

Who'll get the Rockall Plateau?

- An analysis of the claims to the continental shelf in the North East Atlantic by the United Kingdom, Ireland, the Faroe Islands-Denmark, and Iceland.

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In the North East Atlantic the United Kingdom, Ireland, the Faroe Islands-Denmark, and Iceland have competing claims to the continental shelf on the

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Rockall Plateau. In 1974 the UK and Ireland made their first continental shelf designations on the Rockall Plateau west of the Scottish and Irish coasts, and have subsequently designated additional continental shelf areas extending to the western edge of the Rockall Plateau. These two States agreed in 1988 on their continental shelf delimitation in this area. Faroe-Denmark and Iceland designated their continental shelves in 1985, and their claims extend also to the Rockall Plateau and overlap with the UK's and Irish claims. There are now two main areas on the Rockall Plateau where there is a dispute on the rights to the continental shelf between (i) the UK, Faroe-Denmark, and Iceland and (ii) Ireland, Faroe-Denmark, and Iceland.

The dispute on the Rockall Plateau is a consequence of continental shelf claims extending beyond 200 nautical miles from the baselines of the four parties territorial sea. The claims are based on a natural prolongation of the coastal States land territory to the outer edge of the continental margin, as provided in Article 76 of the 1982 United Nations Convention on the Law of the Sea (UNCLOS).

The four parties could possibly agree on the delimitation of the continental shelf. However, continental shelf delimitations have caused much litigation, and probably this dispute would also be submitted to the International Court of Justice or a Tribunal. This would require the parties to present geological evidence for the natural prolongation of their continental shelves extending beyond 200 nautical miles. The Commission on the Limits of the Continental Shelf established by UNCLOS shall also make recommendations to coastal States on continental shelf claims beyond 200 nautical miles. If none of the parties' claims were accepted, the area on the Rockall Plateau would be beyond the limits of national jurisdiction and declared deep sea-bed. The area and its resources would be the common heritage of mankind and fall to the International Sea-Bed Authority.

Introduction

Four States have laid claims to the continental shelf in the North East Atlantic in the area west of the British Isles on the Rockall Plateau. These are: the United Kingdom, Ireland, the Faroe Islands-Denmark, and Iceland.

The first continental shelf designations on the Rockall Plateau were made in 1974 by the UK and Ireland. After these States had claimed continental shelf in the area, Faroe-Denmark and Iceland made designations in 1985. This resulted in overlapping claims on the Rockall Plateau. In 1988 the UK and Ireland signed an agreement on the delimitation of the continental shelf in

this area, which divided the plateau between the two States. However, Faroe-Denmark and Iceland protested against this agreement, and there are still two main areas of dispute between (i) the UK, Faroe-Denmark, and Iceland and (ii) Ireland, Faroe-Denmark, and Iceland.

In 1985 when Faroe-Denmark and Iceland made their continental shelf designations the four parties had consultations on the dispute. Since then there has been no formal contact between the parties on this matter.

Whether the dispute resolution will be by negotiations to enter into a delimitation agreement or by litigation is uncertain. To achieve an agreement each party will have to give up a considerable part of its claims. If judicial settlement is chosen the parties will have difficulty predicting a possible outcome of a court or tribunal decision.

The Faroe Islands are situated in the North Atlantic, northwest of Scotland, about midway between the Shetland Islands and Iceland. The Faroe Islands are a self-governing part of the Kingdom of Denmark. The subsoil resources were following lengthy negotiations transferred to Faroese Authorities in 1992.

If the Faroe Islands become fully independent, agreements entered into by Denmark and the Faroe Islands on the one hand and third parties on the other hand, concerning delimitation of the continental shelf would bind the Faroe Islands.

Danish Sovereignty over the continental shelf extending from the Danish coastlines is proclaimed in Royal Decree No. 259 of 7 June 1963, and it comprises also the Faroese continental shelf. The boundary of the continental shelf between the Faroe Islands and Norway within 200 nautical miles was determined in a treaty concluded between Faroe-Denmark and Norway in 1979. Faroe-Denmark and the UK signed an agreement in 1999 on maritime delimitation in the area between the Faroe Islands and the UK. The parties agreed on the continental shelf boundary and fishery boundary within 200 nautical miles from the baselines from which the territorial sea of each Party is measured. The agreement is without prejudice to any claim of either of the Parties beyond 200 nautical miles, by implication the overlapping claims of Faroe-Denmark and the UK on the Rockall Plateau.

The continental shelf and fishery boundary in the area between the Faroe Islands and Iceland is not established. There is a disagreement between the

parties concerning the Icelandic offshore rock, Hvalbakur, which Faroe-Denmark does not recognise as a basepoint, while Iceland has applied the rock as a basepoint in its continental shelf designation.

Rockall is a small skerry situated about 200 nautical miles west of the Hebrides and was annexed by the British Crown in 1955. There has been a dispute between the UK and Ireland, Faroe-Denmark, and Iceland on UK's fishing zone reckoned from Rockall, and whether Rockall could generate continental shelf areas claimed by the UK. UNCLOS entered into force in 1994, and Article 121(3) of the Convention provides that uninhabitable rocks have no exclusive economic zone or continental shelf. The UK acceded to UNCLOS in 1997 and recognised that Rockall, as an uninhabitable rock, does not generate continental shelf or fishing zones.

The disputed area on the Rockall Plateau is on overlapping claims to the continental shelf extending beyond 200 nautical miles from the coasts of the four parties. The continental shelf extends throughout the natural prolongation of a States land territory to the outer edge of the continental margin (Article 76(1) of UNCLOS). The Commission on the Limits on the Continental Shelf was established in 1997 and has in 1999 adopted Guidelines aimed at assisting coastal States in establishing the outer limits of their continental shelf, where those limits extend beyond 200 nautical miles. The Commissions recommendations will be significant in evaluating the parties' continental shelf claims on the Rockall Plateau.

Continental Shelf Boundary Agreements

Faroe-Denmark – Norway

Faroe-Denmark and Norway agreed on the delimitation of the continental shelf and fishery zones between the Faroe Islands and Norway within 200 nautical miles in an agreement of 15 June 1979, and the boundary is the median line. Similarly, the UK and Norway agreed on a continental shelf boundary on 22 December 1978 where the boundary is an equidistant line. The UK – Norway agreement extends to the point that is equidistant from the nearest points of the baselines from which the territorial sea of the UK, Norway and Faroe Islands is measured.¹ The Faroe-Denmark – Norway

¹ Symmons, C.R., *British Off-Shore Continental Shelf and Fishery Limit Boundaries: An Analysis of Overlapping Zones*, (1979) 28 *International and Comparative Law Quarterly (ICLQ)*, pp. 703-33, at p. 705. For other sources on Continental Shelf delimitation see, *inter alia*, Evans, M.D., *Maritime Delimitation and Expanding Categories of Relevant Circumstances*, (1991) 40 *ICLQ*, pp. 1-33;

agreement extends from this equidistant tripoint north to the point, which is 200 nautical miles from both Faroe and Norway.² It seems like the parties in 1979 accepted that the continental shelf always extends to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, as articulated in Article 76 of UNCLOS. Even if the negotiations at UNCLOS III were still ongoing in 1979, this principle had become part of state practice. Neither of the parties has so far designated continental shelf areas beyond 200 nautical miles in the area north of Faroe. The reason for this is probably that this area is deep seabed and that the continental shelves of the states do not extend into this area.

Denmark, Norway and the UK were all parties to the 1958 Continental Shelf Convention when the agreements on delimitation of the continental shelf were negotiated. It does not appear from the literature, whether there was disagreement at any time between the parties as to where the boundary should be fixed, but as can be seen, all parties used the principle of equidistance in their agreements, as provided in Article 6 of this Convention.

Faroe-Denmark – Iceland

In the area west of the Faroe Islands, between the Faroe Islands and Iceland, the Faroese/Danish designation of continental shelf is a series of steps. The principle of median lines is used by Iceland, which has declared an exclusive economic zone and has designated the continental shelf. However, there is a dispute between the parties concerning the Icelandic rock Hvalbakur that lies 20 miles from Iceland. Faroe-Denmark does not recognise this rock as a basepoint, while Iceland considers the median line towards the Faroe Islands, reckoned from Hvalbakur, to be the boundary of its continental shelf. Faroe-Denmark have also used the median line when declaring the Faroese fishing zone, but have not taken Hvalbakur into consideration, and hence there is an area where the fishing zones of the parties overlap. The Faroese/Danish view is that the offshore rock Hvalbakur has the same status as Rockall, namely a rock that cannot sustain

Harris, D.J., *Cases and Materials on International Law*, 5th Edition, Sweet & Maxwell, London, 1998, at pp. 455-6; Highet, K., *The Use of Geophysical Factors in the Delimitation of Maritime Boundaries*. In Charney, J.I. and Alexander, L.M. (eds.), *International Maritime Boundaries*, 1993, pp. 163-202.

² *Report of the Faroese Hydrocarbon Planning Commission to the Faroese Government*, Tórshavn, Faroe Islands, 1993, at p. 51

human habitation and consequently does not generate an exclusive economic zone or continental shelf (Article 121(3) of UNCLOS).³

Faroe-Denmark – UK

The agreement on maritime delimitation between Faroe-Denmark and the UK of 18 May 1999 seems also to be based on the equidistance principle, and both States are parties to the 1958 Continental Shelf Convention. The negotiations on this agreement took place over more than 20 years. The parties had first declared their respective fishing zones, and although the parties agreed upon that the boundary should be the median line, they disagreed on how this equidistance line should be fixed. The UK used its outermost rocks and islets as basepoints and did not recognise the straight Faroese baselines. Faroe-Denmark did not recognise the small British rocks and islets, as Rockall, Sule Skerry, Sula Sgeir, North Rona, and Flannan Isles. Faroe-Denmark and the UK had designated their continental shelf areas and within 200 nautical miles the parties delineated the designation by step-lines so there was no overlap of designated areas.⁴

The negotiations were confidential so not much information is made public. But it appears that within 200 nautical miles Faroe-Denmark claimed the median line, and preferably the same boundary as the Faroes used for the fishing zone. It seems that the UK claimed a continental shelf boundary that was even nearer to the Faroes than the UK fishing zone boundary. These UK claims were apparently based upon differences in coastal length between the parties, as had been expressed in recent ICJ judgments as the Jan Mayen continental shelf delimitation case (1993). The same principle was used to reach an equitable solution in the Libya – Malta continental shelf case (1985) and in the Anglo – French arbitration (1978) on the continental shelf in the English Channel.

When the UK ratified UNCLOS in 1997 the British Government announced that its claim to a 200 nautical mile fishing zone around Rockall would be withdrawn, since it was not in accordance with the convention. Therefore the overlapping fishing zone in the area southwest of Faroe was considerably diminished.

The continental shelf and fishery boundaries in the 1999 maritime delimitation agreement to a great extent follow the equidistant line. In the

³ *Ibid.*, at p. 53

⁴ Olafsson, Á., The Continental Shelf Boundary. In *Annual Report 1999*, Ministry of Petroleum, Tórshavn, Faroe Islands, 1999, pp. 12-19, at p. 12

8,000 square km disputed area south of Faroe the continental shelf is delimited just south of the UK claimed median line. From carefully studies of the map it seems that the parties have agreed upon to use some of the British rocks and islets as basepoints, as Sule Skerry, North Rona, and partly Flannan Isles while Sula Sgeir is not used as a basepoint. As mentioned above, the UK had accepted that Rockall, as an uninhabitable rock, could not generate continental shelf and fishing zones. In the 1985 continental shelf designation Faroe-Denmark had recognised St. Kilda as a basepoint for the UK's 200 nautical mile zone.

In the Faroe-Denmark – UK agreement the parties agreed on the continental shelf boundary and fishery boundary within 200 nautical miles from the baselines, from which the territorial sea of each Party is measured (named “the Area” in the agreement). The agreement is not binding for the parties beyond 200 nautical miles and Article 10 of the agreement provides: ‘This Agreement shall be without prejudice to any claim of either Party outside the Area’. By this is indicated the disagreement between the parties concerning the continental shelf designations on the Rockall Plateau.

UK – Ireland

The UK – Irish agreement of 1988 on the delimitation of the continental shelf appears also to use the principle of equidistance. In the area west of Ireland and Scotland the boundary is a step-line, beginning from a point close to the coast to a point about 560 miles west of the Irish coast and about 580 miles from the Outer Hebrides.⁵ The parties had previously designated areas along this equidistance line without overlapping their claims. Ireland is not a party to the 1958 Continental Shelf Convention, while the UK is a party to this Convention.

In this agreement the parties agreed on the delimitation of their claims to the continental shelf on the Rockall Plateau. There is a geological discussion as to whether the UK and Ireland actually may claim continental shelf on the Plateau. The Rockall Plateau is delimited towards the UK and Ireland by the Rockall Trough. The UK may probably have a connection/natural prolongation to the Plateau via the Wyville-Thomson Ridge. This argument will be weaker for Ireland, and the Rockall Trough is even deeper west of the Irish coast. The UK could have alleged that Ireland has no right at all to the continental shelf in this area beyond 200 nautical miles and only

⁵ Churchill, R.R., *Current Developments, Law of the Sea, United Kingdom – Ireland Continental Shelf Boundary Agreement*, (1989) 38 *ICLQ*, pp.413-7, at p. 415

delimited the continental shelf within 200 nautical miles. However, as this agreement has been concluded, the parties seem to have established their claims to the continental shelf in the North East Atlantic. Faroe-Denmark and Iceland have protested against this agreement and the delimitation of the continental shelf in areas designated by them.

The continental shelf

Geomorphologically, the seabed adjacent to the coast is usually comprised of three separate sections, which form the continental margin. The first section, the continental shelf proper, slopes down gradually from the low-water mark to an average depth of about 130 metres. The second section is the continental slope, which has a steeper slope, going down to about 1,200 to 3,500 metres. In the third section there is a gentler falling away of the seabed, composed mainly of sediments washed down from the continents; this is the continental rise, which descends to around 3,500 to 5,500 metres.⁶

The continental margin constitutes about one fifth of the global sea floor, and especially the continental shelf is rich in natural resources. Most important are the extensive oil and gas reserves. The legal status of the continental shelf has therefore become an important question.

The proclamation made by President Truman of the USA in 1945 is regarded as the first clear assertion that the continental shelf belongs to the coastal State. At the First United Nations Conference on the Law of the Sea (UNCLOS I) in Geneva in 1958 it was adopted in the Continental Shelf Convention that coastal States should enjoy sovereign rights for the purpose of exploring and exploiting the resources of the continental shelf (Article 2). The term “continental shelf” is defined in Article 1 of the 1958 Continental Shelf Convention⁷ as being:

‘... the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas...’

In other words, in this Convention the seaward limit of the continental shelf is the 200 metre isobath or, as an alternative limit, the ‘exploitability’ criterion. However, by developing technology the exploitability test became

⁶ Churchill, R.R. and Lowe, A.V., *The Law of the Sea*, 2nd Edition, Manchester University Press, Manchester, 1988, at p. 120

⁷ U.K.T.S. 39 (1964); (1958) 52 AJIL 858

very imprecise since most areas of the ocean bed could be exploited. Coastal claims to continental shelves could therefore eventually be extended to cover the entire ocean floor.⁸

In 1970 the General Assembly of the United Nations adopted the Declaration of Principles Governing the Seabed and the Ocean Floor, and the Subsoil Thereof, beyond the Limits of National Jurisdiction (Resolution 2749 (XXV)). In this it is declared that 'the seabed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction, ... , as well as the resources of the area, are the common heritage of mankind.' Therefore there was a need to establish clear outer limits to the continental shelf jurisdiction, which were more precise than the 1958 Continental Shelf Convention.⁹

The 1982 United Nations Convention on the Law of the Sea¹⁰ (UNCLOS) differs from the 1958 Continental Shelf Convention in its legal definition of the continental shelf. The continental shelf is defined in Article 76(1) of UNCLOS:

'The continental shelf of a coastal State comprises the sea-bed 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'.

In UNCLOS there is no longer a 200 metres depth criterion and the continental shelf is not defined in terms of exploitability. UNCLOS differs also from the 1958 Continental Shelf Convention in providing that the continental shelf extends to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, or to the outer edge of the continental margin, whichever is the longer. Therefore, in UNCLOS the continental shelf always extends 200 nautical miles from the coast whether the outer edge of the continental margin extends that far or not.

The continental shelf extends throughout the natural prolongation of the States land territory to the outer edge of the continental margin. The

⁸ *Supra*, n. 6, Churchill & Lowe, at p. 125

⁹ *The Law of the Sea. Definition of the Continental Shelf*, Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations, New York, 1993, at p. 1.

¹⁰ (1982) 21 I.L.M. 1261

reference to natural prolongation in Article 76(1) of UNCLOS is important, as it requires a State to show that there is no discontinuity between the land territory and the continental margin claimed. The continental margin is defined in Article 76(3) of UNCLOS and comprises the submerged prolongation of the land mass of the coastal State, and consists of the seabed and subsoil of the shelf, the slope and the rise.

The continental shelf extends beyond 200 nautical miles to the outer edge of the continental margin if that point is more than 200 nautical miles out. However, this advantage for geologically favoured States is limited. The limit of the continental shelf can be extended up to a 1 per cent sediment thickness line (the Irish formula), or to a line delineated at a distance of 60 nautical miles from the foot of the continental slope (Article 76(4)). These lines have however to be within the maximum limit established in Article 76(5), which provides that the continental shelf cannot be extended beyond 350 nautical miles from the territorial sea baselines, or shall not exceed 100 nautical miles from the 2,500 metre isobath.

The outer edge of the continental margin is of fundamental significance with respect to the drawing of a boundary between coastal States and international jurisdictional regimes. Coastal States are obliged to submit information on the outer limits of their continental shelves where they extend beyond 200 nautical miles to the Commission on the Limits of the Continental Shelf set up under Annex II to UNCLOS. The coastal State shall establish the outer limits of its continental shelf on the basis of recommendations from the Commission (Article 76(8)). Once a coastal State has established the outer limits of its continental shelf either beyond 200 nautical miles or the 200 nautical mile limit, it is required to deposit with the Secretary-General of the United Nations and with the Secretary-General of the International Sea-Bed Authority charts describing the outer limits (Articles 76(9) and 84(2) of UNCLOS).

Article 76(10) of UNCLOS has a saving clause concerning the delimitation of the continental shelf between States, stating that Article 76 does not prejudice the question of delimitation of the continental shelf between States with opposite or adjacent coasts. This is dealt with in Article 83 of UNCLOS

While the 1958 Continental Shelf Convention in Article 1(b) allows for continental shelf around islands there is no definition of islands in this convention. In UNCLOS an island is defined in Article 121(1), and Article

121(2) provides that islands also have a continental shelf determined in accordance with the Convention. However, islands that are just uninhabitable rocks have no continental shelf, and the exception is provided for in Article 121(3): 'Rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.'

UNCLOS entered into force on 16 November 1994 following the deposition of the sixtieth instrument of ratification of accession. Of the four States that have laid claims to the continental shelf in the North East Atlantic three have ratified or acceded to UNCLOS – Iceland, Ireland and the UK. Iceland ratified the Convention in June 1985, and was a party when UNCLOS entered into force. Ireland ratified the Convention in June 1996 while the UK acceded to the Convention in July 1997. Denmark has signed UNCLOS but has not yet ratified it. The 1958 Continental Shelf Convention entered into force in 1964. Only Denmark (the Faroe Islands included) and the UK of the four States have ratified the 1958 Continental Shelf Convention but Ireland has signed this convention. Article 311 of UNCLOS provides that 'this convention shall prevail, as between States Parties, over the Geneva Conventions on the Law of the Sea of 29 April 1958'. Consequently, the regulations in UNCLOS will govern the relations between Iceland, Ireland and the UK, while the 1958 Continental Shelf Convention will govern the relations between Faroe-Denmark and the UK. All four States will however be bound by customary international law.

The Commission on the Limits of the Continental Shelf

The Commission on the Limits of the Continental Shelf is set up under Annex II to UNCLOS and the Commission began its work in June 1997. The purpose of the Commission is to facilitate the implementation of UNCLOS in respect of the establishment of the outer limits of the continental shelf beyond 200 nautical miles. The Commission shall make recommendations to coastal States on matters related to the establishment of those limits based on data and other material included in submissions from coastal States. The limits of the continental shelf established by a coastal State on the basis of these recommendations shall be final and binding. The Commission does not establish the limits.¹¹

¹¹ Commission on the Limits of the Continental Shelf, www.un.org/Depts/los/index.htm

In May 1999 the Commission adopted the Scientific and Technical Guidelines,¹² which are intended to provide assistance to coastal States to prepare their submission to the Commission regarding the outer limits of their continental shelf. The Guidelines are of a highly scientific nature. They deal with geodetic and other methodologies stipulated in Article 76 of the Convention 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 and other underwater elevations.

The 1999 Guidelines provide a procedure for establishing the outer limits of the continental shelf. When a coastal State intends to establish the outer limits of the continental shelf beyond 200 nautical miles, the State has to demonstrate the fact that the outer edge of the continental margin extends beyond 200 nautical miles (Article 76(4)(a) of UNCLOS). The Commission has defined a “test of appurtenance” to examine this provision, and paragraph 2.2.8 of the Guidelines describes the test of appurtenance as follows:

‘If either the line delineated at a distance of 60 nautical miles from the foot of the continental slope, or the line delineated at a distance where the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the slope, or both, extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, then a coastal State is entitled to delineate the outer limits of the continental shelf as prescribed by the provisions contained in article 76, paragraphs 4 to 10.’¹³

The first procedure in the delineation of the outer limits of the continental shelf is to determine the foot of the continental slope. This is defined in Article 76(4)(b) of UNCLOS as: ‘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’. The Commission defines the continental slope as ‘the outer part of the continental margin that extends from the shelf edge to the upper part of the rise or to the deep ocean floor where a rise is not developed.’¹⁴ The base of the continental slope is defined as ‘a region, where the lower part of the slope merges into the top of the

¹² Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf,

CLCS/11, 1999, www.un.org/Depts/los/index.htm

¹³ *Ibid.*, para. 2.2.8

¹⁴ *Ibid.*, para. 5.4.4

continental rise, or into the top of the deep ocean floor where a continental rise does not exist.¹⁵ The point of maximum change in gradient at the base of the continental slope is determined on the basis of geomorphological and bathymetric evidence, and locates the foot of the continental slope.¹⁶

Secondly, the two formulae rules in Article 76(4)(a)(i) and (ii) of UNCLOS should be applied to delineate the outer limits of the continental shelf – the 1 per cent sediment thickness line, or the line delineated at a distance of 60 nautical miles from the foot of the slope. If either or both of the formulae line extend beyond 200 nautical miles from the baselines from which the territorial sea is measured the coastal State is entitled to delineate the outer limits of the continental shelf beyond 200 nautical miles. The 1 per cent sediment thickness line is determined in the way that for a point on this line to be for example 100 nautical miles from the foot of the slope the thickness of sedimentary rocks has to be 1 nautical mile or 1,852 m at that point.

Thirdly, the constraint rules in Article 76(5) of UNCLOS must be applied, where the outer limits of the continental shelf cannot extend beyond 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or beyond 100 nautical miles from the 2,500 metre isobath. For the constraint line determined at a distance of 100 nautical miles from the 2,500 metre isobath to become effective, this isobath has to be located at a distance of 250 nautical miles or greater from the baselines from which the territorial sea is measured, otherwise the line 350 nautical miles from the baselines will apply.¹⁷ The first 2,500 metre isobath from the baselines has to be used in the delineation of the 100 nautical miles limit.¹⁸ These constraint rules set clear cut-off points for the outer limits of the continental shelf, so whichever of the two formulae in Article 76(4)(i) and (ii) are applied, the boundary cannot exceed both of the constraint rules. The inner envelope of the formulae and constraint lines determines the outer limits of the extended continental shelf.¹⁹

The actions of the Commission shall not prejudice matters relating to delimitation of continental shelf boundaries between States with opposite or

¹⁵ *Ibid.*, para. 5.4.5

¹⁶ *Ibid.*, paras. 5.4.6 and 5.4.7

¹⁷ *Ibid.*, para. 4.4.1

¹⁸ *Ibid.*, para. 4.4.2

¹⁹ *Ibid.*, para. 2.3.3

adjacent coasts (Article 9 of Annex II to UNCLOS), and Rule 44 of the Rules of Procedure of the Commission²⁰ provides:

‘1. In case there is a dispute in the delimitation of the continental shelf between opposite or adjacent States or in other cases of unresolved land or maritime disputes, submission may be made and considered in accordance with Annex I to these Rules.

2. The actions of the Commission shall not prejudice matters relating to the delimitation of boundaries between States.’²¹

Annex I to the Rules of Procedure provides that States may make joint submission to the Commission requesting the Commission to make recommendations without regard to the delineation of boundaries between the States (Article 4). The Commission shall not examine and qualify a submission made by any of the States concerned in a land or maritime dispute, except where all the States parties to the dispute give their consent (Article 5).

The Commission requested the eight Meeting of States Parties to UNCLOS, held in 1998, to clarify whether the terms “coastal States” and “States” used in the Convention, especially in Article 76(8) concerning submission of information on the outer limits of the continental shelf beyond 200 nautical miles, included States that were not parties to UNCLOS. The Meeting recommended that a legal opinion should be requested from the Legal Counsel of the United Nations only if the actual need arose. No such need has to yet arisen.²²

Where a coastal State intends to establish the outer limits of its continental shelf beyond 200 nautical miles, it shall in accordance with Article 4 of Annex II to UNCLOS make such submission to the Commission within 10 years of the entry into force of the Convention for that State. The eleventh Meeting of States Parties to UNCLOS, held in 2001, decided that the ten-year time period shall be taken to have commenced when the Scientific and Technical Guidelines were adopted on 13 May 1999 for States that were Parties to UNCLOS before this date.²³ Of the four States claiming

²⁰ Rules of Procedure of the Commission on the Limits of the Continental Shelf, CLCS/3/Rev.2, 1998,

www.un.org/Depts/los/index.htm

²¹ *Ibid.*, Rule 44

²² *Supra*, n. 11

²³ Meeting of States Parties to UNCLOS, SPLOS/72, 2001, www.un.org/Depts/los/index.htm

continental shelves on the Rockall Plateau Iceland, Ireland and the UK were parties to UNCLOS before 13 May 1999.

Geography of the Rockall sector

By the geography of the Rockall sector is understood, apart from the physical geography of the area, its geomorphology (surface form), geology (the nature of the rocks) and bathymetry (the measurement of depth).

The Rockall Plateau is a shoal area some 300 miles west of the Scottish and Irish coasts. The south-western part of the Plateau consists of Hatton Bank, Rockall Bank where the rock Rockall is above water, and the intervening Hatton-Rockall Basin.²⁴ To the north-east the Rockall Plateau includes Lousy Bank, Bill Baileys Bank, Faroe Bank, and Rosemary Bank. The Faroe Bank Channel, about 750 metres deep, separates these from the Faroe Islands.²⁵

The Rockall Plateau is bounded to the east by the 3,000 metres deep Rockall Trough. To the south and west the plateau is bounded by steep margins falling to depths of about 1,500 to 2,500 metres. To the north the western margin of the plateau merges with the footslopes of the Iceland-Faroe Rise. The Rockall Plateau is underlain by continental crust but the Iceland-Faroe Rise is underlain by anomalously thick oceanic crust of Icelandic type.²⁶

The Faroe Islands and the northern part of the Rockall Plateau are characterised by a thick basalt cover formed by extensive volcanic activity, which took place about 60 million years ago. These lavas of the Faroe Islands are underlain by continental crust, and a continental margin separates the Iceland-Faroe Rise from the Faroe Block.²⁷ Brown states that there seems to be general agreement among geologists that the Rockall Plateau forms part of a microcontinent and that it probably extends northwards into the Faroe Block.²⁸

²⁴ Naylor, D. and Mounteney, S.N., *Geology of the North-West European Continental Shelf*, Volume 1, Graham Trotman Dudley Publishers Ltd., London, 1975, at pp. 77-8

²⁵ Brown, E.D., Rockall and the limits of national jurisdiction of the UK, Part 1 and 2, (1978) 2 *Marine Policy*, pp. 181-211 and 275-303, at p. 280

²⁶ *Ibid.*, at p. 281

²⁷ *Ibid.*

²⁸ *Ibid.*

The Rockall Trough separates the Irish and Scottish coasts from the Rockall Plateau. The composition of the crust beneath the Rockall Trough is unknown, but Brown citing Roberts states that geophysical evidence suggests that the Trough is underlain by oceanic crust.²⁹

To the north the Faroe-Shetland Channel separates the Faroe-Rockall Plateau from the Shetland Islands. The Faroe-Shetland Channel seems, like the Rockall Trough, to have been formed by sea-floor spreading and to be underlain by oceanic crust. The Wyville-Thomson Ridge separates the Faroe-Shetland Channel from the Rockall Trough, and connects the Faroe-Rockall Plateau to the North Scottish continental shelf. The Wyville-Thomson Ridge seems to be composed of volcanic rocks formed 60 million years ago, at the same time as the Faroe Islands and the northern part of the Rockall Plateau were covered by basalt.³⁰ Whether there is a natural prolongation from the North Scottish continental shelf to the Faroe-Rockall Plateau will depend upon evidence to show that the Wyville-Thomson Ridge is composed of continental and not oceanic crust.³¹

The Faroe Bank Channel separates the Faroe Islands from the Rockall Plateau. It is unclear whether the Channel marks a discontinuity in the northwards extension of the microcontinent or whether the continental crust of the Faroe Bank extends beneath the Channel to link up with the continental crust underlying the Faroe Islands.³²

As science would have it, rifting and sea-floor spreading caused the huge North American-European continent to break up into the three macrocontinents of Europe, Greenland and North America plus the Faroe-Rockall micro-continent.

Analysis of the continental shelf claims

The claims to the continental shelf in the North East Atlantic made by the UK, Ireland, Faroe-Denmark, and Iceland have resulted in a disputed area on the Rockall Plateau. The dispute between the parties is on overlapping claims to continental shelves, which extend more than 200 nautical miles from the coasts of all four states. UNCLOS provides in Article 76(1) that a coastal State always has sovereignty over the continental shelf within 200 nautical miles from the baselines for the territorial sea, and that the

²⁹ *Ibid.*, at p. 284

³⁰ *Supra*, n. 2, Faroese Hydrocarbon Planning Commission, at pp. 67-8

³¹ *Supra*, n. 25, Brown, at pp. 288-9

³² *Ibid.*, at p. 289

continental shelf can extend beyond 200 nautical miles to the outer edge of the continental margin. Consequently, the claims of all four parties are based on the argument of natural prolongation of their land territory to the outer edge of the continental margin.

To analyse the claims it is, therefore, necessary to investigate if the continental shelves of the parties extend throughout the natural prolongation of their land territory to the outer edge of the continental margin, if the outer edge of the continental margin is indeed located as alleged by the parties, and if the claims otherwise are in compliance with Article 76 of UNCLOS.

According to the 1999 Guidelines of the Commission on the Limits of the Continental Shelf the coastal State shall first demonstrate to the Commission that the natural prolongation of its submerged land territory to the outer edge of its continental margin extends beyond the 200-nautical-mile distance criterion. This is the test of appurtenance, where the first step is to locate the foot of the continental slope. Secondly the outer edge of the continental margin shall be delineated in accordance with Article 76(4) of UNCLOS as either the one per cent sediment thickness line or the line 60 nautical miles from the foot of the continental slope.

Article 76(5) of UNCLOS provides the outer limits of the continental shelf. All four states' claims exceed 350 nautical miles from their respective territorial sea baselines. Therefore, assuming that a natural prolongation does exist beyond 200 nautical miles, to be in compliance with Article 76(5) of UNCLOS the claims cannot exceed 100 nautical miles from the 2,500 metre isobath.

The coastal State shall submit information on the limits of the continental shelf where it extends beyond 200 nautical miles to the Commission on the Limits of the Continental Shelf (Article 76(8) of UNCLOS). The coastal State shall establish the outer limits of its continental shelf on the basis of recommendations of the Commission. Rule 44 and Annex I of the 1998 Rules of Procedure of the Commission provide that in case of a dispute in the delimitation of the continental shelf between opposite or adjacent States the actions of the Commission shall not prejudice matters relating to the delimitation.

The sea-bed and ocean floor and subsoil thereof beyond the limits of national jurisdiction ("the Area", Article 1 of UNCLOS) and its resources are the common heritage of mankind, on which behalf the International Sea-

Bed Authority shall act (Articles 136 and 137 of UNCLOS). It is therefore important to establish the outer limits of the coastal States sovereign rights over the continental shelf in accordance with Article 76 of UNCLOS.

The result of the analysis of the claims could be that the disputed area is a natural prolongation of the land territory of all four states, and in that case the parties have to agree on the delimitation of the continental shelf. Another hypothesis is that none of the parties has the right to claim the continental shelf on the Rockall Plateau. In that case the disputed area will be beyond national jurisdiction of all the States and will be managed by the International Sea-Bed Authority. However, with uncertainty about the geology of the area we have to consider different alternatives.

Analysis of the UK claim

The UK implemented the 1958 Continental Shelf Convention by the Continental Shelf Act 1964, which vests in the Crown 'any rights exercisable by the United Kingdom outside territorial waters with respect to the sea bed and subsoil and their natural resources' (Section 1(1)). Empowered by section 1(7) of this Act the UK has by Order in Council made successive designations of areas within which the right to explore and exploit the natural resources is claimed.³³

The first UK designation on the Rockall Plateau was made on 6 September 1974 when an area of 52,000 square miles was designated. The designation extends to 19°30' West and this is some 360 miles west of the nearest Scottish islands.³⁴ From this it seems that the UK view is that the British continental shelf extends a considerable distance west of Rockall.³⁵ It is not so clear what the foundation of the UK claim is in international law. In 1972 when Rockall by the Island of Rockall Act was incorporated in the UK, the claim was based on the 1958 Continental Shelf Convention and that Rockall, as an island, was entitled to an area of continental shelf under international law. At the time of the Designation Order 1974, as a reaction to growing support at the Third United Nations Conference on the Law of the Sea (UNCLOS III) to the Irish view that uninhabited rocks should not be permitted to generate their own area of continental shelf, the claim seems to be based on the argument that the area is a natural prolongation of the land

³³ *Supra*, n.1, Symmons, at p. 703

³⁴ Symmons, C.R., *Legal Aspects of the Anglo-Irish Dispute over Rockall*, (1975) 26 *Northern Ireland Legal Quarterly*, pp. 65-93, at p. 83

³⁵ *Supra*, n. 25, Brown, at p. 290

mass of the UK. However, still in 1977 the British view was that Rockall, as an island, generated areas of maritime jurisdiction.³⁶

Brown states in 1978 that the British case rested on two arguments. (i) The island argument. The view is that international law does not distinguish different categories of islands. (ii) The natural prolongation argument. The view is that the continental shelf extends throughout the natural prolongation of the land territory to the edge of the continental margin. The exploitability criterion in the 1958 Continental Shelf Convention is no longer regarded as placing any restriction upon the seaward extension of the continental shelf.³⁷

Since the entry into force of UNCLOS in 1994 in which Article 121(3) provides that uninhabitable rocks do not generate continental shelf the UK has only relied on the argument of natural prolongation. This is described in the statement from the Foreign and Commonwealth Office (FCO) in 1996: 'Measuring British fishing limits from Rockall is believed to be inconsistent with the provision in article 121(3) of UNCLOS that rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone'.³⁸ The UK has by this statement recognized that international law distinguishes different categories of islands, and that Rockall is an uninhabitable rock, which does not generate an exclusive economic zone and a continental shelf. In 1994 the Minister of State, Department of Trade and Industry stated: '... The rocks on Rockall are of the same geology as the rocks of Scotland. Therefore, we claim that there is a prolongation'.³⁹ From this is seen that the UK claim to continental shelf on the Rockall Plateau now only is based on the argument of natural prolongation of the land territory of the UK and not on the island argument.

The latest UK continental shelf designation on the Rockall Plateau was made in 1989 by Order in Council (SI 1989/2398) when the UK designated additional areas extending to the west on the Rockall Plateau to 23°57'W, some 500 nautical miles from the territorial sea baselines.⁴⁰

³⁶ *Ibid.*, at p. 292

³⁷ *Ibid.*, at pp. 292-4

³⁸ Minister of State, FCO, (1996) 67 *British Yearbook of International Law (BYIL)*, pp. 797-8

³⁹ Minister of State, Department of Trade and Industry, (1994) 65 *BYIL*, pp. 654-5

⁴⁰ *Competing Claims to Sovereignty and Maritime Jurisdiction in the Rockall Plateau Area*, International Boundaries Research Unit, University of Durham, 1996, at p. 5

The UK has not defined its continental shelf claim with regard to the provisions of Article 76 of UNCLOS. Whether the outer limit is established as 60 nautical miles from the foot of the slope or by the one per cent sediment thickness formula is not clear (article 76(4)(i) and (ii) of UNCLOS), and information on how the foot of the continental slope is determined is not available. However, if the 2,500 metre isobath on the Rockall Plateau is applied the outer limit of the designation to the west on the Plateau appears to be within 100 nautical miles from the 2,500 metre isobath and therefore complies with Article 76(5) of UNCLOS.

In 1985 the Minister of State, Foreign and Commonwealth Office, stated that the UK's rights to continental shelf on the Rockall Plateau is based on geography, geology, and geomorphology.⁴¹

1. 'Geography, because UK is the largest and most populous country nearby.'

In the Libya-Malta continental shelf case the Court rejected the relevance of "landmass" as a special circumstance: 'Landmass has never been regarded as a basis of entitlement to continental shelf rights, and such a proposition finds no support in the practice of States, in the jurisprudence, in doctrine, or indeed in the work of the Third United Nations Conference of the Law of the Sea.'⁴² The Court has also rejected the population of a country and other economic and social factors as relevant circumstances in maritime delimitation as being 'virtually extraneous factors'⁴³ in the Tunisia-Libya case and in the Libya-Malta case the Court rejected the relevance of comparative economic positions⁴⁴.

Consequently, the UK's geographical arguments have little or no importance.

2. 'Geology, because the rocks on the plateau are the same as in the UK, whereas they are quite different in Iceland and the Faroes.'

Before the sea-floor spreading the Rockall Plateau was a part of the European continent and, therefore, the rocks in the UK will naturally be the same as on the Rockall Plateau. Subsequently, about 60 million years ago the northern part of the Rockall Plateau was overlaid and intruded by igneous rocks of volcanic origin, and these areas, including the Faroe Islands, were covered by basalt. The underlying crust of the Faroe Islands is

⁴¹ Minister of State, FCO, (1985) 56 *BYIL*, p. 494

⁴² Libya-Malta case, ICJ Rep. 1985, p. 13, para. 49

⁴³ Tunisia-Libya case, ICJ Rep. 1982, p. 18, para. 107

⁴⁴ Libya-Malta case, ICJ Rep. 1985, p. 13, para. 50

continental, which means that the rocks are the same as on the Rockall Plateau. It is clear that the rocks in Iceland are different from the Rockall Plateau. Iceland is of volcanic origin and the rocks are oceanic while the Rockall Plateau is composed of continental crust.

Consequently, the rocks on the Rockall Plateau are the same as in both the UK and the Faroe Islands, but are different in Iceland.

3. 'Geomorphology, because the sea-bed of the Hatton-Rockall Plateau is an extension of the UK mainland.'

This argument is based on a natural prolongation of the UK's territory to the outer edge of the continental margin, and depends upon evidence to show whether or not a natural prolongation exists⁴⁵ on the ground of 1) the existence of a common continental crust in at least part of the Rockall Trough and/or Faroe-Shetland Channel, 2) the existence of a continental crust link in the shape of the Wyville-Thomson Ridge, and/or 3) acceptance of the proposition that sediments laid down in the Trough and Channel are predominantly of British provenance and that this is sufficient to constitute a natural prolongation.

Analysis of the Irish claim

The Irish Continental Shelf Act was passed in 1968. Empowered by section 2(3) of this Act by Order of 20 December 1974 (S.I. 371/1974) Ireland designated an area of 15,000 square miles west of Ireland, across the Rockall Trough and including a small part of the Rockall Plateau. This is seen as a countermove to the British continental shelf designation earlier in 1974, but the area did however not overlap with the UK's designated area.⁴⁶

An even more extensive designation was made in 1976 (Order S.I. 64/1976), when Ireland designated an area of 85,000 square miles extending to the western edge of the Rockall Plateau and 520 miles from the Irish coastline. The designation commences at 56°20'N, only some 70 miles south of Rockall, but it does not overlap with British designated areas.⁴⁷ In 1976 Ireland therefore appears to have accepted that a rule of customary international law has developed by which a state may claim continental shelf to the outer edge of the continental margin, and an Irish Minister also announced this view in 1976. This customary rule goes beyond the 1958

⁴⁵ *Supra*, n. 25, Brown, at pp. 295-6

⁴⁶ *Supra*, n. 25, Brown, at p. 294

⁴⁷ *Supra*, n. 1, Symmons, at p. 726

Continental Shelf Convention where the 200-metre depth criterion or the exploitability criterion applies.⁴⁸

Symmons states that it may be queried whether the designated area and the Rockall Plateau generally are a natural prolongation of Irish territory and geologically connected with Ireland. It is not clear whether Ireland in the 1976 designation has complied with the limitations in Article 76(5) of UNCLOS where the continental shelf cannot extend beyond either 350 nautical miles from the coast or 100 nautical miles from the 2,500 metre isobath.⁴⁹ The Irish claim may exceed these limitations because a 2,500 metre isobath also exists in the Rockall Trough, apart from on the Rockall Plateau.⁵⁰ The Irish designations of continental shelf that extend across the Rockall Trough to include part of the Rockall Plateau are based on natural prolongation of Irish territory to the edge of the continental margin.⁵¹ Ireland has not stated its claim with reference to Article 76 of UNCLOS, and information on where the foot of the continental slope is located is not provided.

Ireland did not recognise that Rockall generated the right to British maritime jurisdiction and continental shelf. Consequently, from 1974 there was a dispute between Ireland and the UK over the boundary between their respective continental shelves in the area west of Ireland and Scotland, and Ireland denied that Rockall should be used as a British basepoint in the delimitation.⁵²

This dispute was resolved in 1988, when Ireland and the UK signed an agreement on the delimitation of areas of the continental shelf between the two countries. In the UK-Irish agreement Rockall does not generate its own continental shelf, and Rockall has been disregarded as a basepoint for the purposes of continental shelf boundary delimitation. In the area west of Ireland and Scotland the agreement delimits the continental shelf on the Rockall Plateau, and the boundary extends west to the point 57°28'N, 25°31'W (point 132). This point is well beyond the areas previously designated by Ireland and the UK. The UK-Irish agreement provides in

⁴⁸ Symmons, C.R., Ireland and the Law of the Sea. In Treves, T. (ed.), *The Law of the Sea*, Kluwer Law International, Netherlands, 1997, pp. 261-325, at p. 288

⁴⁹ *Ibid.*

⁵⁰ Symmons, C.R., The Rockall Dispute Deepens: An Analysis of Recent Danish and Icelandic Actions, (1986) 35 *JCLQ*, pp. 344-73, at p. 365

⁵¹ *Supra*, n. 25, Brown, at pp. 294-5

⁵² *Supra*, n. 1, Symmons, at pp. 724-6

Article 4 on the continental margin that: 'Nothing in this Agreement affects the position of either Government concerning the location of the outer edge of its continental margin.'⁵³ Therefore, the agreement does not deal with any future extension of the parties' claim to continental shelf to the west on the Rockall Plateau, and the parties' continental margin could either be within or beyond 25°31'W.

In this area on the Rockall Plateau both Iceland and Faroe-Denmark have claimed continental shelf, but Ireland and the UK have rejected these claims.⁵⁴ In a Press Statement from the Foreign and Commonwealth Office, issued on the day of the signing of the agreement, it is stated: 'Claims made in 1985 by Denmark and Iceland, including areas off the north-west coast of Ireland appertaining to the UK and Ireland, were rejected by both Governments. The objections still stand'.⁵⁵ The UK-Irish agreement does not resolve the disputes between either Ireland or the UK and Faroe-Denmark and Iceland to the continental shelf on the Rockall Plateau, and does not bind Faroe-Denmark and Iceland, both of which also have protested.⁵⁶

The Irish claim to the continental shelf on the Rockall Plateau is based on natural prolongation of Irish territory across the Rockall Trough to the outer edge of the continental margin.⁵⁷ Ireland must show that a natural prolongation does exist on the ground of 1) the existence of a common continental crust in at least part of the Rockall Trough, and/or 2) acceptance of the proposition that sediments laid down in the Trough are predominantly of Irish provenance and that this is sufficient to constitute a natural prolongation.

The Irish case that a natural prolongation does exist is weaker than the UK case, since there is no ridge like the Wyville-Thomson Ridge between Ireland and the Faroe-Rockall microcontinent. Furthermore, continental crust linking the British Isles with the microcontinent is more likely to be found in the northern part of the Rockall Trough and in the Faroe-Shetland

⁵³ UK-Irish Continental Shelf Delimitation Agreement, Cm. 535 (1988), Art. 4

⁵⁴ Churchill, R.R., Current Developments, Law of the Sea, United Kingdom – Ireland Continental Shelf Boundary Agreement, (1989) 38 *ICLQ*, pp.413-7, at p. 415

⁵⁵ Foreign and Commonwealth Office, Press Statement, 7 November 1988, (1988) 59 *BYIL*, pp. 531-2

⁵⁶ *Supra*, n. 4, Olafsson, at p. 17

⁵⁷ *Supra*, n. 25, Brown, at p. 296

Channel.⁵⁸ West of Ireland the Rockall Trough is very deep and wide. There appears to be a foot of the continental slope close to the Irish coast, and in the test of appurtenance this foot of the slope has to be applied in order to entitle Ireland to a continental shelf extending beyond 200 nautical miles to the Rockall Plateau. This weakens the Irish case further.

A 2,500 metre isobath exists in the southern part of the Rockall Trough west of Ireland. Consequently, if a natural prolongation does exist that extends the Irish continental shelf across the Rockall Trough, the outer limit cannot exceed 100 nautical miles from this 2,500 metre isobath. The continental shelf cannot extend further than to the eastern edge of the Rockall Plateau, and therefore the Irish claim extending to the western edge on the Rockall Plateau will not be in compliance with Article 76 of UNCLOS.⁵⁹

Analysis of the Faroese-Danish Claim

Royal Decree No. 259 of 7 June 1963 proclaims Danish Sovereignty over the continental shelf extending from the Danish coastlines and it comprises also the Faroese continental shelf. The Decree is based on the 1958 Continental Shelf Convention as stated in the Preamble of the Royal Decree and in Articles 1 and 2.

On 7 May 1985, empowered by section 3 of this Royal Decree, Denmark designated the continental shelf around the Faroe Islands. The northern part of the designation follows approximately the 200 nautical mile fishery limit around Faroe. The south-western part of the designation on the Rockall Plateau is what Faroe-Denmark consider a natural extension/prolongation of the Faroese continental shelf. The designation is based on the assumption that Faroe are part of the micro-continent formed by the Faroe-Rockall plateau. The Faroese/Danish designated area on the Rockall Plateau is approximately 300,000 sq. km. At this point in time the UK had designated approximately 50,000 sq. km and Ireland approximately 180,000 sq. km on the Rockall Plateau.⁶⁰

The Danish press statement that was released at the time of the Faroese/Danish designation states that 'the designation ... allows for a 200 mile zone of the UK and Iceland'. The designation in fact duly observes the 200 nautical miles limits of the other three neighbouring states in the area – Iceland, the UK and Ireland. Consequently, the designation complies with

⁵⁸ *Ibid.*

⁵⁹ *Supra*, n. 50, Symmons, at p. 365

⁶⁰ Danish Press Statement, Ministry of Foreign Affairs, Copenhagen, 7 May 1985

Article 76(1) of UNCLOS, where a coastal state is entitled to a 200 nautical mile continental shelf. In relation to the UK, the designation respects a 200 nautical mile zone appertaining to the UK from the Scottish Western Isles, possible from St. Kilda. The Danish press statement stresses that Rockall has no importance in the designation, but that in accordance with UNCLOS Rockall is only entitled to a 12 mile territorial sea, which is respected in the designation (Article 121(3) of UNCLOS).⁶¹

Denmark protested when the UK made its continental shelf designation on the Rockall Plateau in 1974 and delivered a note on the Danish reservations to the British Embassy in Copenhagen. Denmark maintained that the Rockall Plateau is geologically connected with the Faroes and not with Scotland.⁶² However, no counterdesignations were made until the Faroese/Danish designation in 1985.

In the Danish press statement of 1985 Faroe-Denmark emphasise that the designation is provisional and that the 'delimitation of this area must be determined by agreement between Denmark and any other affected countries.' The press statement continues to state that 'Denmark has stressed its will to negotiate at any time on the delimitation of the continental shelf between the Faroes and the other countries'.⁶³ It is a principle in the law of the sea that 'delimitation of sea areas has always an international aspect', as stated by Lord McNair in the *Anglo-Norwegian Fisheries case*.⁶⁴ Faroe-Denmark complies in the press statement with article 6(1) of the 1958 Continental Shelf Convention, which provides that for states whose coasts are opposite each other, 'the boundary of the continental shelf appertaining to such states shall be determined by agreement between them'. Similarly, Faroe-Denmark complies with Article 83(1) of UNCLOS, which provides that 'the delimitation of the continental shelf between states with opposite or adjacent coasts shall be effected by agreement on the basis of international law, ..., in order to achieve an equitable solution'.

The legal basis of the Faroese/Danish designation is the assumption that the Faroe Islands are part of the microcontinent formed by the Faroe-Rockall Plateau – an elevated plain with its summits in Rockall and the Faroe Islands. The micro-continent is delimited by the Rockall Trough, approximately 2.5 km deep and up to a width of 250 km, towards the UK

⁶¹ *Ibid.*

⁶² *Supra*, n. 50, Symmons, at pp. 347-8

⁶³ *Supra*, n. 60, Danish Press Statement, at pp. 2-3

⁶⁴ ICJ Rep. 1951, p. 116, at 132

and Ireland. Towards Iceland a similar drop of the seafloor delimits the micro-continent. The UK and Ireland have designated continental shelf on the Rockall Plateau and claim that it is an extension of their respective territories, and as the Danish press statement states 'without taking the Rockall Trough and other factors into consideration'. Iceland claims that it, like Faroe-Denmark, has rights to the continental shelf on the Rockall Plateau. Based on the present knowledge of the geological conditions, which exist around the Faroe-Rockall Plateau, Denmark contests the claims made by the UK, Ireland and Iceland to parts of the micro-continent.⁶⁵

To the southwest on the Faroe-Rockall Plateau the designation covers areas of 2,000 to 3,000 metres depth. Symmons states that the designation 'has arguably gone beyond the edge of any Faroeese continental margin', but still complying with Article 76 of UNCLOS.⁶⁶ The Faroeese/Danish claim is within 60 nautical miles from the foot of the continental slope (Article 76(4)(ii)) and within the limit of 100 nautical miles from the 2,500 metre isobath (Article 76(5)).⁶⁷ On the western edge of the Faroe-Rockall Plateau the latest British and Irish designations extend further to the west than the Faroeese/Danish designation.

The British Embassy in Copenhagen protested on the Faroeese/Danish designation in areas, which the 'British Government consider form integral parts of the continental shelf appertaining to the UK in accordance with international law' and reserved fully all the rights of the UK in accordance with international law.⁶⁸ Also Ireland protested on the designation.⁶⁹

The Faroe Bank Channel separates the Faroe Islands from the Rockall Plateau. Faroe-Denmark claim that there is a geological connection of the continental shelf between the Faroes and the Rockall Plateau.⁷⁰ The Faroe-Danish claim will depend on proving that a natural prolongation does exist on the ground of 1) there being a continuation of the continental crust across the Faroe Bank Channel, and/or 2) the sediments in the Faroe Bank Channel are predominantly of Faroeese provenance.

⁶⁵ *Supra*, n. 60, Danish Press Statement, at p. 2

⁶⁶ *Supra*, n. 50, Symmons, at p. 354

⁶⁷ *Ibid.*

⁶⁸ British Press Statement, British Embassy, Copenhagen, 13 May 1985, (1985) 56 *BYIL*, p. 493

⁶⁹ *Supra*, n. 50, Symmons, at p. 356

⁷⁰ *Supra*, n. 25, Brown, at p. 296

The Faroese/Danish case for a natural prolongation appears to be stronger than the Irish case because of the greater likelihood that the Faroe Islands are continentally linked with the Faroe Bank and the Rockall Plateau.⁷¹

Faroe-Denmark claim that the Faroe-Rockall Plateau is a separate microcontinent, the Faroe-Rockall microcontinent, and contests the continental shelf claims of the UK, Ireland and Iceland to parts of the Rockall Plateau. The Faroe-Danish case rests upon evidence to prove that the microcontinent is delimited towards the UK, Ireland and Iceland. The claims of Faroe-Denmark on the one hand and of the UK and Ireland on the other hand are therefore complementary in such a way that Faroe-Denmark have to prove that a natural prolongation does not exist across the Rockall Trough and Faroe-Shetland Channel while the UK and Ireland have to prove that their continental shelves do extend across the Rockall Trough and Faroe-Shetland Channel. Similarly, the claims of Faroe-Denmark and Iceland are complementary, since Faroe-Denmark have to prove that there is a foot of the continental slope to the west on the Rockall Plateau, while Iceland has to prove that its continental shelf extends to the Plateau by a natural prolongation.

Faroe-Denmark claim that the Rockall Trough and the Faroe-Shetland Channel separate the European continent from the Faroe-Rockall microcontinent by a rift between the continents, where oceanic crust appears. The UK and Ireland claim that the continents are not separated, only stretched, and that the Rockall Trough and Faroe-Shetland Channel are underlain by continental crust. The Wyville-Thomson Ridge is possibly a connection between the Faroe-Rockall microcontinent and the North Scottish continental shelf. Faroe-Denmark claim that this is not the case since the Ridge consists of oceanic crust. An evaluation of these theories will depend upon geological research in the area, and sufficiently extensive data sampling has not yet been carried out.

Analysis of the Icelandic Claim

Iceland designated its continental shelf to the west, south and east of Iceland on 9 May 1985 empowered by Law No. 41 of 1 June 1979 concerning the territorial sea, the exclusive economic zone and the continental shelf. Article 5 of this Law of 1979 defines the Icelandic continental shelf in the same way as Article 76(1) of UNCLOS as being a 'natural prolongation to the outer edge of the continental margin, or to a distance of 200 nautical miles

⁷¹ *Ibid.*

from Iceland's baselines where the outer edge of the margin does not extend that far'.

In the 1985 designation Iceland claims a continental shelf area, which to the south extends beyond 200 nautical miles. In this area the Icelandic designation encompasses the Rockall Plateau, while respecting the 200 nautical mile zones of Faroe, the UK and Ireland. Both Iceland and Faroe-Denmark have ignored the UK's 200 nautical mile zone around Rockall in their designations. Furthermore, the Icelandic designation takes no account of St. Kilda, which the UK uses as a basepoint for its 200 nautical mile zone. On the Rockall Plateau the Icelandic designation overlaps completely with the Faroe/Danish, UK and Irish designations on the Plateau, and also extends further towards the deep ocean floor in the south and south-west to areas none of the other three states have laid claim.

In the Press Statement from the Icelandic Ministry for Foreign Affairs released at the same time as Iceland's designation, there is reference to a memorandum on Iceland's continental shelf claims handed over to Faroe-Denmark, the UK and Ireland in July 1984. Also a meeting between Iceland and Faroe-Denmark concerning their common interest in the Rockall Plateau in April 1985 is mentioned. The Press Statement does however not clarify what the Icelandic continental shelf claim is based on. Article 5 in the designation order provides that an agreement will be sought between Iceland and the other affected parties on the final delimitation of the continental shelf in accordance with the procedures of international law. The Press Statement states that Iceland is prepared to negotiate and that its will is to reach a solution by agreement.⁷²

Iceland claims that the Rockall Plateau is a natural prolongation from Iceland itself. The basis of the claim relies on a geomorphological connection from the seabed south of Iceland to the Rockall Plateau and on the argument that parts of the Rockall Plateau have rocks of oceanic origin – a basaltic crust – similar to those found on the Iceland shelf itself. The Icelandic view is, like Faroe-Denmark's view, that the Rockall Trough is a break in the continental shelf of both the UK and Ireland, both geologically and geomorphologically.⁷³ Iceland is alleging that its claim is stronger than the Faroese/Danish on the basis that the Faroe Bank Channel weakens the

⁷² Icelandic Press Statement, Ministry for Foreign Affairs, Reykjavik, 9 May 1985

⁷³ *Supra*, n. 50, Symmons, at p. 360

Faroese/Danish claim to a geological link with the Plateau and constitutes a geomorphological break with the Faroes.⁷⁴

Whether there is a geological connection from Iceland to the Rockall Plateau via the Iceland-Faroe Rise may be queried. Brown, citing Bott, states that the Iceland-Faroe Rise is underlain by thick oceanic crust of Icelandic type, while the Rockall Plateau, including the Faroe Islands, is underlain by continental crust.⁷⁵

On the Rockall Plateau the designation is marked by the line 60 nautical miles from the foot of the continental slope. This is in compliance with Article 76(4)(ii) of UNCLOS. Symmons states however that this delineation appears to be very 'approximate' since the southernmost point (point E at 49°48'N, 19°00'W) appears to be 100 miles from the foot of the continental slope. Furthermore, this line may not exceed 100 nautical miles from the 2,500 metres isobath (Article 76(5) of UNCLOS), and the extreme parts of the designation contravene this requirement.⁷⁶

To the south-west of Iceland on the Reykjanes submarine ridge the continental shelf is limited to 350 miles from Icelandic baselines in accordance with Article 76(6) of UNCLOS, which sets this outer limit for the continental shelf on submarine ridges. This part of the designation implies that Iceland views a natural prolongation link to the Plateau directly to the south, including the Rockall Plateau, and not by the Iceland-Faroe Rise to the east of Iceland.⁷⁷

On 19 June 1985 the British Embassy in Iceland protested on the Icelandic action in claiming an extensive area of continental shelf to the west of the British Isles, and reserved all the rights of the UK in accordance with international law. The UK view is that the Icelandic claim is based on a misinterpretation of UNCLOS and of existing international law and the British Embassy stated that there is no link between Iceland and the Hatton/Rockall Plateau.⁷⁸ The Irish Government on 20 June 1985 also protested on the Icelandic designation.⁷⁹ Denmark had already in its press

⁷⁴ *Ibid.*, at pp. 361-3

⁷⁵ *Supra*, n. 25, Brown, at p. 281

⁷⁶ *Supra*, n. 50, Symmons, at p. 364

⁷⁷ *Ibid.*, at p. 365-8

⁷⁸ British Press Statement, British Embassy, Reykjavík, 19 June 1985, (1985) 56 *BYIL*, pp. 493-4

⁷⁹ *Supra*, n. 50, Symmons, at p. 367

statement of 7 May 1985 contested claims made by the UK, Ireland and Iceland to parts of the microcontinent.⁸⁰

Iceland has to demonstrate the fact that its continental shelf extends beyond 200 nautical miles. First, the foot of the continental slope has to be located. Symmons states that the foot of the slope is close to Iceland's south coast,⁸¹ and given this the continental shelf cannot extend beyond 200 nautical miles. Iceland has however located and applied the foot of the slope on the Rockall Plateau, and has delineated its continental shelf 60 nautical miles from this "foot of the slope".

Iceland claims that the continental shelf extends to the Rockall Plateau and that it is a natural prolongation of the land territory of Iceland. The claim is partly based on geomorphology/bathymetry in alleging a geomorphological connection from the seabed south of Iceland to the Rockall Plateau. The UK rejects this since there is a sharp edge of the land territory to the south of Iceland, beyond which the seabed has the characteristic of deep ocean floor. There is a clear line for the foot of the continental slope close to Iceland's south coast.⁸²

Furthermore the claim is based on geology in that Iceland claims that parts of the Rockall Plateau consists of rocks of oceanic origin, a basaltic crust, similar to rocks found on Iceland. This argument can be rejected since Iceland is of volcanic origin and has no continental crust, while the Rockall Plateau is underlain by continental crust. Parts of the Rockall-Faroe Plateau are covered by volcanic lava, as Iceland, but this is the result of volcanic activity along the Reykjanes Ridge after the separation of the microcontinent from East Greenland, and when Iceland subsequently was created.

It is not clear whether Iceland claims that there is a geological connection to the Rockall Plateau via the Iceland-Faroe Rise. This will, however, be a weak claim, since geological evidence seems to state that the Iceland-Faroe Rise is underlain by oceanic crust of Icelandic type, while the Rockall Plateau and Faroe are underlain by continental crust.

The UK has further alleged, that there is no geographical link between Iceland and the Rockall Plateau, since Iceland lies further away from the

⁸⁰ *Supra*, n. 60, Danish Press Statement

⁸¹ *Supra*, n. 50, Symmons, at p. 367

⁸² *Supra*, n. 78, British Press Statement

plateau than UK.⁸³ This UK argument can be rejected, since the distance from the centre of the Rockall Plateau to both Iceland and the UK is the same.

Faroe-Denmark have stated, that the western edge of the Faroe-Rockall microcontinent is delimited towards Iceland by a steep drop of the sea floor.⁸⁴ There is a clear “foot of the slope”, where the geology changes from continental crust on the Plateau to oceanic crust on the ocean floor. Therefore, there is no geomorphological connection from Iceland to the Plateau.

Discussion

The claims of the parties concerning the natural prolongation of their respective continental shelves across the Faroe Bank Channel, the Rockall Trough, and the Faroe-Shetland Channel, or by the connections via the Wyville-Thomson Ridge and the Faroe-Iceland Rise will depend upon geological evidence to show that the underlying crust is of either continental or oceanic origin. This extensive data sampling in the Rockall Plateau area has not yet been carried out, and the parties must be prepared to perform this geological research to support their claims. Similarly, to support the geomorphological connection from Iceland to the Rockall Plateau bathymetric analysis has to be performed. At present it is not known whether the four parties intend to initiate research in this area.

To delineate the outer limits of the continental shelf the parties must carry out bathymetric analysis to establish where the ‘foot of the slope’, defined in Article 76(4)(b) as the point of maximum change in the gradient at its base, is located. Additionally, the 2,500 metre isobath in the Rockall Trough and on the Rockall Plateau must be determined, since the outer limits of the continental shelf cannot exceed 100 nautical miles from this isobath.

There have not been consultations between the parties since 1985 when Faroe-Denmark and Iceland made their designations. The UK protested against the Faroe/Danish designation in 1985 and expressed that it would return to the matter later. In 1990 during the negotiations between the UK and Faroe-Denmark on the delimitation of the continental shelf the parties discussed the dispute on the Rockall Plateau. However, the parties decided that this dispute was so complex, with claims of four states, that even an agreement between the UK and Faroe-Denmark would not make the area

⁸³ *Ibid.*

⁸⁴ *Supra*, n. 60, Danish Press Statement, at p. 2

undisputed. Consequently, the parties restricted themselves to boundary negotiations in the area within 200 nautical miles. It is not clear whether the Icelandic claim has been further discussed between the parties, but it appears that the other three claimants disregard the Icelandic claim.

In 1988 the UK and Ireland agreed on their continental shelf boundary on the Rockall Plateau. Both Faroe-Denmark and Iceland protested, and this agreement only solved the dispute between the UK and Ireland. Since Faroe-Denmark and Iceland both claim the entire Rockall Plateau there are still two main areas of overlapping claims, one area claimed by Faroe-Denmark, Iceland and the UK, and the other area claimed by Faroe-Denmark, Iceland and Ireland.

The continental shelf designations on the Rockall Plateau have resulted in a very complicated situation. The four parties have asserted their claims to the continental shelf and these are very far from matching together. The UK and Irish claims extend to the western edge of the Rockall Plateau; the Faroese/Danish claim defines the Faroe-Rockall microcontinent extending from the Faroes to include the entire Rockall Plateau; and the Icelandic claim overlaps the claims of the three other parties on the Rockall Plateau and extends further to the south.

Both Faroe-Denmark and Iceland have in their designations stated that the designation is provisional, pending an agreement on the delimitation of the continental shelf with other affected countries in accordance with international law. These parties have also stated their willingness to negotiate at any time in order to reach a delimitation agreement.

Since 1985 there has not been negotiations between the parties. In 1988 the UK and Ireland agreed on their continental shelf delimitation, and divided the Rockall Plateau between each other. These parties will probably be reluctant to enter into agreements with Faroe-Denmark and Iceland that will diminish their designated continental shelf. For Faroe-Denmark and Iceland any possible boundary agreement will also imply a significant reduction in their designated areas. Delimitation agreements between the four parties will be difficult to achieve, since this will require the parties to abandon the basis of their claims and the parties will be very disinclined to make such agreements.

An agreement between Faroe-Denmark and the UK on the continental shelf delimitation would probably result in an equidistant line, since the parties

applied this principle in their boundary agreement within 200 nautical miles. In that case Faroe-Denmark would only achieve a small triangle in the northern part of the Rockall Plateau and indeed a negligible part of its claim. Faroe-Denmark would also have difficulties in maintaining its claim to the southern part of the Rockall Plateau if such an agreement was signed, since the Faroe/Danish claim is based on the Faroe-Rockall microcontinent and an extension from the Faroe Islands to the southern edge of the Rockall Plateau.

For Iceland a boundary agreement with the UK and Ireland could probably also result in an equidistant line, since each of the parties have used this principle in other delimitation agreements. The boundary in the UK/Irish agreement of 1988 appears to be an equidistance line, and the Icelandic continental shelf designation applies the median line as the boundary towards Greenland and the Faroe Islands. Iceland would by such an agreement achieve approximately the western half of the Rockall Plateau, which is an acceptable result. However, the UK and Ireland would lose a significant part of their continental shelf claims and an agreement would be less favourable for these countries. A solution like this would result in actually excluding Faroe-Denmark from gaining part of the continental shelf on the Rockall Plateau.

Attention should be drawn to Article 83 of UNCLOS, which provides that the delimitation of the continental shelf between States with opposite or adjacent coasts shall be effected by agreement on the basis of international law in order to achieve an equitable solution. If none of the four States' continental shelf claims on the Rockall Plateau can be excluded on the ground that it does not comply with Article 76 of UNCLOS, the parties should seek to achieve an equitable solution. The relevant factors that can be taken into account are numerous, as is seen in the jurisprudence of the continental shelf cases. It would though never be an equitable solution for one country only to gain a negligible share of the Rockall Plateau, especially when there is uncertainty about the geological conditions of the area.

Growing interest of oil companies to commence oil exploration in the area and the possible discovery of oil would probably encourage the four parties to find a solution on their overlapping claims. Even if the parties do not agree on the delimitation of the continental shelf they would probably agree on the outer limits of all the continental shelf claims on the Rockall Plateau. This area would be under national jurisdiction of one or more of the four States, and the deep sea-bed beyond the outer limits would be under the

jurisdiction of the International Sea-Bed Authority. The Icelandic claim could represent the delineation towards the deep sea-bed.

The Commission on the Limits of the Continental Shelf shall not examine and qualify submissions on the outer limits of the continental shelf, where the area is disputed. In accordance with Annex I of the Rules of Procedure of the Commission, the four parties can by agreement make a joint submission on the outer limits of the continental shelf for the disputed area. The Commission can make recommendations with respect to the delineation, and these would not prejudice matters relating to delimitation of boundaries between the states.

The parties could then probably agree on a joint development of the natural resources of the disputed area. This could be a preliminary solution, which would enable oil exploration. The income from possible oil exploitation could be divided between the parties on a mutually agreed basis.

As the dispute is so complex one way of progress would be to submit the case to the International Court of Justice or to an arbitral tribunal. If one of the States party to the dispute submits the case to the ICJ or a tribunal the questions of the jurisdiction of the Court or tribunal and acceptance of this jurisdiction by the other parties will arise.

The parties will also be in a situation where it is not possible to predict the Courts or tribunals decision, since there are no other cases concerning delimitation of the continental shelf beyond the 200 nautical mile limit. From the definition of the continental shelf in Article 76(1) of UNCLOS as the “natural prolongation” to the outer edge of the continental margin the parties will without doubt present geological evidence for the natural prolongation of their territory. In the Libya/Malta case the relevance of geological and geomorphological factors in cases concerning areas beyond 200 nautical miles is indirectly recognised.⁸⁵ However, the Court has in the Tunisia/Libya case dismissed the ‘confident assertions of the geologists on both sides’⁸⁶ that evidenced a natural prolongation. The geologists representing the four parties to the dispute on the Rockall Plateau will assumingly also give “confident assertions” on the natural prolongation of the continental shelf of each of the parties, and the Court or tribunal will have difficulties in deciding on this basis.

⁸⁵ ICJ Rep. 1985, p. 13, para. 40

⁸⁶ ICJ Rep. 1982, p. 18, para. 61

Conclusion

The parties to the dispute on the Rockall Plateau must submit information on the outer limits of their continental shelf to the Commission on the Limits of the Continental Shelf within 10 years of the entry into force of UNCLOS for that State. Iceland, Ireland and the UK are parties to UNCLOS and have to submit information to the Commission before 13 May 2009.

Faroe-Denmark have not ratified UNCLOS yet, so for this party the deadline for submitting information on the outer limits of the continental shelf will at the earliest be in 2011, if it ratifies the Convention in 2001. Faroe-Denmark could possibly submit a claim while not being a party to UNCLOS. The Commission will then be required to request the Legal Counsel of the United Nations on a legal opinion whether the term "coastal State" includes a non-party State to the Convention. The outcome could be that the Commission could hear a claim from a non-party State and that Faroe-Denmark is not debarred from lodging a claim on the continental shelf beyond 200 nautical miles to the Commission.

Since the area on the Rockall Plateau is a disputed area the Commission cannot examine or qualify any submissions from these four States. The Commission may only examine submissions with prior consent given by all four States who are parties to the dispute.

The evolution of technology and growing interest by oil companies in starting oil exploitation in the area may drive the four States to come to an agreement on the delimitation of the continental shelf between the parties. Then the Commission may consider the claims made by the parties and make recommendations on the outer limits of the continental shelf. If the Commission and the coastal States agree on the Commission's recommendation, the coastal States can establish the final outer limits of their continental shelf. However, if the coastal States do not agree with the Commission's recommendation a revised or new submission may be made, and the outer limits of the States continental shelf established.

The deep sea-bed in the areas beyond national jurisdiction (the Area) and its resources are the common heritage of mankind. The International Sea-Bed Authority has the responsibility for the deep sea-bed regime. All activities connected with exploration and exploitation of mineral resources in the Area shall be organised, carried out and controlled by the International Sea-Bed Authority (Part XI of UNCLOS).

If the Commission does not accept the claims of the four parties on the outer limits of their continental shelf, the area on the Rockall Plateau will fall under the jurisdiction of the International Sea-Bed Authority, and the resources will be vested in mankind as a whole. This will depend on how the Commission applies and evaluates the information submitted by the coastal States and what recommendations it makes on the outer limits of their continental shelf. The Commission will have to assess the extensive geological and bathymetric information on the Rockall Plateau and how the Plateau is connected to the four parties: the UK, Ireland, Faroe-Denmark, and Iceland, and then eventually it will be established which of the parties, if any, will have sovereignty over the continental shelf on the Rockall Plateau.

As time for the deadlines for submitting claims runs out this may concentrate the minds of the four parties to reach an “equitable” agreement on the division of the Rockall Plateau continental shelf, thus enabling the Commission to establish the outer limits of the continental shelf based on the claims of the four parties and pre-empting the area being declared deep sea bed.