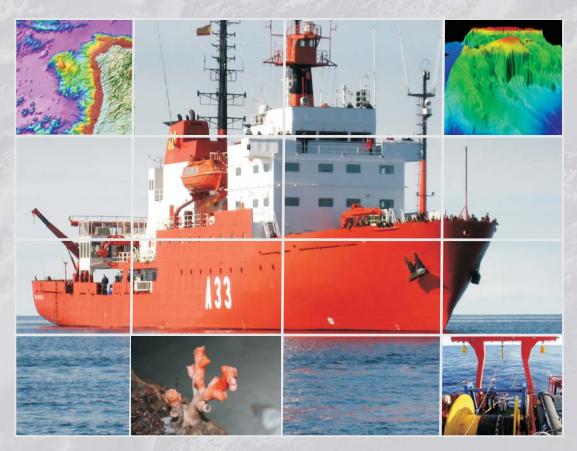


# **Continental Shelf of Spain**

Partial Submission on the limits of the Spanish Continental Shelf pursuant to Article 76 and Annex II of the United Nations Convention on the Law of the Sea in respect of the area of Galicia



Submission to the Commision on the Limits of the Continental Shelf

Part 1 Executive Summary English translation from original Spanish



# **Continental Shelf of Spain**

# Partial Submission on the limits of the Spanish Continental Shelf pursuant to Article 76 and Annex II of the United Nations Convention on the Law of the Sea in respect of the area of Galicia

| Bathymetric<br>map of<br>the Galicia<br>Bank                           |  |  | 3D view<br>on Fledermaus<br>of the<br>Galicia Bank                                       |  |  |
|--|--|--|--|--|--|
| Spanish Oceanographic vessel "Hespérides" (Breogham and ESPOR cruises) |  |  |  |  |  |
| `  |  |  |  |  |  |
|  | "Lophelia<br>pertusa"<br>coral living in<br>the Galicia Bank |  | Multichannel seismic<br>reflection works<br>during the<br>Breogham cruise<br>in the 2005 |  |  |

Submission to the Commision on the Limits of the Continental Shelf

Part 1 Executive Summary

**English translation from original Spanish** 



### **The Continental Shelf of Spain**

Partial Submission on the limits of the Spanish Continental Shelf pursuant to Article 76 and Annex II of the United Nations Convention on the Law of the Sea in respect of the area of Galicia

#### **Part 1 Executive Summary**

**English translation from original Spanish** 

Submission to the Commission on the Limits of the Continental Shelf

2009

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#### 1. Introduction

- **1.1.** This Submission by the Kingdom of Spain (hereinafter "Spain") to the Commission on the Limits of the Continental Shelf (hereinafter "the Commission") was made pursuant to Article 76 and Annex II of the 1982 United Nations Convention on the Law of the Sea (hereinafter "the Convention"), with a view to defining the outer limits of the continental shelf in the Galicia area beyond 200 nautical miles. This Submission is, therefore, of a partial nature, in accordance with Annex I, paragraph 3 of the Commission's Rules of Procedure (CLCS/40/Rev.1).
- **1.2.** Moreover, Spain has made a partial joint Submission together with France, Ireland and the United Kingdom of Great Britain and Northern Ireland (FISU) regarding the area of the Bay of Biscay and the Celtic Sea, submitted to the Commission on 19 May 2006, and formally presented to the Plenary at the eighteenth session of the Commission (CLCS/52). The final Recommendations of this partial Submission by Spain were approved by the Commission on 24 March 2009 (CLCS/62).
- **1.3.** In accordance with the procedures described in Article 76, paragraph 8 and in Annex II, Article 4 of the Convention, and in the Commission's Rules of Procedure (CLCS/40/Rev. 1), Spain is making this Submission of scientific and technical data to support the definition of an outer limit of the continental shelf in the Galicia area beyond 200 nautical miles.

## 2. Outer limits of the continental shelf in the Galicia area beyond 200 nautical miles

**2.1.** This partial Submission deals only with the outer limits of the continental shelf in the Galicia area (Fig. 1). For the purpose of this Submission, the area is bounded to the north by a Fixed Point, defined in the joint partial Submission made by Spain, Ireland and the United Kingdom of Great Britain and Northern Ireland (FISU), in the Bay of Biscay and the Celtic Sea, and to the south by a Fixed Point situated on the southern edge of the Area of Common Interest (hereinafter ACI, Fig. 1) for Spain and

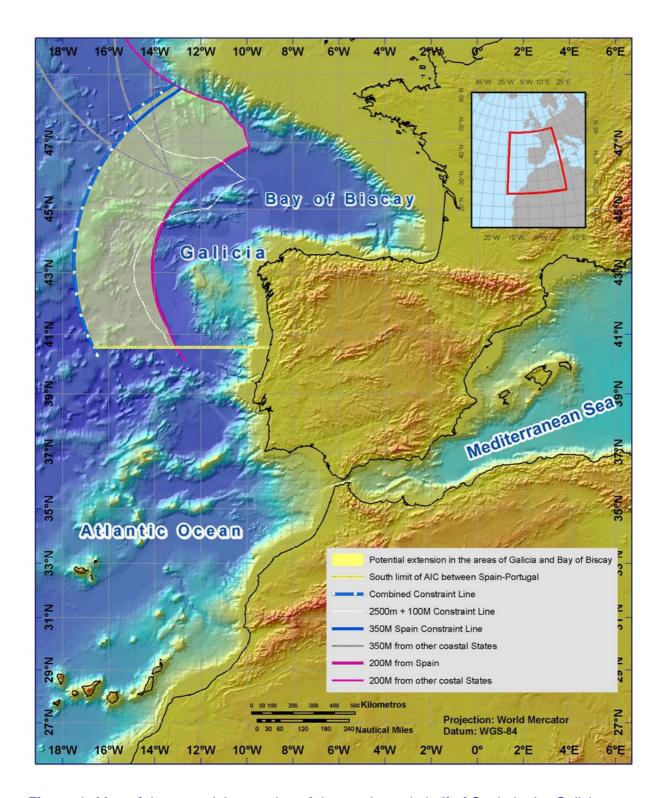
Portugal, defined by common agreement between both coastal States, the limits of which are described in Part 5.

**2.2.** Spain believes that the scientific and technical information provided in this partial Submission will prove to the Commission that both the lines delineated at a distance of 60 nautical miles from the foot of the continental slope, and the lines delineated at a distance where the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope, extend more than 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.

**2.3.** In accordance with the Commission's Scientific and Technical Guidelines, this Submission shows that the natural prolongation of its submerged land mass in the Galicia area extends beyond the 200 nautical miles established in accordance with the distance criterion, and thus the test of appurtenance is fulfilled. Therefore, Spain believes that it has the right to define the outer limit of its continental shelf in the area of the margin of Galicia by applying the rules detailed in Article 76, paragraphs 4 through 10, of the Convention.

# 3. Specific provisions of Article 76 upon which this Submission is based

**3.1.** The outer limits considered in this partial Submission are based on the provisions of Article 76, paragraphs 4, 5 and 7, of the United Nations Convention on the Law of the Sea.



**Figure 1:** Map of the potential extension of the continental shelf of Spain in the Galicia area and the Bay of Biscay.

## 4. Names of Commission members who gave advice in the preparation of the Submission

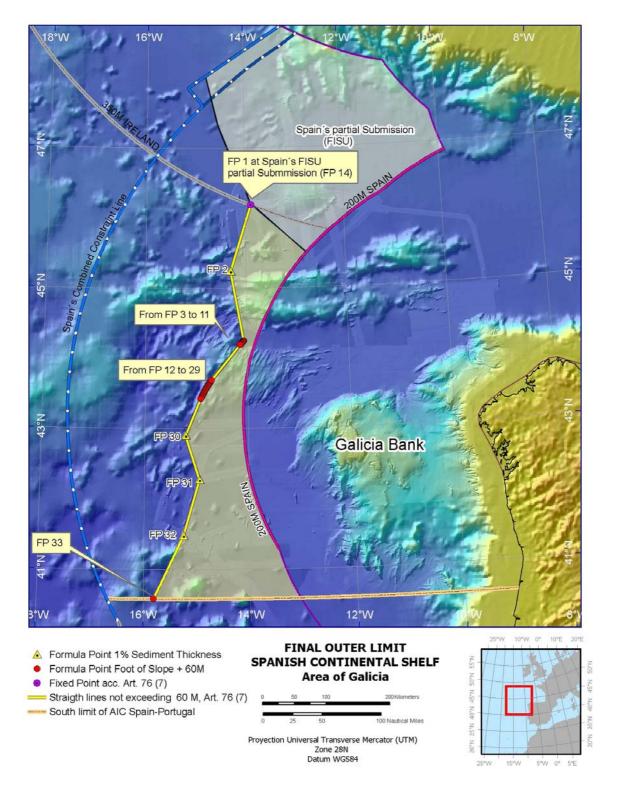
**4.1.** In the preparation of this Submission, Spain consulted Mr. Fernando Maia Pimentel, a Commission member. No other member of the Commission gave advice.

#### 5. Absence of disputes

- **5.1.** Pursuant to Annex I, paragraph 2(a), of the Commission's Rules of Procedure, Spain wishes to inform the Commission that the area of the continental shelf to which this partial Submission refers is not the subject of any dispute with any other coastal State or States, nor does it prejudice matters relating to the delimitation of boundaries between States.
- **5.2.** First, Spain wishes to inform the Commission that this partial Submission does not prejudice the delimitation of the outer limits of the continental shelf resulting from the joint partial Submission by Spain, France, Ireland and the United Kingdom of Great Britain and Northern Ireland in the area of the Celtic Sea and the Bay of Biscay.
- **5.3.** Second, Spain wishes to inform the Commission that, for the exclusive purpose of defining the outer limits of the continental shelf beyond 200 nautical miles in the area of the Galicia Bank, Spain and Portugal have agreed to identify an Area of Common Interest (ACI) for both coastal States, defined to the north by parallel 41° 52' N , to the south by parallel 40° 34' 13'' N, to the east by the baseline from which the breadth of the territorial sea of Spain and Portugal is measured, and to the west by a line 350 nautical miles from the aforesaid baseline.
- **5.4.** Within this ACI, the outer limits of the extended continental shelf have been established by the two coastal States acting in coordination and in accordance with common information, scientific and technical data, and criteria, although each of the two States will present a separate Submission to the Commission.

- **5.5.** Spain has authorized Portugal to make use of the information and scientific and technical data corresponding to the ACI that are included in this partial Submission and which are also relevant to the Portuguese Submission. Accordingly, and always in relation to the ACI, Spain authorizes the Commission to make use of any information and scientific and technical data contained in the Spanish Submission that may also be relevant to the Portuguese Submission.
- **5.6.** In relation to the delimitation of the extended continental shelf in the ACI, Spain wishes to inform the Commission that Spain and Portugal have agreed that the aforesaid delimitation does not prejudice the lateral delimitation of the continental shelf between both coastal States, which shall be resolved in the future and by common agreement between both Parties, in accordance with the applicable rules and principles of international law.

# 6. Detailed description of the outer limit of the continental shelf beyond 200 nautical miles in the Galicia area



**Figure 2**: Details of the lines resulting from the formulas utilized to define the outer limits of the continental shelf beyond 200 nautical miles in the Galicia area.

- **6.1.** In this partial Submission, Spain has utilized the lines resulting from the two applicable formulas (Hedberg, or distance, and Gardiner, or 1% sediment thickness) in accordance with the positive rules contained in Article 76, paragraph 4, of the Convention.
- **6.2.** Following the procedure established in the Commission's Scientific and Technical Guidelines (CLCS/11), the points at the foot of slope (FOS) were determined as the points of maximum change in gradient in the region defined as the base of the continental slope. These points at the foot of the continental slope were determined on consultation of a large bathymetric data base, obtained using multibeam echosounders. The rule applicable to exceptional cases, of "evidence to the contrary", regarding the determination of points at the foot of the continental slope, as described in Article 76, paragraph 4b), of the Convention, has not been applied.
- **6.3.** Fixed points FP 3 to 11, FP 11 to 29 and FP 33 (Fig. 2) result from the application of the Hedberg formula, or of that of 60 nautical miles from the foot of the continental slope, in accordance with Article 76, paragraph 4, subsection (ii) of section a) of the Convention.
- **6.4.** Fixed points FP 2, 30, 31, 32 (Fig. 2) result from the application of the Gardiner formula, that is, they are points where the thickness of sedimentary rocks meets the condition of being at least 1 per cent of the shortest distance from the foot of the continental slope, in accordance with Article 76, paragraph 4, subsection (i) of section a), of the Convention. In determining these points, 4736 km of multichannel seismic profiles were used, together with multiple analyses of seismic velocities, expressly obtained during two oceanographic surveys, *Breogham 2005* and *Espor 2008*, carried out on board the Spanish oceanographic vessel *Hespérides*. Moreover, for each of the fixed points, documentation has been presented on the continuity between the sediments overlying these points and the sediments at the foot of the continental slope, in accordance with paragraph 8.5.3 of the Scientific and Technical Guidelines (CLCS/11).

- **6.5.** In accordance with Article 76, paragraph 7, of the Convention, the outer limit of the continental shelf in the Galicia area has been defined by means of straight lines, with a length not exceeding 60 nautical miles, joining fixed points defined by coordinates of latitude and longitude (Fig. 2). Fixed point FP1, which marks the northern limit referred to in this Submission, is defined as such a fixed point (FP14) in the outer limits in the Recommendations approved by the Commission on 14 March 2009 (Table 3, CLCS/62) in the joint partial Submission made by Spain, France, Ireland and the United Kingdom of Great Britain and Northern Ireland. Fixed point FP 33, which marks the southern limit referred to in this Submission, is a fixed formula point at the southern limit of the ACI, as noted above (Section 5 of this Submission), and which was determined by agreement between the two coastal States.
- **6.6.** The outer limit defined by the combination of the two positive formulas in the area of the Galicia margin does not extend beyond 350 nautical miles measured from the baselines from which from which the breadth of the territorial sea is measured, or 100 nautical miles from the 2,500 metre isobath, in accordance with Article 76, paragraph 5, of the Convention.

# 7. State bodies responsible for the preparation of the partial Submission on the continental shelf

- **7.1.** This partial Submission was prepared by the following State bodies:
  - Ministry of Foreign Affairs and Cooperation
    - International Committee on Limits with France and Portugal
    - International Legal Advisory Board
  - Ministry of Science and Innovation
    - Geological Survey of Spain
    - Spanish Oceanographic Institute
    - Committee for the Coordination and Monitoring of Activities of Oceanographic Vessels
  - Ministry of Defence
    - Hydrographic Institute of the Navy

**7.2.** The general coordination of activities was carried out by the Ministry of Foreign Affairs and Cooperation. The scientific and technical work (maps, figures, documents attached, annexes and digital data) was carried out by the Scientific and Technical Group for the Extension of the Spanish Continental Shelf, constituted by scientists from the aforesaid Institutes.

# Annex 1: List of coordinates that define the outer limits of the continental shelf beyond 200 nautical miles in the Galicia area

All of the coordinates refer to the geodesic system of reference, WGS 84

| FP | Latitude<br>North | Longitude<br>West | Method, Article 76  | Distance to the next point (nautical miles) |
|----|-------------------|-------------------|---|---|
| 1  | 46.185620         | 13.638490         | Fixed Point that coincides with FP 14 included in the Recommendations approved by the Commission of the partial joint Submission by Spain, France, Ireland and United Kingdom of Great Britain and Northern Ireland regarding the Celtic Sea and the Bay of Biscay (CLCS/62), 76(7) | 59,978                                      |
| 2  | 45.234001         | 14.074587         | Fixed Point where the thickness of sedimentary rocks is at least 1 per cent of the distance to the foot of slope FOS 6, 76  (4) (a) (i)   | 59,999                                      |
| 3  | 44.249810         | 13.828230         | Fixed Point at 60 nautical miles from the foot of slope FOS 6, 76 (4) (a) (ii)  | 0.36  |
| 4  | 44.245280         | 13.833870         | Fixed Point at 60 nautical miles from the foot of slope FOS 6, 76 (4) (a) (ii)  | 0.72  |
| 5  | 44.236270         | 13.844820         | Fixed Point at 60 nautical miles from the foot of slope FOS 6, 76 (4) (a) (ii)  | 0.72  |
| 6  | 44.227200         | 13.855650         | Fixed Point at 60 nautical miles from the foot of slope FOS 6, 76 (4) (a) (ii)  | 0.72  |
| 7  | 44.218050         | 13.866380         | Fixed Point at 60 nautical miles from the foot of slope FOS 6, 76 (4) (a) (ii)  | 0.72  |
| 8  | 44.208820         | 13.876960         | Fixed Point at 60 nautical miles from the foot of slope FOS 6, 76 (4) (a) (ii)  | 0.72  |
| 9  | 44.199440         | 13.887290         | Fixed Point at 60 nautical miles from the foot of slope FOS 6, 76 (4) (a) (ii)  | 0.72  |
| 10 | 44.189960         | 13.897450         | Fixed Point at 60 nautical miles from the foot  | 38,910                                      |

| FP | Latitude<br>North | Longitude<br>West | Method, Article 76   | Distance to the next point (nautical miles) |
|----|-------------------|-------------------|--|---|
|    |                   |                   | of slope FOS 6, 76 (4) (a) (ii)  |   |
| 11 | 43.688560         | 14.464900         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1.53  |
| 12 | 43.669650         | 14.485600         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 13 | 43.655160         | 14.500590         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 14 | 43.641630         | 14.513850         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 15 | 43.627950         | 14.526910         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 16 | 43.614220         | 14.539590         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 17 | 43.600520         | 14.552040         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 18 | 43.586480         | 14.564160         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 19 | 43.572320         | 14.575670         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 20 | 43.557870         | 14.587240         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 21 | 43.543340         | 14.598500         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 22 | 43.528650         | 14.609370         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 4(a) (ii)    | 1   |
| 23 | 43.513950         | 14.619620         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |
| 24 | 43.499160         | 14.629620         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 4(a) (ii)    | 1   |
| 25 | 43.484110         | 14.639500         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii) | 1   |

| FP | Latitude<br>North | Longitude<br>West | Method, Article 76   | Distance to the next point (nautical miles) |
|----|-------------------|-------------------|--|---|
| 26 | 43.468870         | 14.649110         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii)   | 1   |
| 27 | 43.453500         | 14.658100         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii)   | 1   |
| 28 | 43.438030         | 14.666960         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii)   | 1   |
| 29 | 43.425620         | 14.673740         | Fixed Point at 60 nautical miles from the foot of slope FOS 7, 76 (4) (a) (ii)   | 34,440                                      |
| 30 | 42.895060         | 14.976950         | Fixed Point where the thickness of sedimentary rocks is at least 1 per cent of the distance to the foot of slope FOS 7, 76  (4) (a) (i)  | 39,140                                      |
| 31 | 42.272170         | 14.711300         | 4(a) (i): Fixed Point where the thickness of sedimentary rocks is at least 1 per cent of the distance to the foot of slope FOS 8, 76  (4)(a) (i)   | 49,660                                      |
| 32 | 41.476646         | 15.017032         | 4(a) (i): Fixed Point where the thickness of sedimentary rocks is at least 1 per cent of the distance to the foot of slope FOS 10, 76 (4(a) (i)  | 59,959                                      |
| 33 | 40.570898         | 15.576534         | Fixed Point at 60 nautical miles from the foot of the slope FOS 12 at the southern limit of the ACI between Spain and Portugal and which coincides with fixed point PT-ECS-OL-FOS_003 from the Portuguese Submission to the CLCS, 76 (a)(i) and (7), |   |