

SUBMISSION TO THE COMMISSION ON THE LAW OF THE SEA

GOVERNMENT OF THE REPUBLIC OF TRINIDAD AND TOBAGO

MARCH 2023

PART I: EXECUTIVE SUMMARY (AMENDMENT)

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1. Introduction

- 1.1 The Republic of Trinidad and Tobago (Figure 1) (hereinafter referred to as Trinidad and Tobago) presents to the Commission on the Limits of the Continental Shelf (hereinafter referred to as "the Commission") this amended Submission containing information on the outer limits of the continental shelf extending beyond 200 M from the baselines from which the breadth of the territorial sea is measured in accordance with Article 76 and Annex II, Article 4 of the 1982 United Nations Convention on the Law of the Sea (hereinafter referred to as "the Convention"). This amended Executive Summary accompanies the amended Submission which replaces the Trinidad and Tobago's Submission made on May 12, 2009 under Article 76 of the Convention.
- 1.2 Trinidad and Tobago signed the Convention on 10 December,1982 in Montego Bay, Jamaica, when it was opened for signature at the close of the Third United Nations Conference on the Law of the Sea and ratified the Convention on 25 April, 1986. It enacted domestic legislation in 1986 to give effect to the Convention, including legislation incorporating those provisions in Part VI of the Convention dealing with the continental shelf, through the Continental Shelf (Amendment) Act which was originally enacted to give effect to the 1958 Geneva Convention on the Continental Shelf.
- 1.3 In the course of preparing this amended Submission Trinidad and Tobago has applied the relevant provisions of Article 76 of the Convention and the Rules of Procedure. The State has also followed the recommendations contained within the Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf (hereinafter referred to as 'the Guidelines'). This amended Submission consists of three parts: (1) the Executive Summary; (2) the Main Body (Amendment) which is the primary analytical and descriptive part of the

Submission; and (3) the Appendices which contain supporting scientific and technical data.

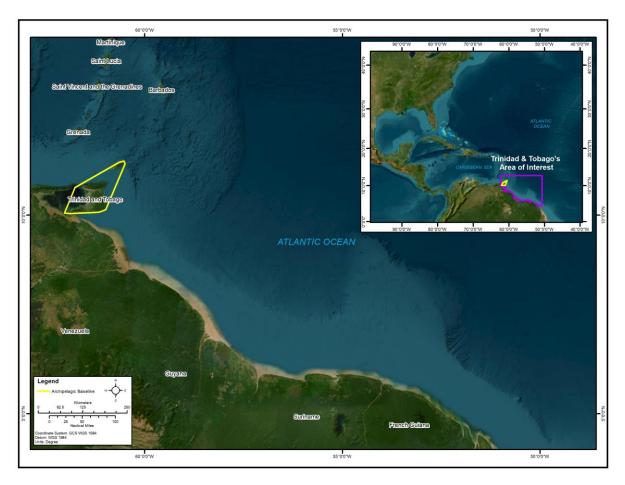


Figure 1 - Location map of Trinidad and Tobago and its archipelagic baselines. The inset map shows the area of interest for this Submission. Bathymetry based on ETOPO grid.

2. Geography

2.1 Trinidad and Tobago consists of two main islands, the island of Trinidad and the island of Tobago, alongside twenty-one (21) other smaller islands. The islands lie at approximately 10 degrees north latitude and 60 degrees west longitude and they cover an area of approximately 5,128 square kilometres

- (1,979 sq mi). The area of interest addressed in this Submission is located within the Atlantic Ocean off the east and southeast coasts of Trinidad and Tobago as shown in Figure 1.
- 2.2 The State has a population of 1.4 million whose diversity reflects its long history of indigenous cultures, colonial governments, slavery, indentureship, industrialization and commerce. It is a hydrocarbon-based economy which provided the platform for significant levels of industrialization, manufacturing and commerce over the past 100 years.

3. Relevant Baselines and Geodetic Datums Employed

- 3.1 The Cartographic Reference System used in this Submission is the World Geodetic System 1984 (WGS 84) unprojected. The area of interest for this Submission straddles two Universal Transverse Mercator Zones (Zone 20 and Zone 21).
- 3.2 Trinidad and Tobago satisfies the provisions contained in Articles 46, 47 and 48 of the Convention for designation as an archipelagic State and the use of the archipelagic baselines for the measurement of the breadth of the territorial and jurisdictional zones, including the continental shelf. For the purposes of this Submission, the baselines on the east and south coasts of Trinidad and Tobago are relevant and the submarine projections of these baselines trend in an east-southeast direction along the continental shelf of the South American continent (Figure 1).

4. Provisions of Article 76 Invoked to Support the Submission

- 4.1 Due to its unique geographical location on the South American continent shelf and the orientation of the archipelagic baselines, Trinidad and Tobago submits that it is permitted to use all permissible criteria as set out in Article 76 of the Convention, to establish the maximum possible outer limit of its continental shelf. This Submission demonstrates that the outer edge of the continental margin of Trinidad and Tobago is a natural prolongation of its land mass and Trinidad and Tobago can proceed with the delineation of the outer limit of the extended continental shelf.
- 4.2 Trinidad and Tobago has gathered and analyzed geomorphological, geological, geophysical, hydrographic and other data, results of which are reflected in the different chapters of the Main Body of the amended Submission and has established the outer limit of its continental shelf in accordance with Article 76 (4) to (10) of the Convention. These results show that the natural prolongation of the land territory of Trinidad and Tobago extends beyond 200 M, thereby fulfilling the *test of appurtenance*. Having regard to its archipelagic status, the delineation of the outer limit of the Trinidad and Tobago continental shelf is based on the combined application of the two formulae and the two constraints set forth in Articles 76 (4) (a) (i) and (ii), (4) (b) and (5) of the Convention.

5. Determination of the Outer Limits of the Continental Shelf

- 5.1 Trinidad and Tobago has delineated the outer limits of the continental shelf, as provided for in Article 76 of the Convention, by geodesic straight lines not exceeding 60 M in length used to connect the fixed points, defined by coordinates of latitude and longitude. This outer limit line has been optimised so that it contains fixed points which are the maximum seaward limit of the outer limit line. The outer limit line is comprised of points generated from the formulae lines, the distance and depth constraints (the 350 M and 2,500 m +100 M respectively). These points delineate a line which is within the combined constraint line. They are shown in Figure 2 and listed in Table 1.
- 5.2 Trinidad and Tobago has used the notation "TT" for the fixed points of the outer limit of its continental shelf. Fixed points TT-FP1 to TT-FP3 are determined by applying the 1% sediment thickness formula while TT-FP4 to TT-FP7 are located on the 350 M constraint line. TT-FP8 to TT-FP21 lie on the 2,500+100 nautical mile constraint line. TT-FP22 to TT-FP23 lie on the 1% sediment thickness formula line and the last segment, TTFP-24 to TT-FP30 are located on the FOS +60 Hedberg formula line.

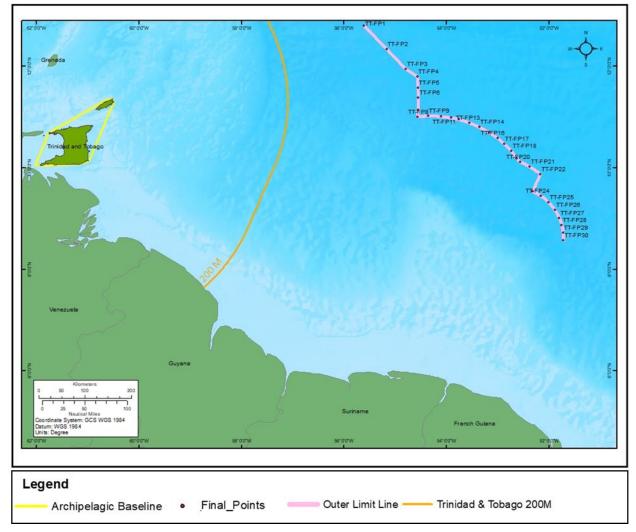


Figure 2 - Map showing the outer limit line delineating the outer limits of the continental shelf of Trinidad and Tobago. The points delineating the outer limits of the continental shelf are also shown.

Fixed points	Latitude	Longitude	Distance from adjacent fixed point (M)	Article 76 Provision
TT-FP1	12-47-31.30873N	55-36-37.97161W	0	76.4(a)(i); 1% sediment thickness
TT-FP2	12-20-14.20729N	55-10-20.48070W	37.4	76.4(a)(i); 1% sediment thickness
TT-FP3	11-56-23.94276N	54-47-36.01430W	32.5	76.4(a)(i); 1% sediment thickness
TT-FP4	11-47-33.66418N	54-34-24.86916W	15.6	76.5: 350 M
TT-FP5	11-34-41.70605N	54-33-40.57438W	12.8	76.5: 350 M
TT-FP6	11-22-38.63820N	54-33-25.11629W	11.9	76.5: 350 M
TT-FP7	11-07-56.26925N	54-33-40.19056W	14.6	76.5: 350 M
TT-FP8	11-00-10.76719N	54-34-03.14843W	7.7	76.5: 2500 +100 M
TT-FP9	11-01-17.71079N	54-21-53.75422W	12	76.5: 2500 +100 M
TT-FP10	11-00-37.71492N	54-06-31.83812W	15.1	76.5: 2500 +100 M
TT-FP11	10-59-03.76752N	53-54-47.49671W	11.6	76.5: 2500 +100 M
TT-FP12	10-57-10.25841N	53-45-51.99855W	8.97	76.5: 2500 +100 M
TT-FP13	10-53-09.11991N	53-33-36.41048W	12.7	76.5: 2500 +100 M
TT-FP14	10-48-06.45477N	53-21-52.33306W	12.5	76.5: 2500 +100 M
TT-FP15	10-41-44.67350N	53-10-31.49158W	12.8	76.5: 2500 +100 M
TT-FP16	10-34-59.37882N	53-00-26.39466W	11.9	76.5: 2500 +100 M
TT-FP17	10-28-28.03480N	52-52-42.29242W	10	76.5: 2500 +100 M
TT-FP18	10-19-43.05206N	52-44-23.50573W	11.9	76.5: 2500 +100 M
TT-FP19	10-11-08.94765N	52-37-56.00819W	10.6	76.5: 2500 +100 M
TT-FP20	10-07-02.36843N	52-34-00.63208W	5.6	76.5: 2500 +100 M
TT-FP21	10-01-13.05365N	52-22-42.17776W	12.5	76.5: 2500 +100 M
TT-FP22	9-52-19.67379N	52-10-06.68909W	15.2	76.4(a)(i); 1% sediment thickness
TT-FP23	9-32-13.20647N	52-19-28.11697W	22.04	76.4(a)(i); 1% sediment thickness
TT-FP24	9-26-40.52906N	52-09-30.21136W	11.28	76.4 (a)(ii): FOS+60 M
TT-FP25	9-19-08.44215N	52-00-32.19705W	11.6	76.4 (a)(ii): FOS+60 M
TT-FP26	9-10-05.69017N	51-53-15.01719W	11.5	76.4 (a)(ii): FOS+60 M
TT-FP27	9-00-44.13707N	51-48-13.27139W	10.56	76.4 (a)(ii): FOS+60 M
TT-FP28	8-52-10.83614N	51-45-18.15652W	8.99	76.4 (a)(ii): FOS+60 M
TT-FP29	8-43-17.26504N	51-43-42.23304W	8.99	76.4 (a)(ii): FOS+60 M
TT-FP30	8-33-55.05837N	51-43-28.70828W	9.33	76.4 (a)(ii): FOS+60 M

Table 1 - Table of fixed points and their limiting critera, defined by coordinates of longitude and latitude, delineating the outer limits of the continental shelf for Trinidad and Tobago.

6. Absence of Disputes

In accordance with paragraph 2(a) of Annex I to the Rules of Procedure of the Commission, Trinidad and Tobago wishes to inform the Commission that there is no dispute with its neighbouring states related to this Submission. Trinidad and Tobago is confident that its Submission can be treated without prejudice to issues related to the future delimitation of the continental shelf between neighbouring states in accordance with Article 76, paragraph 10 of the Convention. There is one no-objection Note Verbale submitted by Suriname to the Commission.

7. State Bodies Responsible for the Preparation of the Amended Submission

- 7.1 Trinidad and Tobago makes a full submission of the outer limit of its continental shelf according to the terms set out in the Rules of Procedure and relevant documents. The preparation of this Submission was as a result of years of national effort and included collaboration with neighboring States in the acquisition of data and information. The Submission was facilitated through the contributions of the following institutions in Trinidad and Tobago:
 - Ministry of Foreign and CARICOM Affairs (MFCA)
 - Ministry of Energy and Energy Industries
 - Office of the Attorney General and Ministry of Legal Affairs
 - Heritage Petroleum Company Ltd.
 - Survey and Mapping Division of the Ministry of Agriculture Land and Fisheries

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¹ CLCS/40/Rev.1 (April 2008)

The late Ambassador Gerald Thompson (MFCA), who contributed immensely to this Submission, is also acknowledged.

8. Other Organizations Involved in the Preparation of the Amended Submission

8.1 Trinidad and Tobago acknowledges the advice received from *GeoLIMITS*Consulting as well as the assistance provided by the UNEP Shelf Programme

(GRID-Arendal), in the preparation of the original Submission.

9. Commission Members who Provided Advice

9.1 This amended Submission was completed with the assistance of Dr. Wanda-Lee De Landro-Clarke, who has been a member of the Commission since 2017 and Mr. Francis Charles, a former member of the Commission from 2007 to 2017.

10. Glossary of Terms

60 M formula line	The line delineated by reference to fixed points determined at a distance of 60 nautical miles from the foot of the continental slope
60 M formula point	Fixed point determined at a distance of 60 nautical miles from the foot of the continental slope
200 M line	The line at a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured
2,500 m isobath	A line connecting the depth of 2,500 metres
Article 76	Article 76 of the Convention
Baselines	The line from which the outer limits of a State's territorial sea and certain other outer limits of coastal State jurisdiction are measured.
Commission	The Commission on the Limits of the Continental Shelf
Convention	The United Nations Convention on the Law of the Sea of 10 December 1982
Depth Constraint	The constraint line determined at a distance of 100 M from the 2,500 m isobath
Distance Constraint	The constraint line determined at a distance of 350 M from the baselines
DOALOS	Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations
FOS	Foot of the continental slope. It is the point where the continental slope meets the continental rise or, if there is no rise, the deep ocean floor. "In the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of maximum change of gradient at its base" (Art. 76.4(b))
Guidelines	The Scientific and Technical Guidelines of the Commission (CLCS/11 and CLCS/11/Add.1)
Isobath	A line representing the horizontal contour of the sea-bed at a given depth
М	Nautical mile. A unit of distance used primarily in navigation. Most of the maritime nations have accepted the international nautical mile of 1852 meters adopted by the International Hydrographic Organization.
Outer limit	In the case of the continental shelf, where the continental margin extends beyond 200 nautical miles from the baseline from which the territorial sea is measured, the extent of the outer limit is described in detail in Art.76.
Rules of Procedure	The Rules of Procedure of the Commission (CLCS/40/Rev.1)
Secretary-General	The Secretary-General of the United Nations
Sediment thickness formula line	The line delineated 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
Sediment thickness formula point	Fixed point at which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from that point to the foot of the continental slope

Glossary compiled from *A Manual on Technical Aspects of the United Nations Convention on the Law of the Sea* – 1982. *IOC, IHO, IAG* (available from https://www.gc.noaa.gov/documents/), AND CLCS Summary Recommendations (various).

End of the Executive Summary