

# **EXECUTIVE SUMMARY**

**A PARTIAL SUBMISSION OF DATA AND INFORMATION  
ON THE OUTER LIMITS OF THE CONTINENTAL SHELF  
OF THE UNITED MEXICAN STATES 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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## 1. INTRODUCTION AND OBJECTIVES

The continental shelf under national jurisdiction is defined under paragraph 1 of article 76 of the United Nations Convention on the Law of the Sea (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 of the same article:

*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 United Mexican States (Mexico) has identified two polygons located in the western and eastern parts of the Gulf of Mexico 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 Western Polygon is delineated by the outer limits of the exclusive economic zones of Mexico and the United States of America (United States) at a distance of 200 nautical miles. The Eastern Polygon is delineated by the outer limits of the exclusive economic zones of Mexico, the United States and the Republic of Cuba (Cuba) also at a distance of 200 nautical miles. Figure 1.1 shows the geographical locations and configurations of these two polygons.

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 also recognises, in paragraph 4 of article 83, that in a maritime region where there is an agreement in force, the delimitation of the continental shelf shall be determined in accordance with the provisions of that agreement:

*Where there is an agreement in force between the States concerned, questions relating to the delimitation of the continental shelf shall be determined in accordance with the provisions of that agreement.*

The overlapping maritime spaces under national jurisdiction leading up to a distance of 200 nautical miles and the overlapping continental shelves located beyond 200 nautical miles in the Western Polygon have been delimited by means of two separate international maritime boundary agreements between Mexico and the United States dated 4 May 1978 and 9 June 2000. Annexes A.1 and A.2 contain copies of the Agreements in force deposited with the Secretary-General of the United Nations.

In accordance with all the above provisions, and in particular paragraph 4 of article 83, it is clear that neither Mexico nor the United States can extend their continental shelves in the Western Polygon beyond the international boundary prescribed in the Continental Shelf Treaty of 9 June 2000.

The international maritime boundary between Mexico and the United States has been established by means of a Treaty signed 4 May 1978. In turn, the international maritime boundary between Mexico and Cuba has been established by means of an exchange of notes constituting an agreement dated 26 July 1976. Annexes A.1 and A.3 contain copies of the Agreements in force deposited with the Secretary-General of the United Nations. However, any potential continental shelf spaces whose outer limits might overlap beyond 200 nautical miles in the Eastern Polygon have not been subject to any delimitation agreements among the coastal States to date. Figure 1.2 shows the international maritime boundaries established in the Agreements between Mexico and Cuba in 1976, and Mexico and the United States in 1978 and 2000.

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.*

This is appropriate under certain circumstances because the basis for entitlement to the continental shelf by States cannot be other than pertinent to its delimitation. Mexico takes note of paragraph 3 of Annex I of the Rules of Procedure of the CLCS:

*A submission may be made by a coastal State for a portion of its continental shelf in order not to prejudice questions relating to the delimitation of boundaries between States in any other portion or portions of the continental shelf for which a submission may be made later, notwithstanding the provisions regarding the ten-year period established by article 4 of Annex II to the Convention.*

In this sense, this initial submission of the Government of Mexico will concern only the Western Part of the Gulf of Mexico, and it will be done in accordance with the bilateral maritime boundary established by the Treaty between the United States and Mexico on the Delimitation of the Continental Shelf beyond the 200 nautical miles of 9 June 2000.



In light of the above provisions contained in the Convention and Annex I to the Rules of Procedure of the Commission, Mexico makes this partial 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) in order not to prejudice questions relating to the delimitation of international boundaries among States in any other portion or portions of its continental shelf in the Gulf of Mexico for which a submission may be made later in accordance with paragraph 3 of Annex I of the Rules of Procedure of the CLCS.

Accordingly, Mexico reserves the right to make a second partial separate submission of information and data to support the outer limits of the continental shelf beyond 200 nautical miles from which the breadth of the territorial sea is measured in the Eastern Polygon located in the Gulf of Mexico at a later date, notwithstanding the provisions regarding the ten-year period established by article 4 of Annex II to the Convention.

This partial submission contains data and information used in support of the determination of the outer limits of the continental shelf beyond 200 nautical miles of Mexico in the Western Polygon 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 IN THE WESTERN POLYGON

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 limit of the continental shelf beyond 200 nautical miles in the Western Polygon is determined under the above provisions by the application of a single formula provided by the percentage of sediment thickness to the shortest distance to the foot of the continental slope, and a single constraint provided by the 350 nautical miles line. The formula line defined by the foot

of the slope plus 60 nautical miles and the constraint line defined by the 2,500 metres isobath plus 100 nautical miles are not satisfied in the Western Polygon and they were not applied to determine the outer limit of the continental shelf.

## **2.1 THE SEDIMENT THICKNESS FORMULA**

Geophysical 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 Mexico to the outer edge of the continental margin (Article 76, Paragraph 1). Geophysical surveys were conducted to demonstrate the legal entitlement of Mexico to extend the outer limits of the continental shelf beyond 200 nautical miles and to determine the coordinates of these limits.

Geophysical data were collected and compiled to determine sediment thickness in the Western Polygon located 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 points define the outer limit of the continental shelf of Mexico beyond 200 nautical miles.

## **2.2 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 collected 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 in the Western Polygon. This constraint is satisfied by the points which define the outer limit of the continental shelf of Mexico beyond 200 nautical miles.

### **3. NAMES OF MEMBERS OF THE CLCS WHO PROVIDED ADVICE**

Mexico received advice from Mr. Galo Carrera-Hurtado in his official capacity as a member of the Commission on the Limits of the Continental Shelf.

### **4. ABSENCE OF DISPUTES**

The Western Polygon in the Gulf of Mexico is a region delimited by an international Continental Shelf Boundary Treaty in force between Mexico and the United States. There are not boundary disputes or controversies in any portion of the outer limits of the continental shelf beyond 200 nautical miles submitted to the Commission.

### **5. MEXICAN INSTITUTIONS RESPONSIBLE FOR THE PREPARATION OF THIS PARTIAL SUBMISSION**

The Mexican institutions responsible for the preparation of this submission to the Commission on the Limits of the Continental Shelf are, in alphabetical order:

- Ministry of Energy (SENER)
- Ministry of Foreign Affairs (SRE)

- Ministry of the Navy (SEMAR)
- National Institute of Statistics, Geography and Informatics (INEGI)
- Petróleos Mexicanos (PEMEX)

## **6. THE OUTER LIMIT OF THE CONTINENTAL SHELF**

Figure 1.3 shows the outer limit of the continental shelf beyond 200 nautical miles in the Western Polygon. Table 1 lists the coordinates of the turning points of the outer limit and the distances of the straight lines joining them. These are the same coordinates agreed by Mexico and the United States in the Continental Shelf Treaty of 9 June 2000 (Annex A.2).

<b>Outer Limit of the continental shelf</b>	<b>Latitude N</b>	<b>Longitude W</b>	<b>Distance nautical miles</b>
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"	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"	

Table 1. List of coordinates of the turning points that define the outer limit of the continental shelf beyond 200 nautical miles at distances not exceeding 60 nautical miles.

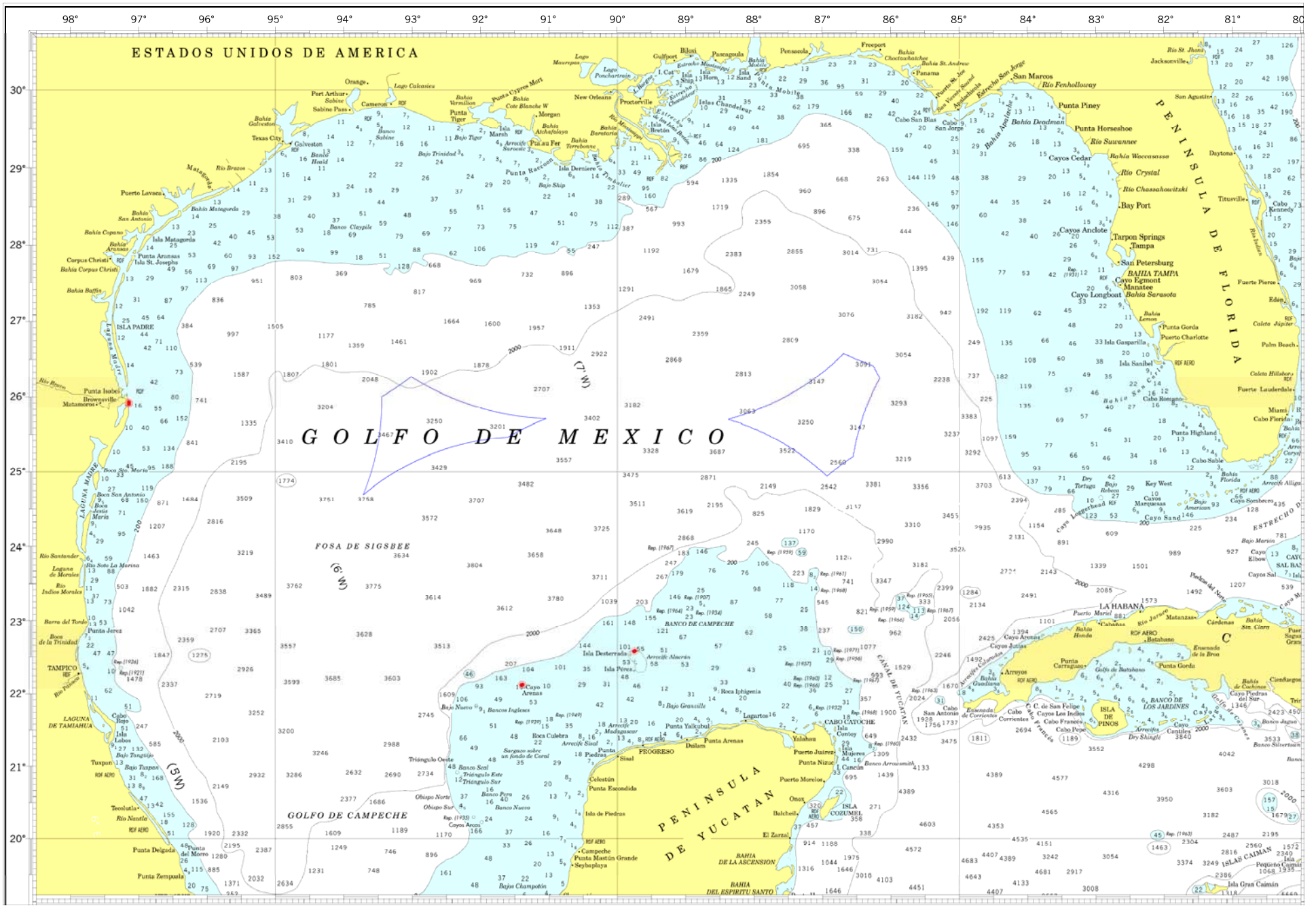


Figure 1.1 The Western and Eastern Polygons beyond 200 nautical miles from which the breadth of the territorial sea is measured located in the Gulf of Mexico.



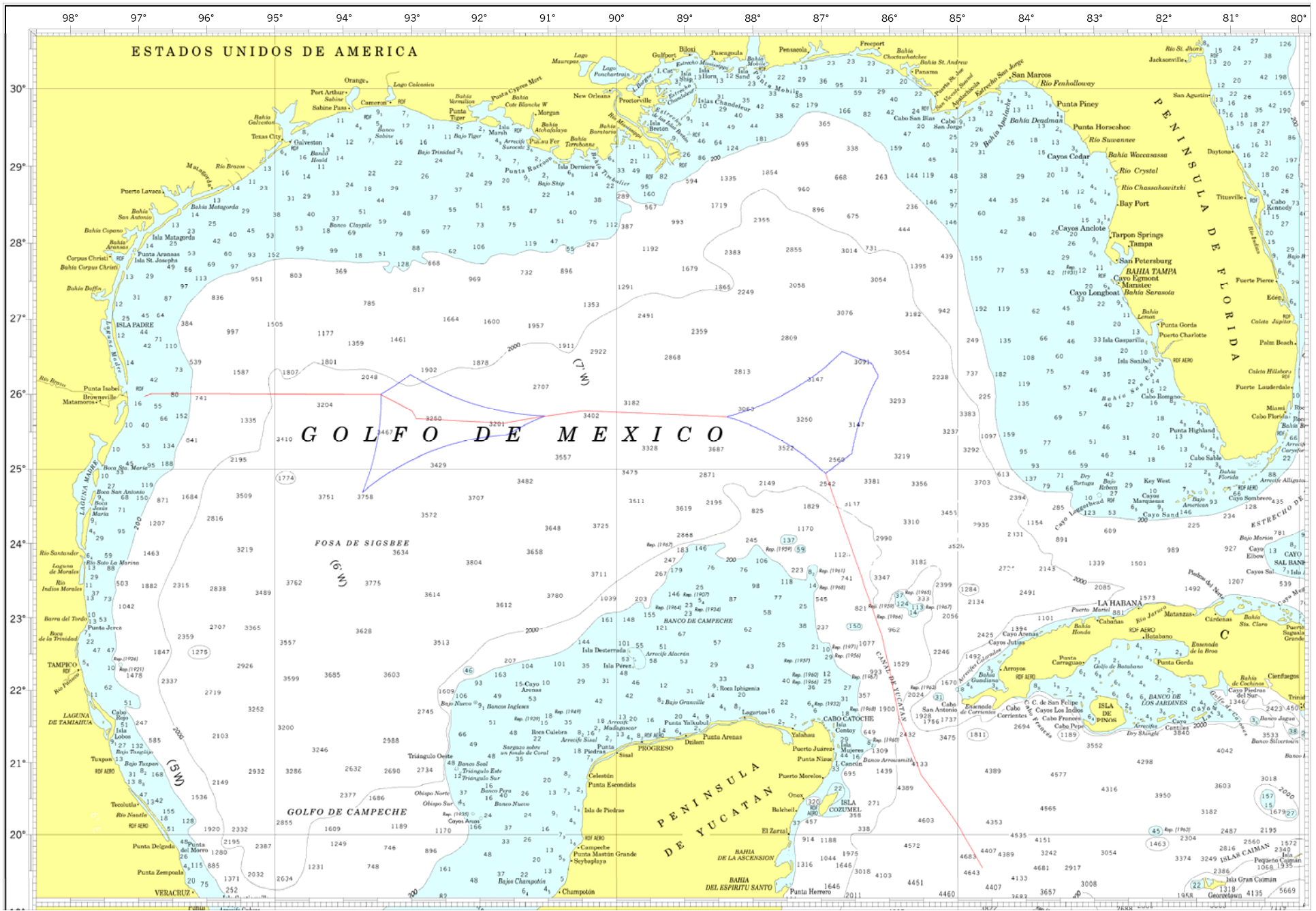


Figure 1.2 International maritime boundary agreements in force between Mexico and other States in the Gulf of Mexico.

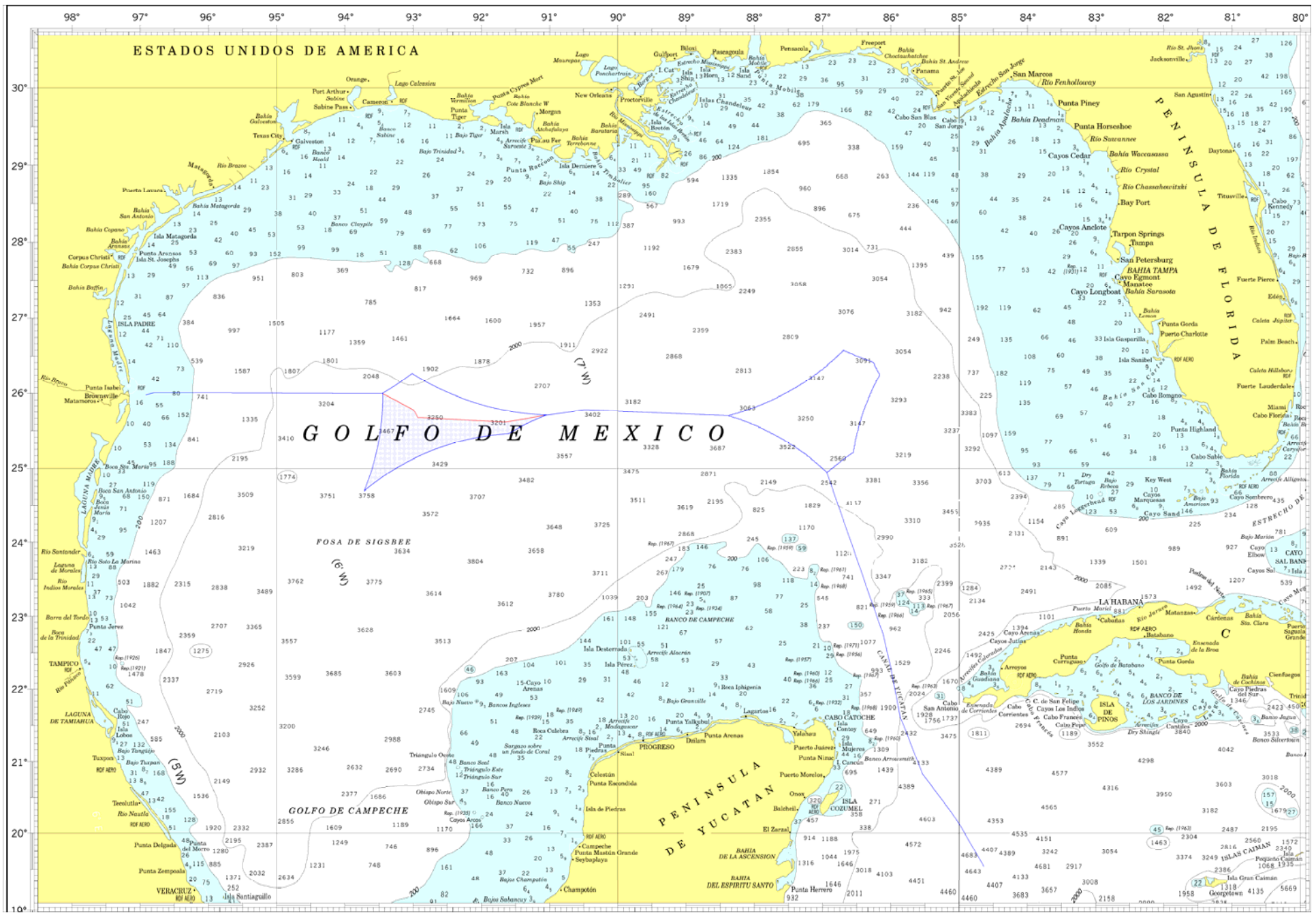


Figure 1.3 The outer limit of the continental shelf beyond 200 nautical miles submitted by Mexico in the Western Polygon.