

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

Marine scientific research

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(A) SPANISH LEGAL REGULATION OF MARINE SCIENTIFIC RESEARCH

Spanish legal and administrative practice on marine scientific research (MSR) has been consistent with its positions maintained during the discussions at the Seabed Committee and later, the III United Nations Conference on the Law of the Sea (UNCLOS)¹. This position was based on the following main premises:

- (1) Spain does not distinguish between pure or fundamental MSR and applied MSR but our country considers it necessary to establish a distinction between MSR and “exploitation”.
- (2) The rule of consent is the general principle, with some nuances, such as possible implied consent under some circumstances and the coastal State’s (Spain) obligation to grant consent when some requirements are fulfilled in maritime spaces under the Spanish maritime jurisdiction.
- (3) Great interest in international cooperation through several channels: a) publication or dissemination of the results obtained, always bearing in mind the main interests of the coastal state; b) Spanish participation in the scientific expedition and c) cooperation through international organizations.

In accordance with these general principles, in 1970, Spain enacted an administrative act (*Circular*) on rules applying to marine scientific research activities in areas under Spanish maritime jurisdiction, whose general inspiration was maintained in subsequent and current regulation of these activities.

The subsequent regulation of MSR activities followed and is still contained in the current Royal Decree 799/1981, on rules concerning marine scientific research activities in maritime areas under

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¹ On this question, see the contribution in this volume by de Yturriaga Barberán on “[Spain at UNCLOS](#)”.

Spanish jurisdiction.² Consequently, Spanish regulation of MSR is previous to the entry into force of the LOSC for the country, which happened on 14 February 1997. Though there is a long lapse in time between the two dates under consideration —1981-1997—, the Royal Decree still in force in Spain is clearly influenced by the negotiation of the topic during UNCLOS and the customary regime on the subject. The Royal Decree is also consequent with some other Spanish regulations of new or renewed maritime spaces at the time: the territorial sea³ and the Exclusive Economic Zone (EEZ)⁴ as the Preamble of the Royal Decree reminds.

In its four parts —General provisions, territorial sea, continental shelf and EEZ, and stay in ports— the Royal Decree follows the main provisions of Part XIII LOSC:

- (a) General provisions: the Royal Decree is applicable to research states⁵ and international organizations⁶ and it specifies that MSR cannot be the legal basis for any claim to the marine environment or its resources⁷.
- (b) Territorial sea: while LOSC⁸ contains its most specific regulations concerning MSR in areas under sovereign rights or jurisdiction of coastal States, as is the case of continental shelf and EEZ, Spanish regulation deals in detail with MSR activities undertaken in territorial sea. Recalling that this space is under the total sovereignty of the coastal State, it is easy to understand the provision contained in Article 9.1 by which the results of the scientific expedition will be transmitted to the Spanish Foreign Affairs Department one year after the expedition has finished. However, given the implications of scientific research, this delay becomes unrealistic. Differently from the previous administrative regulation of 1971 that in part was more liberal than current one and provided for the previous contacts between Spanish and foreign scientists, the Royal Decree establishes the contact through diplomatic channels —Article 7 consequent with art 250 LOSC— Article 9(1) considers the possibility of non-sharable data: in that case, the data will be kept by the researching State for its use if needed by interested Spanish departments.
- (c) Continental shelf and EEZ: as it has been previously mentioned, it is remarkable that in Spanish regulation the most specific provisions are those related to territorial sea. It could be understood that the legislator did not yet have knowledge of the possible implications of these two new oceanic spaces. In general terms, Spanish regulation follows Part XIII LOSC

² Royal Decree 799/1981, of 27 February, concerning the Rules Applicable to Marine Scientific Research Activities in Areas under Spanish Jurisdiction ([BOE No. 110](#), 8 May 1981).

³ Law 10/1977, 4 January, on the Territorial Sea ([BOE No. 7](#), 8 January 1977).

⁴ Law 15/1978, 20 February 1978, on the Economic Zone ([BOE No. 46](#), 23 February 1978).

⁵ Art. 1.

⁶ Art. 5.

⁷ LOSC regulates MSR activities in its Part XIII, providing that all States (not only parties to the LOSC) and competent international organizations have the right to conduct MSR subject to the rights and duties of other States under this Convention (Art. 24(5)). Art. 241 provides that MSR cannot be the legal basis for any claim to the marine environment or its resources.

⁸ Under Part XIII of LOSC, in internal waters, archipelagic waters and the territorial sea, the coastal state has complete control over MSR: these activities can only be performed with the express consent of the coastal state, which can impose its own conditions. In territorial sea, under the provision of Art. 19(2)(j) passage will be considered non-innocent if it involves research or survey activities.

provisions⁹ but there are some discrepancies with it; for instance, the Royal Decree contains an *ad hoc* procedure —Articles 14 and 15— to obtain Spanish consent to accede to Spanish ports by vessels that are not carrying out or do not try to develop MSR in Spanish maritime spaces, which have been interpreted as a major obstacle to the free development of MSR activities¹⁰.

Considering the Royal Decree in its whole one can draw the following conclusions:

- The consent rule is reinforced, although compared to previous Spanish administrative acts —*Circular 1970*—, the Royal Decree introduces more control in favor of Spain and in detriment of scientific research (Articles 7-9).
- Compared to LOSC, the Royal Decree is more rigorous in some aspects: (1) There is no provision that resembles that of Article 246(3) and no granting of consent under “normal circumstances”; (2) There is no provision for implied consent as in Article 252 LOSC; and (3) Rights of non-coastal or disadvantageous States are not mentioned. As a conclusion, the consent rule is reinforced. However, Spanish legislation is in some aspects more liberal than LOSC: for example, the conditions required by Article 249 LOSC¹¹ are more lenient than those in Spanish Royal Decree.

⁹ Art. 246 LOSC addresses MSR in the EEZ and continental shelf in a combined set of provisions. Coastal states have general rights to regulate, authorize and conduct MSR in both zones; in consequence, the overriding rule is that MSR in EEZ and continental shelf can only be conducted with the consent of the coastal state. However, there are some provisions that make the process of obtaining this consent easier: Art. 246(3) LOSC: States shall “in normal circumstances” grant consent for research “carried out exclusively for peaceful purposes and in order to increase scientific knowledge of the marine environment for the benefit of all mankind”, and it mandates that coastal states must establish rules and procedures ensuring that such consent will not be delayed or denied unreasonably. Notwithstanding, in Art. 246(5)(a) coastal states enjoy absolute discretion to withhold consent for MSR which is of direct significance to the exploration and exploitation of natural resources, whether living or non-living. This same right is given to coastal States in relation to research, whether pure or applied, if it involves drilling into the continental shelf, the use of explosives, the introduction of harmful substances into the marine environment, or involves the construction, operation, or use of artificial islands and structures. Art. 246(6), in relation to continental shelf beyond 200 nm., is interesting as it provides that coastal states may not withhold consent unless the research project refers to specific areas publicly designated by coastal states as areas in which exploration or exploitation is occurring or about to occur. Art. 252 provides for implied consent when the coastal state fails to give its permission or withhold consent within six months of a valid request containing all the information. The information that the researchers must provide at least six months in advance of the expected starting date of the project includes the following data: a) nature and objectives; b) method and means; c) area; d) time period; e) body sponsoring the project and person in charge; f) extent to which the coastal state could potentially participate in the project. This obligation is particularly constraining as under art 246(5)(d) a coastal state may withhold or withdraw consent if the nature or objectives of a research project have been inaccurately documented.

¹⁰ M. Pérez González, “La investigación científica marina y el nuevo Derecho del Mar desde la perspectiva española”, 5 *Anuario de Derecho Marítimo* (1986), at 85.

¹¹ Researchers must respect the right of coastal states to participate or be represented in the project (Art. 249(1)(a) and must provide the coastal state with both preliminary and final reports and conclusions arising from the research (Art. 249(1)(b)). Researching states are also under obligation to make the results internationally available as soon as practicable (Art. 249(1)(e) and to remove scientific research installations or equipment once the research project has been completed unless otherwise agreed with the host country (Art. 249(1)(g)). When the research is of direct significance for the exploration or exploitation of the natural resources, coastal states may impose conditions (Art. 249(2)) and may insist that their agreement be obtained before the results of any resource-oriented research are made internationally available (Art. 249(2)).

- Bearing in mind that in 1981 Spain had not yet ratified LOSC, the similitudes between the two regimes are many. The permanence of the same legislation since 1981 is evidence of its relevance to the present day and its customary character.

(B) SPANISH PRACTICAL APPLICATION OF MSR RULES: PROCEDURE AND INSTITUTIONS ENGAGED.

This part of the contribution will consider Spanish practice in MSR from two perspectives: as a coastal state and as a researcher state.

(1) As a coastal State.

As a coastal state, Spanish practice is consequent with the provisions of the Royal Decree 799/1981. In this vein, the administrative procedure starts with the submission of a request for permission to undertake MSR activities in maritime spaces under Spanish jurisdiction—internal waters, territorial sea, continental shelf and EEZ. This request must be submitted six months previous to the starting date of the proposed research project and be made through diplomatic channels, taking the form of *note verbale* that the permanent diplomatic mission of the flag researching vessel addresses to Spanish Department of Foreign Affairs¹². Article 6(3) of the Royal Decree specifies the information that the foreign researchers must provide, and this Article in general terms follows Article 248 LOSC¹³. The participation of Spanish scientists is not a pre-requisite to giving consent (Article 6(3)(f)), although it is usual in practice, as a courtesy, that this invitation is extended to Spanish scientists. Once the Spanish Foreign Affairs Department has received the advice of the Spanish institutions engaged in MSR, decides to deny its consent (this happens only very occasionally); to ask for more information or some amendments to the researching institutions (Article 7) or to consent (this is the general rule). Once the research expedition is developing its project in areas under Spanish jurisdiction, Spain may ask for a suspension of these activities if it considers that the activities are not being performed in accordance with Spanish legislation or do not follow the program consented to by Spain (Article 12).

MSR files collected at the Spanish Foreign Ministry have been studied in order to write this contribution: in our investigation, we have found that only in very limited cases does Spain deny its consent to MSR activities. This happened, for instance, with the oceanographic campaign that Norwegian vessel *Princess* intended to perform in 2014 in maritime areas near to the island of

¹² Within the structure of the Foreign Affairs Ministry, it is the Under-Directorate-General of Multilateral Economic Relations and Aerial, Maritime and Terrestrial Cooperation which is the department that asks for advice to the following institutions: Defence Ministry; Development Ministry (Directorate-General of Energy Policy and Mines, Directorate-General of Navy and Spanish Division for the Protection of the Oceans); Ministry of Agriculture, Food and Environment (General Secretary of Fisheries, General Directorate of Fisheries Management); Oceanographic Spanish Institute (IEO); Spanish Council for Advanced Scientific Research (CSIC).

¹³ The request for Spanish consent must contain the following data: Expected research programme; Name of the researching institution, main responsible person, number of researching staff; Aims of the researching expedition, Method and means to be used. Name of the vessel and main features. Description of the scientific gear; Geographical areas; Expected dates; Number of vacancies, in case Spain wants to send Spanish scientists to the expedition.

Lanzarote. As some Spanish institutions stated in their advice, the information provided was insufficient. In any, with this scarce information submitted, the Spanish Oceanographic Institute (IEO) considered that the project was a seismic study whose main aim was to obtain a better understanding of the geological resources of the zone, probably related to the existence of fuel deposits in the area. IEO also considered that the methodology to be used was not suitable as it might interfere with areas under Moroccan jurisdiction. Finally, the advice stated that some conservative measures related to marine mammals were not being observed.

Some of the most common requests of consent by researching vessels are related to urgent repairs to submarine cables that pass through many areas under several States' jurisdiction. In these compelling cases in which the proper laying of submarine cables transporting many vital resources for societies are at stake¹⁴, the requirements for six months and even the information programme, are considered leniently, especially if all the countries involved in giving their consent have been positive. In 2016, the MSR expedition of the vessel *Odyssey Explorer* under request of the Bahamas was denied by Spanish authorities: it was supposedly related to repairs to Orval cable¹⁵ and Spanish authorities took into consideration the long and conflictive background of this vessel as regards underwater cultural heritage. In its report denying its consent, Spanish Council for Advanced Scientific Research (CSIC) recalls the *Mercedes* case that confronted "Odyssey Marine Exploration Inc." against Spain in 2011 before United States courts¹⁶ and further incidents with some other countries.

There is no evidence of any relaxed application of these rules to any vessel coming from any country, for vessels coming from EU countries, for example. In fact, most of the research visitors come from EU countries. However, Article 13 of the Royal Decree provides for implied Spanish consent in EEZ and continental shelf in the case of the researching vessel being an international organization of which Spain is a member and Spanish delegates having previously approved the research project inside this organization¹⁷. In addition to this, the Spanish Foreign Ministry must not have expressed its opposition within four months since the submission of the request by the researching organization. Notwithstanding the demanding provision of six months, in practice—as confirmed with some Spanish institutions engaged in MSR, such as IEO or Spanish Department of Foreign Affairs—the period of six months is considered with flexibility by Spanish authorities and most research projects are authorized by our country.

Most researching vessels are open to the participation of Spanish scientists in the expedition. This is provided for in Article 6 of the Royal Decree and is considered both a courtesy and criteria for reciprocity.

The rule established in Article 9 by which the researching institution must submit the results of

¹⁴ See the very interesting [map](#) of submarine cables in this web site; the reader can reach his own conclusions.

¹⁵ See more information [here](#).

¹⁶ M.J., Aznar Gómez, M.J.: "Treasure Hunters, Sunken State Vessels and the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage", 25 *International Journal of Marine and Coastal Law* (2010), pp. 209-236. On this question, see the contribution in this volume by Carrera Hernández on "[Protecting Underwater Cultural Heritage](#)".

¹⁷ Art. 247(5) LOSC relaxes the exigence of explicit consent, establishing the possibility of implied consent when the research is conducted by an international organization of which the coastal state is a member and when the coastal state has not expressed its objection within four months of the request.

the research project to the Spanish Department of Foreign Affairs is not fulfilled as often as should be, as Spanish institutions concerned with MSR state. Anyway, it has already been mentioned in this contribution that this rule is unrealistic in its delay as many of these results are difficult to evaluate and assess in a one-year period. The same can be said in reference to the publications derived from the research project.

Considering the period of time 2011-2015, the foreign vessels that have undertaken marine scientific research campaigns in areas under Spanish jurisdiction are: Barbados: 1; Belgium: 5; Cyprus: 3; Denmark: 1; France: 72; Germany: 35; Greece: 1; Ireland: 1; Island: 1; Italy: 15; Malta: 1; Netherlands: 8; Norway: 4; Portugal: 7; Sweden: 1; Turkey: 1; United Kingdom: 13; United States: 11.

As a conclusion of the Spanish practice as a host state of MSR activities, the following remarks can be made:

- In general terms, Spanish procedure follows Part XIII of LOSC.
- Spanish practice puts stress on the participation of Spanish scientists.
- Although Spanish rules are quite demanding, the general evidence is that most scientific expeditions in areas under Spanish jurisdiction are undertaken with Spanish consent.
- In practice, some of the rules are applied with some flexibility, as is the case with those related to the six months advance request and one year to submit results.

(2) As a researching country

The practice of Spain as a country engaged in MSR can be studied from the two following perspectives: main legal framework; main institutional structure engaged in MSR and report of some incidents affecting Spanish vessels.

(a) Legal framework

The Spanish Strategy of Science, Technology and Innovation is the framework instrument that establishes the general objectives linked to fostering and developing research activities in Spain during the period from 2013 to 2020. Its objectives are aligned with those highlighted by the European Union under Horizon 2020. The basic legal framework is the Law 14/2011 on Science, Technology and Innovation¹⁸.

(b) Main institutional structure

Main Spanish oceanographic research infrastructures concerned with MSR are composed by oceanographic vessels. This is consequent with Part XIII LOSC that only considers as MSR activities those conducted at sea, that are on its surface, water column, subsoil or seabed.

The Spanish oceanographic fleet depends on two main public departments: the Ministry of Economy, Industry and Competitiveness (hereinafter, MINECO) and the Ministry of Agriculture, Food and Environment (hereinafter, MAPAMA).

¹⁸ [BOE No. 131](#), 2 June 2011.

- (1) MINECO oceanographic campaigns are planned by the Commission of Coordination and Monitoring of Oceanographic Vessels' Activities (hereinafter, COCSABO). There are currently 10 oceanographic vessels, all funded by MINECO. These vessels conform to what is called a Singular and Technical Infrastructure¹⁹, particularly the ICTS FLOTA. These oceanographic vessels fundamentally provide services to campaigns being carried out within the framework of the Spanish State Plan for Scientific and Technical Research and Innovation and of the framework programme of the European Union, as well as the specific responsibilities assigned to different Public Research Organizations of the Secretary of State for Research, Development, and Innovation. The on-board technical support of the oceanographic vessels of the campaigns approved by the COCSABO is provided by the Marine Technology Unit of the CSIC. The ICTS FLOTA consists of two infrastructures, BIO Hespérides²⁰ and the FLOTPOL²¹.
- (2) For its part, the research campaigns carried out by the General Secretariat of Fisheries in MAPAMA are currently divided between fisheries assessment and mapping and are carried out on board the three fishing and oceanographic research vessels managed by the General Secretariat for Fisheries. In the case of fisheries research campaigns there are agreements with scientific institutions for scientific personnel on board and the scientific coordination of the campaign. The fisheries' assessment campaigns are included in the national program for the collection of basic data for the Spanish fisheries sector, which follows the recently updated European data collection framework guidelines.²² Campaigns carried out in waters of third countries follow the protocol established for authorization, always through our Department of Foreign Affairs, which is in charge of the procedures. In particular, evaluation campaigns are carried out in the North Atlantic Fisheries' Organization (NAFO) zone, reaching Canadian waters and within the Porcupine bank (Irish waters) and certain inclusions in French waters,

¹⁹ The so-called singular scientific and technical infrastructures (ICTS) are large installations, resources, facilities and services, unique in their kind, that are dedicated to cutting-edge and high-quality research and technological development, as well as to promoting exchange, transmission and preservation of knowledge, technology transfer and innovation.

²⁰ The BIO Hespérides is a vessel of the Navy integrated into the Maritime Task Force of the Spanish Navy, based in Cartagena (Murcia). Its scientific equipment is managed completely by the Marine Technology Unit of the CSIC. Its hull is reinforced for the navigation of the polar areas of the Antarctic and the Arctic. Its main activity focuses on austral summers, carrying out scientific research campaigns in the Antarctic and occasionally providing support to Spanish Antarctic Facilities and their research projects. It is a global research vessel with instrumentation and laboratories that allow for investigation of natural resources and risks, global change, marine resources, global ocean currents, and marine biodiversity. See more information [here](#).

²¹ The FLOTPOL infrastructure integrates the resources provided by the Marine Technology Unit of the CSIC and by the Ships and Campaigns Unit of the Oceanography Spanish Institute. The vessels included in this infrastructure are: B/O Sarmiento de Gamboa, B/O García del Cid, B/O Ramón Margalef, B/O Ángeles Alvariño, B/O Mytilus, B/O Francisco de Paula Navarro, B/O José María Navaz, B/O Lura y B/O SOCIB. The FLOTPOL deals with the MINECO Oceanographic fleet management, providing technical and logistical support to oceanographic and polar research and the Spanish bases in Antarctica, in accordance with the plans of activities established by the different administrative units of the General Administration of the State or other competent bodies for this purpose. It provides technical support to campaigns conducted aboard the ship Hespérides of the Spanish Navy. See more information [here](#). Their current campaigns can be consulted [here](#).

²² See more information [here](#).

for which the corresponding authorizations are requested from the authorities of those countries. Cartography campaigns are not being carried out outside the limits of Spanish waters. On the other hand, certain campaigns have been carried out on board commercial vessels to evaluate certain resources or to carry out tests on the implementation of the landing obligation policy. When these have been necessary within the waters of other States, the same authorization procedure as explained above has been followed through the Department of Foreign Affairs.

Spanish activities undertaken in foreign maritime areas in general terms follow the principles already established in Part XIII LOSC, as most of the countries that have enacted any legislation about marine scientific research activities are part of the above mentioned convention and their practices in the matter, consistent²³. Under these premises, most Spanish MSR activities are granted the consent of the host State. However, there have been some interesting incidents to be reported in this contribution:

- In disputed waters of Svalbard islands, where Spain doesn't recognize the jurisdiction exercised by Norway, some incidents took place in 2005 with Spanish fishing vessels accused of illegal fishing. One of these vessels —*Garayoa Segundo*— had gone to Svalbard waters in order to carry out a scientific assessment of halibut populations.
- In 2016, great expectation was caused by the incident of IEO research vessel *Ángeles Alvariño*, that was developing research activities in maritime areas face Gibraltar coast. Gibraltar authorities accused the Spanish vessel of having invaded their territorial sea, and threatened with the use of force against the researchers. As it is obvious, this is a long-standing dispute between Great Britain and Spain about the width of Gibraltar's territorial sea.²⁴

(C) CONCLUDING REMARKS: EVALUATION AND CHALLENGES AHEAD

Part XIII of the LOSC intends to reconcile the interests of the scientific community with those of coastal states. As such, this regime makes it clear that the principle of consent of the coastal State is the general rule in spaces under its jurisdiction. Spanish regulation, in general terms, follows this rule. However, this rule is implemented with certain degree of flexibility considering the unexpected events that may surround a scientific expedition. In this vein, Spanish practice is not different from that of countries of the same socio-economic development as ours.

²³ Vid. [Marine Scientific Research. A revised guide to the implementation of the relevant provisions of the UN LOSC](#). United Nations Division for Ocean Affairs and the Law of the Sea Office of Legal Affairs, New York, 2010.

²⁴ Spain determines that the waters where this new incident has occurred are Spanish because the Treaty of Utrecht of 1713 ceded the city and the castle of Gibraltar (next to its port, defense and fortress) to the British Crown. The same is not true of the isthmus that links the Rock with the Peninsula and the surrounding waters. For this reason, Spain only recognizes United Kingdom sovereignty over the waters of the interior of the port. For years, London has been claiming up to three nautical miles under the LOSC (post-Utrecht) and which attributes adjacent waters to any territory. In the midst of this misunderstanding, ships of the security forces of both countries, fishing vessels or researchers have been involved in various conflicts. On this question, see the contribution in this volume by del Valle Gálvez on "[Maritime zones around Gibraltar](#)".

International regulation of MSR as established in LOSC and national regulations of these activities —Spain among them— will have to face, in the years to come, some important challenges:

- (1) First of them is the definition of MSR activities: there is no definition of MSR in Part XIII of LOSC and most national legislations, as Spanish one, have followed the same path. This has provoked disputes about the scope of activities normally considered as MSR or not, and some scientific powers, such as the United States of America or the United Kingdom, are keen advocates of a very narrow interpretation of Part XIII of LOSC.
- (2) International and national regulations of MSR have got obsolete as they don't contemplate MSR undertaken from satellites or other methods that are increasingly displacing *in situ* ship based methods.
- (3) The “direct significance” test of Article 246(5)(a) was valid to manage the resources at the time the LOSC as negotiated but is not so clear when considering bioprospecting in the marine environment, as this activity might not be considered as “pure” scientific research, due its commercial aim. Anyway, the great challenge that bioprospecting activities pose to LOSC relates to maritime areas beyond national jurisdictions.
- (4) Finally, the paramount importance of MSR in enhancing the better understanding of the oceanic environment and its influence over many natural phenomena cannot be underestimated. Nowadays, MSR is related to a multitude of topics whose social relevance is beyond any doubt. For instance, bathymetry —or the drawing of nautical charts—, the geological or geomorphological study of the seabed —for locating resources, understanding seismic processes or shedding light on the understanding of the outer limits of the continental shelves—, the assessment of fisheries and marine ecosystems —both for improving fisheries management or for bioprospecting purposes—, the role of the oceans in the global climate system or in the sustainable development of the marine environment, or the very significant findings in the deep seabed —the discovery of chemosynthetic-based ecosystems at hydrothermal vents, with its implications for the production of energy or the discovery of new biological species—, to mention just a few, are all activities that come into the realm of MSR and whose social relevance is generally recognized.