Maritime jurisdiction and boundaries in the Arctic region

- **Internal waters**
- **Canada territorial sea and exclusive economic zone (EEZ)**
- **Canada claimed continental shelf beyond 200 M (see note 2)**
- **Denmark territorial sea and EEZ**
- **Denmark claimed continental shelf beyond 200 M (note 3)**
- **Iceland territorial sea and EEZ**
- **Iceland continental shelf beyond 200 M (note 3)**
- **Norway territorial sea and EEZ / Fishery zone (Jan Mayen) / Fishery protection zone (Svalbard)**
- **Norway continental shelf beyond 200 M (note 4)**
- **Russia territorial sea and EEZ**
- **Russia claimed continental shelf beyond 200 M (note 5)**
- **Norway-Russia Special Area (note 6)**
- **Norway-Russia Eastern Special Area (note 6)**
- **USA territorial sea and EEZ**
- **Potential USA continental shelf beyond 200 M (note 7)**
- **Overlapping Canada / USA EEZ (note 8)**
- **Russia-US Eastern Special Area (note 9)**
- **Unclaimed seabed (note 1)**

**Notes:**
1. Straight baselines
2. Agreement boundary
3. Median line
4. 300 M from baselines
5. Special Area
6. Overlapping Canada / USA EEZ
7. Russia-US Eastern Special Area
8. Unclaimed seabed
9. Russia-US Eastern Special Area
10. Svalbard treaty area
11. Iceland-Norway joint zone
12. Main 'Northwest Passage' shipping routes through Canada claimed internal waters
The Kingdom of Denmark made a partial submission to the CLCS concerning the outer limit of the North-Eastern Continental Shelf of Greenland on 23 May 2019 (see https://www.un.org/Depts/los/clcs_new/submissions_files/can1_84_2019/CDA_ARCH_ES_EN_secured.pdf). Noting that “the continental margin of Canada in the Arctic Ocean is part of a morphologically continuous continental margin that includes a number of extensive seafloor highs” and that “these seafloor highs include the Central Arctic Plateau (Lomonosov Ridge, Alpha Ridge, and Mendeleev Rise) that forms the submerged prolongation of the landmass of Canada,” Canada laid claim to c. 352,000 square nautical miles of seabed beyond 200 M from its baselines. In addition to likely overlaps with the USA (should the USA ever make a claim), the Canadian claims include c. 108,900 square nautical miles of overlap with the Kingdom of Denmark’s claim and c. 77,100 square nautical miles of overlap with Russia’s claim. These figures include a 54,850 square nautical mile area that includes the North Pole that falls within the claims of Canada, the Kingdom of Denmark, and Russia. Additionally, the straight line joining the two main claim areas (the Canada Basin and the Amandin Basin) is accompanied by a notation that this line is understood as lying entirely within Canada’s continental margin and that “Canada does not delineate the outer limits of its continental shelf in the Arctic Ocean beyond this line.” This implies that Canada reserves the right to make a more extensive claim in the future. The submission refers to non-objection agreements with all three neighbours that allow for consideration of the Canadian submission without prejudice to future delimitation negotiations.

The Kingdom of Denmark made a second partial submission to the CLCS concerning the outer limit of the Northern Continental Shelf of Greenland on 26 November 2013 (www.un.org/Depts/los/clcs_new/submissions_files/dnk68_13/DNK2013_ES.pdf). After reviewing the first submission made in 2001, the CLCS asked Russia to revise its submission relating to its continental shelf in the Central Arctic Ocean; a partial revised submission was made on 3 August 2015. The area covered by the original submission was more than 386,000 square nautical miles, and the 2015 submission added a further 30,000 square nautical miles. The 2015 submission identifies that geological and geophysical research undertaken from 2005 to 2014 confirmed the Russian view that “the Lomonosov Ridge, the Mendeleev Rise, the Chukchi Rise and separating them the Podvodnikov Basin and the Chukchi Basin form a single consolidated block of continental crust [which] is a component of the continental margin of the Arctic Ocean and constitutes a natural prolongation of the continental margin of Eurasia”. The Russian claim overlaps with the claim previously made by the Kingdom of Denmark (overlap = c.170,100 square nautical miles), and the one subsequently made by Canada (overlap = c.108,900 square nautical miles). These figures include a 54,850 square nautical mile area around the North Pole where claims by Canada, the Kingdom of Denmark, and Russia all overlap. The submission notes that the Greenland shelf is also claimed as a future continental shelf by the USA. The executive summary notes that the Kingdom of Denmark has consulted with all of its neighbours regarding its submission, and refers to non-objective agreements with Norway and Russia that allow the CLCS to consider the Danish submission without prejudice to the future delimitation of the areas submitted by the respective parties.

A 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 can be found at www.un.org/Depts/los/clcs_new/submissions_files/nor06/nor_rec_summ.pdf.

Summaries of Russia’s Arctic Ocean submissions to the CLCS are available at www.un.org/Depts/los/clcs_new/submissions_files/ru74_01_2007.htm and www.un.org/Depts/los/clcs_new/submissions_files/submission_rus_rev1.htm. After reviewing the first submission made in 2001, the CLCS asked Russia to revise its submission relating to its continental shelf in the Central Arctic Ocean; a partial revised submission was made on 3 August 2015. The area covered by the original submission was more than 386,000 square nautical miles, and the 2015 submission added a further 30,000 square nautical miles. The 2015 submission identifies that geological and geophysical research undertaken from 2005 to 2014 confirmed the Russian view that “the Lomonosov Ridge, the Mendeleev Rise, the Chukchi Rise and separating them the Podvodnikov Basin and the Chukchi Basin form a single consolidated block of continental crust [which] is a component of the continental margin of the Arctic Ocean and constitutes a natural prolongation of the continental margin of Eurasia”. The Russian claim overlaps with the claim previously made by the Kingdom of Denmark (overlap = c.170,100 square nautical miles), and the one subsequently made by Canada (overlap = c.108,900 square nautical miles). These figures include a 54,850 square nautical mile area around the North Pole where claims by Canada, the Kingdom of Denmark, and Russia all overlap. The submission notes that the Greenland shelf is also claimed as a future continental shelf by the USA. The executive summary notes that the Kingdom of Denmark has consulted with all of its neighbours regarding its submission, and refers to non-objective agreements with Norway and Russia that allow the CLCS to consider the Danish submission without prejudice to the future delimitation of the areas submitted by the respective parties.

Note 1. This map illustrates Arctic Ocean continental shelf claims, as well as exclusive economic zones (EEZs) and miscellaneous special management areas and disputed boundary lines and limits in the Arctic Ocean. Continental shelf claims are made to the Commission on the Limits of the Continental Shelf (CLCS) using criteria established in Article 76 of the United Nations Convention on the Law of the Sea (UNCLOS), for example, see https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf. Where the continental margin of a coastal state extends beyond the 200 nautical mile limit of the continental shelf (M) from the foot of the continental slope or the outer limit of the continental slope (if defined with reference to two sets of points: (i) points 60 M from the foot of the continental slope; (ii) points at which the thickness of sediment is at least 1% of the shortest distance from the points in question to the foot of the continental slope. The outer limit of the continental shelf is defined by a series of straight lines (not exceeding 60 M in length) connecting the seawardmost of the points in the two sets described above. Each coastal state’s claim is then limited by one of two ‘cutoff’ criteria that apply regardless of the location of the foot of the continental slope and the thickness of sediment seaward of that point. The ‘cutoff’ limit is the seawardmost combination of two lines: (i) a line 350 M from the state’s territorial sea baseline; (ii) a line 100 M seaward of the 2,500 metre isobath.

Because the Arctic Ocean contains a number of shallow ridges where ocean depth falls short of 2,500 metres, there are significant areas of continental shelf overlap, including the continental shelf area to the east of the Barents Sea by Russia, the Kingdom of Denmark, and Norway, and the Grey Zone established in 1978 has been terminated. The agreement also includes provisions for cooperative exploitation and management of transboundary hydrocarbon deposits.

Note 7. The USA has yet to ratify UNCLOS, and would appear to be unable to make a submission to the CLCS until it becomes a party to the Convention. The hypothetical claims (see the summaries of the CLCS records listed earlier by the Chukchi/Alpha Ridge/ Mendeleev Rise in the CLCS recommended partial submissions on 03 14 SDUN_REC_COM_20140521.pdf) and the USA’s interpretation of the disputed Beaufort Sea maritime boundary claim submitted by the USA and Canada (see note 8), and publicly available bathymetric data.
Note 8. Canada argues that the maritime boundary in the Beaufort Sea was delimited in the 1825 treaty between Great Britain and Russia defining the boundary between Alaska and the Yukon as following the 141° W meridian “as far as the frozen ocean”. The USA argues that no maritime boundary has yet been defined and that the boundary should follow the median line between the two coastlines. The area of overlap between the two claims is more than 7,000 M². Settlement of this dispute could potentially affect the delimitation of outer continental shelf claims as well as the delimitation of territorial seas and exclusive economic zones.

Note 9. The Eastern Special Area lies more than 200 M from the baseline of the USA but less than 200 M from the baseline of Russia. Under the June 1990 boundary agreement between the two states, the Soviet Union agreed that the USA should exercise EEZ jurisdiction within this area. A second Eastern Special Area and a Western Special Area (in which the opposite arrangement applies) were established adjacent to the boundary south of 60° north. The agreement has yet to be ratified by the Russian parliament but its provisions have been applied since 1990 through an exchange of diplomatic notes.

Note 10. Under a treaty signed in February 1920, Norway has sovereignty over the Svalbard archipelago and all islands between latitudes 74° and 81° north and longitudes 10° and 35° east. However, citizens and companies from all treaty nations enjoy the same right of access to and residence in Svalbard. Right to fish, hunt or undertake any kind of maritime, industrial, mining or trade activity are granted to them all on equal terms. All activity is subject to the legislation adopted by Norwegian authorities, but there may be no preferential treatment on the basis of nationality. Norway is required to protect Svalbard’s natural environment and to ensure that no fortresses or naval bases are established. 39 countries are currently registered as parties to the Svalbard treaty.

Note 11. Under the 1981 continental shelf boundary agreement between Iceland and Norway, each country is entitled to a 25% share in petroleum activities on the other’s continental shelf within a 45,470 km² area between latitudes 68° N and 70° 35' N and longitudes 6° 30' W and 10° 30' W. The idea of a joint development zone straddling the boundary was proposed by a conciliation commission set up by the two governments when they were unable to reach a negotiated boundary settlement. The continental shelf boundary itself is located 200 M from the coast of Iceland but less than 100 M from Jan Mayen, reflecting the significant disparity in the lengths of the relevant coastal fronts (more than 18:1 in Iceland’s favour).

Note 12. Canada claims that the waters of its Arctic archipelago are historic internal waters, and has enclosed them within a system of straight baselines. Under normal circumstances there is no automatic right of innocent passage through internal waters for foreign ships. However, other states (particularly the USA) argue that the channels in the archipelago which form part of the ‘Northwest Passage’ through the Arctic qualify as straits used for international navigation under Part III of UNCLOS, and that there is therefore a right of transit passage through the straits for foreign ships. While the Northwest Passage was under permanent ice cover, the debate was largely academic - but with the polar ice cap retreating and the Passage becoming increasingly navigable, the question of which legal regime applies has become increasingly pressing. Similar issues affect the straits of the ‘Northeast Passage’ (or ‘Northern Sea Route’) around Russia’s Arctic coastline.

Agreed maritime boundaries

- Denmark (Greenland)-Iceland: continental shelf and fisheries boundary agreed 11 November 1997.
- Denmark (Greenland)-Norway (Jan Mayen): continental shelf and fisheries boundary agreed 18 December 1995 following adjudication by the International Court of Justice.
- Denmark (Greenland)-Iceland-Norway (Jan Mayen) tripoint agreed 11 November 1997.
- Denmark (Greenland)-Norway (Svalbard): continental shelf and fisheries boundary agreed 20 February 2006.
- Iceland-Norway (Jan Mayen): fisheries boundary following the 200 nm limit of Iceland’s EEZ agreed 28 May 1980; continental shelf boundary and joint zone agreed 22 October 1981 (see note 11).
- Norway-Russia: maritime boundary in Varangerfjord partially delimited 15 February 1957 and extended 11 July 2007. Agreement on the maritime boundary in the Barents Sea and Arctic Ocean signed on 15 September 2010 and entered into force on 7 July 2011 (see note 6).
- Russia-USA: single maritime boundary agreed 1 June 1990 (see note 9).

Seabed topography

As discussed in note 1, the outer limit of the continental shelf is defined in relation to the geology and geomorphology of the continental margin. Since 1997, 24 institutions in 10 countries have been pooling their data to produce the definitive map of the Arctic Ocean seabed. The most recent update to the International Bathymetric Chart of the Arctic Ocean (ICA/O), produced in 2012, is shown below.

International Bathymetric Chart of the Arctic Ocean
https://www.ngdc.noaa.gov/mgg/bathymetry/arctic/maps/version3_0/Ver3_Map_LetterSize_round.pdf

Map updated July 2019