Geological Continental Shelf versus Legal Continental Shelf

In geological terms, the continental shelf of a coastal State is described as the extended perimeter of each continent and associated coastal plain, and was part of the continent during the glacial periods. However, in this present era which is called "the interglacial periods the continental shelf is now submerged by relatively shallow seas.

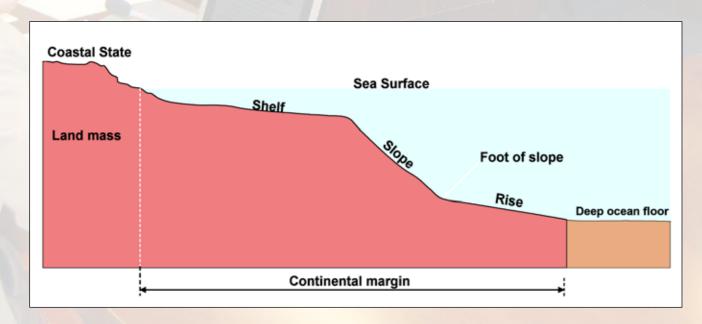
Under UNCLOS, the term "continental shelf" was given a legal definition as the stretch of the seabed adjacent to the shores of the particular country to which it belongs.

According to UNCLOS, the continental shelf of a coastal State comprises the submerged prolongation of the land territory of the coastal State-the seabed and subsoil of the submarine areas that extend beyond its territorial sea to the outer edge of the continental margin, or to a distance of 200 nautical miles where the outer edge of the continental margin does not extend up to that distance.

The continental margin 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.

The continental rise is below the slope, but landward of the abyssal plains. Its gradient is intermediate between the slope and the shelf, on the order of 0.5-1.0. Extending from the slope, it normally consists of thick sediments deposited by turbidity currents from the shelf and slope. Sediment cascades down the slope and accumulates as a pile of sediment at the base of the slope, called the continental rise. However, some continental margins, like in the Mascarene Plateau region, do not necessarily consist of a continental rise.

The foot of the continental slope is normally located between the rise and the slope. However, in the absence of a rise, it is taken as a point where the maximum change in gradient occurs between the slope and the deep seabed.



What is an Extended Continental Shelf (ECS)?

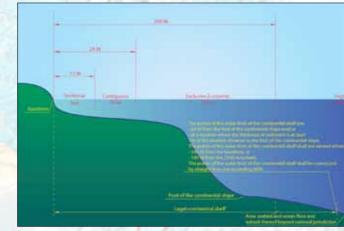
Under UNCLOS, a coastal State can extend its territorial claim of the ocean floor if the surrounding continental area or the natural prolongation of its land territory extends more than 200 nautical miles offshore. The maximum limit of this additional area is defined by the outer limit of the continental margin.

In the case of the Joint Mauritius and Seychelles Submission, the limit of the outer edge of the continental margin has been defined by a series of points taken at 60 nautical miles away from the location of the foot of the slope (defined normally as the point of maximum change in gradient between the slope/rise and the base of the deep sea). The limit of the ECS in the region of the Mascarene Plateau was then delineated by applying the two constraints of 350 nautical miles and the 2500 metres depth as provided for in UNCLOS.

What are the rights of a coastal State over the ECS?

The coastal State exercises sovereign rights over the ECS for the purposes of exploring it and exploiting its natural resources, living or not, but has no control over any living organisms above the shelf that are beyond its exclusive economic zone.

The rights of the coastal State over the continental shelf do not affect the legal status the superjacent waters or of the air space above those waters. The exercise of the rights of the coastal State over the continental shelf must not infringe or result in any unjustifiable interference with navigation and other rights and freedoms of other States as provided for in UNCLOS.



What next?

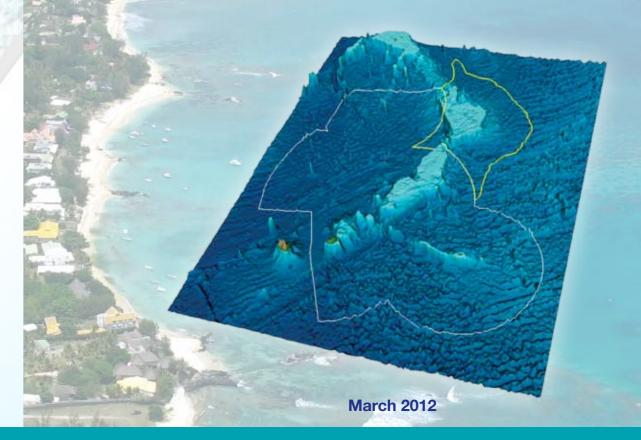
Now that Mauritius and Seychelles have joint jurisdiction over the Extended Continental Shelf, as recommended by the CLCS, the two States have undertaken to jointly manage the area. In that context, the Prime Minister of the Republic of Mauritius and the President of the Republic of Seychelles will sign two Treaties during the forthcoming visit of the President of the Republic of Seychelles to Mauritius in March 2012.

The first Treaty deals with the joint exercise of sovereign rights in the Joint Zone and the second defines the framework for the co-management of the area. Once the two Treaties will have entered into force, Seychelles and Mauritius will through agreed mechanisms be able to explore the extended continental shelf and exploit its resources.



MAURITIUS OCEANOGRAPHY INSTITUTE

The Joint Extended Continental Shelf of the Republic of Mauritius & the Republic of Seychelles



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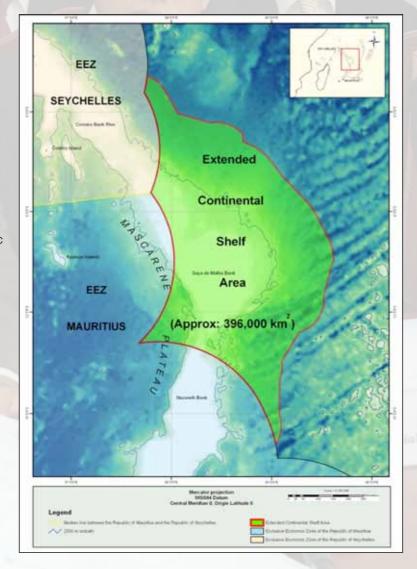
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The Extended Continental Shelf of Mauritius and Seychelles in the Region of the Mascarene Plateau

In December 2008, the Republic of Mauritius and the Republic of Seychelles, both parties to the United Nations Convention on the Law of the Sea (UNCLOS), made a Joint Submission to the United Nations Commission on the Limits of the Continental Shelf (CLCS) for an Extended Continental Shelf (ECS) beyond their respective 200 nautical miles Exclusive Economic Zones in the region of the Mascarene Plateau.

The area comprises a vast extent of seabed and underlying marine subsoil of approximately 396,000 square kilometres. This ECS represents nearly 20% of the size of the Exclusive Economic Zone (EEZ) of Mauritius (approximately the size of Germany) and is located North East of the Cargados Carajos (Mauritius) and South East of Fregate Island (Seychelles). It commences at the neck of the Nazareth Bank which lies in the EEZ of Mauritius to join the Correira Bank Rise which lies within the EEZ of Seychelles. The area comprises the whole extent of the Saya de Malha Bank.

The CLCS appointed a sub-commission that examined the Joint Submission in 2009. Following extensive deliberations, the CLCS finally made its recommendations in March 2011 which resulted in Mauritius and Seychelles being jointly conferred the jurisdiction upon the joint area of ECS of 396,000 sq. km (as shown in green in the diagram).



Why did Mauritius and Seychelles have to make a Joint Submission?

In accordance with Article 76 of UNCLOS, both Mauritius and Seychelles could claim the area of the Mascarene Plateau as the natural prolongation of their respective land mass. In such a situation a maritime dispute would have arisen in which case the Commission on the Limits of the Continental Shelf would have deferred the consideration of both submission until the dispute would have been resolved.

By making a joint submission the two States have demonstrated their willingness to collaborate closely as two mid ocean small island states in harnessing the huge potential which the extended continental shelf represents.

What is UNCLOS?

The United Nations Convention on the Law of the Sea (UNCLOS), which applies to 162 States, as well as to the European Community, and whose principles are being followed by many other States, is a multilateral convention which seeks to regulate the rights of States in the different maritime zones and the high seas, including freedom of navigation, protection of the marine environment and the right to exploit, use and own marine resources.

This Convention is the international agreement that resulted from the third United Nations Conference on the Law of the Sea (UNCLOS III), which took place from 1973 to 1982. UNCLOS came into force on 16 November 1994.

It sets out clear criteria for the establishment of the various maritime zones such as the territorial sea, the Exclusive Economic Zone and the continental shelf. Part VI (articles. 76-85) of UNCLOS deals with the coastal State's rights in relation to the continental shelf, including any extended continental shelf.

One of the most significant achievements of UNCLOS is that it regulates the exploitation of natural resources found in the continental shelf of a coastal State and those found in the international seabed area beyond the limits of national jurisdiction.

What is the CLCS and what does it do?

The Commission on the Limits of the Continental Shelf (CLCS) has been established under UNCLOS to allow coastal States to establish the outer limits of their extended continental shelf beyond 200 nautical miles (ECS) where they satisfy the conditions prescribed in UNCLOS.

The CLCS, upon application by a coastal State, will analyse the information and data communicated on the proposed outer limits and, if need be, provide scientific and technical advice on same. Once the CLCS makes recommendations on the outer limits, these are final and binding.

What is the Exclusive Economic Zone (EEZ)?

According to UNCLOS, the Exclusive Economic Zone (EEZ) is an area beyond and adjacent to the territorial sea which is subject to a specific legal regime, under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention, primarily:

- 1. the coastal State has sovereign rights over fisheries, production of energy from water, currents and winds;
- the coastal State can exercise jurisdiction over artificial islands, marine scientific research and environment protection; and
- other States can enjoy freedom of navigation and overflight, the right to lay and operate submarine cables and pipelines whilst having due regard to the rights and duties of the coastal State.

The EEZ starts at the coastal baseline and extends 200 nautical miles out into the sea, perpendicular to the baseline.

What are the territorial sea and the contiguous zone?

The territorial sea, as defined by UNCLOS, is a belt of coastal waters extending at most 12 nautical miles from the baseline of a coastal State.

The territorial sea is regarded as the sovereign territory of the State, although foreign ships (both military and civilian) are allowed innocent passage through it; this sovereignty also extends to the airspace over and seabed below.

The contiguous zone is a band of water extending from the outer edge of the territorial sea to up to 24 nautical miles from the baseline, within which a coastal State can exercise limited control for the purpose of preventing or punishing "infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea". This will typically be 12 nautical miles wide.

