



EXECUTIVE SUMMARY

A SUBMISSION OF DATA AND INFORMATION

ON THE OUTER LIMITS OF THE CONTINENTAL SHELF

OF THE CO-OPERATIVE REPUBLIC OF GUYANA PURSUANT TO

PART VI OF AND ANNEX II TO THE UNITED NATIONS

CONVENTION ON THE LAW OF THE SEA

PART I

Submission to the Commission on the Limits of the Continental Shelf

through the Secretary-General of the United Nations

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TABLE OF CONTENTS

List of Tables	ii
List of Figures	ii
1. Introduction and Objectives	1
2. The outer limit of the continental shelf	5
2.1 The sediment thickness formula	7
2.2 The foot of the continental slope plus 60 M formula	8
2.3 The 350 M constraint	9
3. Names of members of the CLCS who provided advice	9
4. Absence of disputes	10
5. Guyanese institutions responsible for the preparation of this submission	10
6. The outer limit of the continental shelf	11

LIST OF TABLES

Table 1.	List of coordinates of latitude and longitude of the turning points determined in accordance with paragraph 7 of article 76 which define the outer limit of the continental shelf of the Co-operative Republic of Guyana beyond 200 nautical miles at distances not exceeding 60 nautical miles	12
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LIST OF FIGURES

Figure 1.	The outer limits of the continental shelf of the Co-operative Republic of Guyana beyond 200 nautical miles measured from the baselines from which the breadth of the territorial sea is measured according to paragraph 7 by straight lines not exceeding 60 nautical miles in length, connecting fixed points, defined by coordinates of latitude and longitude	13
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1. INTRODUCTION AND OBJECTIVES

The Co-operative Republic of Guyana signed the United Nations Convention on the Law of the Sea (United Nations, Treaty Series, vol. 1833, p. 3) on 10 December 1982 and it became a State Party to the Convention when it deposited the sixtieth instrument of ratification on 16 November 1993. In accordance with article 308, the Convention entered into force twelve months later on 16 November 1994. Guyana acceded to the Agreement relating to the implementation of Part XI of the United Nations Convention on 25 September 2008.

The continental shelf under national jurisdiction is defined under paragraph 1 of article 76 of the Convention as:

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.

The continental margin, in turn, is defined under paragraph 3 of article 76 of the Convention as:

The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the sea-bed and subsoil of the shelf the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.

The outer limits of the continental shelf are prescribed under paragraph 2 of article 76 not to exceed the combination of rules referred to in paragraphs 4 to 6:

The continental shelf of a coastal State shall not extend beyond the limits provided for in paragraphs 4 to 6.

The Convention also establishes a procedure for the determination of the outer limits of the continental shelf beyond 200 nautical miles by the coastal State based on the recommendations made by the Commission on the Limits of the Continental Shelf (CLCS) in relation to a submission of information on the limits as described in paragraph 8 of article 76:

Information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured shall be submitted by the coastal State to the Commission on the Limits of the Continental Shelf set up under Annex II on the basis of equitable geographical representation. The Commission shall make recommendations to coastal States on matters related to the establishment of the outer limits of their continental shelf. The limits of the shelf established by a coastal State on the basis of these recommendations shall be final and binding.

The above procedure is further elaborated in article 4 of Annex II to the Convention with the addition of a temporal requirement and a request designed to inform the Commission:

Where a coastal State intends to establish, in accordance with article 76, the outer limits of its continental shelf beyond 200 nautical miles, it shall submit particulars of such limits to the Commission along with supporting scientific and technical data as soon as possible but in any case within 10 years of the entry into force of this Convention for that State. The coastal State shall at the same time give the names of any Commission members who have provided it with scientific and technical advice.

The Eleventh Meeting of States Parties to the Convention, held from 14 to 18 May 2001, noted that it was only after the adoption of the Scientific and Technical Guidelines by the Commission on 13 May 1999 that States had before them the basic documents concerning submissions in accordance with article 76, paragraph 8, of the Convention. Considering the problems encountered by States Parties, in particular developing countries, including small-island

developing States, in complying with the time limit set out in article 4 of Annex II to the Convention; the Meeting of States Parties (SPLOS/72) decided that:

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

(b) the general issue of the ability of States, particularly developing States, to fulfil the requirements of article 4 of Annex II to the Convention is kept under review.

The Government of the Co-operative Republic of Guyana has identified its continental margin as a region over which it can extend its national jurisdiction over the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.

The Convention recognizes that competence with respect to the delimitation of international maritime boundaries which may arise in connection with the establishment of the outer limits of the continental shelf rests with States according to paragraph 1 of article 83:

The delimitation of the continental shelf between States with opposite or adjacent coasts shall be effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution.

The Convention establishes that any outer limits of the continental shelf beyond 200 nautical miles determined in accordance with paragraphs 4 to 6 of article 76 are without prejudice to the delimitation of continental shelf boundaries between States according to paragraph 10 of the same article:

The provisions of this article are without prejudice to the question of delimitation of the continental shelf between States with opposite or adjacent coasts.

The distinction between the delimitation of international continental shelf boundaries and the determination of the outer limits of the continental shelf is further reinforced by a savings provision contained in paragraph 4 of article 134:

Nothing in this article affects the establishment of the outer limits of the continental shelf in accordance with Part VI or the validity of agreements relating to delimitation between States with opposite or adjacent coasts.

However, the Convention, in article 9 of Annex II, also urges the Commission to take a cautious approach during the consideration of submissions and the preparation of its recommendations:

The actions of the Commission shall not prejudice matters relating to delimitation of boundaries between States with opposite or adjacent coasts.

In this sense, the Co-operative Republic of Guyana makes a Submission of data and information concerning the outer limits of the continental shelf along the northern part of its continental margin for the consideration of the CLCS without prejudice to any potential boundary delimitations with any other States which may be conducted at a later date.

In light of the relevant provisions contained in the Convention, the Co-operative Republic of Guyana makes this submission through the Secretary-General to the Commission:

- i) to fulfil its obligations pursuant to paragraph 8 of article 76 of, and article 4 of Annex II to the Convention;
- ii) in accordance with the methodology contained in paragraphs 1 to 7 of article 76 of the Convention; and

- iii) without prejudice to questions relating to the delimitation of international boundaries with any other States.

Accordingly, the Co-operative Republic of Guyana reserves the right to determine the outer limit of the continental shelf beyond 200 nautical miles based on the recommendations of the Commission, and any potential maritime boundary agreements made with other States at a later date.

This submission contains data and information used in support of the determination of the outer limits of the continental shelf beyond 200 nautical miles of the Co-operative Republic of Guyana in accordance with the Convention and the Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf (CLCS/11; CLCS/11/Corr. 1; CLCS/11/Add. 1; CLCS/11/Add. 1/Corr. 1).

2. THE OUTER LIMIT OF THE CONTINENTAL SHELF

The Convention offers two complementary provisions designed to provide the definition of the continental margin and the breadth of its outer limit. The first provision, contained in paragraph 3 of article 76, provides its definition:

The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the sea-bed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.

The second provision, contained in paragraph 4 (a) (i) and (ii), subject to paragraphs 5 and 6 of article 76, determines the position of the outer limit of the continental margin by means of a complex formula based on four rules. Two of these rules are affirmative and the remaining two are negative. The two positive rules, herein referred to as *formulae*, are connected through an inclusive disjunction:

- (i) *a line delineated in accordance with paragraph 7 by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope; or*
- (ii) *a line delineated in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the slope.*

The use of a disjunction between the two *formulae* above implies that it is sufficient that one formula line extends beyond 200 nautical miles in order to ensure the determination of an outer limit of the continental shelf beyond this distance. Thus, the limit of the continental shelf beyond 200 nautical miles can be extended up to a line delineated by reference to fixed points where sediment thickness is at least 1% from the shortest distance to the foot of the continental slope, or to a line delineated by reference to fixed points at a distance of 60 nautical miles from the foot of the continental slope, whichever is furthest from the baselines from which the breadth of the territorial sea is measured.

The use of an inclusive disjunction also implies that when both *formulae* lines are used, their outer envelope determines the maximum potential extent of entitlement over the continental shelf by a coastal State. If any portion of this outer envelope extends beyond 200 nautical miles, the test of appurtenance would be satisfied and a coastal State would be in a position to apply the full range of provisions contained in paragraphs 4 to 6 to determine the outer limits of the continental shelf extended beyond 200 nautical miles.

The determination of the outer limits is an essential procedure of the implementation of article 76. The outer envelope of the 1% sediment thickness and the foot of the slope plus 60 nautical miles lines *formulae* is used once again in this procedure. But it is still subject to spatial constraints in order to produce the determination of the outer limits of the continental shelf.

The extent of the outer envelope formed by the lines derived from the two *formulae* is restricted by a line derived from the two lines, defined by the Commission as constraints. According to paragraph 5, the simultaneous application of these two constraints defines the outer limit beyond which the continental shelf cannot be extended:

The fixed points comprising the line of the outer limits of the continental shelf on the seabed, drawn in accordance with paragraph 4 (a) (i) and (ii), either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 metre isobath, which is a line connecting the depth of 2,500 metres.

The outer limits of the continental shelf beyond 200 nautical miles in the continental margin of Guyana are determined under the above provisions by the application of both formulae provided by a line defined by 1 per cent sediment thickness of the shortest distance to the foot of the continental slope and a line determined at a distance of 60 nautical miles from the foot of the continental slope, and a single constraint provided by the 350 nautical miles line.

The constraint line defined by the 2,500 metres isobath plus 100 nautical miles does not extend beyond the 350 M constraint, and it was not applied to determine the outer limit of the continental shelf.

2.1 THE SEDIMENT THICKNESS FORMULA

Bathymetric and geophysical data and information were assembled in order to demonstrate that the seabed and subsoil of the submarine areas that extend beyond the territorial sea to the outer edge of the continental margin are the natural prolongation of the land territory of the Co-operative Republic of Guyana to the outer edge of the continental margin (Article 76, Paragraph 1). Geophysical surveys were conducted to demonstrate the legal entitlement of Guyana to

extend the outer limits of its continental shelf beyond 200 nautical miles and to determine the coordinates of these limits.

Geophysical data was applied with the dual purpose to demonstrate the continuity of the sedimentary apron from the continental slope throughout the outer limit of the continental margin, as proof that it meets the Test of Appurtenance described in section 2.2 of the CLCS Scientific and Technical Guidelines, and to estimate sediment thickness beyond 200 nautical miles to determine the position of the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope during the implementation of the sediment thickness formula (Article 76, Paragraph 4 (i)). These fixed points contribute to the determination of the outer limit of the continental shelf of Guyana beyond 200 nautical miles.

The search for the base of the continental slope was conducted by means of evidence to the contrary provision contained in article 76 4 (b) and Chapter 7 of the Scientific and Technical Guidelines of the CLCS. The foot of the continental slope points were also determined by means of evidence to the contrary to the general rule of maximum change in the gradient due to the almost constant curvature shown by the continental slope and rise of Guyana.

2.2 THE FOOT OF THE CONTINENTAL SLOPE PLUS 60 M FORMULA

The Bathymetric and morphological information was assembled in order to demonstrate that the seabed and subsoil of the submarine areas that extend beyond the territorial sea to the outer edge of the continental margin are the natural prolongation of the land territory of Guyana to the outer edge of the continental margin (Article 76, Paragraph 1). Morphological criteria were implemented to demonstrate the legal entitlement of Guyana to extend the outer limits of the continental shelf beyond 200 nautical miles and to determine the coordinates of these limits.

The distance formula was implemented by means of the method of envelopes of arcs in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the continental slope. (Article 76, Paragraph 4 (ii)).

2.3 THE 350 M CONSTRAINT

The extent of the outer envelope formed by the lines derived from the two *formulae* is restricted by a line derived from the two lines, defined by the Commission as constraints. According to paragraph 5 of article 76, the simultaneous application of these two constraints defines the outer limit beyond which the continental shelf cannot be extended:

The fixed points comprising the line of the outer limits of the continental shelf on the seabed, drawn in accordance with paragraph 4 (a) (i) and (ii), either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 metre isobath, which is a line connecting the depth of 2,500 metres.

Geodetic baseline information was compiled to determine the location of the constraint line at a distance of 350 nautical miles from the baselines from which the breadth of the territorial sea is measured along the low-water line of the coastline of the Co-operative Republic of Guyana. This constraint is satisfied by the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope during the implementation of the sediment thickness formula line.

3. NAMES OF MEMBERS OF THE CLCS WHO PROVIDED ADVICE

The Co-operative Republic of Guyana received advice from Mr. Galo Carrera in his official capacity as a member of the Commission on the Limits of the Continental Shelf.

4. ABSENCE OF DISPUTES

The continental margin of the Co-operative Republic of Guyana is a maritime region over which there are overlapping claims made by other States and consultations among the States in the region are expected to take place soon for their delimitation. There are no disputes in the region relevant to this Submission of data and information relating to the outer limits of the continental shelf beyond 200 nautical miles. This submission is made without prejudice to the delimitation of continental shelf boundaries between States according to paragraph 10 of article 76.

5. GUYANESE INSTITUTIONS RESPONSIBLE FOR THE PREPARATION OF THIS PARTIAL SUBMISSION

The national institutions responsible for the preparation of this submission to the Commission on the Limits of the Continental Shelf are:

- Ministry of Foreign Affairs; and
- Guyana Geology and Mines Commission.

The Preparation of the Submission of the Co-operative Republic of Guyana was supported with legal and technical assistance from the Special Advisory Services Division of the Commonwealth Secretariat.

Scientific and technical training on the implementation of article 76 was gratefully received from the United Nations Division of Oceans Affairs and the Law of the Sea (DOALOS) through two training courses held in Buenos Aires, Argentina, and Port of Spain, Trinidad and Tobago.

Scientific and technical cooperation was kindly provided by the Federal Institute for Geosciences and Natural Resources (BGR) in Germany through an Agreement with the Government of Guyana concerning data compilation, seismic data interpretation, and scientific and technical advice.

The UNEP Shelf Programme at GRID-Arendal in Norway provided a data compilation from its One Stop Data Shop and it supported the development of the Geocap Project encompassing the digital data contained in the Submission.

6. THE OUTER LIMIT OF THE CONTINENTAL SHELF

Figure 1 shows the outer limits of the continental shelf of the Co-operative Republic of Guyana beyond 200 nautical miles measured from the baselines from which the breadth of the territorial sea is measured according to paragraph 7 by straight lines not exceeding 60 nautical miles in length, connecting fixed points, defined by coordinates of latitude and longitude.

Table 1. List of coordinates of latitude and longitude of the turning points determined in accordance with paragraph 7 of article 76 which define the outer limit of the continental shelf of the Co-operative Republic of Guyana beyond 200 nautical miles at distances not exceeding 60 nautical miles.

Outer Limit of the continental shelf	Latitude N	Longitude E	Distance nautical miles
OL-Guy-1	11° 48' 09.18"	54° 33' 47.05"	20.816
OL-Guy-2	12° 03' 19.20'	54° 48' 24.12"	17.787
OL-Guy-3	11° 51' 26.39"	55° 01' 57.70"	59.998
OL-Guy-4	11° 35' 43.57"	56° 01' 00.00"	

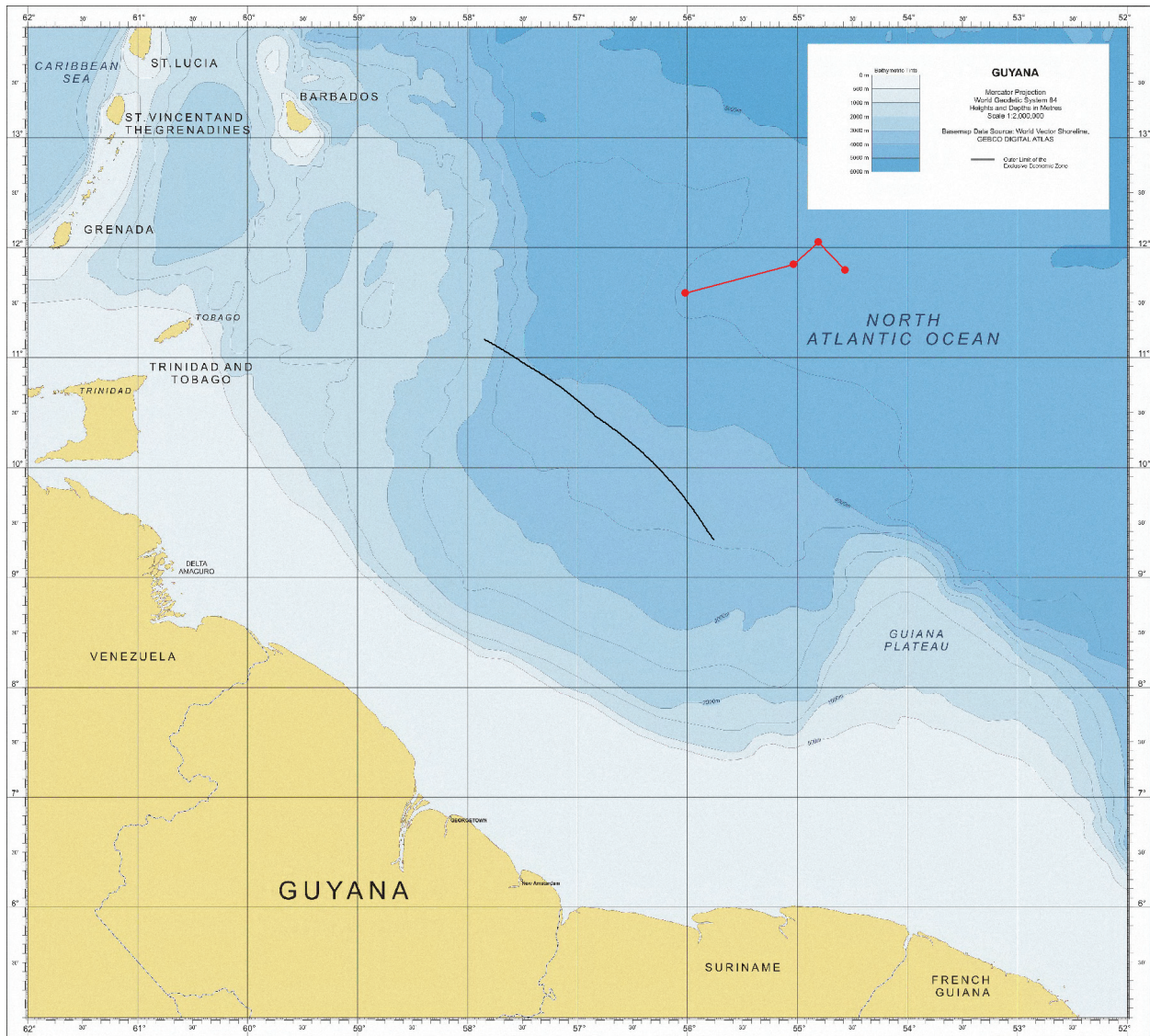


Figure 1. The outer limits of the continental shelf of the Co-operative Republic of Guyana (red line) beyond 200 nautical miles (black line) measured from the baselines from which the breadth of the territorial sea is measured according to paragraph 7 by straight lines not exceeding 60 nautical miles in length, connecting fixed points, defined by coordinates of latitude and longitude.