

Spain and the Law of the Sea: 20 years under LOSC

The continental shelf and its extension

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(A) THE LEGAL FRAMEWORK OF THE CONTINENTAL SHELF AND THE EXTENDED SHELF

One of the major steps taken in international law in recent times has been the negotiation and entry into force of the Convention on the Law of the Sea, done at Montego Bay (Jamaica) in 1982, to which the Kingdom of Spain has been a signatory since 14 February 1997. Within this legal framework, which establishes the definition of the different marine spaces, the continental shelf implies an extension of the sovereignty of the coastal state beyond its coasts below the marine surface. This extension *ipso facto et ab initio* is determined in Article 76 of the United Nations Convention on the Law of the Sea (LOSC), which states:

“The continental shelf of a coastal State comprises the seabed 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.”

Nevertheless, it is appropriate to point out that the legal regime of the continental shelf which is set forth in the Convention does not coincide with the scientific concept¹. This is due to the fact that its drafters had to satisfy the interests of different states, some with broad shelves and others with narrow shelves. We need to bear in mind that terms such as “continental mass” and “continental margin” are scientific concepts, whereas “land territory” and “continental shelf” are legal concepts. By combining these criteria, the determination of the “continental margin” is effective for determining the “continental shelf” for legal purposes.

In addition, the Convention grants to interested states the possibility of extending their continental shelf beyond 200 nautical miles. This means that, based on the different geomorphological modifications, the continental shelf can, from a legal perspective, be narrower or wider than the

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¹ J. M. de Faramiñán Gilbert, ‘Consideraciones jurídicas sobre la extensión de la plataforma continental (PC) más allá de las 200 (M) millas marinas (algunas referencias a la plataforma continental española)’, in J. Juste Ruiz, V. Bou Franch and J. M. Sánchez Patrón (eds), *Derecho del Mar y Sostenibilidad Ambiental en el Mediterráneo* (Tirant, Valencia, 2013) 59-87; J. M. de Faramiñán Gilbert and V.L. Gutiérrez Castillo, *El Mediterráneo y la delimitación de su Plataforma Continental* (Tirant, Valencia, 2007).

continental margin, giving rise to an “extended continental shelf”. Thus, for the purposes of the Convention, as Article 76(4) states:

“(a) the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by either:

(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 continental slope.

“(b) In the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of maximum change in the gradient at its base.”

Accordingly, the extension of the continental shelf beyond 200 nautical miles is established on a geophysical basis, based on a series of formulas which are calculated from the foot of the continental slope, although one must bear in mind the limitation specified in Article 76(5), which specifies that,

“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.”

Therefore, up to a distance of 200 nautical miles, the coastal state does not need to make any announcement in relation to the extension of its sovereignty over its continental shelf, provided that it does not affect the continental shelves of other adjacent or opposite states. On the other hand, if it wishes to claim its extended continental shelf beyond 200 nautical miles, it must submit its claim to the Commission on the Limits of the Continental Shelf. As laid down in Article 76(8) UNCLOS,

“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.”

If a state is interested in extending its continental shelf beyond 200 nautical miles it must follow an exhaustive four-stage process²: (1) Delineate the outer edge of its continental margin by applying the “formulae lines” as set out in Article 76(4) LOSC; (2) Generate the so-called “test of appurtenance”, proving that its continental shelf extends throughout the natural prolongation of its territory beyond 200 nautical miles; (3) Once the “test of appurtenance” has been satisfactorily determined, it must verify that the “formulae lines” do not exceed the limits established by the “constraint lines”³; and (4)

² *Rules of Procedure of the Commission on the Limits of the Continental Shelf*. CLCS/40*, 2 September 2004. Training Manual for Delineation of the Outer Limits of the Continental Shelf Beyond 200 Nautical Miles and for Preparation of Submissions to the Commission on the Limits of the Continental Shelf. DOALOS. Office of Legal Affairs. United Nations, New York, 2006.

³ Paragraphs 5 and 6 of Article 76: “5. 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

finally, delineate the “outer limits of the extended shelf”, taking into account the “formulae lines” and the “constraint lines”⁴.

(B) SETTING UP THE TEAMS OF EXPERTS

As a state party to the Montego Bay Convention, Spain has the right to extend its continental shelf beyond 200 nautical miles. Accordingly, it has submitted the following claims to the Commission on the Limits of the Continental Shelf: (a) in 2006, it made a joint submission with France, Ireland and the United Kingdom of Great Britain and Northern Ireland (FISU) in respect of the area of the Celtic Sea and the Bay of Biscay; (b) in 2009 it made a partial submission (coordinated with Portugal) in respect of the area of Galicia and (c) in 2014 it made a partial submission in respect of the continental shelf to the west of the Canary Islands.

To address these claims, the Spanish Ministry of Foreign Affairs and Cooperation (MAEC), through its International Legal Department (*Asesoría Jurídica Internacional*), and through the Commissions on the Limits with France and Portugal, set up a working group that would be concerned with negotiating with the states involved to reach agreements and avoid overlapping of the respective continental shelves. For the preparation of these submissions of the FISU area and the area of Galicia, a scientific-technical team was formed that brought together experts in geology, oceanography, hydrology, diplomacy and law.⁵

As already stated, these submissions have to follow a strict protocol from a geological,

isobath, which is a line connecting the depth of 2,500 metres. 6. Notwithstanding the provisions of paragraph 5, on submarine ridges, the outer limit of the continental shelf shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured. This paragraph does not apply to submarine elevations that are natural components of the continental margin, such as its plateaux, rises, caps, banks and spurs.”

⁴ Art. 76(7) LOSC: “The coastal State shall delineate the outer limits of its continental shelf, where that shelf extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by straight lines not exceeding 60 nautical miles in length, connecting fixed points, defined by coordinates of latitude and longitude.”

⁵ The team was comprised of scientists from the Geological and Mining Institute of Spain (IGME), the Spanish Institute of Oceanography (IEO) of the Ministry of Science and Innovation and the Hydrographic Institute of the Navy (IHM) of the Ministry of Defence, and an expert in the Law of the Sea from the University of Jaén. During the course of the negotiations, the Ministry of Foreign Affairs and Cooperation created several delegations. The first of these was composed of Ambassador Pablo de Jevenois Acillona as chairman, the Commissions on the Limits with France and Portugal (MAEC), Dr. Concepción Escobar Hernández, Head of the International Legal Department (MAEC), Luis Somoza Losada, Technical Coordinator (IGME) and the scientific-technical team composed of Teresa Medialdea Cela (IGME), Ricardo León Buendía (IGME), Juan Tomás Vázquez Garrido (IEO), Luis Miguel Fernández Salas (IEO) and Juan Antonio Rengel Ortega (IHM), together with Juan Manuel de Faramiñán Gilbert from the University of Jaén, as jurist. Subsequently, as a replacement for the previous chairman, the Ministry appointed Ambassador Álvaro Alabart Fernández-Cavada, who is also the chairman of the Commissions on the Limits with France and Portugal, while the diplomat José Lorenzo Outón became a member of the International Legal Department which otherwise remained unchanged. The submission in respect of the Canary Islands was made by a team appointed by the Ministry of Foreign Affairs and Cooperation, with Dr. José Martín y Pérez de Nanclares as the new Head of the International Legal Department, the diplomat Ana María Salomón Pérez as chairperson of the Commissions on the Limits with France and Portugal and a number of new members with scientific-technical backgrounds such as Francisco Javier González Sanz (IGME), Desirée Palomino Canterio (IEO), Daniel González-Aller Lacalle (IHM), Juan Ramón Conforto Sesto (IHM), Salvador Espínola González Llanos (IHM), Paloma Sevillano Sánchez (IHM) and Constantino Cid Álvarez (IHM), who are currently on the point of finalizing submissions to the Commission on the Limits of the Continental Shelf.

oceanographic and hydrographic point of view. Consequently, the presence of highly qualified experts in these matters is fundamental when setting up the working groups, as is the legal and diplomatic perspective, which is central to the negotiations with neighbouring states. Hence the importance of the work carried out on board the oceanographic vessels *Hespérides*, *Sarmiento de Gamboa* and *Miguel Oliver*, which was designed to determine, in the irregular topography of the seabed, the changes in the gradient at the base of the continental slope. Thus, whether by using the “sediment thickness” formula or the “distance” formula, the “formulae lines” can be delineated, as stated in Article 76(4) UNCLOS. Two types of formulas can be used to achieve this: the Gardiner formula and the Hedberg formula. Once the foot of the continental slope has been determined, these formulas can be used to establish the “formulae lines” which delineate the outer edge of the extended continental shelf. The Gardiner formula, also known as the “Irish formula”, enables the “sediment thickness” to be determined, by measuring the thickness of the sedimentary rocks on their continental rise and generating a “fixed point” at which the thickness of the sediment is at least 1% of the shortest distance from that point to the foot of the continental slope. This is the most suitable method to use where there are significant volumes of sediment deposited on the continental rise. The Hedberg formula, on the other hand, also known as the “distance formula”, is used when the thickness of the sediment is not sufficient to establish the edge of the continental margin beyond 60 nautical miles from the foot of the continental slope. It enables arcs to be delineated at a distance of not more than 60 nautical miles from the foot of the continental slope. In this way, by using these two formulas, either jointly or separately, it is possible to establish the outer enveloping line of the extended continental shelf.

The three submissions made by Spain will allow it to extend its continental shelf beyond 200 nautical miles, with the resulting impact on its sovereignty⁶, as laid down in Article 77 of the Convention on the Law of the Sea, and on the exploration and exploitation of any natural resources⁷ located on it. In that sense, in the submission for the FISU zone between Spain, France, Ireland and Great Britain, based on the information obtained from the Breogham oceanographic survey, it was calculated that the four member countries would be able to obtain an extension of the continental shelf, on which they would have to reach a delimitation agreement. The joint submission contains a partial claim by each of the four states involved, in respect of the area of 83,000 km² in which they converge beyond 200 nautical miles. With regard to the submission for the area of Galicia, the agreement reached between Spain and Portugal in respect of the outer limits of the extended continental shelf could obtain 56,000 km² for Spain. The submission for the Canary Islands (limited to the western area of the islands of La Palma and El Hierro) would imply an extension of about

⁶ Paragraphs 1 and 3 of Article 77 LOSC: “1. The coastal State exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources [...] 3. The rights of the coastal State over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation.”

⁷ Paragraphs 2 and 4 of Article 77 LOSC: “2. The rights referred to in paragraph 1 are exclusive in the sense that if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities without the express consent of the coastal State [...] 4. The natural resources referred to in this Part consist of the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil.”

296,500 km², on which Spain will have to reach a consensual agreement with Portugal and Morocco. This will not be without difficulties, because the southern zone of the extension area coincides with the marine projection of the non-autonomous territory of Western Sahara and the particular case of the Savage Islands in respect of Portugal.

However, as has been correctly pointed out, “[i]t is remarkable that, in spite of its advanced position towards the sea, Spain has not claimed a new limit for its continental shelf in all the areas that would be capable of extension. We are referring here to the western area of the Strait of Gibraltar and the Gulf of Cadiz, which projects a small continental shelf in the area between the Portuguese and Moroccan shelves. The proximity of the neighbouring continental shelves would hinder the Spanish extension in the area.”⁸

(C) THE SUBMISSION OF SPAIN, FRANCE, IRELAND AND THE UNITED KINGDOM (FISU)

On 19 May 2006, Spain, France, Ireland and the United Kingdom made a joint submission to the Commission on the Limits of the Continental Shelf in respect of the outer limits of their respective continental shelves in the Bay of Biscay and the Celtic Sea. It needs to be borne in mind that a series of agreements and maritime boundary delimitations had already existed between these four states in the form of the delimitation of the continental shelf between France and the United Kingdom resulting from the arbitration award of 30 June 1977⁹, and the delimitation of the continental shelf between the United Kingdom and Ireland defined by the Agreement of 7 November 1988¹⁰. Regarding the delimitation agreement concerning the continental shelf between France and Spain¹¹ it should be remembered how unfortunate this was for Spain, as the delimitation of the continental shelf between France and Spain agreed in 1974 was detrimental to Spain’s interests. It is therefore to be expected that both states will have to renegotiate the extension of the continental shelf by seeking a review of the previous positions.

The agreement reached in the FISU submission is clearly an exemplary model of good interstate collaboration on a matter of such importance for these four states, involving the extension of their continental shelf beyond 200 nautical miles. At first, the parties considered the possibility of making

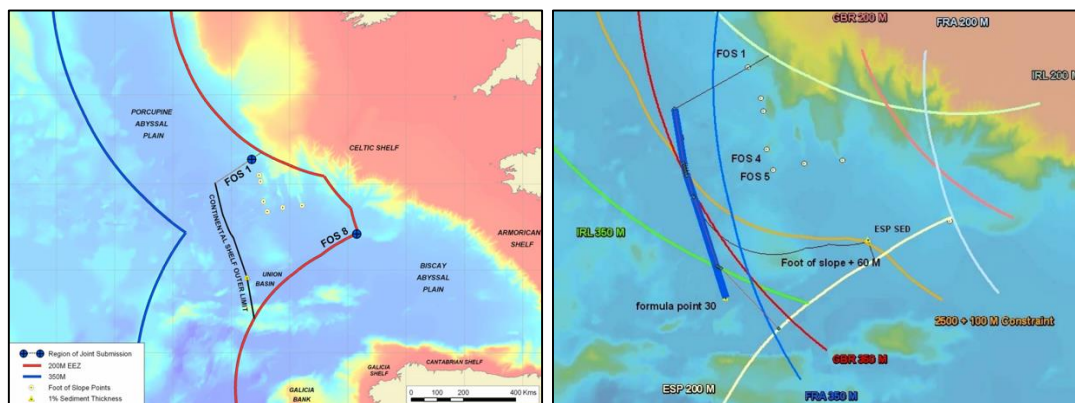
⁸ A. Jiménez García-Carriazo, *La ampliación de la plataforma continental más allá de las doscientas millas marinas en el marco de la Convención de las Naciones Unidas sobre el Derecho del Mar - especial referencia a España*, PhD Thesis, University of Jaén, 2017.

⁹ *Delimitation of the Continental Shelf between the United Kingdom of Great Britain and Northern Ireland, and the French Republic*, Decision of 30 June 1977, 18 RIAA 3.

¹⁰ Agreement between the Government of the United Kingdom and the Republic of Ireland concerning the Delimitation of Areas of the Continental Shelf between the Two Countries (signed on 7 November 1988, entered into force 11 January 1990), 1564 UNTS 218. It is worth noting that United Kingdom and Ireland have already drawn a maritime boundary that delimits their exclusive economic zones and parts of the continental shelves up to 200 nautical miles. Agreement between the Government of Ireland and the Government of the United Kingdom of Great Britain and Northern Ireland establishing a Single Maritime Boundary between the Exclusive Economic Zones of the two countries and parts of their Continental Shelves, signed on 28 March 2013.

¹¹ Agreement between Spain and France concerning the Delimitation of the Continental Shelf in the Bay of Biscay (Golfe de Gascogne/Golfo de Vizcaya) (adopted 29 January 1974, entered into force 5 April 1975), 996 UNTS 351 (BOE No. 163, 9 July 1975).

the four submissions separately, but at the suggestion of Doug Wilson, the coordinator of the four delegations, they opted for the solution of making a joint submission. On the one hand, this simplified the work of the Commission on the Limits and, on the other hand, the outstanding issue of the delimitations of maritime borders was put off until a later stage. The submission was jointly prepared by the Marine Geology Division of the Geological and Mining Institute of Spain, the Hydrographic Institute of the Navy and the Spanish Institute of Oceanography; EXTRAPLAC of France¹²; the Petroleum Affairs Division of the Department of Communications, Marine and Natural Resources of Ireland; and the National Oceanography Centre and the United Kingdom Hydrographic Office of the United Kingdom.



Source: Executive summary of the FISU submission and summary of recommendations adopted by the CLCS on 24 March 2009.

The decision to make a joint submission resulted in a synergy between the teams of the four states, which divided up the work between themselves. Four working groups were set up, according to the technical needs of the submission, to produce a consensus that would enable them to obtain the maximum extension of the extended continental shelf. The “Natural Prolongation Group” dealt with the geological and morphological analysis, the “Bathymetry and Foot of the Continental Slope Group” studied the bathymetric data, the “Sediment Thickness and Seismic Group” undertook to determine the point of 1% of the thickness of the sedimentary rocks on the basis of the seismic data, and the “Geographic Information System Group” prepared the digital program for the submission. Once the technical data of the submission had been collected, the diplomats and jurists worked on completing the final agreement. The first submission was made on 22 August 2006. According to the Rules of Procedure of the Commission on the Limits, its members can offer assistance to the delegations. In this case, for the preparation of the documentation that was to be submitted, advice was given by Peter F. Croker, an Irish member of the Commission, on simplifying the procedure. In this regard, as the rules allow the Commission on the Limits to carry out certain activities via sub-commissions, it was agreed to create a sub-commission that would submit the conclusions in a later session. This enabled the four states to carry out the “tests of appurtenance” on their respective natural prolongations, thereby establishing that their respective continental margins extended beyond 200 nautical miles. They managed to identify the base of the continental slope by determining eight points

¹² A consortium composed of Ifremer, Service Hydrographique et Océanographique de la Marine, Institut Français du Pétrole and Institut Polaire Français Paul-Émile-Victor under the auspices of the Secrétariat-General for the Sea.

at the foot of the slope, which enabled them to delineate the outer limits of the continental shelf¹³. The final lines were determined by a combination of the Hedberg and Gardiner formulas, using either the distance formula based on the eight points at the foot of the slope, or using the sediment thickness formula, as the seismic data presented established that the sediment thickness was sufficient to enable the sediment thickness formula to be applied from one of the points to the foot of the slope. Finally, the Commission on the Limits approved the methodology used to locate the points at the foot of the continental slope and it was confirmed that the delineation of the lines was not more than 60 nautical miles, as required by Article 76(7) of the Convention. Consequently, the Commission finally approved the recommendations by consensus on 24 March 2009. It should be noted that, in the recommendations received by the Commission on the Limits of the Continental Shelf, the limits delineated by the parties are recognised without prejudice to the pending delimitations that will need to be made in the future.

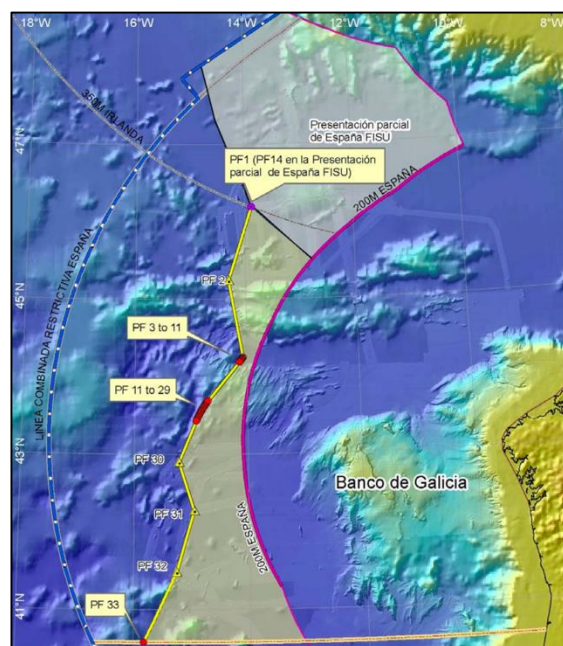
(D) THE SUBMISSION IN RESPECT OF THE AREA OF GALICIA

On 11 May 2009 Spain delivered a partial submission to the Commission on the Limits with a proposal to extend the continental shelf in the area of Galicia. This proposal to extend the Galician continental shelf has been determined at its northern limit by following the area already extended in the Bay of Biscay by the delimitations made by FISU; at its southern limit, on the other hand, a negotiation will need to be conducted with Portugal, since there is an overlapping of shelves in the region of the Galicia Bank. It must also be borne in mind that the orography of the seabed in the area is extremely complex, since the Galician continental margin presents a wide variety of segments with great depths and many submarine craters. In 2005 the Breogham survey was carried out by the oceanographic vessel Hespérides between the area of Galicia and the Irish margin. This was completed by another survey, the Espor, in 2008 which involved a coordination between Spain and Portugal, with their respective vessels Hespérides and Joao Coutinho, in order to determine the limits of the natural prolongation of the continental mass of the Galicia Bank. The outer limit has been delineated by applying the Hedberg and Gardiner formulas, which has made it possible to establish 33 fixed points, 28 of which are the result of applying the method of 60 nautical miles from the 12 points established at the foot of the continental slope from the spur of Cape Ortegal (Hedberg formula) and a further 4 fixed points which comply with the condition of sediment thickness of at least 1% of the shortest distance to the foot of the continental slope (Gardiner formula). These are completed by fixed point 1, which corresponds to fixed point 14 (of the FISU joint submission) to the north and fixed point 33, which was established by mutual agreement between Spain and Portugal when determining the Area of Common Interest to the south.

Under the Rules of the Commission on the Limits, it was possible to take advice from Fernando

¹³ L. Somoza, T. Medialdea, T. Rengel, R. León, T. Vázquez, F. Bohoyo, F.J. González, *Extensión de la Plataforma Continental española en el Golfo de Vizcaya y Mar Céltico con arreglo al artículo 76 de la Convención de las Naciones Unidas sobre el Derecho del Mar (1982)*, 6th Symposium on the Iberian Atlantic Margin, Oviedo, 1-5 December 2009.

Pimentel, a Portuguese member of the Commission. This led the two countries to consider the possibility of making separating proposals for their extensions in the area of the above-mentioned Galicia Bank, but in a co-ordinated and parallel way, so that the Commission on the Limits could appreciate the consensus between the two states. As a result of this consensus it has been possible to define the Area of Common Interest in which the extensions to the continental shelves of the two countries overlap. From this it is clear that there is agreement between them and a joint effort has been made to define this area on the basis of scientific-technical criteria. These criteria were determined by the above-mentioned Breogham and Espor surveys, and by the bathymetric and geophysical data obtained by the *Estructura de Missao para a Extensao da Plataforma Continental do Portugal* (EMEPC).



Source: Executive summary of the Spanish submission in respect of the area of Galicia.

As a result, it has been possible to establish this Area of Common Interest as a “superimposed zone” between parallel 41° 52’ N to the north and parallel 40° 34’ 13” N to the south along the baseline from which the width of the territorial sea of Spain and Portugal is measured to the east and along the constraint line of 350 nautical miles to the west. In this way, as has been pointed out, the area to which the Spanish submission relates is delineated to the north by the fixed point defined by the submission of the FISU area and to the south by the fixed point located at the southern limit of the Area of Common Interest.

Following the criteria established in its Rules of Procedure, the Commission on the Limits has set up a sub-commission to study the submission of Portugal which is scheduled for August 2017 and which, for the moment, is in a higher position than the Spanish submission on the list of receipt and analysis of proposals. It will therefore be necessary for Spain and Portugal to wait for the Commission on the Limits to issue its respective recommendations before they can define the delimitation of the Area of Common Interest in the framework of bilateral negotiations between the two governments. Finally, the extended outer limit of the continental shelves of the two countries

must follow the criteria of Article 76(5) of the Convention on the Law of the Sea, according to which this line must not exceed the distance of 350 nautical miles or 100 nautical miles from the 2,500-metre isobath.

(E) SUBMISSION IN RESPECT OF THE AREA TO THE WEST OF THE CANARY ISLANDS

The third (and final) submission to the Commission on the Limits of the Continental Shelf was made by Spain on 17 December 2014 in respect of the area corresponding to the west of the Canary Islands. It must be borne in mind that, as stated in Annex II of the Convention (UNCLOS) with regard to the functioning of the Commission on the Limits,

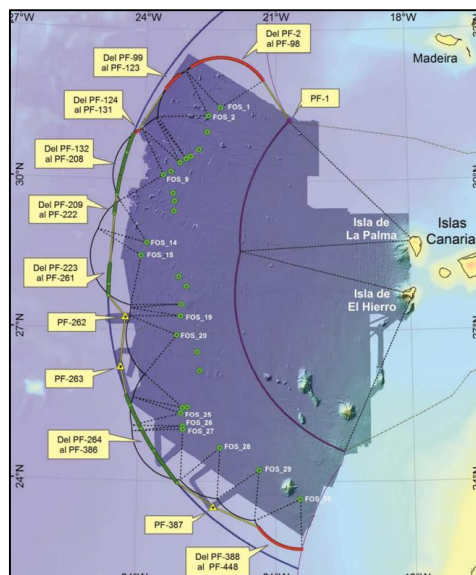
“Where a coastal State intends to establish, in accordance with article 76, the outer limits of its continental shelf beyond 200 nautical miles, it shall submit particulars of such limits to the Commission along with supporting scientific and technical data as soon as possible but in any case within 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.”

In May 2009, Spain announced its claim for extension through a preliminary notice. In this way, it prevented the time-limit of ten years from lapsing and undertook to make the final submission within a period of five years. Accordingly, it conducted a series of prospecting surveys with the oceanographic vessels *Hespérides*, *Sarmiento de Gamboa* and *Miguel Oliver*, which took place between 2010 and 2014. These surveys revealed the uneven topography of the area, highlighting an important orography of seamounts of volcanic origin lying to the south-west of the Canary Islands Archipelago, which demonstrate the geological and geomorphological continuity with the Canary Islands. This provides an argument for the continuity of its natural prolongation beneath the sea, a fact which was confirmed by the Drago survey¹⁴. Based on the results obtained, the outer limit of the extended continental shelf has been calculated using 30 fixed points at the foot of the continental slope, as points of maximum change in the gradient at the base of that slope. It should be borne in mind that, as the proposal concerns an extension to an area characterised by submarine ridges of mountain ranges formed by volcanic activity, related to the movement of the crust on hotspots, its measurements must be very strictly regulated on the basis of the criterion of distance and in compliance with Article 76(6) UNCLOS. As in the previous submissions, both the Gardiner and Hedberg formulas have been used to determine 448 fixed points, either by taking into account the 1% sediment thickness according to the Gardiner formula or by applying the distance formula according to the Hedberg formula, to ensure that the outer limit of the extended continental shelf, resulting from the combined application of the two formulas, will not exceed 350 nautical miles, as specified by Article 76(5) UNCLOS. Fixed point 1 is located at an equidistance of 200 nautical miles between Spain and Portugal (between el Roque de Santo Domingo on the island of La Palma and la Ponta do Pargo in Madeira), while fixed point 448 is determined at the intersection of 60 nautical miles from

¹⁴ J.T. Vázquez et al., *Informe científico Campaña Drago 0511*, Proyecto para la Ampliación de la Plataforma Continental de España al Oeste de las Islas Canarias (2011).

point 30 at the foot of the continental slope and the 200-nautical mile line of third party states.

However, in view of the order in which the submissions to the Commission on the Limits are to be studied and the number of submissions currently being processed, it is highly unlikely that the recommendations in respect of the Spanish proposal will be made in the near future.



Source: Executive summary of the Spanish submission in respect of the area to the west of the Canary Islands.

In any case, by the time these future recommendations are produced, Spain will still have to resolve some outstanding delimitations with Portugal and Morocco. Nevertheless, Spain has informed the Commission on the Limits that there are no disputes in the area of extension of the continental shelf towards the north of the island of La Palma, to which this submission relates and, in addition, that this partial submission does not prejudice or prejudice the determination of the outer limit of the Portuguese submission. In accordance with Article 121 of the Convention, the matter as to whether the Savage Islands are to be considered as islands or rocks is yet to be resolved, since in the first case, as an island, its continental shelf must be recognised and extended, and in the second case, as a rock, it would only be entitled to the delimitation of its territorial sea. Indeed, the delimitation of the continental shelf between Madeira and the Canary Islands may be affected by the consideration of the Savage Islands as “islands”, which is the view held by Portugal on the grounds that they meet the requirements for being considered as “habitable”. Portugal argues that the Savage Islands are “inhabited” by a unit of the Portuguese Nature Protection Force responsible for safeguarding it and that, in consequence, it does not match the criteria set out in Article 121(3) of the Convention, which states: “rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.” This is no trivial matter, since the subsoil surrounding the islands is rich in deposits of sulphur, tin, hydrocarbons, phosphates and manganese nodules, although, strictly speaking, this issue does not affect the projection of the extended continental shelf to the west of the Canary Islands.

Reference is also made in the submission to the fact that the Spanish delimitation to the south of the island of El Hierro does not prejudice “the rights of third parties” that may give rise to claims, which is an implicit reference to the situation of the Western Sahara. This is a complex issue, since

there are still unresolved matters concerning the decolonization of the territory of the Western Sahara, a non-self-governing territory in which Morocco maintains an interest. Furthermore, the Alawite kingdom has submitted reservations with regard to the Spanish submission, recalling that the delimitation of the marine spaces with Spain is still pending.

(F) FINAL CONSIDERATIONS

The extension of the continental shelf beyond 200 nautical miles has become a high impact model for territorial sovereignty claims by coastal states, as evidenced by the number of submissions being presented to the Commission on the Limits of the Continental Shelf. The procedure for interested states entails a particularly complex technical exercise in which they must prove the legitimacy of their claims.

It is important to bear in mind that in order to extend the continental shelf beyond 200 nautical miles, the interested state must base its submission on the configuration of the seabed and on the location of the foot of the continental slope, rather than on the configuration of its coasts, as is the case with the demarcation of the continental shelf up to 200 nautical miles. For this reason, Article 76 of the Convention lays down clear and detailed criteria for establishing the outer limits of the extended continental shelf.

Spain possesses an extensive coastline and the projection of its continental shelf beyond 200 nautical miles is not only a challenge but, above all, a priority in view of the natural resources contained on its seabed.