AAPG HEDBERG CONFERENCE "Hydrocarbon Habitat of Volcanic Rifted Passive Margins" September 8-11, 2002, Stavanger, Norway

The Law of the Sea System: Some major features of high relevance for marine scientific researchers and explorationists

Karl Hinz Bundesanstalt für Geowissenschaften und Rohstoffe (BGR) D-30655 Hannover, Germany

The 1982 United Nations Convention on the Law of the Sea (UNCLOS) entered into force on 16 November 1994. To date, the Convention has been ratified or acceded to by 135 States. The Convention stands among the major achievements of the United Nations because it addresses a multitude of issues: territorial limits, economic jurisdiction, navigational rights, conservation and management of living resources, a marine scientific research regime and a system of settlement of disputes, among other things.

Important Features of the Convention

The provisions on the continental shelf are the ones of major interest to marine scientific researchers and explorationists. The Convention defines the following major Maritime Zones:

<u>-Territorial Sea:</u> Articles 2 to 16 deal with the territorial sea which extends from the baselines to a limit not exceeding 12 nautical miles. In this area the coastal State exercises sovereignty subject to certain restrictions and rights of other States.

<u>- Contiguous Zone:</u> This is the next zone seaward of the territorial Sea. It extends up to 24 nautical miles (M) from the baselines. In this zone a coastal State may exercise control concerning customs, fiscal, immigration and sanitary laws and regulations.

<u>- Exclusive Economic Zone</u>: Articles 55 - 75 deal with the exclusive economic zone with profound impact on the management and conservation of the resources of the oceans. To the coastal States fall the rights to exploit, develop, manage and conserve all resources to be found in the waters, on the ocean floor and in the subsoil of an area extending 200 M from its baselines.

<u>- Continental Shelf</u>: Articles 76 to 85 deal with the continental shelf which is a revolutionary feature of the Convention. Article 76 refers to *"continental shelf"* as a juridical - and not a geomorphological - term which applies to an area of the seabed, beyond the territorial sea, falling under the sovereign rights of the coastal State for the purpose of exploring it and exploiting its natural resources. The natural resources consist of mineral and other non-living resources of the seabed and subsoil, together with living organisms belonging to sedentary species. The definition of the continental shelf contained in article 76 of the Convention takes into consideration two possibilities:

- In the first case, the breadth of this zone is limited to a distance of 200 M from the baselines from which the breadth of the territorial sea is measured. This occurs where the outer edge of the continental margin does not extend beyond 200 M.
- In the second case, the outer edge of the continental margin extends beyond 200 M from the baselines. In this instance, the coastal State may delineate its continental shelf to a breadth greater than 200 M, in accordance with the criteria specified in article 76. The breadth of this

zone shall not exceed 350 M, or in the alternative, extend beyond 100 M from the 2,500 metre isobath. In this case, the coastal State must pass the Appurtenance Test - the continental shelf must be the natural prolongation of the land territory of the State to the outer edge of the continental margin. Information on the limits of the continental shelf extending beyond 200 M shall be submitted by the coastal State to the *Commission on the Limits of the Continental Shelf*. Beyond 200 M, coastal States will have to make modest payments or contributions in kind in respect of the exploitation of mineral resources of their continental shelf. These payments shall be made through the *International Seabed Authority*, which shall distribute them to State Parties to the Convention, taking particularly into account interests and needs of developing States.

It is difficult to ascertain precisely how many States would be entitled to continental shelf jurisdiction beyond the 200 M exclusive economic zone. Estimates on the number of coastal States having continental shelves extending beyond 200 M are in the range between 33 and 75. - <u>High Seas and the Area</u>: The high sea areas are comprised of waters beyond the national jurisdiction of any coastal State. The basic principle is stated in article 136: *"The area and its resources are common heritage of the mankind"*. The *"Area"* is defined in article 1 as *"the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction"*.

New Institutions established under the Convention: The Convention created three institutions to deal with special tasks. These institutions are:

<u>- The International Seabed Authority</u>: It is the organization through which States Parties to UNCLOS shall organize and control activities in the Area, in particular with a view to administering the resources of the Area.

<u>- The International Tribunal for the Law of the Sea:</u> This institution was established by the Convention with jurisdiction over any dispute concerning the interpretation or application of UNCLOS.

<u>- Commission on the Limits of the Continental Shelf</u>: The purpose of the Commission is to facilitate the implementation of the Convention in respect of the outer limits of the continental shelf beyond 200 M from the baselines from which the breadth of the territorial sea is measured. Article 3 of annex II to the Convention formulates the functions of the Commission:

- a) To consider the data and other material submitted by coastal States concerning the outer limits of the continental shelf extending beyond 200 nautical miles, and to make recommendations in accordance with article 76 and the Statement of Understanding adopted on 29 August 1980 by the Third United Nations Conference on the Law of the Sea;
- b) To provide scientific and technical advice, if requested by the coastal State concerned during preparation of such data.

Among the most significant achievements of the Commission are the adoption of *Scientific* and *Technical Guidelines (CLCS/11)* which are intended to provide assistance to coastal States regarding the technical nature and scope of the data and information which those States must submit to the Commission to enable it to make recommendations on the outer limits of the continental shelf beyond 200 M, and of annexes to the Guidelines (CLCS/11/Add. 1). The Scientific and Technical Guidelines deal with geodetic, bathymetric, geophysical and other methodologies stipulated in article 76 for the establishment of the outer limits of the continental shelf, using such criteria as determination of the foot of the slope of the continental margin, sediment thickness and structure of submarine ridges. Incorporated are such matters as baselines; the selection of straight lines to delineate the outer edge of the continental shelf; some aspects of geodetic methodologies; sources of data for bathymetric measurements; establishment of the foot

of the continental slope determined as the point of maximum change of gradient, and as determined on the basis of evidence to the contrary; ridges; and sediment thickness.

The Commission adopted new rules requiring the members of the Commission to act independently in the performance of their duties in the Commission, and not to seek or receive instructions from any government or from any other authority external to the Commission. All important documents of the Commission are posted on the WEB site of DOALOS (http://www.un.org/Depth/los).

10-years Deadline for Submissions to the CLCS

If a coastal State intends to establish, in accordance with article 76, the outer limits of its continental shelf beyond 200 M, the Convention requires that "it shall submit particulars of such limits to the Commission on the Limits of the Continental Shelf 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" (article 4, Annex II to the Convention).

Due to strong concern of many States regarding a difficulty to complete the preparation of their submission before 2004 a shift of about 4.5 years of the 10-year deadline (May, 2009) was decided during the Meeting of States Parties in 2001.

Marine Scientific Research

In their territorial sea, coastal States have the exclusive right to regulate marine scientific research (article 245). In the exclusive economic zone and on the continental shelf, marine scientific research shall also be conducted with the prior consent of the coastal State. However, such consent for peaceful purposes is to be granted *"in normal circumstances"* and *"shall not be delayed or denied unreasonably"*, except under certain specific circumstances identified in article 246 of the Convention. In the case the consent of the State is requested and such State does not reply within six months, the research State or international organization may proceed with the research project on the basis of implied consent (article 252).

Outlook

It appears apparent that the law of the sea will not remain static also due to some of its delicately balanced and sensitive provisions. Although there is broad acceptance of the basic principles contained in the Convention relating to the rights of States over maritime zones, there is still a continued need to encourage States toward uniform and consistent application of these principles in their national policy and practice. At present, two organs are entrusted with the monitoring of the sea in general, namely, the Meetings of States Parties to the Law of the Sea Convention and the General Assembly of the United Nations. The General Assembly of the United Nations is the highest international forum where questions relating to ocean affairs and the law of the sea are debated. Its Division of Ocean Affairs and the Law of the Sea assists the States so that their marine practice develops in a manner consistent with the rules and principles embodied in the Convention.

It can be expected that over the next 10 to 15 years States will document and divide an area of perhaps 75 million sqkm, equal to more than half of Earth's land surface, without wars for the first time in history of Mankind.

The Russian Federation is the first State which made a submission to the CLCS of December 20, 2001, pursuant to Article 76 of the Convention.