The United Nations Convention on the Law of the Seas (UNCLOS) is an international agreement that defines the rights and responsibilities of nations with respect to their use of the world’s ocean. The UN has no direct operational role in the implementation of the convention. The International Maritime Organization, the International Whaling Commission, and the International Seabed Authority organize, regulate, control, and authorize activities within the convention.

UNCLOS was created from the desire to settle all issues relating to the seas in a spirit of mutual understanding and cooperation. The Treaty came into force in 1994. As of 2015, 166 countries and the European Union have joined the convention.

Photo: Patrick Gruban
A major feature of the convention was the creation of maritime zones either under the sovereignty or sovereign rights of coastal states or beyond any national jurisdiction.

- **Internal waters**
- **Territorial sea**
- **Archipelagic waters**
- **Contiguous zone**
- **Exclusive economic zone**
- **Continental shelf**
- **High seas**
- **The Area**

The convention also made provisions for the passage of ships, protection of the marine environment, freedom of scientific research, and exploitation of resources.

*Photo: NASA and Bundesanstalt für Geowissenschaften und Rohstoffe*
A continental shelf is a shallow extension of the continent’s landmass under the ocean, restricted outwardly by the ocean floor bend.

A coastal state holds sovereign rights over its continental shelf for the purposes of exploring and exploiting its natural recourses in the seabed and subsoil of the submarine areas. These rights do not depend on occupation or proclamation. (Art. 77(3))

A claim to the continental shelf does not give a state sovereign rights of those waters in the water column, also known as waters superjacent to the seabed.

Valid extended continental shelf claims do not and cannot extend a state’s EEZ, since the EEZ is determined by drawing a line 200 nautical miles from a territorial sea baseline.
Upon ratification, a country has a ten year period to make claims to an extended continental shelf, which, if validated, gives it exclusive rights to resources on or below the seabed of that extended shelf area.

In order to claim an extended shelf, a country must collect and analyze data that describe the depth, shape, and geophysical characteristics of the seabed and sub-sea floor. In order to meet the legal definition, countries must collect bathymetric data that provides a three-dimensional map of the ocean floor. They must also obtain seismic reflection data, which provides a cross-section view of what’s beneath the floor. From this, scientists can derive information on the thickness, geometry, and other geologic characteristics of the layers.

"The currency of sovereignty is scientific data." - Government of Canada

Photo: NASA
Countries who have made seabed or extended shelf claims

- Canada
- Russia
- Norway
- Denmark

Signed but not yet ratified

- USA

Public media often fears that overlapping continental shelf claims could escalate into international disputes. However, the Ilulissat Declaration of 2008 on the orderly settlement of potential overlapping claims created a peaceful, legal framework to resolve conflicts amongst the Arctic 5.
Canada ratified UNCLOS on November 7, 2003 and had until 2013 to file an extended shelf claim.

As a partial submission in 2013, Canada declared sovereignty over approximately 1.2 million square kilometers.

Canada is still developing options to obtain scientific data required to support its claim to sovereignty rights of additional seabed territory, including the Lomonosov Ridge.

Photo: NASA World Wind
Denmark ratified UNCLOS on November 16, 2004 and had until 2014 to file an extended shelf claim.

In December 2014, Denmark submitted a partial claim together with the Government of Greenland for an area of 895,000 square kilometers, extending from Greenland past the North Pole to the outer limit of the Russian EEZ.

The Commission has not yet provided final recommendations on Denmark’s submission.

Photo: NASA World Wind
Norway ratified UNCLOS on June 24, 1996 and had until 2006 to file an extended shelf claim.

The Commission on the Law of the Seas adopted its final recommendations on Norway’s 2006 submission on March 27, 2009. The extended continental shelf measures in total 325,000 square kilometers and comprises areas in the Arctic Ocean, the Barents Sea, and the Norwegian Sea, but does not extend the Norwegian Continental shelf to the North Pole.

On September 9, 2010 Norway and Russia signed a treaty on delimitating the maritime boundary between the two states in the Barents Sea and the Arctic Ocean. The agreement divided a formerly disputed area into two nearly equal parts.

Photo: NASA World Wind
Russia ratified UNCLOS on March 12, 1997 and had until 2007 to file an extended shelf claim.

It made a first submission to the Commission in 2001. However, this first submission was neither accepted nor rejected but instead recommended a revised submission.

In August 2015 Russia submitted a partially revised application including claims to both the Mendeleev and Lomonosov Ridges. On February 9, 2016, Russia provided additional rationalizing materials to their adjusted bid to the Lomonosov Ridge, the Mendeleyev Elevation, and the Chukchi high plain.

Photo: NASA World Wind
An extended continental shelf could mean access to profitable recourses in the years to come. Countries have researched considerable amounts of hydrocarbon sources like oil and gas, minerals like manganese nodules and polymetallic sulfides, and sedentary creatures such as clams and crabs in their claimed seabed.

There is also a question of indigenous rights in the Arctic Ocean. Groups like the Inuit, who have been largely left out of UNCLOS discussions, have a legitimate historic claim to the waters of the North, which may extend to the submarine resources.

Ultimately, while there is much press on a “scramble for the Arctic” UNCLOS will ensure that disputes are resolved in a legal, peaceful manner.

What impact will continental shelf claims have on the Arctic’s future?