

Article 76, variations in annotation and implementation seen in submission documents for the claim of Extended Continental Shelf

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About ABLOS

At first, today I'll talk in my capacity as the Chairman of ABLOS. ABLOS stands for "IHO/IAG Advisory Board on the Law of the Sea". ABLOS has two parent organizations, which are IHO, the International Hydrographic Organization and IAG, the International Association of Geodesy. You may wonder why hydrography and geodesy are related to the Law of the Sea.

The hydrography is because the Law of the Sea (UNCLOS) uses a lot of technical terms like low-water line, 2,500 meter isobath, and so on. Geodesy is used in the Convention like a median line between two countries for delineating the boundary between two nations.

ABLOS consists of eight (8) full members, preferably chosen with wide geographic representation. Each parent organization appoints four members. In addition, the Division of Ocean Affairs and the Law of the Sea of the UN Office of Legal Affairs (DOALOS), and International Hydrographic Bureau (IHB) have representatives in an ex-officio capacity without voting rights.

Terms of Reference (TOR) says the objective of the ABLOS is to provide advice on technical aspects on the Law of the Sea. As I mentioned, the UNCLOS includes lots of technical terms and phrases which are really difficult to understand. Therefore ABLOS is here to help not only the member states of the parents organizations, but of assistance to CLCS according to Article 3, Annex II to the UNCLOS. It says that:

'The Commission may cooperate, to the extent considered necessary and useful, with the Intergovernmental Oceanographic Commission (IOC) of UNESCO, the International Hydrographic Organization and other competent international organizations with a view to exchanging scientific and technical information which might be of assistance in discharging the Commission's responsibilities.'

ABLOS is exactly a body which is designed and established to discharge IHO's responsibility of working for Article 3, Annex II to the UNCLOS.

In the aspect of ABLOS's activities, it holds a business meeting once a year and also a biennial international conference in Monaco. Today, I will talk about the presentation title based on the discussion and information raised in the past meetings.

Current status of the submissions to Commission on the Limits of the Continental Shelf (CLCS)

Article 76 of the UNCLOS, which provides rules on the extended continental shelf has become a great concern among coastal States. According to the Article 76, the extended continental shelf is a place over which a coastal state can exercise its sovereign rights for the purpose of exploring it and exploiting its natural resources, which includes oil, gas, mineral wealth and living resources. The Article 4 of the Annex II to the convention defines the deadline for the submission:

'Where a coastal State intends to establish, in accordance with article 76, the outer limits of its continental shelf beyond 200 nautical miles, it 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 ...'.

After CLCS adopted Scientific and Technical Guidelines (STGL) in 1999, however, the Meeting of States Parties decided in 2001 that:

'In the case of a State Party for which the Convention entered into force before 13 May 1999, it is understood that the ten-year time period referred to in article 4 of Annex II to the Convention shall be taken to have commenced on 13 May 1999'.

The STGL may have been used as an excuse for coastal States to extend the dead line for their submissions.

According to an estimate by Mr. Croker, the former Chairman of CLCS, 54 coastal States will face the deadline in May 2009. CLCS currently received 9 submissions which include a joint submission made by 4 coastal States. Therefore, 11 coastal States made their claims. On the other hand, Ireland, New Zealand, France, and Mexico point out that their claims are partial ones. This indicates the possibility that other coastal States may make partial submissions, which will increase the number of the cases, thus the workload of the CLCS.

Furthermore, Australia made its submission in 2004, which includes 10 regions. One region out of 10 is with regards to Australian Antarctic Territory. Australia requested CLCS not to take any action for the time being with regard to the information in its submission that relates to continental shelf accordance with the circumstances of the area south of 60

degree South latitude, and the special legal and political status of Antarctica under the provisions of the Antarctic Treaty including its article IV. Therefore, Australian submission can be recognized as a partial one as well.

Russian Federation and Brazil received their recommendations already. It is rumored that these coastal States may not be too happy about the recommendation they got and might re-submit their claims. For now Ireland is the only coastal State which may establish their outer limits of the continental shelf based on the recommendation provided by CLCS.

According to Mr. Croker, 65 coastal States have possibilities of making claims to CLCS. Not only many of the coastal States face difficulties in making their submission in time for the dead line, due to the lack of sufficient resources, but also another problem has been identified that whether CLCS has a capacity to deal with massive amounts of the submissions in a timely fashion.

It may be difficult that CLCS quickly deals with the surge of the submissions. At the current rate of its consideration is as followings:

- Russian Federation: 3 months
- Brazil: 2 years and 8 months
- Ireland 1 year and 8 months

Consideration of the submission in CLCS

CLCS considers the submissions according to Article 76. In addition to that, CLCS produced

'Scientific and Technical Guidelines' which provides a guidance for its consideration as well as the preparation of the submission by coastal States.

The provision of Article 76 is straightforward. UNCLOS defines the continental shelf as:

1. *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.*

Where the continental margin is defined as:

3. *The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the sea-bed 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.

And the extent of the continental shelf is defined as follows:

4. (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 per cent of the shortest distance from such point to the foot of the continental slope; or
 - (ii) 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.
- (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.
5. The fixed points comprising the line of the outer limits of the continental shelf on the sea-bed, 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.
6. 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 plateaux, rises, caps, banks and spurs.
7. The coastal State shall delineate the outer 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 co-ordinates of latitude and longitude.

The text is already quite complex but coherent. However, it's certain that the implementation of the provisions is difficult in the context of geology. There are three reasons for this:

1. The logic of the provisions is based on the passive margin seen in the seabed along the coasts of, for example, the North Atlantic Ocean. Therefore, the implementation of the provisions is hard, if not impossible, in other types of the seabed such as the active margin and the seabed with hot spots,
2. The advance of science produced a wide spectrum of new findings which proved that the premises assumed at the time of constituting UNCLOS are not perfectly workable today,
3. Terms used self-evidently are, geologically speaking, not perfectly crystal clear.

For the example of the point one (1), if you see the feature of the seabed, you may understand how it's difficult to define the base of the continental slope and the foot of the continental slope. In this case, judgment is not easy as the features in North Atlantic Ocean.

For the example of the point two (2), UNCLOS assumed that the sediment thickness is assumed to decrease from coasts gradually. However, a new finding proves that there are areas where the thickness of sedimentary rocks increases offshore.

For the example of the point three (3), there is no commonly accepted geological term with clear definition for the oceanic ridge, the submarine ridge and the submarine elevation.

For other examples, it's impossible to distinguish between the continental slope and rise. This results that the judgment of the foot of the continental slope becomes very hard.

Furthermore, the constraint line is defined according to the type of the sea bottom bulge: an oceanic ridge, a submarine ridge and a submarine elevation. It is widely acknowledged that coastal States prefer the constraint line to gain the largest extension of the continental shelf. This means that coastal States tend to use the definition of submarine elevations.

Submissions

Now look at the submissions.

The Russian claim extends its extended continental shelf to the North Pole. From the map which was published with the executive summary of the Russian submission, the North Pole is well beyond 350 nautical miles from the territorial sea baseline. This means that Russian Federation took Romanosov Ridge as a submarine elevation.

The Brazilian claim extends its extended continental shelf to Vitoria-Trindade Island, using Vitoria-Trindade Ridge. It was commented by the USA in its note verbal to the UN that Vitoria-Trindade Ridge is not a ridge but it's a mere seamount chain. Of course, the implementation of the provisions will not be based on its name. Therefore, a sea bottom bulge called "ridge" is not always considered as a submarine ridge. The Brazilian claim seems that the extension exceeds 350 nautical miles from the territorial baseline. This means that Brazilian Government takes the Vitoria-Trindade Ridge as a submarine elevation.

Now, when applying the 2,500 meter isobath close, which contour line can be used? The STGL provided by CLCS considers that:

'4.4.2. ... Unless there is evidence to the contrary, the Commission may recommend the use of the first 2,500m isobath from the baselines from which the breadth of the territorial sea is measured that conforms to the general configuration of the continental margin.'

When looking at a New Zealander submission, one can find a constraint line well beyond the first 2,500 meter isobath. Where is the origin of this line beyond 350 nautical miles? Some isolated offshore 2,500 meter isobath must be used for the 2,500 meter clause. This is an interesting challenge which New Zealand Government must have considered that it follows STGL..

This is the seabed of the Atlantic Ocean in North East of the USA. This is the image of the UNCLOS. When looking at this, where is the border between the continental slope and rise? There is no abrupt change so that the base of the continental slope cannot be defined. The provisions can be implemented only in the typical seabed.

For example, in the Brazilian claim includes Amazon Fan. Its shape is fan and it consists of sediment flowed from the Amazon. In the profile, this area seems to transit to rise. According to "Standardization of undersea feature names" published by International Hydrographic Bureau, rise is:

A broad elevation that rises gently and generally smoothly from the sea floor.

The profile of the fan is very similar, but the process of creation is different from the rise. Therefore, fan is not understood as rise. In the Brazilian claim, the foot of the continental slope is placed beyond the beginning of the fan.

In the Irish claim, the foot of the continental slope seems to be on the tip of the landslide. Irish Government must have considered that the process of creation is as same as the rise but sediment accumulated by several landslides is not classified into rise.

In the Australian claim, the foot of the continental slope seems to be defined on the tip of the rise in the context of topography. Geologically it consists of igneous rocks. In short, the shape of the seabed can be classified into the rise but its component is different from the rise. Therefore, the Australian Government must have regarded as the continental slope and defined the foot of the continental slope on the tip.

There is a wide and exciting variety of interpretation of the provisions of UNCLOS, which results in time consuming consideration in CLCS. At last, I will show you the seabed in the Japanese territorial sea. It's apparent that the rugged feature is very much different from the one in the North Atlantic Ocean. It's necessary to categorize between the shelf, the slope and the rise. The consideration of the future Japanese claim must take time.