Commission on the Limits of the Continental Shelf' in D Vidas (ed), *Law, Technology and Science for Oceans in Globalisation: 100 Fishing, Oil Pollution, Bioprospecting, Outer Continental Shelf* (Brill Nijhoff, Leiden, 2010) 449–475, at p. 474.

130 Kunoy (n 124), at p. 318.

131 Guðmundsdóttir (n 98), at p. 298.

Subsequent Agreement/Practice

Ultimately, CLCS recommendations are an application of the rules established by the LOSC. Thus, if a legal disagreement arises between the CLCS and the submitting coastal State, the rules on treaty interpretation become relevant. Based on these rules, a submitting coastal State might be able to make a claim that specific aspects of Article 76 (implemented through the Scientific and Technical Guidelines) should be interpreted differently based on 'any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions' or on 'any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation'.¹³²

Establishing Outer Limits Not 'on the Basis of' CLCS Recommendations

As CLCS recommendations are recommendatory, they themselves do not have binding force. Furthermore, the LOSC itself does not include an explicit obligation to adhere to the recommendations of the CLCS.¹³³ However, LOSC Article 76 stipulates that outer limits established by the coastal State 'on the basis of' CLCS recommendations 'shall be final and binding'.¹³⁴ In cases where a coastal State disagrees with the recommendations of the CLCS, and making a revised submission would not resolve such disagreement, it has been suggested that an option would be to establish limits not on the basis of the CLCS recommendations. Or, in the case of Iceland, it has been suggested that Iceland could establish limits on the basis of the sub-commission's recommendations rather than those of the plenary CLCS.¹³⁵

However, this option is certainly not without its problems either. First of all, it may be implied that if outer limits are *not* based on the CLCS recommendations, the limits may not be 'final and binding', and thus perhaps not opposable to third States.¹³⁶ Furthermore, if a coastal State that disagrees with the CLCS deposits outer limits established otherwise than on the basis of the CLCS recommendations, the UN Secretary-General may not be able to accept them and publicise them according to Article 76(9).¹³⁷ Secondly, who determines whether

132 VCLT (n 44), Article 31(3)(a)–(b). See also Serdy (n 33), at p. 609.

133 Kunoy (n 124), at p. 306.

134 LOSC (n 2), Article 76(8).

135 Guðmundsdóttir (n 98), at pp. 297–298.

136 R Wolfrum, 'The role of international dispute settlement institutions in the delimitation of the outer continental shelf' in R Lagoni and D Vignes (eds), *Maritime Delimitation* (Brill Nijhoff, Leiden, 2006) 19–31, at p. 25; Kunoy (n 124), at p. 306.

137 Wolfrum (n 136), at p. 25; Kunoy (n 124), at p. 309.

certain outer limits are indeed 'on the basis of' CLCS recommendations?¹³⁸ Scholars have suggested that the 'based upon' requirement 'provides certainty and consistency for the international community, while preserving sufficient, although unspecified, flexibility for the coastal State'.¹³⁹ How far that flexibility extends is yet to be seen. In any event, a submitting coastal State is obliged by Article 300 of the LOSC to act in good faith.¹⁴⁰

If a coastal State did decide to establish outer limits not on the basis of the CLCS recommendations, this decision may be subject to dispute settlement under Part xv of the LOSC, although questions arise as to who has standing to initiate such proceedings.¹⁴¹ In the prolonged absence of such dispute settlement procedures, however, one might draw the conclusion that this could be evidence of other States' acquiescence of the limits established.¹⁴²

Concluding Remarks: the Resilience of the LOSC

Disagreements between the CLCS and submitting coastal States demonstrate that the provisions in Article 76 may be interpreted and applied in different ways, as recognised by the Scientific and Technical Guidelines.¹⁴³ The CLCS has attempted to resolve some of these issues.

Despite ample disagreements between the CLCS and submitting coastal States, coastal States continue to provide the CLCS with information about their continental shelf limits, and still seem willing to comply with this procedure. Even non-parties to the LOSC have demonstrated interest in using the CLCS procedure.¹⁴⁴ Several States that have received negative recommendations from the CLCS have submitted revised submissions, thus demonstrating

138 TL McDorman, 'The role of the Commission on the Limits of the Continental Shelf: A technical body in a political world' (2002) 17(3) *IJMC* 301–324, at p. 315. Note how 'on the basis of' differs from previous suggestions made in the course of LOSC negotiations, such as 'taking into account', or the suggestion that the CLCS would 'take decisions'. See, for example, Ø Jensen, *The Commission on the Limits of the Continental Shelf: Law and Legitimacy* (Brill Nijhoff, Leiden, 2014) 22–36.

139 RW Smith and G Taft, 'Legal aspects of the continental shelf' in Cook and Carleton (eds) (n 70), 17–24, at p. 20.

140 LOSC (n 2), Article 300.

141 See Wolfrum (n 136), at pp. 27–31; Kunoy (n 124), at p. 328; International Law Association Committee on Legal Issues of the Outer Continental Shelf, 'Second Report' (2006), at p. 22.

142 Serdy (n 33), at p. 607.

143 CLCS Scientific and Technical Guidelines (n 7), Article 1.3.

144 See, for example, US Department of State (n 110), at p. 6.

a continued willingness to engage in the CLCS procedure. This practice shows that although the procedure created in the 1970s is not without challenges, it reflects the willingness of States to still abide by it, thus hinting at the resilience of the LOSC. In his contribution to this volume, Murphy deconstructs the term 'resilience' into three different concepts: durability, flexibility, and plasticity.¹⁴⁵ By way of conclusion, each of these three concepts is applied here to the issue of disagreements between the CLCS and submitting coastal States, to reflect upon the resilience of the LOSC.

Firstly, durability, defined as 'the ability of the Convention to withstand wear, pressure, or damage over time',¹⁴⁶ should in this context be viewed in light of Article 76 and Annex II of the LOSC. Although the rules on delineation of the continental shelf included in Article 76 are relatively technical in nature, there is still enough openness about them so that questions pertaining to their meaning may be resolved in specific contexts by the institutions created by the LOSC, including the CLCS. Indeed, with its Scientific and Technical Guidelines and its application in practice, the CLCS has attempted to clarify how specific aspects of Article 76 should be implemented, including in examples not foreseen by the LOSC. For example, what do Ascension Island and Iceland, among the more controversial sets of recommendations by the CLCS, have in common? They are both islands on mid-ocean ridges, and thus have no typical shelf-slope-rise structure, and thus present scenarios that had not been envisaged by the drafters of the LOSC in the 1970s. Yet, the CLCS has found a way to apply the terms of the LOSC to these non-envisaged scenarios. Similarly, the mandate of the LOSC stipulated in Annex II raised all kinds of questions and uncertainties, which the CLCS has attempted to clarify and implement over the past decades. As Eiriksson submits, the members of the CLCS 'can be congratulated on how they have addressed their duties in the face of the uncertainties and inconsistencies in their mandate'.¹⁴⁷

Murphy uses examples of open-textured terms and how their meaning may be resolved through dispute settlement procedures.¹⁴⁸ Notably, in the case of rules governing the outer limits of the continental shelf beyond 200 M, the incompletions of the LOSC are not completed by legal dispute settlement bodies, but by a scientific body, that is, the CLCS. The difference between adjudicative bodies and the CLCS is notable, of course, due to the inherent differences

145 SD Murphy, 'Durability, flexibility and plasticity in the UN Convention on the Law of the Sea' (2024) 39(2) *IJMC* 225–251, this volume.

146 *Ibid.*

147 Eiriksson (n 127), at p. 253.

148 Murphy (n 145).

between law and science.¹⁴⁹ At the same time, the delineation of the continental shelf is a legal-scientific exercise, and the fact that the LOSC allows for a scientific body to resolve questions of its implementation allows the procedure to be flexible, innovative, and able to respond to developments in science and technology and thus stand the test of time.

The concepts of plasticity and flexibility, together, offer perhaps the most relevant observations in respect of the resilience of LOSC in light of disagreements between the CLCS and submitting coastal States. Flexibility, understood as ‘the quality of bending easily without breaking’, and plasticity, defined as ‘the quality of being easily shaped or moulded’,¹⁵⁰ are interrelated when applied to the examples discussed above. The CLCS in its Scientific and Technical Guidelines, as well as throughout its practice, has bent the LOSC towards practical outcomes, by introducing the test of appurtenance, creating a method to classify seafloor highs and to establish other means to apply the provisions of Article 76 imagined 40 years ago in today’s day and age. At the same time, those bending exercises have now contributed to the legal status quo, thus having shaped or moulded the LOSC. Non-parties refer to the Scientific and Technical Guidelines in their delineation of the continental shelf,¹⁵¹ and submissions to the CLCS (based upon the Guidelines and its past practice) have been relied upon – albeit controversially¹⁵² – to determine the existence of a rule of customary international law.¹⁵³

Ultimately, the CLCS is part of the package deal established by the LOSC, balancing the rights and interests of the coastal State over its continental shelf with the common heritage of humankind in the Area. Article 76 provides limits to the extent of coastal State jurisdiction, and the CLCS was created to safeguard and scientifically review those limits. In any independent review process, it is expected that disagreement sometimes occurs. It confirms the

¹⁴⁹ See, for example, H Woker, ‘Interactions between law and science within the law of the sea: A systems theory perspective’ in N Matz-Lück, Ø Jensen and E Johansen (eds), *The Law of the Sea: Normative Context and Interactions with other Legal Regimes* (Routledge, Abingdon, 2022) 14–43, at pp. 16–18.

¹⁵⁰ Murphy (n 145).

¹⁵¹ US Department of State (n 110), at p. 6.

¹⁵² H Woker, ‘Preliminary reflections on the ICJ judgment in Question of the Delimitation of the Continental Shelf between Nicaragua and Colombia beyond 200 Nautical Miles from the Nicaraguan Coast (Nicaragua v. Colombia) of 13 July 2023’ (*EJIL: Talk!*, 21 July 2023) available at <https://www.ejiltalk.org/preliminary-reflections-on-the-icj-judgment-in-question-of-the-delimitation-of-the-continental-shelf-between-nicaragua-and-colombia-beyond-200-nautical-miles-from-the-nicaraguan-coast-nicaragua-v-co/>.

¹⁵³ *Question of the Delimitation of the Continental Shelf between Nicaragua and Colombia beyond 200 Nautical Miles from the Nicaraguan Coast (Nicaragua v. Colombia)*, Judgment, *ICJ Reports* 2023 (not yet reported), para 77.

independence of the review process. Thus, in theory, the fact that the CLCS sometimes disagrees with the submitting coastal State is only an exercise of this independent review process.

In practice, however, the practice of the CLCS has been subject to ample commentary concerning its inconsistency, lack of transparency, and tendency to overreach in legal interpretation.¹⁵⁴ This creates the impression that perhaps the review process is not being executed the way in which it was envisaged by the drafters of the LOSC. However, let us imagine the alternative, in which the role of the CLCS (and its consideration of coastal States' submissions) would be interpreted much more rigidly. How would it have been able to address the issue of islands on mid-ocean ridges not foreseen by the LOSC itself, or the actual implementation of identifying the foot the slope, or any of the other questions that would have come up in the implementation of Article 76? Furthermore, how would it have been able to respond to developments in science and technology not foreseen in the 1970s but now incredibly relevant to gathering data in support of a submission to the CLCS? Alternatively, what if the CLCS had bent and reshaped the LOSC to a much larger extent, with the risk that States Parties may 'view their consent to the treaty ... as being abused, potentially triggering adverse reactions that challenge if not undermine the treaty regime'?¹⁵⁵

If the CLCS had either interpreted its role more rigidly or more extensively, it would have become irrelevant, thus diminishing the resilience of the LOSC in the maintenance of a legal order for the ocean. If the CLCS were to become irrelevant and thus cease to function, this could lead to coastal States asserting excessive claims to the seabed as these would no longer be subject to scientific review, thus threatening the (extent of) the common heritage of humankind. In other words, despite disagreement between the CLCS and submitting coastal States, and despite CLCS practice sometimes being viewed as controversial, the independent review process executed by the CLCS is of paramount importance in ensuring the continued resilience of the LOSC in the years to come.

¹⁵⁴ See, for example, Serdy (n 103); de Herdt (n 125); B Kunoy, 'The terms of reference of the Commission on the Limits of the Continental Shelf: A creeping legal mandate' (2012) 25(1) *Leiden Journal of International Law* 109–130; Cavnar (n 123); Jensen (n 138); Baumert and Mayer (n 86); R Macnab, 'The case for transparency in the delimitation of the outer continental shelf in accordance with UNCLOS Article 76' (2004) 35(1) *ODIL* 1–17; SP Subedi, 'Problems and prospects for the Commission on the Limits of the Continental Shelf in dealing with submissions by coastal States in relation to the ocean territory beyond 200 nautical miles' (2011) 26(3) *IJMCL* 413–431.

¹⁵⁵ Murphy (n 145).