United Nations Convention on the Law of the Sea



Commission on the Limits of the Continental Shelf

RECOMMENDATIONS OF THE COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF IN REGARD TO THE SUBMISSION MADE BY MEXICO IN RESPECT OF THE WESTERN POLYGON IN THE GULF OF MEXICO ON 13 DECEMBER 2007

Recommendations prepared by the Subcommission established for the consideration of the submission made by Mexico

Adopted by the Subcommission on 20 March 2009, and submitted to the Commission on the Limits of the Continental Shelf for consideration and approval by the Commission.

Adopted by the Commission on 31 March 2009

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I. INTRODUCTION

- On 13 December 2007, Mexico submitted through the Secretary-General of the United Nations to the Commission on the Limits of the Continental Shelf ("the Commission"), in accordance with Article 76, paragraph 8 of the United Nations Convention on the Law of the Sea of 10 December 1982 ("the Convention"), information on the limits of the continental shelf beyond 200 nautical miles (M) from the baselines from which the breadth of the territorial sea is measured. The Convention entered into force for Mexico on 16 November 1994.
- On 17 December 2007 the Secretary-General issued Continental Shelf Notification CLCS.09.2007.LOS in order to give due publicity to the Executive Summary of the Submission in accordance with rule 50 of the Rules of Procedure of the Commission on the Limits of the Continental Shelf (CLCS/40/Rev.1) ("the Rules of Procedure"). In conformity with rule 51 of the Rules of Procedure, the consideration of the Submission made by Mexico was included in the agenda of the twenty-first session of the Commission.
- 3 The presentation on the Submission of Mexico was made to the plenary of the twenty-first session of the Commission on 1 April 2008, by Joel Hernández García, Legal Counsel, Ministry of Foreign Affairs of Mexico; Mario Alberto Reyes Ibarra, Director-General of Geology, National Institute of Statistics, Geography and Technology; Mario Alberto Góngora Villareal, Director of Hydrography, Ministry of the Navy; and Rebeca Navarro Hernández, Expert Coordinator, Petróleos Mexicanos. The Delegation of Mexico also included several scientific, legal and technical advisers. Mr. Hernández indicated that the submission made by Mexico is a partial one. Mr. Hernández noted in particular that part II (main body) and part III (supporting scientific and technical data) of the submission are confidential. While part II could be considered by the members of the Commission away from Headquarters for the purpose of its examination, part III was strictly confidential under the terms of annex II to the Rules of Procedure and should not be made available beyond the designated GIS laboratories. In addition to elaborating on substantive points of the Submission, Mr. Hernández indicated that Mr. Carrera, member of the Commission, had assisted Mexico by providing advice with respect to the submission.
- The Commission addressed the modalities for the consideration of the Submission. It decided that, as provided for in article 5 of Annex II to the Convention and in rule 42 of the Rules of Procedure, the Submission of Mexico would be addressed through the establishment of a subcommission.
- The following members of the Commission were elected as members of the Subcommission for consideration of the Submission made by Mexico: Osvaldo Pedro Astiz, Peter F. Croker, Yuri Borisovitch Kazmin, Fernando Manuel Maia Pimentel, Sivaramakrishnan Rajan, Michael Anselme Marc Rosette and Kensaku Tamaki. The Subcommission elected Mr. Tamaki as its Chairman, and Mr. Astiz and Mr. Pimentel as its Vice-Chairmen.
- Following its establishment, the Subcommission met without delay to conduct a preliminary examination of the Submission and the data accompanying it. It was determined that given the volume and nature of the data contained in the Submission, the Subcommission would require additional time for the consideration of the Submission.

- The Subcommission met during the twenty-second session from 4 to 5 September 2008, commencing its consideration of the Submission. After examining the Submission and the accompanying data, the Subcommission transmitted a list of questions to the Delegation of Mexico on 5 September 2008. On 9 March 2009 the Delegation of Mexico provided the responses to those questions.
- The Subcommission continued its examination of the Submission during the twenty-third session, from 16 to 20 March 2009, including the examination of the responses provided by the Delegation of Mexico on 9 March 2009. The Subcommission then drafted its Recommendations and submitted them to the Commission during the twenty-third session.
- During the examination of the Submission, the Subcommission requested and received support from the Division for Ocean Affairs and the Law of the Sea ("DOALOS"), Office of Legal Affairs, in particular in the form of secretariat and technical support by DOALOS GIS staff.
- The Commission prepared these Recommendations taking into consideration the internal procedures and the methodology outlined in the following official documents of the Commission: the Rules of Procedure; the Scientific and Technical Guidelines (CLCS/11 and CLCS/11/Add.1 "the Guidelines").
- 11 The Commission makes these Recommendations to Mexico in fulfilment of its mandate as contained in article 76, paragraph 8, and articles 3 and 5 of Annex II to the Convention.
- 12 A Summary of the Recommendations is included as Annex V of this document in conformity with Annex III, V. 11(3) of the Rules of Procedure.
- The Commission makes its Recommendations recognizing that the outer limits of the continental shelf as established by a coastal State on the basis of its Recommendations shall be final and binding according to article 76, paragraph 8.

II. CONTENTS OF THE SUBMISSION

A. Original Submission

The original Submission received on 13 December 2007 contained: an Executive Summary; a Main Body which is the analytical and descriptive part; and Scientific and Technical Data. A list of the material included in the Submission is included as Annex II to these Recommendations.

B. Communications and additional material

In the course of the examination of the Submission by the Subcommission, the Delegation of Mexico submitted additional material, including in response to questions and requests for clarification. Lists of both the additional material submitted by Mexico and the communications of the Subcommission are included as Annexes III and IV respectively to these Recommendations.

III. EXAMINATION OF THE SUBMISSION BY THE SUBCOMMISSION

A. Examination of the format and completeness of the Submission

16 Pursuant to paragraph 3 of Annex III, section III of the Rules of Procedure, the Subcommission examined and verified the format and completeness of the Submission.

B. Preliminary analysis of the Submission

- Pursuant to paragraph 5 of Annex III, section III to the Rules of Procedure, the Subcommission undertook a preliminary analysis of the Submission, in accordance with article 76 and the Guidelines and concluded as follows:
- The outer edge of the continental margin as established by the 1 per cent sediment thickness formula lies beyond 200 M, and therefore the test of appurtenance was satisfied by Mexico;
- The proposed outer limits of Mexico's extended continental shelf beyond 200 M consist of 1 per cent sediment thickness formula ("Gardiner") points, and the applicable 350 M distance and 100 M from 2500 m isobath depth constraints;
- The construction of the outer limits contains no straight line segments exceeding 60 M in length; and
- 21 Additional time would be required to review all data and to prepare the recommendations during future sessions of the Commission.

C. Main scientific and technical examination of the submission

- 22 The Subcommission examined the Submission through the following processes:
 - (i) Detailed examination of the data and information supporting every foot of the continental slope ("FOS") and sediment thickness point, selected for the establishment of the outer edge of the continental margin and for the delineation of the proposed outer limits of the continental shelf following consideration of the applicable constraint; and
 - (ii) Seeking clarifications from the Delegation of Mexico.

IV. GENERAL PRINCIPLES ON WHICH THESE RECOMMENDATIONS ARE BASED

The Recommendations of the Commission are based on the scientific and technical data and other material provided by Mexico in relation to the implementation of article 76. The Recommendations of the Commission only deal with issues related to article 76 and Annex II to the Convention and are without prejudice to matters relating to delimitation between States, or application of other parts of the Convention or any other treaties.

V. RECOMMENDATIONS

The Submission of Mexico of 13 December 2007 is a partial submission, and relates to one region, the Western Polygon.

1. Geographical region description

The Western Polygon is located in the centre of the western part of the Gulf of Mexico Basin with water depths ranging from 3000 to 3700 m (Figure 1). Westward from the Western Polygon the basin is bounded by the Tamaulipas continental slope and south-east of the Western Polygon the basin is bounded by the Campeche Escarpment off the Yucatan Peninsula.

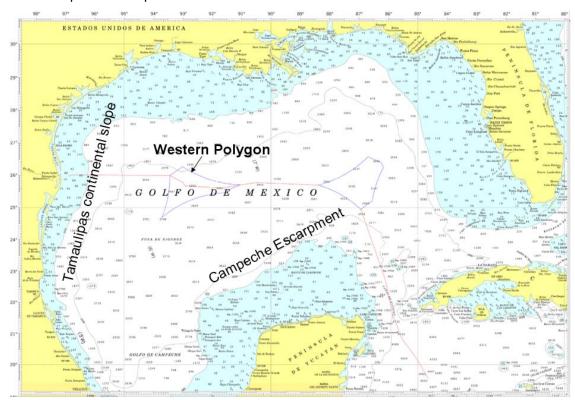


Figure 1. Geographic map and the location of the Western Polygon. Red lines show the agreed lines with other States (modified from Figure 1.2 of the Executive Summary).

2. Notes verbales submitted by other States

26 No notes verbales were submitted by other States.

3. Submerged prolongation of the landmass and entitlement to the continental shelf beyond 200 M

The outer edge of the continental margin, established from the foot of the continental slope of the Western Polygon by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Mexico. On this basis, the Commission recognises the legal entitlement of Mexico to establish continental shelf beyond its 200 M limits in this area.

4. The determination of the foot of the continental slope

The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

4.1 Considerations

- The locations of the base of the continental slope off the coast of Tamaulipas and the Campeche Escarpment are distinct and easily identified on a morphological basis.
- Mexico presented eight bathymetric profiles in the Campeche Escarpment (Figures 2, 3 and 4) and three bathymetric profiles off the Tamaulipas coast (Figures 5, 6 and 7). These profiles were used to establish six FOS points on the Campeche Escarpment (FOS 1 to FOS 6) and three FOS points off the Tamaulipas coast (FOS 7 to FOS 9).

Figure 2. Bathymetric profiles presented by Mexico on the Campeche Escarpment (after Figure 4.3 of the Main Body of the Submission).

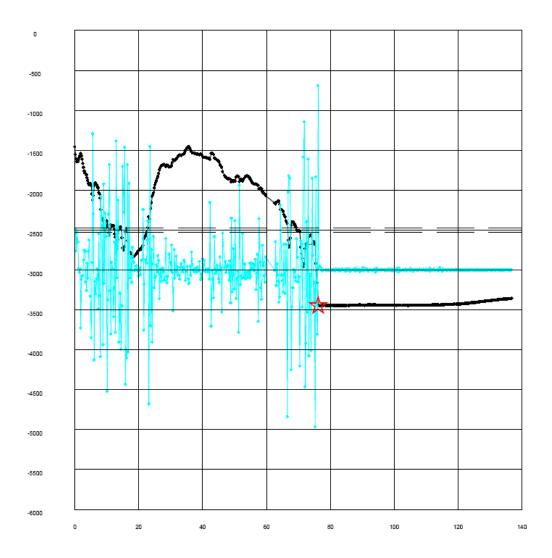


Figure 3. Computation of FOS 6 (Campeche Profile 3) (Profile constructed for the Subcommission from data provided by Mexico, blue line and dots indicate the second derivative, red star indicates the FOS point).

Figure 4. FOS presented by Mexico on the Campeche Escarpment (modified from Figure 4.10 of the Main Body of the Submission).

Figure not made public at the request of the coastal State, by virtue of paragraph 11.3 of annex III to the Rules of Procedure.

Figure 5. Bathymetric profiles presented by Mexico off the Coast of Tamaulipas (after Figure 4.1 of the Main Body of the Submission).

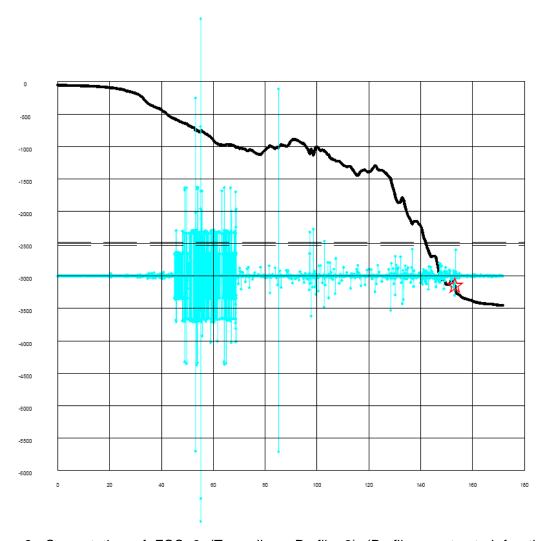


Figure 6. Computation of FOS 9 (Tamaulipas Profile 3) (Profile constructed for the Subcommission from data provided by Mexico, blue line and dots indicate the second derivative, red star indicates the FOS point).

Figure 7. FOS presented by Mexico off the Coast of Tamaulipas (modified from Figure 4.9 of the Main Body of the Submission).

- The above mentioned profiles and the base data from which they were derived were accepted by the Commission as valid for the determination of the foot of the continental slope in compliance with article 76 paragraph 4(b).
- Furthermore, the Commission agrees in general with the way the foot of the continental slope is established and so accepts all the nine FOS points submitted by Mexico.

4.2 Recommendations

33 Based on its consideration of the technical and scientific documentation contained in the submission as submitted by Mexico on 13 December 2007, the Commission concludes that the FOS points presented fulfil the criteria set out in article 76 and Chapter 5 of the Guidelines. The Commission recommends that these FOS points form the basis for the establishment of the outer edge of the continental margin of Mexico for the purposes of the Convention. Only FOS 6, in the Campeche Escarpment (Figures 2, 3 and 4), and FOS 9, off the coast of Tamaulipas (Figures 5, 6 and 7), are critical for the delineation of the outer limits of the continental shelf of Mexico.

5. The establishment of the outer edge of the continental margin

The outer edge of the continental margin of Mexico in the Western Polygon shall, for the purposes of the Convention, be established in accordance with article 76, paragraphs 4 and 7.

5.1 The application of the 60 M distance formula

35 Mexico presented the arcs constructed at 60 M distance from the FOS points in accordance with the provisions contained in article 76, paragraph 4(a)(ii) (Figure 8).

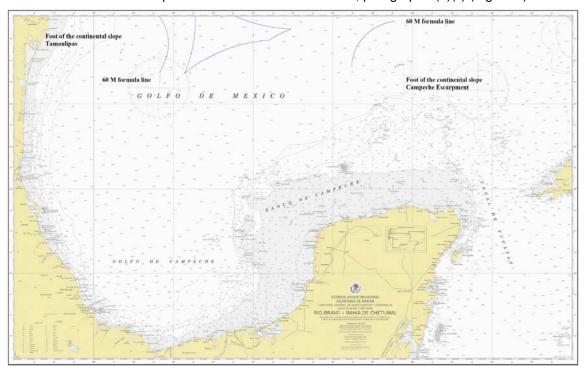


Figure 8. The formula lines at a distance of 60 M from the foot of the continental slope. FOS points 1 to 9 are shown as red points (after Figure 4.15 of the Main Body of the Submission).

The Commission agrees with the way these arcs have been established by Mexico, and recommends that they should be considered for establishing the outer edge of the continental margin and the outer limits of the continental shelf.

5.2 The application of the sediment thickness formula

In the Western Polygon region located in the western part of the Gulf of Mexico, Mexico has submitted 16 fixed points based on the sediment thickness provision of article 76, paragraph 4 (a)(i). These points which define the outer limit of the continental shelf of Mexico beyond 200 nautical miles also correspond to the points agreed upon between Mexico and the United States in the Continental Shelf Treaty of 9 June 2000. Mexico has established these sediment thickness points based on the seismic lines 9, 10, 11, 12, 15, 16, 17, 18 and 20, corresponding to PEMEX line Nos. VL_504, 506, 508, 514, 526, 530, 532, 534 and 538 (Figure 9). In addition, Mexico has provided data from the seismic surveys conducted in the areas outside the western polygon to demonstrate the continuity of the sedimentary apron from the base of the continental slope off Tamaulipas and the Campeche Escarpment to the outer limit of the continental shelf in the western polygon (Figure 10).

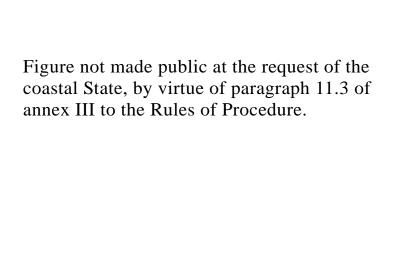


Figure 9. Seismic lines used for sediment thickness determinations (modified from Figure 3.15 of the Main Body of the Submission).

Figure not made public at the request of the coastal State, by virtue of paragraph 11.3 of annex III to the Rules of Procedure.

Figure 10. Seismic lines submitted to support the continuity of sediments across the continental margin (after Figure 3.2 of the Main Body of the Submission).

- During its examination, the Subcommission observed a discrepancy in the sediment thickness between Figure 4.18 and Table 4.4 in the Main Body and the isopach map seabed to basement shown in Part III Supporting Data. This was brought to the attention of Mexico in the communication of the Subcommission dated 5 September 2008 (SUBCOMM_MEX_LET_003_05_09_2008). In its response, dated 9 March 2009, Mexico concurred with the observations of the Subcommission and submitted a revised set of sediment thickness computations, maps and tables replacing the "Annex G.1 Sediment thickness computations" to the Main Body of the submission as well as the Figures 3.19 (a) to (c); Figures 3.21, 3.22, 4.17 (a) to (c), 4.18, 4.19, Tables 3.5 and 4.4. The Commission agrees with the procedure applied by Mexico to establish the sediment thickness points based on the revised data provided, including the seismic interpretation, the methods of depth conversion, and the distance calculations.
- Mexico has derived the sediment thickness values at the 16 turning points of the Mexico-USA Treaty line by means of interpolation. Given the very considerable sediment thickness (c. 9-10km) in this part of the Gulf of Mexico it is easy to demonstrate that the sediment thickness values are significantly greater than that required to establish Gardiner points (c. 2-5%, revised Table 4.4, page 73, Main Body). The input data, methodology, calculations and output values for the sediment thickness were all verified to the satisfaction of the Subcommission.
- The Subcommission also decided to take a different approach, however. This was aimed at establishing an envelope of Gardiner points from CDPs on seismic lines which would completely encompass the Treaty line turning points, thus avoiding the need for either extrapolation or interpolation. For this purpose, two additional seismic lines (Line 22 (VL_542) and TGS-Nopec line 783) were requested by the Subcommission and provided by Mexico in its communication dated 9 March 2009.
- The selected CDPs on the various seismic lines are as follows: Line 514 CDP_481, Line 526 CDP_321, Line 534 CDP_321, Line 542 CDP_988 and Line 783 CDP_EOL. These are also shown on the attached map (Figure 11), together with the 16 Treaty turning points (purple triangles), the sediment thickness (ST) values in metres and the sediment thickness percentages (in brackets) of the distance to the relevant foot of the continental slope. The sediment thickness values at the 5 outer envelope points are significantly greater (2-6%) than the 1 per cent required for Gardiner points, and even when, in the case of Line 783 CDP_EOL, a water column velocity of 1500 m/s is used instead of extrapolated sediment velocities the sediment thickness percentage is greater than 1 per cent (1.47%). The latter calculation was done since Mexico did not provide velocity data for this particular line.

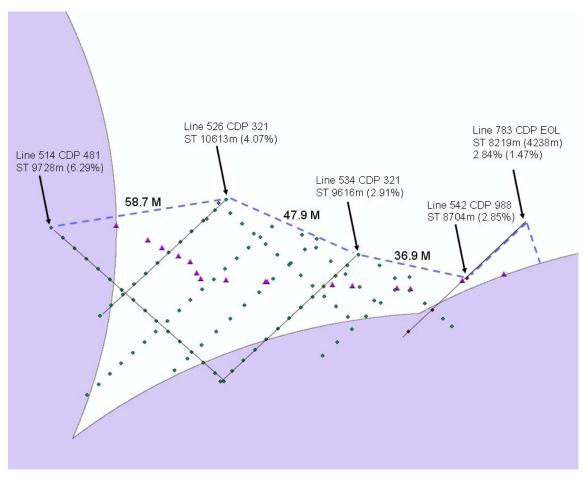


Figure 11. Map showing the CDPs as green and red diamonds, the turning points as purple triangles, and the sediment thickness (ST) values. For Line 783 CDP EOL the figures in brackets represent sediment thickness and sediment thickness percentage calculated using a velocity of 1500 m/s.

5.3 Configuration of the Outer Edge of the Continental Margin

42 On the basis of the above, the Subcommission reached the view that all 16 turning points of the Treaty line lie within the outer limits of the continental margin delineated on the basis of Article 76.4(a)(i) ("the sediment thickness provision").

5.4 Recommendations

In the Western Polygon, the outer edge of the continental margin beyond 200 M is based on sediment thickness points as described in sections 5.1 and 5.2, in accordance with article 76, paragraph 7. The Commission recommends that these points are used as the basis for delineating the outer limits of the continental shelf in this area.

6. The delineation of the outer limits of the continental shelf

The outer limits of the continental shelf should be based on the established outer edge of the continental margin, taking into consideration the constraints contained in article 76, paragraphs 5 and 6.

6.1 The application of constraint criteria

The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraph 5. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M from the territorial sea baselines ("the distance constraint") may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M from the 2500 m isobath ("the depth constraint") may be applied to those parts of the continental margin that are classified as natural components of that margin.

6.1.1 The construction of the distance constraint line

The distance constraint line submitted by Mexico is constructed by arcs at 350 M distance from the territorial sea baselines of Mexico (Figure 12). The Commission agrees with the procedure and methods applied by Mexico in the construction of this constraint line.

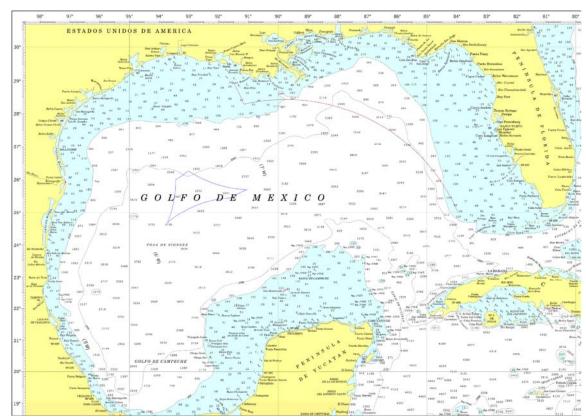


Figure 12. Constraint lines of 350 M in red (after Figure 4.21 of the Main Body of the Submission).

6.1.2 The construction of the depth constraint line

For Mexico, the 2500 m isobaths on which the depth constraint line is based are located along the Tamaulipas coast and the Campeche Bank (Figure 13). Since all these isobaths are landward of the foot of the continental slope, they can be considered to conform to the general configuration of the continental margin. Therefore, the application of these isobaths as a basis for the depth constraint is in accordance with paragraphs 4.4.1 and 4.4.2 of the Guidelines. The Commission recommends that the depth constraint line for the continental margin of Mexico is constructed as submitted by Mexico.

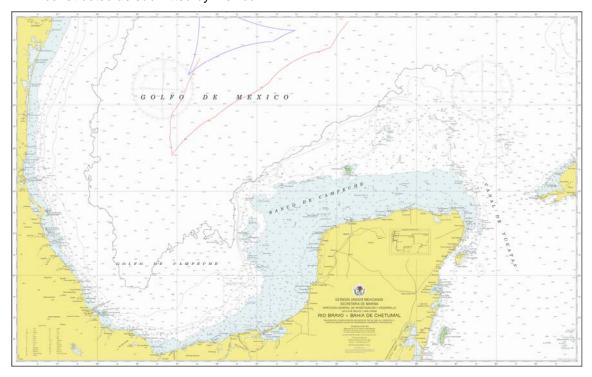


Figure 13. Constraint lines of 2500 m plus 100 M in red with 2500 m isobath in black (after Figure 4.20 of the Main Body of the Submission).

6.1.3 The application of the combination of the distance and the depth constraints

In the Western Polygon, Mexico has applied a constraint line based on the application of the distance constraints contained in article 76, paragraph 5 (see sections 6.1.1 and 6.1.2 above). The Commission agrees in general with the way this combined constraint line has been applied and notes that all 16 points defined by the Mexico - United States of America Treaty of 9 June 2000 lie landward of the final combined constraint line.

6.2 The outer limits of the continental shelf

The outer limits of the continental shelf in the Western Polygon as contained in the Submission of Mexico of 13 December 2007 consists of fixed points connected by straight lines not exceeding 60 M in length (Figure 14). The fixed points are listed in Annex I, as submitted on 13 December 2007. The fixed points are established by the provisions contained in article 76, paragraphs 4 and 10. These fixed points are

located on the Treaty line with the United States of America in accordance with the Continental Shelf Treaty of 9 June 2000.

Figure 14. Outer limits of the continental shelf of Mexico between Points 1 to 16 reflecting these Recommendations (refer to paragraph 50). The outer limit fixed points are shown as red points, the continental shelf outer limit line in black line, the 200 M lines of Mexico and neighbouring States in blue (after Figure 5.1 of the Main Body of the Submission).

6.3 Recommendations

The Commission agrees with the determination of the fixed points listed in Annex I, delineating the outer edge of the continental margin of Mexico in the Western Polygon. The establishment of the final outer limits of the continental shelf of Mexico in this region will depend on the connection of Point 1 and Point 16 to the 200 M line from the baseline points presented by Mexico. The Commission recommends that Mexico proceeds to establish the outer limits of the continental shelf in the Western Polygon accordingly.

ANNEX I LIST OF COORDINATES OF TURNING POINTS THAT DEFINE THE OUTER LIMIT OF THE CONTINENTAL SHELF BEYOND 200 M AS SUBMITTED BY MEXICO

Outer Limit of the	Latitude N	Longitude W	Distance
continental shelf	25° 59' 49.3"	93° 26' 42.5"	nautical miles
I	25 59 49.5	93 20 42.3	11.698999
2	25° 54' 27.4"	93° 15' 09.9"	11.090999
	25 54 21.4	93 13 09.9	5.294683
3	25° 51' 51.0"	93° 10' 03.0"	3.294003
3	23 31 31.0	93 10 03.0	6.285443
4	25° 48' 45.2"	93° 03′ 58.9″	0.203443
_	25 40 45.2	33 03 30.3	4.444310
5	25° 46' 33.9"	92° 59' 41.5"	4.444310
<u> </u>	20 40 00.0	32 33 41.3	4.501502
6	25° 42' 37.2"	92° 57' 16.0"	4.001002
	20 42 07.2	32 07 10.0	2.471743
7	25° 40' 27.3"	92° 55' 56.0"	2.171710
	20 10 2710	02 00 00.0	8.309650
8	25° 40' 03.2"	92° 46' 44.8"	0.00000
		02 10 1110	13.134355
9	25° 39' 23.8"	92° 32' 13.7"	
			0.502113
10	25° 39' 22.3"	92° 31' 40.4"	
			21.433914
11	25° 38' 13.4"	92° 07' 59.3"	
			6.695456
12	25° 37' 50.7"	92° 00' 35.5"	
			14.731418
13	25° 37' 01.2"	91° 44' 19.1"	
			4.371463
14	25° 36' 46.2"	91° 39' 29.4"	
			17.394012
15	25° 39' 43.1"	91° 20' 31.2"	
			13.870044
16	25° 42' 14.1"	91° 05' 25.0"	

ANNEX II

LIST OF THE MATERIAL CONTAINED IN THE ORIGINAL SUBMISSION OF MEXICO MADE TO THE COMMISSION ON 13 DECEMBER 2007

ANNEX III LIST OF ADDITIONAL MATERIAL SUBMITTED TO THE COMMISSION BY MEXICO

ANNEX IV

MATERIAL SUPPLIED TO THE DELEGATION OF MEXICO BY THE SUBCOMMISSION – QUESTIONS, AND LIST OF DOCUMENTS AND PRESENTATIONS

ANNEX V

United Nations Convention on the Law of the Sea



Commission on the Limits of the Continental Shelf

SUMMARY OF THE RECOMMENDATIONS OF THE COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF IN REGARD TO THE SUBMISSION MADE BY MEXICO IN RESPECT OF THE WESTERN POLYGON IN THE GULF OF MEXICO ON 13 DECEMBER 2007.

Recommendations prepared by the Subcommission established for the consideration of the submission made by Mexico

Adopted by the Subcommission on 20 March 2009, and submitted to the Commission on the Limits of the Continental Shelf for consideration and approval by the Commission.

Adopted by the Commission on 31 March 2009

^{*} The aim of this Summary is to provide information which is not of confidential or propriety nature in order to facilitate the function of the Secretary-General of the United Nations in accordance with CLCS/40/Rev.1, Annex III, Section V, Rule 11.3. This Summary is based on excerpts of the Recommendations.

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Table 1.	List of coordinates of turning points that define the outer limit of the continental shelf beyond 200 M as submitted by Mexico

I. INTRODUCTION

- On 13 December 2007, Mexico submitted through the Secretary-General of the United Nations to the Commission on the Limits of the Continental Shelf ("the Commission"), in accordance with Article 76, paragraph 8 of the United Nations Convention on the Law of the Sea of 10 December 1982 ("the Convention"), information on the limits of the continental shelf beyond 200 nautical miles (M) from the baselines from which the breadth of the territorial sea is measured. The Convention entered into force for Mexico on 16 November 1994.
- The presentation on the Submission of Mexico was made to the plenary of the twenty-first session of the Commission on 1 April 2008. The Commission addressed the modalities for the consideration of the Submission. It decided that, as provided for in article 5 of Annex II to the Convention and in rule 42 of the Rules of Procedure of the Commission on the Limits of the Continental Shelf (CLCS/40/Rev.1) ("the Rules of Procedure"), the Submission of Mexico would be addressed through the establishment of a subcommission. The Subcommission was formed during the twenty-first session consisting of seven members of the Commission. The Subcommission met during the twenty-first, twenty-second and twenty-third sessions and examined the Submission and the accompanying data.

II. CONTENTS OF THE SUBMISSION

A. Original Submission

The original Submission received on 13 December 2007 contained: an Executive Summary; a Main Body which is the analytical and descriptive part; and Scientific and Technical Data.

B. Communications and additional material

In the course of the examination of the Submission by the Subcommission, the Delegation of Mexico submitted additional material, including in response to questions and requests for clarification.

III. GENERAL PRINCIPLES ON WHICH THESE RECOMMENDATIONS ARE BASED

The Recommendations of the Commission are based on the scientific and technical data and other material provided by Mexico in relation to the implementation of article 76. The Recommendations of the Commission only deal with issues related to article 76 and Annex II to the Convention and are without prejudice to matters relating to delimitation between States, or application of other parts of the Convention or any other treaties.

IV. RECOMMENDATIONS

The Submission of Mexico of 13 December 2007, is a partial submission, and relates to one region, the Western Polygon.

1. Geographical region description

7 The Western Polygon is located in the centre of the western part of the Gulf of Mexico Basin with water depths ranging from 3000 to 3700 m (Figure 1). Westward from the Western Polygon the basin is bounded by the Tamaulipas continental slope and south-east of the Western Polygon the basin is bounded by the Campeche Escarpment off the Yucatan Peninsula.

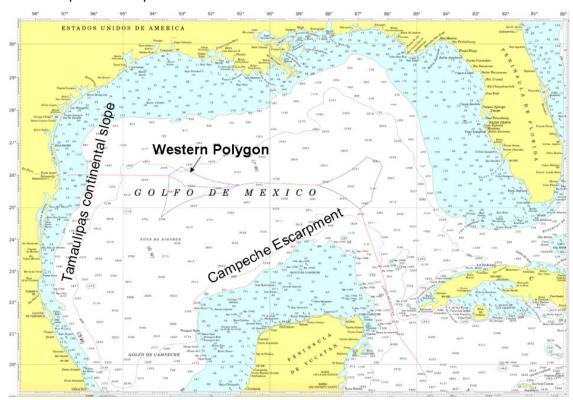


Figure 1. Geographic map and the location of the Western Polygon. Red lines show the agreed lines with other States (modified from Figure 1.2 of the Executive Summary).

2. Notes verbales submitted by other States

8 No notes verbales were submitted by other States.

3. Submerged prolongation of the landmass and entitlement to the continental shelf beyond 200 M

The outer edge of the continental margin, established from the foot of the continental slope of the Western Polygon by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Mexico. On this basis, the Commission recognises the legal entitlement of Mexico to establish continental shelf beyond its 200 M limits in this area.

4. The determination of the foot of the continental slope

The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

4.1 Considerations

- The locations of the base of the continental slope off the coast of Tamaulipas and the Campeche Escarpment are distinct and easily identified on a morphological basis.
- Mexico presented eight bathymetric profiles in the Campeche Escarpment (Figure 2) and three bathymetric profiles off the Tamaulipas coast (Figure 3). These profiles were used to establish six FOS points on the Campeche Escarpment (FOS 1 to FOS 6) and three FOS points off the Tamaulipas coast (FOS 7 to FOS 9).

Figure not made public at the request of the coastal State, by virtue of paragraph 11.3 of annex III to the Rules of Procedure.

Figure 2. FOS presented by Mexico on the Campeche Escarpment (modified from Figure 4.10 of the Main Body of the Submission).

Figure 3. FOS presented by Mexico off the Coast of Tamaulipas (modified from Figure 4.9 of the Main Body of the Submission).

- The above mentioned profiles and the base data from which they were derived were accepted by the Commission as valid for the determination of the foot of the continental slope in compliance with article 76 paragraph 4(b).
- 14 Furthermore, the Commission agrees in general with the way the foot of the continental slope is established and so accepts all the nine FOS points submitted by Mexico.

4.2 Recommendations

15 Based on its consideration of the technical and scientific documentation contained in the submission as submitted by Mexico on 13 December 2007, the Commission concludes that the FOS points presented fulfil the criteria set out in article 76 and Chapter 5 of the Guidelines. The Commission recommends that these FOS points form the basis for the establishment of the outer edge of the continental margin of Mexico for the purposes of the Convention. Only FOS 6, in the Campeche Escarpment (Figure 2), and FOS 9, off the coast of Tamaulipas (Figure 3), are critical for the delineation of the outer limits of the continental shelf of Mexico.

5. The establishment of the outer edge of the continental margin

The outer edge of the continental margin of Mexico in the Western Polygon shall, for the purposes of the Convention, be established in accordance with article 76, paragraphs 4 and 7.

5.1 The application of the 60 M distance formula

Mexico presented the arcs constructed at 60 M distance from the FOS points in accordance with the provisions contained in article 76, paragraph 4(a)(ii) (Figure 4).

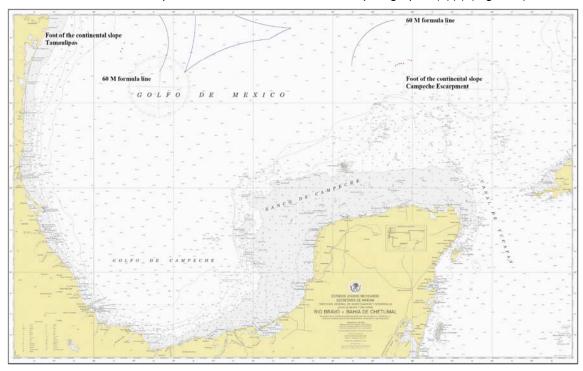


Figure 4. The formula lines at a distance of 60 M from the foot of the continental slope. FOS points 1 to 9 are shown as red points (after Figure 4.15 of the Main Body of the Submission).

18 The Commission agrees with the way these arcs have been established by Mexico, and recommends that they should be considered for establishing the outer edge of the continental margin and the outer limits of the continental shelf.

5.2 The application of the sediment thickness formula

Mexico has derived the sediment thickness values at the 16 turning points of the Mexico-USA Treaty line. Given the very considerable sediment thickness (c. 9-10 km) in this part of the Gulf of Mexico it is easy to demonstrate that the sediment thickness values are significantly greater than that required to establish Gardiner points (c. 2-5%, revised Table 4.4, page 73, Main Body). The input data (Figure 5), methodology, calculations and output values for the sediment thickness were all verified to the satisfaction of the Subcommission.

Figure 5. Seismic lines submitted to support the continuity of sediments across the continental margin (after Figure 3.2 of the Main Body of the Submission).

5.3 Configuration of the Outer Edge of the Continental Margin

On the basis of the above, the Subcommission reached the view that all 16 turning points of the Treaty line lie within the outer limits of the continental margin delineated on the basis of Article 76.4(a)(i) ("the sediment thickness provision").

5.4 Recommendations

In the Western Polygon, the outer edge of the continental margin beyond 200 M is based on sediment thickness points as described in sections 5.1 and 5.2, in accordance with article 76, paragraph 7. The Commission recommends that these points are used as the basis for delineating the outer limits of the continental shelf in this area.

6. The delineation of the outer limits of the continental shelf

The outer limits of the continental shelf should be based on the established outer edge of the continental margin, taking into consideration the constraints contained in article 76, paragraphs 5 and 6.

6.1 The application of constraint criteria

The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraph 5. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M from the territorial sea baselines ("the distance constraint") may be applied in all cases.

Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M from the 2500 m isobath ("the depth constraint") may be applied to those parts of the continental margin that are classified as natural components of that margin.

6.1.1 The construction of the distance constraint line

24 The distance constraint line submitted by Mexico is constructed by arcs at 350 M distance from the territorial sea baselines of Mexico (Figure 6). The Commission agrees with the procedure and methods applied by Mexico in the construction of this constraint line.

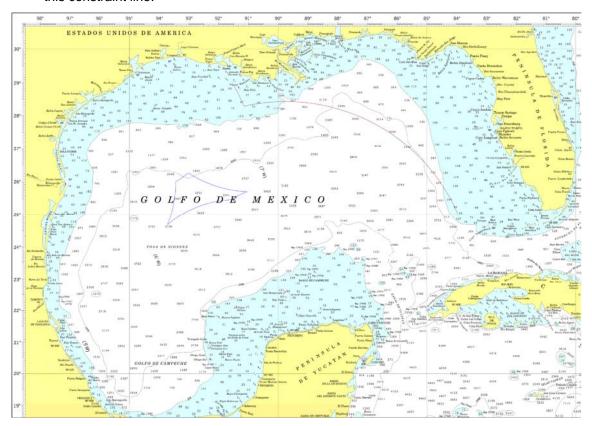


Figure 6. Constraint lines of 350 M in red (after Figure 4.21 of the Main Body of the Submission).

6.1.2 The construction of the depth constraint line

For Mexico, the 2500 m isobaths on which the depth constraint line is based are located along the Tamaulipas coast and the Campeche Bank (Figure 7). Since all these isobaths are landward of the foot of the continental slope, they can be considered to conform to the general configuration of the continental margin. Therefore, the application of these isobaths as a basis for the depth constraint is in accordance with paragraphs 4.4.1 and 4.4.2 of the Guidelines. The Commission recommends that the depth constraint line for the continental margin of Mexico is constructed as submitted by Mexico.

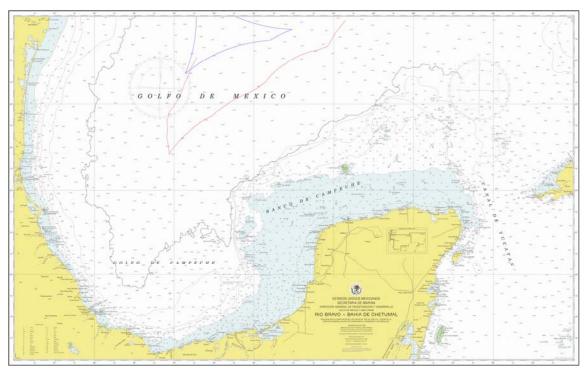


Figure 7. Constraint lines of 2500 m plus 100 M in red with 2500 m isobath in black (after Figure 4.20 of the Main Body of the Submission).

6.1.3 The application of the combination of the distance and the depth constraints

In the Western Polygon, Mexico has applied a constraint line based on the application of the distance constraints contained in article 76, paragraph 5 (see sections 6.1.1 and 6.1.2 above). The Commission agrees in general with the way this combined constraint line has been applied and notes that all 16 points defined by the Mexico - United States of America Treaty of 9 June 2000 lie landward of the final combined constraint line.

6.2 The outer limits of the continental shelf

27 The outer limits of the continental shelf in the Western Polygon as contained in the Submission of Mexico of 13 December 2007 consists of fixed points connected by straight lines not exceeding 60 M in length (Figure 8). The fixed points are listed in Table 1, as submitted on 13 December 2007. The fixed points are established by the provisions contained in article 76, paragraphs 4 and 10. These fixed points are located on the Treaty line with the United States of America in accordance with the Continental Shelf Treaty of 9 June 2000.

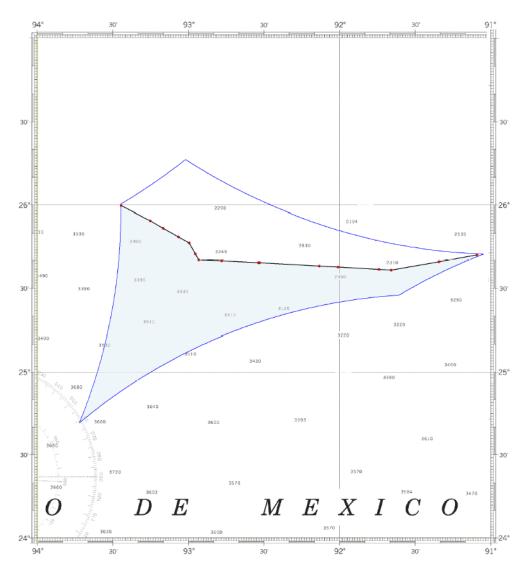


Figure 8. Outer limits of the continental shelf of Mexico between Points 1 to 16 reflecting these Recommendations (refer to paragraph 28). The outer limit fixed points are shown as red points, the continental shelf outer limit line in black, the 200 M lines of Mexico and neighbouring States in blue (after Figure 5.1 of the Main Body of the Submission).

6.3 Recommendations

The Commission agrees with the determination of the fixed points listed in Table 1, delineating the outer edge of the continental margin of Mexico in the Western Polygon. The establishment of the final outer limits of the continental shelf of Mexico in this region will depend on the connection of Point 1 and Point 16 to the 200 M line from the baseline points presented by Mexico. The Commission recommends that Mexico proceeds to establish the outer limits of the continental shelf in the Western Polygon accordingly.

Outer Limit of the continental shelf	Latitude N	Longitude W	Distance nautical miles
1	25° 59' 49.3"	93° 26' 42.5"	
			11.698999
2	25° 54' 27.4"	93° 15' 09.9"	
			5.294683
3	25° 51' 51.0"	93° 10' 03.0"	
			6.285443
4	25° 48' 45.2"	93° 03' 58.9"	
			4.444310
5	25° 46' 33.9"	92° 59' 41.5"	
			4.501502
6	25° 42' 37.2"	92° 57' 16.0"	
			2.471743
7	25° 40' 27.3"	92° 55' 56.0"	
			8.309650
8	25° 40' 03.2"	92° 46′ 44.8″	
			13.134355
9	25° 39' 23.8"	92° 32' 13.7"	
			0.502113
10	25° 39' 22.3"	92° 31' 40.4"	
			21.433914
11	25° 38' 13.4"	92° 07' 59.3"	
			6.695456
12	25° 37' 50.7"	92° 00' 35.5"	
		<u> </u>	14.731418
13	25° 37' 01.2"	91° 44' 19.1"	
		<u> </u>	4.371463
14	25° 36' 46.2"	91° 39' 29.4"	1
			17.394012
15	25° 39' 43.1"	91° 20' 31.2"	12.222.11
			13.870044
16	25° 42' 14.1"	91° 05' 25.0"	

 $\textbf{Table 1.} \ \, \textbf{List of coordinates of turning points that define the outer limit of the continental shelf beyond 200 M as submitted by Mexico}$