On Russia's Submission Concerning the Continental Shelf beyond 200 NM

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Abstract; Delimitation of the outer limits of the continental shelf beyond 200 nm is of far-reaching strategic significance for coastal States on their politics, economy and military affairs, and factors significantly in the new order set by the UN Convention on Law of the Sea. Russia's 2001 Submission, the first one of this kind considered by the UN Commission on the Limits of the Continental Shelf, has acquainted Russia and other coastal States with the complexity and difficulty in their attempts to extend their continental shelf beyond 200 nm from the baseline of the territorial sea under international law. Frustrated, Russia has coordinated with its neighbors in a pragmatic manner and proactively created an international atmosphere, while carrying out further survey for geo-scientific data to prepare its resubmission carefully. The gains and losses of Russia's submission have provided good lessons on scientific and legal practice for the coastal States, especially for China facing great difficulty in maritime delimitation.

Key Words: Russia; CLCS; Continental shelf beyond 200 nm; Outer limits; Submission

 $Russia^{\oplus}$ is the first country that presented to the UN Commission on the

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① Russia's submission was submitted on December 20,2001, see home page of Russia's submission, at http://www.un.org/Depts/los/clcs_new/submissions_files/submission_rus.htm,1 May 2012.

Limits of the Continental Shelf^①(hereinafter as "the Commission") its submission for the continental shelf beyond 200 nm^② in accordance with the 1982 UN Convention on the Law of the Sea^③(hereinafter as "the Convention"), involving four different waters including two in the Arctic region (Central Arctic and Barents Sea) and two in the Northwest Pacific region (Sea of Okhotsk and Bering Sea), with a total area of 1.58 million km² of the continental shelf beyond 200 nm. ^④ The recommendations by the Commission were issued on May 27,2002 with non-approval for each of the four waters. In the ten years after the recommendations, Russia has made a series of painstaking and persevering efforts and is expected to resubmit in 2012. In light of the latest research from developed countries, this paper intends to make a brief review of, and comments on, the ins and outs of Russia's submission.

I . The Legal System on the Continental Shelf beyond 200 nm and the Definition on the Outer Limits of the Continental Shelf Set by Article 76 of the Convention

A. The Legal System on the Continental Shelf beyond 200 nm

The third United Nations Conference on the Law of the Sea⁵, which lasted nine years (1973~1982) with arduous negotiations, gave birth to a brand-new convention on the law of the sea—The 1982 UN Convention on the Law of the

- ① The Commission on the Limits of the Continental Shelf (CLCS), a special committee of UN system, was established in 1997, dedicated to handling matters concerning the outer limits of the continental shelf beyond 200 nm. The function of CLCS is to consider submissions concerning the outer limits of the continental shelf beyond 200 nm submitted by coastal States, make recommendations and provide scientific and technical advice, if requested by coastal States concerned during their preparations. It so far has lasted for three terms (1997,2002 and 2007).
- ② 1 nm (nautical mile) is equal to 1852 m (meter).
- The 1982 United Nations Convention on the Law of the Sea (1833U. N. T. S. 3), at ht-tp://treaties. un. org/doc/Publication/MTDSG/Volume% 20II/Chapter% 20XXI/XXI 6. en. pdf, 1 May 2012.
- (4) Kuang Zengjun, Russia's Policy on Outer Continental Shelf, Studies on Russia, Central Asia and Eastern Europe, No. 2, 2011, p. 74. (in Chinese)
- The Third United Nations Conference on the Law of the Sea created three MOSTs in the history of international relations; number of participating countries, scale and duration. It was also the convention with the most provisions in the history of international law codification. The Convention includes a preamble, 17 parts comprising 320 articles, and 9 annexes. China's delegation had participated in all sessions.

Sea covering several previous conventions. ^① The Convention is the most comprehensive and complete maritime code in the history of mankind by far (for maritime space set by the Convention, see Fig. 1). The Convention has radically renovated the legal concept of the continental shelf. ^② Its article 76 and Annex II have become programmatic documents in international law in the field of delimitation of the outer limits on the continental shelf beyond 200 nm for the time being.

B. The Definition on Outer Limits of the Continental Shelf Set by Article 76 of the Convention

Article 76, paragraph 1 of the Convention reads, "The continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance." This paragraph puts forward two kinds of criteria for the outer limits of the continental shelf: "natural prolongation" and "200-nm distance". A coastal State may choose either of them according to its continental margin. Paragraphs $4 \sim 7$ in article 76 should be followed in delineating the continental edge which is more than 200 nm from the territorial baselines.

Paragraph 4 reads: "(a) For the purposes of this Convention, the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by either (i) a line delineated in accordance with paragraph 7 by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 percent of the shortest distance from such point to the foot of the continental slope [namely "Irish

The first United Nations Conference on the Law of the Sea in 1958 established four Conventions; Convention on the Territorial Sea and the Contiguous Zone; Convention on the High Seas; Convention on Fishing and Conservation of the Living Resources of the High Seas and Convention on the Continental Shelf.

② It is generally acknowledged that the legal concept of the continental shelf has gone through an evolutionary process from The Continental Shelf Notice by US President Harry Truman in 1945 to The Convention on Continental Shelf (article 1) in 1958, and then to The United Nations Convention on the Law of the Sea (article 76) in 1982.

Formula" line, or (i) a line delineated in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the continental slope [namely "Hedberg Formula" line; (b) in the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of maximum change in the gradient at its base. The two lines defined by paragraph 4 are known as "formula line", which coastal States can apply singly or jointly according to their specific situations to maximize their outer limits by taking the outer envelope of the lines as the formula line farthest from shore.

Paragraph 5 reads: "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, which is a line connecting the depth of 2,500 metres." The two lines defined by paragraph 5 are known as "constraint line", which coastal States can apply singly or jointly according to their specific situations to maximize their outer limits by taking the outer envelope of them as the constraint line farethest from shore.

Finally, the greatest outer limits of the continental shelf beyond 200 nm for the best interests of coastal States can be established initially by inner-enveloping of the maximum formula line from paragraph 4 and constraint line from paragraph 5 (see Fig. 2). Of course, the specific location of this line and the lengths of composing segments are also subject to such terms of article 76 of the Convention as paragraph 3[®](oceanic ridges), paragraph 6[®](submarine rid-

① It was put forward by the Irish geologist P. R. R. Gardiner participating in the Third United Nations Conference on the Law of the Sea, thus named "Irish Formula".

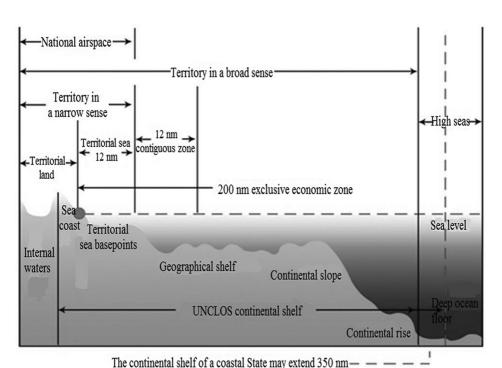
② It was put forward by the American geologist H. D. Hedberg participating in the Third United Nations Conference on the Law of the Sea, thus named "Hedberg Formula".

Article 76, paragraph 3 of the Convention reads: "The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the seabed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof."

Article 76, paragraph 6 of the Convention reads: "Notwithstanding the provisions of paragraph 5, on submarine ridges, the outer limit of the continental shelf shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured. This paragraph does not apply to submarine elevations that are natural components of the continental margin, such as its plateaus, rises, caps, banks and spurs."

ges) and paragraph 7⁽¹⁾(segmental length) etc.

Fig. 1



Maritime Space Set by the Convention²

Article 76, paragraph 7 of the Convention reads: "The coastal State shall delineate the out-(1) er limits of its continental shelf, where that shelf extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by straight lines not exceeding 60 nautical miles in length, connecting fixed points, defined by coordinates of latitude and longitude."

See Schematic of marine divisions set by the Convention, at http://image, baidu.com/i? tn=baiduimage&ct=201326592&lm=-1&cl=2&word=%B4%F3%C2%BD%BC% DC,1 May 2012.

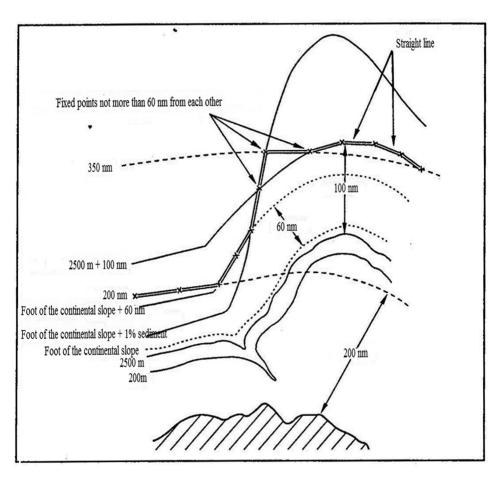


Fig. 2 Possible Maximum Outer Limit of Continental Shelf^①

I. The Presentation of and the Consideration on Russia's 2001 Submission

A. The Presentation of Russia's 2001 Submission

Russia presented its submission to the Commission through the UN Secretary-General on December 20,2001 pursuant to article 76, paragraph 8 and arti-

Muen-chen Fu, Essays on International Law of the Sea, Xiamen; Xiamen University Press, 2004, p. 283. (in Chinese)

cle 4 of Annex II in the Convention. ^① The official website of the UN Division for Ocean Affairs and the Law of the Sea (hereinafter as "DOALOS") released the first continental shelf notice on the same day as the establishment of the Commission, announcing: the bulletin would be distributed to all UN members and parties to the Convention [...] following consideration of the submission, the Commission ought to make recommendations to Russia in accordance with article 76 of the Convention; the UN Secretary-General should make due publicity; and Russia's limits of continental shelf based on these recommendations would be final and binding. The DOALOS issued a more detailed press release the next day stating that consideration of Russia's submission should be included in the agenda of the Commission's 10th session, indicating the official hearing on Russia's submission. ³ After the UN Secretary-General distributed the notice and made public part of the information in the executive summary of Russia's submission in accordance with article 50[®] in the Rules of Procedure of the Commission on the Limits of the Continental Shelf (hereinafter as "Rules of Procedure")⁵, Canada, Denmark, Japan, Norway and the United States responded by presenting their diplomatic notes to safeguard their rights because the five countries were directly or indirectly involved in Russia's submission. The problems related to those notes exerted serious impacts on the

Article 76, paragraph 8 of the Convention reads: "Information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured shall be submitted by the coastal State to the Commission on the Limits of the Continental Shelf set up under Annex II on the basis of equitable geographical representation." Article 4 in Annex II to the Convention reads: "Where a coastal State [...] shall submit particulars of such limits to the Commission along with supporting scientific and technical data as soon as possible but in any case within 10 years of the entry into force of this Convention for that state."

See CLCS. 01. 2001. LOS, at http://www. un. org/Depts/los/clcs_new/submissions_files/rus01/RUS_CLCS_01_2001_LOS_English, pdf, 1 May 2012.

See Commission on Limits of Continental Shelf Receives Its First Submission, at http://www.un.org/News/Press/docs/2001/sea1729.doc.htm,1 May 2012.

Rule 50 of the Rules of Procedure reads: "UN Secretary-General shall, through the appropriate channels, promptly notify the Commission and all UN States Members, including States Parties to the Convention, of the receipt of a submission, and make the executive summary known for public including all charts and coordinates referred to in paragraph 9.

 1. 4 of the Guidelines and contained in that summary, upon completion of the translation of the executive summary referred to in rule 47, paragraph 3."

See Rules of Procedure of the Commission on the Limits of the Continental Shelf (CLCS/40/Rev. 1), at http://daccess-dds-ny. un. org/doc/UNDOC/GEN/N08/309/23/PDF/N0830923. pdf? OpenElement, 1 May 2012.

Commission's consideration and recommendations on Russia's submission.

B. Russia's Treatment of the Deadline of its Submission

The Convention entered into force for Russia on April 11,1997, thus making April 11,2007, the original terminal date for Russia's submission, against the 10-year deadline. The 11th session of the Assembly of State Parties to the Convention in May 2001 postponed the deadline for submission to May 13, 2009. © Russia would have taken this advantage, but finally decided to present its submission in 2001, seven and a half years earlier than its deadline. There are several aspects behind this to be analyzed. Firstly, there was some uncertainty and vulnerability in the Commission's consideration in terms of such aspects as legal proceeding and the scientific nature of data because it was the first submission, from which Russia sought to gain an advantage. Secondly, scientific and technological progress may have rendered the old data sub-optimal (and in fact it was no longer widely accepted by 2009), thus forcing the submitting State to make costly investments for new data and recalculate their limits. Thirdly, preparation of submission requires long-term planning including maintenance for a number of key scientific technical and legal areas of expertise, and intermittence means that governments would lose the expertise due to the turnover of key staff. Finally, the alteration of the 10-year deadline by the Assembly of States Parties does not fully comply with relevant procedures on amendment to the Convention, ² but is merely a putative functional equivalent, thus resulting in an inability to bind those who accede to or ratify the Convention subsequently. Presenting a submission beyond the original deadline set by the Convention may be subject to their challenges. However, presentation ahead of schedule would have negative impacts including extremely strict consideration by the Commission for the purpose of establishing its reputation

① The Assembly of States Parties to the Convention considered the technical difficulty of a submission especially prepared by developing countries, and postponed the date of commencement for the 10-year deadline to May 13,1999, also the date on which the Guidelines were made public. The Convention came into force for Russia on April 11,1997, which means Russia would have to put forward its submission before April 11, 2007. See SPLOS/72, at http://daccess-dds-ny. un. org/doc/UNDOC/GEN/N01/387/64/PDF/N0138764, pdf? OpenElement, 1 May 2012.

See articles 312,313 of the Convention involving the amendment and simplified amendment procedure of the Convention.

in its first case. In addition, the Commission dares not jump to conclusions on some key issues since there are no precedents on a number of controversial scientific issues (such as the nature of Lomonosov Ridge).

C. The Consideration on Russia's Submission by the Commission

In accordance with article 5 of Annex II to the Convention and article 42 of the Rules of Procedure, the Commission established a seven-member subcommittee responsible for considering Russia's submission.

The initial consideration on Russia's submission was included in the agenda of the Commission's 10th session held from March 25 to April 12 in New York in 2002. Russia's Vice Minister of Natural Resources Ivan F. Gloumov introduced Russia's submission at the session, and believed that diplomatic notes from Canada, Denmark, Japan, Norway and the U.S. did not constitute a barrier to the Commission's consideration on Russia's submission. ²⁰ Gloumov also invited the Commission to visit Russia for the purpose of verifying data on the spot, though this was followed by no response from the Commission. The subcommittee held a total of twenty sessions from April 1 to 12 in 2002, six of them only for exchanging views with a team of Russian experts in the form of question-and-answer, and a total of thirty-six questions being put forward followed by written reply from the Russian experts. The subcommittee required Russia to submit additional data and information concerning certain matters, and went on with the consideration from June 10 to 14 just before expiration of the first term of the Commission on June 15,2002, including considering addi-

Article 5 in Annex II to the Convention reads: "Unless the Commission decides otherwise, the Commission shall function by way of sub-commissions composed of seven members, appointed in a balanced manner taking into account the specific elements of each submission by a coastal State ... the coastal State which has made a submission to the Commission may send its representatives to participate in the relevant proceedings without the right to vote." Paragraph 1 in rule 50 of the Rules of Procedure reads: "If, in accordance with article 5 of Annex II to the Convention, the Commission decides to establish a subcommittee for the deliberation of a submission, it shall ... appoint from among the nominated candidates seven members of the subcommittee." The 7-people subcommittee considering Russia's submission consisted of Galo Carrera Hurtado (Mexico, the President), Karl HF Hinz, (Germany, Vice-Chairman), Peter F. Croker (Ireland, Rapporteur), Alexandre Tagore Medeiros de Albuquerque (Brazil), Lawrence Folajimi Awosika (Nigeria), Iain C. Lamont (New Zealand) and Yong Ahn Park (South Korea).

See CLCS/31, at http://daccess - dds - ny. un. org/doc/UNDOC/GEN/N02/318/60/PDF/N0231860.pdf? OpenElement, 1 May 2012.

tional data submitted by Russia on May 15. In order to get the latest data on seismic track line, multi-wave channel seismic and strip depth, the DOALOS had also arranged for the Commission to visit Lamont-Doherty Earth Observatory[®] in the U. S. and compare them with SCICEX/99[®] data from the U. S. Scientific Ice Expeditions project. [®] Recommendations from the subcommittee were completed on June 14,2002 and submitted to the Commission's 11th session held from June 24 to 28,2002. After the settlement on procedural matters related to Russian members' involvement in consideration in accordance with relevant legal procedures set by article 5 of Annex II to the Convention, the Commission continued to consider recommendations by the subcommittee on Russia's submission in a closed session. Mr. Carrera, chairman of the subcommittee, introduced the work of the subcommittee and its recommendations. The Commission's recommendations based on certain amendments after consultation were unanimously adopted on May 27,2002, and were passed on to the UN Secretary-General and Russia in writing according to the Convention.

D. Brief Summary of Recommendations on Russia's Submission by the Commission

Compared with the recommendations on Australia's submission, [®] both the Commission and the UN Secretary-General addressed Russia's submission in a very low-profile manner. The Commission has not worked out a more complete summary of recommendations on Russia's submission for the public so far, [®] while the UN Secretary-General has merely summarized the recommendations into an extremely brief, conclusive version submitted to the 57th session of the UN General Assembly as Addendum to the Report of the Secre-

① Lamont—Doherty Earth Observatory, at http://en. wikipedia. org/wiki/Lamont% E2% 80%93Doherty_Earth_Observatory, 1 May 2012.

Suzette V. Suarez, The Outer Limits of the Continental Shelf - Legal Aspects of their Establishment, Berlin/Heidelberg/New York; Springer Press Ltd., 2008, p. 193.

SCICEX (Science Ice Exercise), at http://en. wikipedia. org/wiki/SCICEX and http://nsidc.org/scicex/,1 May 2012.

See Summary of the Recommendations of the Commission on the Limits of the Continental Shelf in Regard to the Submission Made by Australia on 15 November 2004, recommendations adopted by CLCS on 9 April 2008, at http://www.un.org/Depts/los/clcs_new/submissions_files/aus04/aus_summary_of_recommendations.pdf, 1 May 2012

See CLCS/60, paragraph 59, at http://daccess - dds - ny. un. org/doc/UNDOC/GEN/ N08/523/33/PDF/N0852333. pdf? OpenElement,1 May 2012.

tary-General on Oceans and the Law of the Sea (hereinafter as the "Addendum") ^① for publicity. The reasons might be as follows: firstly, as the first and an essentially fruitless case considered by the Commission, it seems better not to trumpet it; secondly, the outstanding disputes are extraordinarily sensitive to other stakeholders, and the UN avoided stirring up more trouble in the international community; thirdly, frustrated Russia was unwilling to make the international community more informed of the core contents of its submission in order to avoid negative effects on its resubmission; finally, because the Commission dealt with scientific data in a tentative manner due to the absence of any precedent, it would be more appropriate to publicize the contents and range concerned carefully.

The Addendum, with a brief introduction to the consideration on Russia's submission on its front page, pointed out that the Commission's recommendations contained results of its deliberations on data and information submitted by Russia, specifically mentioning Russia's rights on the continental shelf beyond 200 nm and whether formula and constraint lines set by article 76 of the Convention had been applied. As to the Barents Sea and the Bering Sea, the Commission recommended that Russia, upon entry into force of the maritime boundary agreements with Norway in the Barents Sea and with the U.S. in the Bering Sea, transmit the charts and coordinates of delimitation lines to the Commission as they would represent Russia's outer limits of continental shelf beyond 200 nm in these two seas. ² Regarding the Sea of Okhotsk, the Commission recommended that Russia make a well-documented, partial submission for its extended continental shelf in the northern part of that sea, stating that this partial submission shall not prejudice questions relating to delimitation of boundaries between States in the south for which a submission might subsequently be made, and do its best to effect an agreement with Japan in accordance with paragraph 4 of Annex I to the Rules of Procedure of the Commission. As regards the Central Arctic Ocean, the Commission recommended that

See Oceans and the law of the sea/Report of the Secretary-General * Addendum (A/57/57/Add. 1), paragraphs 38 ~ 41, at http://iilj.org/courses/documents/SG2002Oceansan dthelawoftheseareport. pdf, 1 May 2012.

② Paragraph 2 in rule 54 of the Rules of Procedure reads: "Pursuant to article 84 of the Convention, in the case of delimitation on continental shelf between States with opposite or adjacent coasts, charts and/or coordinates describing the lines of delimitation drawn in accordance with article 83 of the Convention shall be deposited with the Secretary-General of the United Nations.

Russia present a revised submission in respect of its extended continental shelf based on the findings contained in the recommendations. Apparently, the Commission found that the data provided by Russia were insufficient to prove that there is a natural link between the Russian landmass and its related claims. In addition, there is on mention of any other State here, which means that there was no direct connection between the part of submission concerning this water with any territorial or maritime disputes in the sense of Annex I to the Rules of Procedure.

In the event that a coastal State disagrees with the Commission's recommendations, both the Convention and the Rules of Procedure allow the coastal State to resubmit a revised or new submission to the Commission within a reasonable time. ^① However, the term "reasonable time" is not defined, nor is the deadline for a coastal State to have the Commission informed about its objection. There has been no revised or new submission (relative to original submission) from Russia to the Commission so far. On June 3,2003, Russia replied to the Commission's recommendations in a document containing a number of questions and comments yet unpublished, and thus whether Russia agreed to the Commission's recommendations is unknown. The subcommittee considering Russia's submissions prepared a written reply, while the Commission agreed with the content and the method adopted and subsequently transferred it to Russia. ^② At this point, the first phase of Russia's submission (2001 Submission) came to an end.

II. Overview of Russia's 2001 Submission

As stipulated, the executive summary of coastal States' submissions should be made publicly available on the official website of the DOALOS. Because of the demarcation disputes and scientific data credibility, Russia had on-

① Paragraph 4 in rule 53 of the Rules of Procedure reads: "In the case of disagreement by the coastal State with the recommendations of the Commission, the coastal State shall, in accordance with article 8 of Annex II to the Convention, make a revised or new submission to the Commission within a reasonable time." Article 5 in Annex II to the Convention reads: "In the case of disagreement by the coastal State with the recommendations of the Commission, the coastal State shall, within a reasonable time, make a revised or new submission to the Commission."

See CLCS/39, paragraph 20, at http://daccess - dds - ny. un. org/doc/UNDOC/GEN/ N04/359/63/PDF/N0435963. pdf? OpenElement, 1 May 2012.

ly agreed to release part of its information, while the open items and quantity of information is at the lowest level without clear logic, thus leaving a "last resort" impression. In view of this, Russia did not want the public to have a clear understanding of its submission. In stark contrast, the executive summary of Australia's submission gives the public a clear outline readily available on the official website of the DOALOS.

The information Russia agreed to make public included three charts and five single-pages of text (pages $1 \sim 5^{\circ}$). The three charts include Russia's general outer limit of the continental shelf²⁰ and two individual ones in the Arctic Ocean and the Pacific Ocean (see Fig. 3, Fig. 4). It is noteworthy that the three charts are drawn in different ways, and with different colors and legends, which, listed together, seem to be unconventional. By contrast, all of Australia's charts of the same nature were drawn in a unified approach. Page 1 of Russia's executive summary is a short description of the abbreviations and symbols employed in the summary and the proposed limits of the continental shelf in the Arctic Ocean; page 2 provides the information of thirty-two fixed points which determine Russia's proposed outer limits in the Arctic Ocean (more detailed); page 3 reflects the information of twenty-one fixed points which determine Russia's proposed outer limits in the Bering Sea (more simple, with only longitude and latitude coordinates), followed by apparently inconsistent wording on the front of the page; ³ page 4 is a brief description of Russia's proposed continental shelf limits in the Bering Sea and the Sea of Okhotsk (without any coordinate information on the fixed points); page 5 is only a list of legends to the three charts without further reference value. Apparently, these five pages are coarsely clipped and scraped together from the executive summary of Russia's submission and charts, with obvious problems in wording, logical order, and extent of coverage by the contents of a single page, a-

[©] See pages 1~5, at http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/RUS_page1_Arctic.pdf, http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/RUS_page2_Arctic.pdf, http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/RUS_page3_Pacific.pdf, http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/RUS_page4_Pacific.pdf and http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/RUS_page5_Legend.pdf, 1_May_2012.

See the map at http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/RUS_CLCS_01_2001_LOS_1.jpg,1 May 2012.

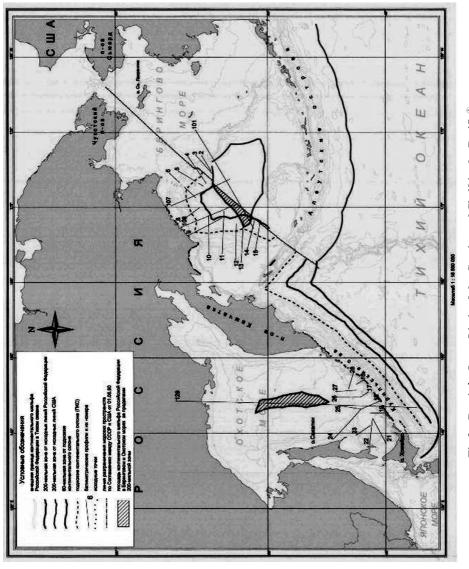
③ For example, the first paragraph on this page reads, "The outer limit of continental shelf in Arctic Ocean is shown on map 3 ...", but map 3 in the executive summary is the chart for Northwest Pacific.

mongst other issues.

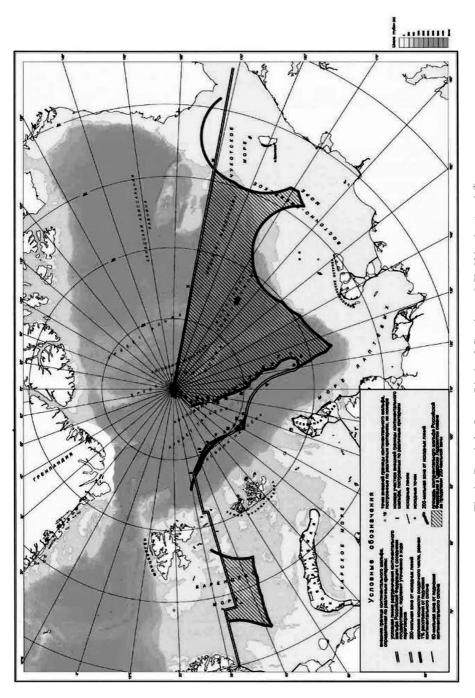
Due to the Commission's strict internal rules of confidentiality, ^① it is impossible for the public to become directly informed on the specific legal and scientific details which Russia cited in its 2001 Submission. This article can only trace the details of Russia's submission from the reaction of related countries and scholarly writings. ^②

① Article 2 (1) in Annex II to the Rules of Procedure reads: "The coastal State making a submission may classify as confidential any data and other material, not otherwise publicly available, that it submits in accordance with rule 45 ...; article 2 (3) reads: "Confidential material so classified by the coastal State shall remain confidential after the consideration of the submission is concluded unless decided otherwise by the Commission with the written consent of the coastal State concerned."

T. Gorski, A Note on Submarine Ridges and Elevations with Special Reference to the Russian Federation and the Arctic Ridges, Ocean Development & International Law, Vol. 40, 2009, pp. 51~60.



① The shaded area shows the position of Russia's continental shelf beyond 200 nm in the Sea of Okhotsk and the Bering Sea, while the yellow line is the agreed demarcation line between the U. S. S. R. and the U. S. in 1990. See the map at http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/RUS_CLCS_01_2001_LOS_3.jpg,1 May 2012



① The shaded area shows the position of Russia's continental shelf beyond 200 nm in the Barents Sea and the Arctic Ocean, while the red line demarks its 200-nm limits. See the map at http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/RUS_CLCS_01_2001_LOS_2.jpg,1 May 2012.

IV. The Main Issues Related to Russia's 2001 Submission

A. The Dispute on Maritime Delimitation with Norway in the Barents Sea

The Barents Sea, named after the 16th century Dutch explorer W. Barents, is a marginal sea of the Arctic Ocean near the European continent, and is surrounded by the Scandinavian Peninsula, Svalbard, Bear Island, Franz Josef Land, Novaya Zemlya, Kolguyev Island, the Kanin Peninsula and the Kola Peninsula (see Fig. 5). The southern part of the sea is a gulf called the White Sea, extending deep into Russia's mainland. The Barents Sea covers an area of about 1.41 million km², with an average depth of 229 m, and a maximum depth of 600 m, having a continental shelf of 1.27 million km² in the south, several deep trenches in the center and west, a platform in the north and shoals in the southeast. ^①

Norway and the former Union of Soviet Socialist Republics (U. S. S. R.) had delimited part of the maritime boundary between them at Varangerfjord in 1957, but failed to reach agreement on maritime boundary in the Barents Sea. The disputed area is located between a middle line claimed by Norway in the east and a longitude line claimed by Russia in the west. Due to the dispute, Russia's submission was immediately followed by a moderate note from Norway. Onway's note emphasized the following points: firstly, because a large area in the central Barents Sea is beyond 200 nm from Norway's and Russia's baselines, pending delimitation on the overlap should be categorized as a maritime dispute in the meaning of rule 5 in Annex I to the Rule of Procedure (Norway submitted two lists of coordinates reflecting Norway's and Russia's respective stances on delimitation); secondly, the region is entirely located within the landwards area from the foot of the continental slope, and within the 350-nm limits from the baselines of the two countries; thirdly, according to paragraphs 3,4 and 5 in article 76 of the Convention, the delimitation of this region can be directly settled by an agreement between the two countries without

Barents Sea, at http://www.britannica.com/EBchecked/topic/53189/Barents — Sea, 1
 May 2012.

See CLCS. 01. 2001. LOS/NOR, at http://www. un. org/Depts/los/clcs_new/submissions_files/rus01/CLCS_01_2001_LOS__NORtext. pdf, 1 May 2012.

a technical evaluation by the Commission; fourthly, Norway agreed that the Commission could consider the disputed area in Russia's submission but without prejudice to the issues of maritime delimitation between Norway and Russia; and finally, the note was submitted upon an agreement with Russia on the relevant issues.

In addition, Norway made a formal submission of its own to the Commission on November 27,2006, [©] involving three parts of the continental shelf beyond 200 nm in the Northeast Atlantic and the Arctic Ocean: Ring in the Barents Sea, western Nansen Basin and Banana Hole in the Norwegian Sea. Citing rule 5 in Annex I to the Rules of Procedure, Russia also put forward a note on Norway's submission requesting that the Commission's consideration on Norway's submission be without prejudice to the delimitation between Norway and Russia. [©] The Commission's recommendations on the Barents Sea for Norway are exactly the same as those for Russia: in order to mark the outer limits of the continental shelf beyond 200 nm for both countries in the Barents Sea, both parties should submit the charts and coordinates of their maritime boundary to the Commission, as soon as the delimitation agreement concluded between them enters into force. [®]

[©] See Continental Shelf Submission of Norway in Respect of Areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea, Executive Summary, at http://www.un.org/Depts/los/clcs new/submissions files/nor06/nor exec sum.pdf, 1 May 2012.

② See Russia's Note, at http://www.un.org/Depts/los/clcs_new/submissions_files/nor06/rus 07 00325, pdf, 1 May 2012.

See Summary of the Recommendations of the Commission on the Limits of the Continental Shelf 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, at http://www.un.org/Depts/los/clcs_new/submissions_files/nor06/nor_rec_summ.pdf, 1 May 2012.

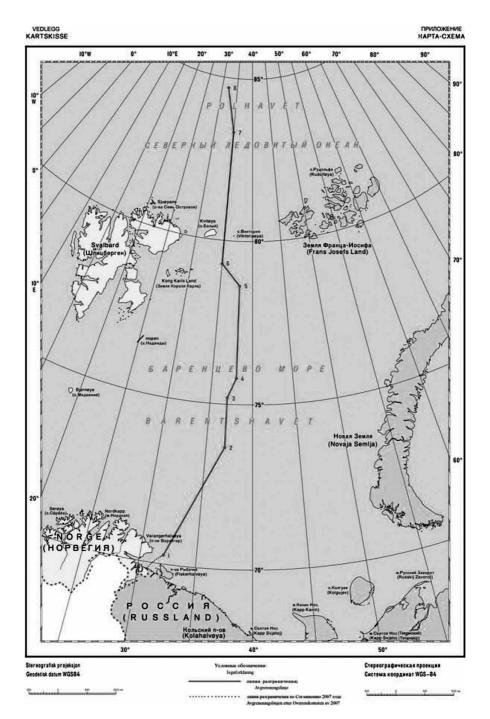
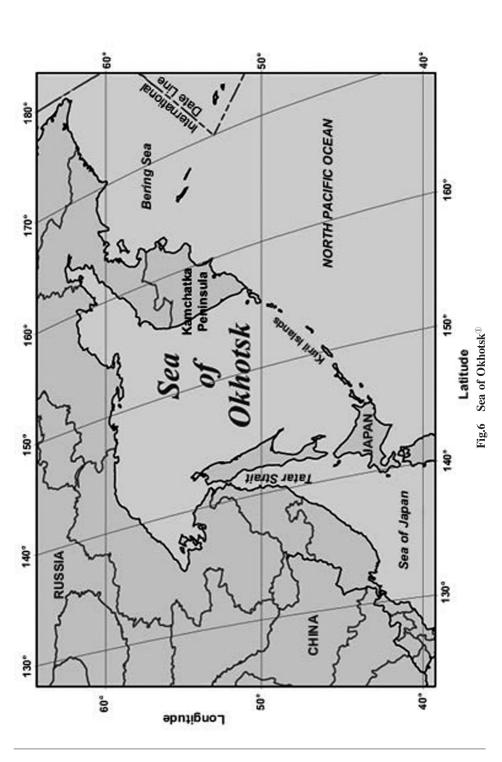


Fig. 5 Russia-Norway Barents Sea Treaty Line in 2010^①

T. Henriksena and G. Ulfsteinb, Maritime Delimitation in the Arctic: The Barents Sea 1 Treaty, Ocean Development & International Law, Vol. 42, 2011, p. 3.



B. The Dispute on Maritime Delimitation with Japan in the Sea of Okhotsk

The Sea of Okhotsk is a marginal sea comprising the northwestern part of the North Pacific Ocean, surrounded by Kamchatka, Kuril Islands, Hokkaido, Karafuto (also known as "Sakhalin Island") and a section of the coast of east Siberia, and connected to the Sea of Japan by Sakhalin Gulf, Gulf of Tartary and La Pérouse Strait (see Fig. 6). The sea is named after Okhotsk, Russia's first settlement in the Far East. The Sea of Okhotsk covers 1.58 million km², with a mean depth of 859 m, and a maximum depth of 3,372 m. Its continental shelf in the north and west accounts for about 42% of the total seabed, its continental slope strip in the center about 48%, and the Kuril Basin in the south 9%, with reserves of 1.2 billion tons of oil and 1.5 billion m³ of natural gas.

There has been a long-standing dispute focusing on territorial sovereignty of the four northern islands (hereinafter the "Four Islands") between Russia and Japan in these waters. [®] Four Islands connecting Kamchatka in the north, the Sea of Japan in the south, the Sea of Okhotsk in the west and the Pacific Ocean in the east, guard the sea lanes connecting the Sea of Okhotsk with the Pacific Ocean, with important strategic military significance. [®] Both Japan and Russia began to contend for them in the late 17th century. During nearly a hundred years from the mid-19th century to the end of World War II, the sovereignty of Kuril Islands including Four Islands was tossed about between Russia (the U. S. S. R.) and Japan by a series of treaties such as the Treaty of Commerce and Navigation between Japan and Russia (also known as "Treaty of

Etorofu, Kunashir, Shikotan and Habomai are the southern extension of the Kuril Islands in the Northwest Pacific, with a total area of about 5,000 km². Japan calls them Northern Territory or Four Northern Islands, while Russia names them South Kuril Islands. They are currently under the control of Russia's Sakhalin, and the vast majority of their residents are immigrants from various regions of the former U. S. S. R., which occupied these four islands after World War II. Japan has deemed the occupation illegal, and insists that the sovereignty of the four islands belong to Japan all the time. See Kuril Islands Dispute, at http://en. wikipedia.org/wiki/Kuril_Islands_dispute, 1 May 2012.

② During the Cold War, the Sea of Okhotsk was the location of several successful military operations in which the U. S. Navy had monitored undersea communications cable of U. S. S. R. Navy (including Ivy Bells action), and was also where U. S. S. R. Strany Air-defense Forces attacked Flight 007 of ROK Airlines in 1983. Russia takes the Sea of Okhotsk as the shelter for ballistic-missile submarines of its Pacific Fleet by now.

Shimoda") (1855), the Treaty of Saint Petersburg (1875), the Treaty of Portsmouth (1905), the Yalta Agreement (1945), the Potsdam Proclamation (1945) and the San Francisco Peace Treaty (1951). ^① Four Islands is currently under the actual control of Russia.

Losing Four Islands and with Hokkaido alone, Japan would be deprived of almost all of its interests in the Sea of Okhotsk. The limits of the continental shelf proposed in Russia's submission invaded the coastal waters of Hokkaido and Four Islands by employing base-points and the baseline of Four Islands as a benchmark, thus provoking Japan's intense challenge. Japan pointed out that Russia's submission reflected a procedural flaw due to the presence of sovereignty disputes on Four Islands. Japan requested that the Commission not just refer to charts and ancillary data submitted by Russia, or prejudge the sovereignty disputes between the two countries on Four Islands as well as the delimitation issues on the continental shelf. Considering paragraph 5 (b) in Annex I to the Rules of Procedure and Section 9.1.4 (d) in the Guidelines, Japan believed that Russia ought to inform the Commission of the existing disputes, and should take measures to ensure that its submission would not prejudice the delimitation issues between the two countries.

See Treaty of Shimoda, at http://en. wikipedia. org/wiki/Treaty_of_Shimoda; Treaty of Saint Petersburg, at http://en. wikipedia. org/wiki/Treaty_of_Saint_Petersburg_(1875); Treaty of Portsmouth, at http://en. wikipedia. org/wiki/Treaty_of_Portsmouth; Yalta Agreement, at http://www.ndl. go.jp/constitution/e/etc/c04. html; Potsdam Declaration, at http://en. wikipedia. org/wiki/Potsdam_Declaration; Treaty of San Francisco, at http://www.taiwandocuments.org/sanfrancisco01. htm, 1 May 2012.

Michael Sheng-Ti Gau, Third Party Intervention in the Commission on the Limits of the Continental Shelf Regarding a Submission Involving a Dispute, Ocean Development & International Law, Vol. 40, 2009, pp. 61~79.

See CLCS. 01. 2001. LOS/JPN, at http://www.un. org/Depts/los/clcs_new/submissions files/rus01/CLCS 01 2001 LOS JPNtext, pdf, 1 May 2012.

Article 5(b) of Annex I to the Rules of Procedure reads: "The submissions made before
the Commission and the recommendations approved by the Commission thereon shall not
prejudice the position of States which are parties to a land or maritime dispute." Article
9.1.4. of the Guidelines reads: "The executive summary will contain the following information: ... (d) Any disputes as referred to in rule 44 and annex I to the Rules of Procedure of the Commission."

C. The Dispute on Maritime Delimitation with the U.S. in the Bering Sea and the 1990 U.S.—U.S.S.R. Agreement on Maritime Border

The Bering Sea is the northernmost marginal sea of the Pacific Ocean, with an area of 2.3 million km², an average depth of 1,636 m and a maximum depth of 4,773 m, connected with the Arctic Ocean by the Bering Strait in the north, and separated from the Pacific Ocean by the Aleutian Islands in the south (see Fig. 7). It was named after Danish captain V. Bering who was the first European to discover it in 1728. ^① The maritime boundary between the U. S. S. R. and the U. S. in the Chukchi Sea, the Bering Sea and the northern Pacific was determined by an agreement between them in 1990 (hereinafter "the 1990 Agreement"), @ and is the longest international maritime border at 1,390 nm. The 1990 Agreement was smoothly adopted by the U.S. Congress within a year without any twists or turns because it was obviously favorable to the U. S., while it was not ratified by the Supreme Soviet of the U. S. S. R. However, the foreign ministers of the two governments exchanged a note and agreed to make the 1990 Agreement enter into force in the form of an interim agreement. Since its independence, Russia has believed that the U.S.S.R. suffered a great loss in the 1990 Agreement (delimitation in the Bering Sea not by the medium line), and that it is unfair for Russia to bear the consequences; Russia's Duma has not ratified the 1990 Agreement.

The reasons behind the scenes for Russia's taking the boundary set by the 1990 Agreement (hereinafter as "the 1990 Boundary") uncharacteristically in its submission might be as follows: firstly, realizing the gloomy prospect of getting immediate approval by the Commission in other waters (especially in the

① Bering Sea, at http://en. wikipedia.org/wiki/Bering_Sea, 1 May 2012.

[©] See Agreement Between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary, at http://www.un.org/depts/los/LEGISLATION-ANDTREATIES/PDFFILES/TREATIES/USA—RUS1990MB. PDF, 1 May 2012. The agreement was signed by USSR Foreign Minister Eduard Shevardnadze and US Secretary of State James Baker on behalf of their governments in Washington on June 1,1990. Russia used to call the boundary line "Shevardnadze Line". The line moved to USSR side about 200 nm against the medium line, resulting in the fact that an economic zone about 20,000 km² which originally belonged to the U. S. S. R. was transferred to the U. S. in the Bering Sea and the Chukchi Sea. However, the agreement provided that it could only come into effect subject to the approval by their parliaments respectively.

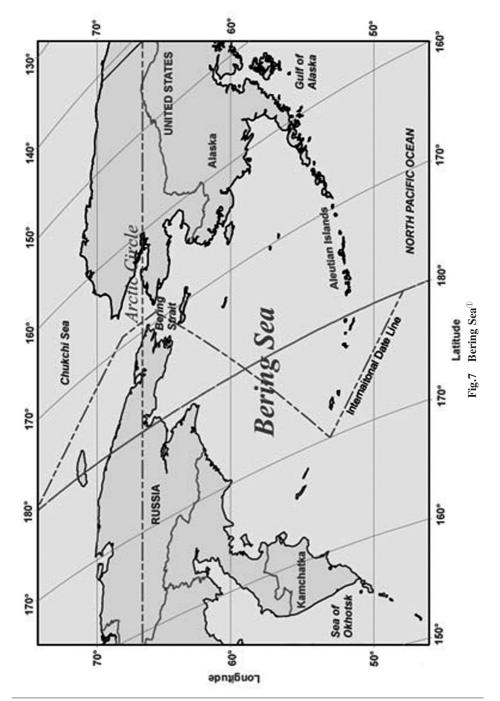
Sea of Okhotsk and the Central Arctic Ocean), Russia wanted to "borrow" the 1990 Boundary in the Bering Sea as a breakthrough; secondly, the 1990 Agreement entered into force against a provisional agreement, Russia has been inclined to accept it; thirdly, the cost would rise dramatically if another negotiation on delimitation were to be carried out, and the U.S. would not accept Russia's medium-line precept easily on a second negotiation; fourthly, Russia's willingness to accept the 1990 Agreement informally was based on the hope that U.S. resistance to Russia's submission would be minimized; fifthly, Russia's obfuscation could pave the way to a bargain with the U.S. concerning delimitation on the Bering Sea in the future in order to compensate for the losses caused by the U.S.S.R.. However, taking the 1990 Boundary would create an international obligation for Russia to comply with the 1990 Agreement in the manner of following general practice. If the U.S. could prove that Russia complied with the 1990 Agreement based on legal obligation or necessity, Russia would be bound by the agreement. That means Russia would lose the possibility for a "re-delimitation" with the U.S..

The U. S. chuckled to itself on Russia's taking the 1990 Boundary directly, while losing no opportunity to bring up again the fact that the 1990 Agreement had not been sanctioned by Russia's Duma, for the following reasons; firstly, although the 1990 Agreement has become effective by means of the exchange of notes, in order to make the maritime boundary between the U. S. and Russia confirmed in international law, the U. S. has been hoping for the Russian Duma's ratification of the agreement at an early date because there would be a problem on the succession of the treaty in international law due to the collapse of the U. S. S. R.; secondly, the U. S. intimated to Russia that it did not accept Russia's manner by only mentioning the 1990 Agreement in its submission, and that it hoped Russia could approve it in a formal manner in order to avoid a branch-off in the future; thirdly, the U. S. cannot effectively participate in the delimitation on the continental shelf beyond 200 nm due to its

D. J. Bederman, International Law Frameworks, 2nd ed., New York: Foundation Press, 2006, pp. 16~17.

The U. S. pointed out in its note that, the 1990 Agreement border had been employed in Russia's submission although Russia's Duma had not ratified the Agreement in fact. The U. S. also stated that taking this border would be consistent with the common stable expected interests of Russia and the U. S., and in conformity with article 9 in Annex II to the Convention which provides that the actions of the Commission shall not prejudice matters relating to delimitation of boundaries between States with opposite or adjacent coasts.

non-ratification on the Convention, and is therefore only able to obstruct and exert pressure on Russia's submission indirectly.



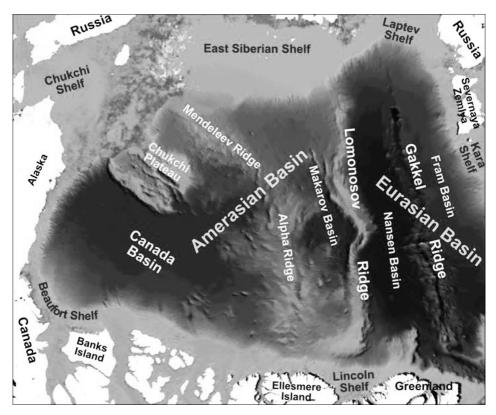


Fig. 8 Arctic seabed 1

D. The Geological Data in the Central Arctic Ocean and the Disputes with Bordering Countries in This Region

1. Overview of the Seabed Topography of the Arctic

The Arctic seabed (see Fig. 8) is split by the Lomonosov Ridge, the $\alpha-$ Mendeleev Ridge and the Gakkel Ridge. The Eurasian Basin, a basin of the Lomonosov Ridge close to Eurasia, is divided into the Nansen Basin and the Fram Basin by the Gakkel Ridge, with an average depth of $3,300\sim3,700$ m, and a maximum depth over 5,499 m. The Amerasian Basin, a basin of the Lomonosov Ridge close to North America, is divided into the Canada Basin and the Makarov Basin by the $\alpha-$ Mendeleev Ridge, with an average depth of 3,000

File: Arctic Ocean bathymetric features. png, at http://en. wikipedia. org/wiki/File: Arctic_Ocean_bathymetric_features. png, 1 May 2012.

 \sim 3,500 m, and a maximum depth over 4,683 m.

The Lomonosov Ridge governing the Arctic Basin is the main underwater ridge of the continental crust in the Arctic Ocean, spanning 1,800 km from Ellesmere Island of the Canadian Arctic Archipelago to the Arctic Point northwards along west longitude 60°, then to Russia's New Siberian Islands southwards along east longitude 140°, rising 3,300~3,700 m above the seabed with a minimum depth of 954 m. [©] It has been proven that the Lomonosov Ridge does not possess relevant characteristics of seismic activity described in the Guidance, despite of its volcanic activity. It consists mainly of sedimentary and metamorphic rocks with obscure folds on the surface, and is not part of the global oceanic ridge system. It was first discovered by a U. S. S. R. Arctic exploration crew in 1948 and named after the Russian scientist M. V. Lomonosov.

The α-Mendeleev Ridge, a ridge system with a total length of 1,500 km and roughly parallel to but smaller than the Lomonosov Ridge, is composed of the α Ridge and the Mendeleev Ridge, starting from the northern side of Wrangel Island in the north of Russia to the northeastern side of Ellesmere Island in the north of Canada, and eventually converging with the Lomonosov Ridge. The Mendeleev Ridge, aged about 80 million years, is of relatively low height and gentle slope, and is about 2,000 m below sea level with a minimum depth over the ridge of approximately 800 m. It was discovered in 1948 by a U. S. S. R. high-latitude expedition and named after the Russian scientist D. I. Mendeleev.

The Gakkel Ridge (or Nansen Ridge), stretching from the estuary of Russia's Lena River to the northern side of Denmark's Greenland and connecting with the North Atlantic Ridge which crosses Iceland, is about 2,000 km long and roughly parallel to the Lomonosov Ridge. Since there are many cracked rocks, abnormal extensions parallel to the magnetic axis as well as perpendicular transverse fault zones, it is an integral part of the global oceanic ridge system. The ridge was first discovered by a U. S. S. R. polar expedition in 1948 and named after the Russian explorer Y. Y. Gakkel.

The names of the above ridges were all approved by the SCUFN² (subcommittee on geographical names and nomenclature of ocean bottom features)

① Lomonosov Ridge, at http://en. wikipedia.org/wiki/Lomonosov_Ridge, 1 May 2012.

Undersea Feature Names, at http://www.gebco.net/data_and_products/undersea_feature_names/,1 May 2012.

of the GEBCO[®] (General Bathymetric Chart of the Oceans). [®] After four years of investigation, the US Geological Survey confirmed for the first time in May 2008 that the Arctic Ocean could hold 83 billion barrels of oil and 44 trillion m³ of natural gas. [®] The huge energy reserves in the Arctic Ocean and its growing importance as a military-strategic position have increasingly intensified the contention among the Arctic nations for the Arctic Ocean, which began several hundreds of years ago.

2. The History of Russia's Contention for the Arctic Ocean

With one third of its territory located within the Arctic Circle, Russia has always taken the Arctic as its traditional sphere of influence. As early as the period of Peter the Great, Tsarist Russia organized several investigations on the Arctic collecting relevant geographic and geological information. Following state practice by Canada claiming Arctic waters under the Sector Principle, the Presidium of the Central Executive Committee of the U. S. S. R. announced "On the Declaration of Soviet Land and Island Territories Located in the Arctic Ocean" ("1926 Decree") unilaterally on April 15,1926, declaring that the Gore Area (or "the Triangle") about 1. 19 million km² (accounting for 45% of the Arctic Ocean) between the meridian 32°04′35″ E and the meridian 168°49′30″ W. Fixed by the three points of Kola Peninsula, Chukchi Autonomous Region and North Pole belonged to the U. S. S. R., which was officially marked on its national map (Russia followed suit after the disintegration of the U. S. S. R. with the same marking). The U. S. S. R. set up research stations on the Arctic ice cap in the 1930s, and encouraged moderate emigration to the Arctic. The

① GEBCO, at http://www.gebco.net/,1 May 2012.

② International Hydrographic Organization/Intergovernmental Oceanographic Commission, IHO-IOC GEBCO Gazetteer, at http://www.gebco.net/about_us/meetings_and_minutes/documents/gebco_scufn_15_report, pdf, 1 May 2012.

M. Byers, Who Owns the Arctic? Understanding Sovereignty Disputes in the North, Vanderbilt Journal of Transnational Law, Vol. 42, 2009, p. 89.

① During the so-called "Northern Adventure" in the 18th and 19th centuries, some residents from Tsarist Russia had moved to live in the Arctic. Russia had established 12 large-scale settlements scattered in Alaska by the first half of the 19th century before it was sold to the United States in 1867.

⑤ For the first time in 1907, Canada's Senator P. Poirier put forward the "Sector Principle" which holds that all land between two meridian lines and the Arctic point should belong to the country whose territory abuts up there.

⁶ L. Timtchenko, The Russian Arctic Sectoral Concept: Past And Present, ARCTIC, Vol. 50, 1997, pp. 29~35, or at http://pubs. aina. ucalgary. ca/arctic/Arctic50-1-29. pdf, 1 May 2012.

U. S. S. R. discovered the Lomonosov Ridge in 1948, which remains the scientific and historical basis for Russia to claim Arctic territory.

However, the situation came to a significant turning point in 1997. Out of comprehensive consideration of such factors as economy and strategy, Russia did not want to stay outside the Convention. As the Arctic waters in fact have not been demarcated, members to the Convention may only claim such national jurisdiction waters as contiguous zone, EEZ or continental shelf in accordance with the provisions of the Convention. Russia had to sign the Convention in 1997, thus losing the ownership it had unilaterally claimed over the Triangle. There has been censure in Russia stating that joining the Convention was absurd, while the desire for Russia to recover the Triangle is growing with its recovery of national power. Once the Triangle was recovered, Russia would grab most of the oil and gas resources in the Arctic Ocean for its economy, and secure its great-power status by gaining strategic military dominance with its unique geographical advantage. ¹ Russia has been seeking all means to gain control of the Lomonosov Ridge, the backbone of the Arctic Ocean, and presented its submission on the continental shelf beyond 200 nm to the Commission in 2001 by means of the Sector Principle, to claim the continental shelf beyond 200 nm, mainly comprising the Lomonosov and α-Mendeleev Ridges in the Arctic, although ultimately in vain because of the adverse recommendations of the Commission.

3. Other Stakeholders' Contentions for the Arctic Ocean

a. Canada

An important principle of acquiring territory in modern international law is "Occupation", namely discovery and effective preemption over "terra nullius". During the 18th and 19th centuries, the U. K. took advantage of its navigation strength to preempt vast amounts of the Arctic regions including Arctic Islands and the Northwest Passage[©] followed by non-recognition by the international community. The above so-called "sovereignty" was handed over to Canada by the U. K. in 1880, and became a source by which Canada claims sov-

In recent years, Russia's strategic living space has been squeezed by the Western States, its estuaries also blocked thereby. Striving for the Arctic Ocean and opening the Arctic sea outlet has become an important consideration for Russia to maintain its strategic security. Once the "Triangle" was taken over again, Russia's Northern Fleet could easily pass in and out of the North Atlantic and the North Pacific at any time provided that the Arctic Ocean is navigable.

② Northwest Passage, at http://en. wikipedia.org/wiki/Northwest_Passage, 1 May 2012.

ereignty over parts of the Arctic regions including the Northwest Passage. Canada declared sovereignty over the Arctic in the 1950s but its claim was not recognized by the international community. In addition, there has been a long-standing sovereignty dispute between Canada and the U.S. over the Northwest Passage (the U.S. views it as open waters and an international waterway) and an area of 21,000 km² in the Beaufort Sea. The sovereignty dispute with Denmark over Hans Island, [®] which is of great significance for future delimitation and waterway control, has existed for nearly forty years (since 1973).

As to the Central Arctic Ocean in Russia's submission, Canada as a non-member to the Convention at that time put forward a note of right protection pointing out that, in the absence of further supporting data for analysis, Canada could not determine whether to agree to Russia's submission, but that the comment should not be construed as consent or acquiescence to Russia's submission, and also that any recommendations by the Commission should not prejudice delimitation on the continental shelf between Russia and Canada. ^② The International Bathymetric Chart of the Arctic Ocean (IBCAO) ^③ shows that the α—Mendeleev and Lomonosov Ridges are very close to Canada's Ellesmere Island from Ace Kashmir. Canada also wants to claim the continental shelf in the Arctic based on the two ridges. Despite a potential problem on overlapping demarcation concerning the two ridges between Canada and Russia, the Commission did not respond in particular to Canada's note because the geological

Hans Island near the Arctic is a small, unsupervised and uninhabited barren knoll measuring 1.3 km²,1,300 m long and 1,200 m wide. If being awarded efficacy in future maritime delimitation, it would be entitled to considerable reserves of oil and gas resources within the surrounding sea-bed. In addition, it has been contended by Denmark, Canada and Russia for control over fairway which is vital for connecting the Nares Strait and the Arctic Ocean. Denmark and Canada tried to make demarcation in the Nares Strait in 1973 but failed, thus causing unresolved sovereignty dispute so far. T. Hφyem, former Denmark's minister for Greenland affairs, visited Hans Island in 1984, planting a flagpole with Danish flag, burying a bottle of brandy at the end of the pole and leaving a note marked "Welcome Denmark". Since then, Denmark and Canada often carry "banner war", taking turns landing and declaring sovereignty. Canadian Army landed, planted Canadian flag and buried a bottle of Canadian rye whiskey at the end of the pole in 2005. Canadian post-office also pretentiously assigned HOHOHO, a postal code created for the Arctic officially. Conflict concerning Hans Island in recent years appears to upgrade potentially.

See CLCS. 01. 2001. LOS/CAN, at http://www. un. org/Depts/los/clcs_new/submissions_files/rus01/CLCS_01_2001_LOS_CANtext. pdf, 1 May 2012.

features of the two ridges have not been determined and Canada's note was of plain wording and avoided mentioning any specifics. In order to prepare its own submission, Canada has put two issues on agenda, namely joining the Convention and collecting seabed data of the Arctic Ocean, after the recommendations of the Commission to Russia's submission were made.

b. Denmark

Denmark's contention for the Arctic regions is based mainly on Greenland. Norwegians emigrating to Iceland in AD 982 discovered Greenland, which became a colony of Norway in 1261. Denmark, Sweden and Norway concluded the Kalmar Treaty in 1397 which resulted in a Scandinavian confederation to place Greenland under a condominium. After the collapse of the confederation in 1524, Greenland was transferred to a dual monarchy of Denmark-Norway. Denmark regained Greenland by the Kiel Treaty after the separation between Denmark and Norway in 1814. Onrway and Denmark faced another rough spot concerning Greenland later on, when the International Court of Justice in the Hague awarded Greenland to Denmark in 1933. Greenland was granted home rule by Denmark on May 1,1979 and an autonomy referendum on November 25,2008 resulted in a transitional regime in which its internal affairs are independent while its foreign affairs, defense and financial-related matters are still in the charge of Denmark after June 21,2009. ² In addition, Hans Island in the Nares Strait between Greenland and Ellesmere Island is another bone of contention for Denmark in the Arctic region.

As to the central Arctic Ocean part of Russia's submission, the note of rights protection presented by Denmark, then a non-member of the Convention, was similar to Canada's in the sense that Denmark could not propose a comment on Russia's submission because professional evaluation needs further supporting data, and that non-comment does not mean a consent or acquiescence to Russia's submission, and further that any recommendations by the Commission should be without prejudice to delimitation on the continental shelf between Russia and Denmark. [®] The IBCAO shows that one bottom of the Lomonosov Ridge is located on the continental shelf of Greenland. It is

See Treaty of Kalmar, Wikipedia, at http://en. wikipedia.org/wiki/Treaty_of_Kalmar;
 Treaty of Kiel, Wikipedia, at http://en. wikipedia.org/wiki/Treaty_of_Kiel, 1 May 2012.

[©] Greenland, at http://en. wikipedia.org/wiki/Greenland, 1 May 2012.

See CLCS. 01. 2001. LOS/DNK, at http://www. un. org/Depts/los/clcs_new/submissions_files/rus01/CLCS_01_2001_LOS__DNKtext. pdf, 1 May 2012.

based on this point that Denmark attempts to prove that the ridge is a natural prolongation of the continental shelf of Greenland, thus claiming a continental shelf beyond 200 nm in the Arctic Ocean. The Commission made no particular response to Denmark's note just as it did not make a response to Canada's. In order to make active preparation for its own submission, Denmark has also put the same things on agenda: joining the Convention and collecting seabed data of the Arctic Ocean after the recommendations on Russia's submission by the Commission.

c. The U.S.

As the U.S. is in an inferior geographical position in the Arctic and unwilling to tolerate losing its Arctic interests to Russia, Canada and other Arctic countries, it has insisted that the Arctic Ocean be international waters. The U.S. Congress adopted the Arctic Research and Policy Act (ARPA) formally in 1984, binding U.S. Arctic scientific research, economic interests and strategic consideration in a form of law. From 1993 to 2000, the U.S. Navy carried out six missions for the Scientific Ice Expeditions (SCICEX) in assisting the U.S. scientific community. The U.S. enacted the SCICEX Phase I Science Plan® as a follow-up study plan in June 2010 for the purpose of contesting with other Arctic countries and preparing for future competition in the Arctic.

The U. S. was the only country referring to scientific and technical aspects in Russia's 2001 Submission. In its note submitted to the Commission on February 28,2002, [©] the U. S. stated its belief that the part of Russia's submission concerning the claim of Arctic continental shelf had significant defects, the most crucial problem being the nature of geological structure of the Lomonosov and α -Mendeleev Ridges. In order to pave a way to questioning Russia's submission, the U. S. 's note pointed out at its front that according to article 76, paragraph 3 of the Convention, oceanic ridges cannot be considered as natural prolongation in the meaning of article 76. That means that if the Lomonosov and α -Mendeleev Ridges are defined as oceanic ridges, Russia will lose the basis of its claim. The U. S. has strongly put forward relevant evidence to the contrary by means of its technological advantages in the field of marine geology for the purpose of setting obstacles to Russia's submission.

SCICEX Phase II Science Plan, at http://www.arctic.gov/publications/scicex_plan.pdf, 1 May 2012.

See CLCS. 01. 2001. LOS/USA, at http://www. un. org/Depts/los/clcs_new/submissions_files/rus01/CLCS_01_2001_LOS__USAtext. pdf, 1 May 2012.

As to the α-Mendeleev Ridge, the U.S. gave a geological interpretation directly: much geological and physical evidence has indicated that the α-Mendeleev Ridge, thirty-five km thick, is a newly formed volcanic ridge on the oceanic crust from a "hot spot" where magma overflowed, diffused and accumulated along an axis located in the Amerasian Basin in the Arctic Ocean 120 to 130 million years ago; it is a surface morphology with a single continuous geological characteristic formed through the volcanic mechanism by a hot spot on the oceanic crust. The U.S. has put forward evidence in the form of bathymetric, aeromagnetic, seismic and bedrock data to show that the α-Mendeleev Ridge is not connected to Russia's mainland: aeromagnetic and bathymetric data show that the ridge goes across the Arctic Ocean, aeromagnetic features disappear at both ends of the continental margin without appearing on the adjacent continental shelf; the rocks found in the ridge are of an oceanic type rather than the more rapidly deposited, typically coarser-grained current-bedded deposits found on continental shelves. Furthermore, all types of bedrock originated from northwestern Canada and were distributed widely in the Amerasian Basin in the Arctic Ocean. Therefore, the α-Mendeleev Ridge is only a volcanic oceanic ridge by marine origin developed on the oceanic crust in the Amerasian Basin rather than part of the continental shelf of any country. This argument was fatal to Russia's submission because the Guidelines point out that ridges formed by volcanic activity related to crustal movement at hot spot are likely to be oceanic ridges rather than a natural prolongation of the continental shelf.

Regarding the Lomonosov Ridge, the U. S. believes that it is a continental geological structure formed by seafloor spreading and separated from Scandinavia and Russia's northwestern continental margin, and is an independent topographical feature in the deep part of the Arctic Ocean Basin rather than a product of volcanic activity. It is an oceanic ridge consisting of basalt, and therefore not part of the natural continental margin of Russia or any other countries. The U. S. has also provided a large amount of evidence of rock source found in the α -Mendeleev Ridge. But in recent years, the struggles among various domestic political forces in the U. S. as to whether to ratify the Convention or not, as well as how to maintain U. S. maritime rights and interests in the fu-

A "hot spot" is a magma source rooted in the Earth's mantle that is persistent for at least
 a few tens of million of years and intermittently produces volcanoes on the overlying
 earth's crust as it drifts across the hot spot during continental drift.

ture, have not stopped. Currently, the attitude towards the nature of the Lomonosov Ridge by U. S. government-led academics has changed fundamentally, taking a trend arguing that the Lomonosov Ridge has a strong geological connection with the related land mass. This indicates that the U. S. might re-define its interests and strategies in the Arctic waters.

E. Other Issues

With the decline of the socialist bloc headed by the U.S.S.R. and the end of the Cold War, the U.S. has ushered in an era in which it absolutely dominates international affairs. Out of consideration of other interests, the U.S. has not ratified the Convention, thus leading to a serious weakness on its discourse power in the field of delimitation of continental shelf beyond 200 nm. However, the U.S. is unwilling to lose its interests to any other countries. Facing the first submission in the world, which was put forward by its old rival, the U.S. has launched a strong offensive indirectly with great efforts. In addition to challenging the nature of the Lomonosov and α-Mendeleev Ridges directly (as aforementioned), the U.S. also referred to relevant provisions of the Guidelines for the purpose of curbing Russia as well as strengthening its own rights to speak to maintain its potential interests. The U.S. pointed out that the Rules of Procedure permit the Commission to consider comments on data contained in an executive summary from other countries as well as any disputes related to a submission. The U.S. put forward a series of objections to Russia's submission, and the remaining questions were also quite weighty, having the potential to seriously impede any of Russia's follow-up claims.

The Need to Provide Objective Data Sources to Determine the Location of 2500-m Isobath and the Foot of Continental Slope

The U.S. 's note stated that there were two pieces of unclear information in Russia's submission, namely 2500-m isobath and foot of continental slope, which cannot be ignored in any submission. Although the fixed points of 2500-m isobath are not required in an executive summary according to the Guidelines, the U.S. still worried that such confidential data as 2500-m isobath and foot of continental slope might be inconsistent with those in the topogra-

phy database of the IBCAO, [®] and therefore it appealed to the Commission to make an objective evaluation on Russia's fixed points. [®] If the data in Russia's 2001 Submission as well as its possible resubmission were significantly different from the internationally recognized data provided by the International Oceanographic Commission (IOC), Russia must employ the internationally accepted data to eliminate this discrepancy. Since the outcome of deliberations on this issue has not been made public, it is unclear whether the 2500-m isobath and the foot of continental slope in Russia's 2001 Submission could meet the requirements of the Commission's Guidelines.

Absence of the Term "Submarine Ridges" in the Executive Summary of Russia's 2001 Submission

The U. S. 's note also pointed out that due to the absence of the term "submarine ridges" for Russia to establish the outer limits of continental shelf in its submission, submarine ridges could not be applied for this purpose in Russia's submission any longer. The U. S. 's note actually only involved part of the information in the executive summary disclosed upon Russia's permission, while it is unclear whether submarine ridges were employed in the undisclosed portion and the main body of Russia's submission. Though the Guidelines require that a description on specifics quoted from article 76 must be contained in a submission, both the Guidelines and the Rules of Procedure do not mention the consequences of an omission. Some scholars including those from the U. S. do not believe that Russia would be in a position to employ the provision (submarine ridges) if it were not employed in its first submission, but this argument is subject to challenge. Russia's 2001 Submission was unlikely to vi-

[©] See CLCS. 01. 2001. LOS/USA, at http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/CLCS_01_2001_LOS__USAtext.pdf,1 May 2012.

The U. S. urged the Commission to make decision based on relevant scientific data, especially open and peer-reviewed scientific literature reports. It also strongly advocated reference to the International Bathymetric Chart of the Arctic Ocean (IBCOA), because it is a cooperative result contributed by the International Arctic Science Committee (IASC), the Intergovernmental Oceanographic Commission (IOC), and the International Hydrographic Organization (IHO).

See paragraph "SUBMARINE RIDGES" on page 3 of CLCS. 01. 2001. LOS/USA, at http://www.un.org/Depts/los/clcs_new/submissions_files/rus01/CLCS_01_2001_LOS_USAtext. pdf, 1 May 2012.

For example, B. Spielman (Notes & Comments Editor of Emory International Law Review), An Evaluation of Russia's Impending Claim for Continental Shelf Expansion: Why Rule 5 Will Shelve Russia's Submission, Emory International Law Review, Vol. 23, 2009, p. 329.

olate the requirements that the specifics cited from article 76 must be indicated. It indicated only that Russia was unwilling to make them publicly available due to uncertainty of scientific data, lest it incur more criticism. If the "submarine ridges" clause was truly not employed in Russia's 2001 Submission, the effect should be limited within Russia's 2001 Submission in which Russia could not claim the continental shelf beyond 200 nm based on submarine ridges, rather than its subsequent submission.

Judging from the charts permitted by Russia for the public, the provision of "submarine elevations" was the most likely to be employed, Decause Russia could claim continental shelf according to 2500-m isobath plus 100 nm free from the restriction set by the 350-nm limits, much in line with Russia's charts. Although the terms "submarine elevations" and "natural components" are not defined in the Convention, if it deemed the Lomonosov and α – Mendeleev Ridges as submarine elevations, Russia would provoke a serious condemnation from the world. That might be the true cause for Russia's unwillingness to release the specifics it cited for public. Should the Commission recognize the Lomonosov Ridge as submarine elevations, it would exert considerable negative impact on future delimitation of the continental shelf beyond 200 nm, namely encouraging coastal States to follow Russia's suit making farfetched submarine topographical structures into submarine elevations, thus undermining the consistency and authority of the Convention and the Guidelines. In addition, the U.S. also pointed out that the Commission has no competence to deal with baselines, regardless of whether or not they comply with international law. The challenge from the U.S. was the greatest, and the questions it posed were also the most difficult ones for Russia to handle.

V. The Aftermath of Russia's 2001 Submission

A. Russia

Russia did not give up its efforts in spite of its frustration on the 2001 Submission, considering the huge potential energy and military interests, its international position and influence in the future. Based on the recommendations

M. Benitah, Russia's Claim in the Arctic and the Vexing Issue of Ridges in UNCLOS, ASIL INSIGHTS, Vol. 11, Issue 27, 2007, or at http://www.asil.org/insights071108. cfm,1 May 2012.

by the Commission on its submission in 2002, Russia has adjusted its direction to the two key issues of maritime delimitation disputes and scientific data. As to maritime delimitation disputes, the Barents Sea Treaty signed in 2010 with Norway cleared the barriers and paved a way for Russia to claim the continental shelf beyond 200 nm in this water successfully and creatively, while there were not many improvements in the Bering Sea and the Sea of Okhotsk. The problem in the Bering Sea is not serious because the initiative is in the hands of Russia, and it might not be called a problem in some ways. However, the disputes with Japan in the southern Sea of Okhotsk will not be resolved easily for now, and might last for a long period of time.

In the realm of scientific data, most of Russia's efforts in recent years have been focused on the requirements of the Guidelines, namely that it must find the continental margin based on prolongation by providing the turning point of continental slope, slope area, 2500-M isobath and 1% sediment as well as at least five kinds of data such as single-beam echo, multi-beam echo, bathymetric side-scan sonar, coherent side-scan sonar and seismic reflection. Russia worked out the first topographic map of the Arctic seabed in the world in 2004, began a new round of large-scale Arctic expedition investigating the connection between the α-Mendeleev Ridge and the Siberian continental margin in terms of geology and tectonics in the summer of 2005, and presented its preliminary results to the 2005 AGU (American Geophysical Union) Fall Meeting. [©] Russia carried out the second round of large-scale Arctic expedition called "Arktika 2007" in August 2007 as part of its activities in the 2007-2008 IPY (International Polar

V. D. Kaminsky, V. A. Poselov, V. Y Glebovsky, A. V. Zayonchek and V. V. Butsenko, Geophysical and Geological Study of the Transition Zone between the Mendeleev Rise and the Adjacent Siberian Shelf: Preliminary Results, 2005, at http://www.agu.org/meetings/fm05, 1 May 2012.

In the expedition, A. Chilingarov, the renowned Arctic expert, former Deputy Chairman of Russia's Duma, led his expedition team of 50 scientists and took deep-sea submersible MIR-1 and MIR-2 diving to the North Pole on the seafloor of the Arctic up to 4,261 m below the sea level. They had taken back land and ocean biological samples there by manipulating a deep-sea diving robot, and placed a 1-M high titanium Russian flag which could be preserved for about 100 years on the ocean floor. The move had caused an uproar in the international community.

Year) ①.

In addition, Russia has made a lot of effort in creating an international atmosphere following the Commission's recommendations on its 2001 Submission in 2002. To cope with the Commission's questions, Russia held a special international seminar at St. Petersburg in 2003 aiming to promote the implementation of article 76 as well as to discuss issues related to geosciences in the Arctic. In order to mitigate the increasingly tense situation in the Arctic and to open an international dialogue window, Russia held two high-level international forums themed "Arctic:territorial dialogue" in 2010 and 2011 successfully, intending to forge it into a permanent international forum. It is worth mentioning that Russia selected the birthplace of Lomonosov, Arkhangelsk, as the site for the second forum.

In March of 2009, Russia introduced the Foundations of Russian Federation State Policy in the Arctic through 2020 and Beyond[®] which clearly defines its interests in the Arctic. The exacting legal and scientific requirements have forced Russia to postpone its resubmission again and again. Based on the 2010 9000-km section survey in the Arctic and the latest data collected for the two ridges in 2011, Russia announced that its evidence for territorial sovereignty in the Arctic had been acquired, and its resubmission might be set in 2012. The move reflected Russia's strong desire not to be a loser to Canada and Denmark with the same desire for the Arctic.

B. Norway

After a 40-year negotiation, the Treaty Between the Kingdom of Norway

- International Polar Year (IPY) is planned and carried out jointly by scientists around the world, also known as the "Polar Olympic Games" for scientific expeditions. Only four Years have been organized since 1882 to date, namely 1882—1883, 1932—1933, 1957—1958 and 2007—2008. The 1957—1958 IPY directly contributed to the birth of the Antarctic Treaty. For historical reasons, China didn't participate in the first three IPYs. As one of the sponsors for the 4th IPY, China's government attached great importance to the activity by preparing an action plan, which reflected China's increasing impact on polar expedition.
- Mikhail Vasilyevich Lomonosov (1711—1765), Russia's encyclopedic scientists, linguists, philosophers and poets, also known as Peter the Great in Russia's history of science, had founded Russia's first chemical laboratory in 1748 and first university—University of Moscow in 1755.
- Soundations of Russian Federation State Policy in the Arctic through 2020 and Beyond, at http://www.scrf.gov.ru/documents/98.html,1 May 2012.

and the Russian Federation Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean[®] (hereinafter "the Barents Sea Treaty") was finally signed in 2010, marking the maritime delimitation in the Barents Sea concerning a disputed area of about 175,000 km². A single delimitation line for both EEZ and continental shelf within 200 nm and for the continental shelf beyond 200 nm was established between Russia and Norway under the treaty (see Fig. 5). Eight coordinates defining the delimitation line which divides the disputed area into two parts of roughly the same area are determined by article 1 of the treaty. The fact that the delimitation line has been adjusted by taking Russia's long coastline into account reflects that non-legal factors can also be given weight in delimitation. ² The Barents Sea Treaty has a unique feature in international law: a small portion in which Russia exercises its sovereign rights to the east of demarcation line is actually within Norway's 200-nm limit and outside that of Russia. The case that the sovereign rights of one nation by origin can be moved into the jurisdiction of another country by surpassing international law reflects once again that international law is characteristically soft law resulting from the coordinated will of the international community. The Barents Sea Treaty has not only cleared the demarcation obstacles for the two countries, but also set a new model for the settlement of maritime disputes between countries around the world, especially for the disputes related to delimitation on the continental shelf beyond 200 nm.

C. Japan

The dispute on territorial sovereignty over Four Islands, which is a direct impact of the delimitation between Russia and Japan in the southern Sea of Ok-

The Barents Sea Treaty was signed on September 15,2010 in Murmansk, and was ratified by Norway's parliament and Russia's Duma on February 8 and March 25,2011 respectively. At a ceremony on June 7,2011 in Oslo, Norway, Norwaw's Foreign Minister Jonas Gahr Store and Russia's Foreign Minister Sergei Lavrov exchanged the text of the treaty which came into effect on May 7,2011. For the English and Russian versions of the treaty, at http://www.regjeringen.no/upload/UD/Vedlegg/Folkerett/avtale_russisk.pdf respectively, 1 May 2012.

The two countries referred to the Black Sea Demarcation Case in 2009, which gave more consideration on the coastline of disputed area. See Maritime Delimitation in the Black Sea (Romania v. Ukraine), Judgment of 3 February 2009, paragraph 77~78, at http://www.icj-cij.org/docket/files/132/14987.pdf,1 May 2012.

hotsk, saw a turnaround again in 2004. Putin said that Russia intended to return Habomai and Shikotan to Japan under the 1956 U.S.S.R. — Japan Joint Declaration, while Koizumi insisted upon the bottom line set by the 1993 Russo-Japanese Tokyo Declaration, anamely that Four Islands ought to be returned at the same time, thus losing the best opportunity for the settlement of disputes. Japan's Foreign Minister Taro also put forward a bisector of the area of Four Islands as Russo-Japanese border in 2006, which was ignored by Russia. Instead, Russia passed a nine-year development plan called "Social-Economic Development of Kuril Islands in 2007—2015" costing 17.9 billion rs(ruble) in the same year. Unwilling to admit Russia's victory, Japan adopted a bill of amendment called "Special Law to Promote Settlement of Problems Concerning the Northern Territories" in 2009, which, for the first time, expressly conferred the status of domestic law to Four Islands by stating that "Japan has sovereignty over Four Islands", while its annual white paper entitled "The DE-FENSE OF JAPAN 2010" also said that Takeshima and Four Islands are Japanese territory. Conflict between Russia and Japan around Four Islands have been escalating since Russia's former President Dmitry Medvedev visited Kunashir on November 1,2010 as head of state for the first time. Medvedev's visit highlighted Russia's tough stance on the issue of Four Islands, not only strongly proclaiming to the international community that Four Islands are an important part of Russia, but also exerting heavy pressure on Japan in order to settle delimitation of the continental shelf beyond 200 nm in the southern Sea of Okhotsk.

D. Denmark

After Russia's 2001 Submission, Denmark ratified the Convention on November 16,2004, while speeding up its basic work on the submission for the continental shelf. In order to survey seabed and reduce research costs, Denmark and Canada signed a memorandum of understanding to collect seabed data surrounding Ellesmere Island and Greenland jointly on June 27, 2005. ³

[©] See 1956 U. S. S. R. — Japan Joint Declaration, Wikipedia, at http://en. wikipedia.org/wi-ki/Soviet% E2%80%93 Japanese_Joint_Declaration_of_1956,1 May 2012.

See Tokyo Declaration on Japan-Russia Relations, at http://www.mofa.go.jp/region/n-america/us/q&-a/declaration.html,1 May 2012.

③ T. L. McDorman, The Continental Shelf beyond 200 nm; Law and Politics in the Arctic Ocean, Journal of Transnational Law and Policy, Vol. 18, 2009, pp. 155∼193.

Denmark's special projects on the continental shelf include LORITA-1, LOM-ROG 2007, Spring 2009 and LOMROG II 2009. Denmark's Minister of Science and Technology, H. Sander, pointed out that the preliminary investigation had shown that the Lomonosov Ridge is a geological extension of the northern coast of Greenland. ²⁰ Beginning in 2010, Denmark's experts have employed sonar, seismological instruments and global satellite system in their re-expedition to pinpoint the edge of continental shelf of Greenland and the seabed of the Arctic. In order to take precautions against potential military disputes concerning competition for the continental shelf of the Arctic, the Danish parliament passed the Danish Defence Agreement 2010 - 2014 on June 24,2009, intending to establish its military bases in Greenland for the purpose of strengthening its military force in the Arctic. In order to create an appropriate atmosphere for submission for the continental shelf in the Arctic, the Danish government released the Kingdom of Denmark-Strategy for the Arctic 2011 - 2020 on August 22,2011, claiming sovereignty over the continental shelf of the five regions around Faroe Islands and Greenland including the North Pole in totality. In addition, Denmark announced a new position of Arctic Ambassador responsible for coordinating and implementing Denmark's unique strategy in the Arctic on January 17,2012. In accordance with the 10-year deadline, Denmark is expected to put forward its submission by the end of 2014.

E. Canada

In fact, Canada and Denmark had already begun mapping work under the ice of the Arctic before Russia high-profiledly announced its Arctic sovereignty by planting a flag during its expedition named "Arktika 2007" in April 2007. Since Canada's Prime Minister S. Harper took office in 2006, his Arctic trip has become an annual tour declaring Canada's sovereignty. Canada's government stresses that Canada has sovereignty over the Arctic by making public its latest Arctic policy report — "Canada's Northern Strategy; Our North, Our

① Expeditions and fieldwork, at http://a76.dk/greenland_uk/north_uk/gr_n_expeditions_uk/index.html, 1 May 2012.

M. Rajabov, Melting Ice and Heated Conflicts: A Multilateral Treaty as a Preferable Settlement for the Arctic Territorial Dispute, Southwestern Journal of International Law, Vol. 15, 2009, p. 427.

See Danish Defence Agreement, at http://merln. ndu. edu/whitepapers/Denmark2010 — 2014English. pdf, 1 May 2012.

Heritage, Our Future" on May 27,2009, and its "Statement on Canada's Arctic Foreign Policy" on August 20,2010. In addition, Canada has paid special attention to cooperation with the U. S. on Arctic-related issues in spite of a dispute between the two countries over the ownership of seabed area in the Beaufort Sea. In order to prepare for their future submissions, they carried out three joint Arctic expeditions collecting scientific data of seabed, including the continental shelf of the Arctic, in 2008, 2009 and 2010. Canada's research pointed out that its claim over the eastern region in the Arctic is based on the α —Mendeleev and Lomonosov Ridges. In light of the 10-year deadline, Canada is expected to make its submission by the end of 2013, as it ratified the Convention on November 7,2003.

F. The U.S.

As the U.S. is the only country that has not ratified the Convention among nations within the Arctic Circle, ¹⁰ it can only intervene indirectly in the delimitation contests on the continental shelf beyond 200 nm. The U.S. is deeply aware that once it chooses to ratify the Convention to apply for the continental shelf beyond 200 nm in the future, it will experience at least as much difficulty as it has created for Russia. Therefore, the U.S. established a special working group for the continental shelf in 2003, and carried out three largescale mappings on its so-called "Arctic Ocean Territory" in 2003, 2004 and 2007. The Center for Coastal Ocean Mapping (CCOM) and the Joint Hydrographic Center (JHC) in the University of New Hampshire have also drawn three-dimensional topographic maps of the relevant seabed in the Chukchi Sea. On one hand, the U.S. is actively preparing scientific data for what it will do after the Arctic dispute is peacefully settled at last and when it has to ratify the Convention for the limited interests of the Arctic. On the other hand, the U.S. would like to make a profit from other parties' conflict as it did during the World Wars rather than ratifying the Convention soon; that is, take opportunistic action when the other four Arctic countries lose patience and start to fight.

① 158 countries have ratified the Convention. There has been debate on why the U.S. has not ratified the Convention. Some hold the view it is because of the concern about infringing sovereignty, while others think that the U.S. would be asked to pay the fees of mining rights as well as bound to prejudiced jurisdiction on the high seas and weapons-related matters.

In addition, always defying international law, the U. S. has already embarked on preparation in military tactics and domestic law; A Cooperative Strategy for 21st Century Sea-power was issued jointly by the U. S. Navy, Coast Guard, and Marine Corps in October 2007 in spite of its non-approval of the Convention; [©] former President Bush signed the presidential directives NSPD-66 and HSPD-25 which are the comprehensive exposition of U. S. Arctic policy on January 9, 2009; [©] the Navy Arctic Roadmap formulating policies and strategies of the U. S. Navy for the Arctic region was approved in November 2009; [®] military joint exercises code-named "Occam's Razor" have been held almost every year since 1993. [®] Military deterrence is another tool for the U. S. to deter other countries, including Russia, from claiming the continental shelf beyond 200 nm in the Arctic.

VI. The Prospect of Russia's Future Submission

Due to the constraints from the UN and the Convention, coupled with its weakening influence on international affairs compared with the former U. S. S. R., Russia cannot keep up with the former U. S. — led NATO which exceeds what is allowed by international law at will in international affairs. It can be speculated that Russia's future submission will be less likely to break through the framework proposed by the Commission for all of its waters, and as a matter of fact, Russia has been working hard within this framework for nearly ten years.

A. Barents Sea

As mentioned earlier, the Russia — Norway Barents Sea Treaty in 2010 cleared the obstacles for Russia to claim the continental shelf beyond 200 nm in the Barents Sea, leaving only some minor and procedural matters (such as sub-

① See A Cooperative Strategy for 21st Century Seapower, at http://www.navy.mil/maritime/Maritimestrategy.pdf,1 May 2012.

[©] See National Security Presidential Directive and Homeland Security Presidential Directive, at http://www.arctic.gov/news/2009% 20Arctic% 20Region% 20Policy.pdf, 1 May 2012.

See U. S. Navy Arctic Roadmap, at http://www.wired.com/images_blogs/dangerroom/ 2009/11/us-navy-arctic-roadmap-nov-2009.pdf,1 May 2012.

① Northern Edge, at http://en. wikipedia.org/wiki/Northern_Edge, 1 May 2012.

mitting coordinates and charts, announcing boundaries, etc). Based on the current situation, it seems that Russia has no intention to announce its limits on the continental shelf beyond 200 nm in this water separately. It will come up with the limits on the continental shelf beyond 200 nm of other regions as a whole in Russia's future resubmission upon the consideration by the Commission.

B. Bering Sea

As previously discussed, the direct use of the 1990 Boundary determining the outer limits of the continental shelf beyond 200 nm in the Bering Sea in Russia's 2001 Submission reflected that Russia has tended to accept the 1990 Boundary. However, Russia's claim in the Bering Sea would still be a dispute in the meaning of paragraph 5 in Annex I to the Rules of Procedure as the 1990 Boundary is still a pending boundary with the U.S. In order not to leave room for the U.S. to raise objection on this pretext, Russia's Duma should ratify the agreement at an appropriate time, which has also been desired by the U.S. as such, the initiative would be on Russia's side. In this way, it would not be difficult for Russia to delimit the continental shelf beyond 200 nm in this water. But if Russia does not employ the 1990 Boundary in its future resubmission, another maritime boundary dispute with the U.S. would definitely arise in the sense of article 5 in Annex I to the Rules of Procedure because that move would demonstrate that Russia itself is unwilling to be bound legally to the 1990 Agreement. Such action would seriously prejudice consideration by the Commission on its revised submission as well as increase the difficulty for delimitation. It is estimated that Russia, facing a strong rival in the U.S., will act cautiously rather than proceed to re-delimitation without careful consideration.

C. Sea of Okhotsk

The brief summary of recommendations by the Commission implicitly recognized that all the seabed under the Sea of Okhotsk is part of the legal continental shelf in that area. Furthermore, the dispute on Four Islands will not spread to the northern Sea of Okhotsk. Thus, there is no obstacle to Russia putting forward its submission there. The situation in the south is more difficult. The seesaw battle concerning the critical problem on Four Islands between Japan and Russia may lead to a protracted case of delimitation, thus af-

fecting Russia's delimitation of the continental shelf beyond 200 nm in that area. However, from the current situation, Russia seems to have gradually lost patience with Japan on the protracted conflict, preferring to shelve disputes and preemptively exploit oil and gas resources in the Sea of Okhotsk by virtue of geographical advantages as well as to overawe Japan and to exploit opportunities to delimit. Japan is now in the dock concerning the dispute with Russia in the Sea of Okhotsk due to its geopolitical and military disadvantage coupled with its dispute on Diaoyu Islands with China as well as its less-than-optimistic outcomes on the delimitation of continental shelf beyond 200 nm in the Northwest Pacific. Therefore, it is possible for Russia to settle all of its continental shelf beyond 200 nm in the Sea of Okhotsk subject to possible alterations. Of course, that depends on the contest behind the scenes between Russia and Japan.

D. Central Arctic Ocean

For Russia, the most difficult delimitation of continental shelf beyond 200 nm is in the Central Arctic Ocean. Firstly, it has to face three strong competitors including Denmark and Canada from the front as well as the U.S. laterally; secondly, collecting geo-scientific evidence calls for great effort; thirdly, in order to cope with the circle of science, international law and the Commission, a positive international atmosphere has to be created. It should be mentioned that Russia's claim for the continental shelf beyond 200 nm in this area would encounter the greatest difficulty, while the potential benefits are the most attractive.

Academics have put forward a variety of schemes for the Arctic such as the Medium-Line approach, the Sector Principle, the Antarctic Treaty[®] approach, the Svalbard Treaty[®] approach, the military method as well as the Convention approach. Judging from the current situation, taking the Convention approach is the most likely option, while the possibility of relevant countries taking extreme approaches cannot be ruled out because they might prefer ignoring international law due to the temptation of huge profits. According to the provisions in the Convention, claiming for the continental shelf of the Arctic

See Antarctic Treaty System, at http://en. wikipedia. org/wiki/Antarctic_Treaty_System, 1 May 2012.

See Svalbard Treaty, at http://en. wikipedia.org/wiki/Svalbard_Treaty, 1 May 2012.

(only possible by Russia, Denmark and Canada) must pass the test of appurtenance at first. [®] Russia, Denmark and Canada in recent years have been in full swing with Arctic expeditions collecting scientific data which will serve their following submissions possibly from 2012 to 2014. If the Commission only recognizes data from one country, the problem would be simple, with only such follow-up matters as procedure. If the data of two or three countries are recognized, a second problem, namely overlapping delimitation between the relevant countries, might follow. If the matter goes this way, the Commission would basically be free from the bondage. Then the countries concerned must negotiate to reach an agreement and submit their charts and coordinates to be deposited with the UN Secretary-General in order to be recognized by the international community for their limits of continental shelf beyond 200 nm. However, delimitation of the overlapping region is difficult and often protracted.

As no broad consensus within the geo-science circle has been reached on the tectonic history and the geological features of seabed in the Arctic Ocean, only a few scholars have put forward some points based on the expeditions to date. For instance, Australia's P. Symonds described the α —Mendeleev Ridge as a micro-continent within the vicinity of a continent, its origin and separation from the main continent difficult to define; A. Grantz from the U. S. pointed out that the origins of both the α —Mendeleev Ridge and Iceland-Faroe Ridges in the North Atlantic are similar, both formed by the separation between the shelf of deep oceanic crust and the surrounding mainland upon fracture; Canada's R. MacNab believed that in order to explain the potential form of fracture, one needs to better understand the form of fracture or the deep trench between the end of ridge and the continental margin. When it comes to the Commission to consider the submissions of the three countries, a conclusion could only be reached by a deep exchange with the geo-science circle, especially

① See CLCS/11, paragraph. 2. 3, at http://daccess-dds-ny. un. org/doc/UNDOC/GEN/N99/171/08/IMG/N9917108, pdf? OpenElement, 1 May 2012.

② P. A. Symonds, Ridge Issues, in P. J. Cook and C. M. Carleron, ed., Continental Shelf Limits: The Scientific and Legal Interface, New York: Oxford University Press, 2000, p. 290

³ A. Grantz, Treatment of Ridges and Borderlands Under Article 76 of the United Nations Convention on the Law of the Sea; the Example of the Arctic Ocean, in M. H. Nordquist, J. N. Moore and T. H. Heidar, ed., Legal and Scientific Aspects of Continental Shelf Limits, The Hague: Martinus Nijhoff Publishers, 2004, pp. 206~207.

R. Macnab, Submarine Elevations and Ridges: Wild Cards in the Poker Game of UNCLOS
 Article 76, Ocean Development & International Law, Vol. 39, 2008, p. 226.

on whether the geological features of the Lomonosov and α -Mendeleev Ridges are consistent with the norm of "natural prolongation" from the land mass of coastal States. Should an understanding among the three countries be reached in advance, the possibility for the Commission to recognize their claims would be greatly increased.

Is it possible for Russia to employ the mandatory mechanism expressed by article 286[®] of the Convention to handle the potential delimitation dispute in the Arctic Ocean? The answer is no, because Russia declared upon its signature on the Convention explicitly that it would not be bound to a decision "related to the delimitation dispute of maritime boundaries by the mandatory procedures". Russia is unable to take advantage of this mechanism until it withdraws its reservations. In addition, Russia could not agitate a forced delimitation since Canada, Norway and Denmark have refused to make use of an arbitration court to resolve the disputes on maritime delimitation even if Russia withdraws its reservations. Moreover, a forced delimitation is a passive way which would bring no greater benefits to Russia.

At the international political level, the Arctic Council® established in 1996 and the Ilulissat Declaration® by the five Arctic countries in 2008 both suggested to the international community that the Arctic belongs to the Arctic countries, while outsiders ought to have no finger in the pie. The Antarctic is relatively calm because of the existence of the Antarctic Treaty, a "hard nail" no one wants to touch. However, due to the absence of a similar Arctic Treaty and extreme reluctance on the part of Arctic countries to increase any further constraint to curb contention for the Arctic, the Convention can only suspend contention for the time being. With future submissions to be put forward by the three countries, the Convention would not be in a position to prevent relevant nations from contending for the Arctic, namely a parallel arrangement by legal

Article 286 of the Convention reads: "Subject to section 3, any dispute concerning the interpretation or application of this Convention shall, where no settlement has been reached by recourse to section 1, be submitted at the request of any party to the dispute to the court or tribunal having jurisdiction under this section."

② Declarations and Statements, at http://www.un.org/Depts/los/convention_agreements/convention_declarations. htm # Russian% 20Federation% 2OUpon% 20signature, 1 May 2012.

³ Arctic Council, at http://en. wikipedia.org/wiki/Arctic Council, 1 May 2012.

See The Ilulissat Declaration, at http://www.oceanlaw.org/downloads/arctic/Ilulissat_
 Declaration, pdf, 1 May 2012.

and military means followed by military deterrence and exploiting the resources in advance in order to prevent other countries from becoming involved, provided that the legal resolution does not work, and then waiting for a chance to make the proper delimitation.

In addition, the U. S. played a decisive role in curbing Russia's 2001 Submission especially for the central Arctic Ocean. The U. S. 's glacier study project continues for the purpose of preparing for future submission of its own and employing more effective ways to curb the claims of Russia (resubmission), Canada and Denmark upon their submissions concerning the continental shelf beyond 200 nm in the Arctic. The U. S. will not sit by and watch the three countries carve up the Arctic pie. Therefore, Russia's resubmission concerning the continental shelf beyond 200 nm in the Arctic will surely be more difficult and present more variables than its 2001 Submission.

W. The Implication of Russia's Submission for China's Future Submission

To sum up, Russia's 2001 Submission failed mainly due to the following three reasons: firstly, Russia's failure in settling the disputes with stakeholder countries before its submission led to a strong resistance which at least made the Commission unwilling to intervene, lest more international disputes be provoked; secondly, the geo-scientific data provided in its submission, with a wide gap from the requirements of the Guidance, failed to obtain the approval of the international community (especially the Commission); thirdly, its submission, as the first to the Commission, touched the polar regions (Central Arctic Ocean), thus incurring a strong resistance from the international community (mainly the U.S.), which is very sensitive to them.

Rather than sitting still on its frustration, Russia has made a great endeavor in adjusting its strategy and actively creating an international atmosphere for its next submissions.

China officially submitted its preliminary information about the outer limits on the continental shelf beyond 200 nm in the East China Sea on May 11, 2009. The next step is to make a formal submission for the East China Sea and South China Sea. China should take precautions to cope with the Commission, the States parties to the Convention, and its surrounding ocean neighbors from

D. A. Colson, The Delimitation of the Outer Continental Shelf between Neighboring States, The American Society of International Law, Vol. 97, 2003, pp. 91~107.

all aspects. In order to solve the problems on the continental shelf beyond 200 nm in the East and South China seas successfully, it is imperative for China to mitigate, neutralize and resolve the disputes with its neighboring countries in the two waters. Practice has shown that dealing with all disputes from one approach tends to exact a greater cost. The settlement of disputes in the Barents Sea as well as those for Australia with neighboring countries in its submission has provided valuable legal precedent for China and other countries that are preparing to make a submission. In addition, the overall standardization of a submission containing detailed scientific data and being versed in international law are important pillars to support a submission. To maximize its oceanic rights and interests, China will have a long way to go for its delimitation of continental shelf beyond 200 nm, which calls for more flexible measures to deal with the maritime disputes in the East and South China Seas.