ENVIRONMENTAL IMPACT ASSESSMENT
"3D" OFFSHORE SEISMIC RECORD
CAN_100, CAN_108 Y CAN_114 AREAS, ARGENTINA

CHAPTER 3 – LEGAL AND INSTITUTIONAL FRAMEWORK

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INDEX

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CHAPTER 3 – LEGAL AND INSTITUTIONAL FRAMEWORK

This chapter develops the analysis of the legal and institutional framework applicable to the exploration project granted on CAN_100, CAN_108 and CAN_114 Areas, located in the North Argentine Basin of the Argentine Continental Shelf. The areas were granted in accordance with the exploration regulations established in Law 17,319 and its amendments. Likewise, the environmental impact assessment regulations applicable to the contemplated activity framed within the Argentine Federal system are analyzed, as well as the hydrocarbon regulatory framework and the international maritime protection treaties to which the Argentine Republic has adhered, especially the Convention of the International Maritime Organization (IMO) on the Law of the Sea.

CAN_108 and 114 areas were granted through Resolutions 691 and 702 of 2019, issued by the former Secretariat of Energy of the Government (today the Ministry of Energy, dependent on the Ministry of Production, in accordance with the reorganization of the National Administration established in PEN 7/19 Decree) to EQUINOR ARGENTINA AS SUCURSAL ARGENTINA, and EQUINOR ARGENTINA AS SUCURSAL ARGENTINA and YPF SA respectively, within the framework of the Offshore International Public Bid No. 1.

Resolution 55/2020 of the Ministry of Energy authorized the transfer of YPF SA 50% ownership of the exploration permit granted on CAN_100 Area in favor of EQUINOR BV ARGENTINA SUCURSAL ARGENTINA.

Likewise, and taking into account the particularities of seismic activity in maritime spaces and the different methods and regulatory techniques in other regions of the world with a long history in the exploration and exploitation of hydrocarbons at sea, reference is made to good practices and performance standards used in similar activities. This is based on the provisions regarding the obligation of the States Parties to establish environmental protection frameworks that are "not inferior" or "less effective" than those that govern other states of the global community (Convention on the Law of the Sea -CONVEMAR-, Article 208, paragraph 3).

1 INTRODUCTION AND GEOGRAPHIC FRAMING

This chapter presents a survey of the main rules of application to surface exploratory activity to be carried out in Argentine jurisdictional waters, by virtue of the exploration permits awarded by the aforementioned Resolutions 691/19 and 702/19 of the former Secretariat of Energy of the Government and Resolution 55/2020 of the Ministry of Energy to EQUINOR ARGENTINA on the aforementioned areas.

Unlike superficial recognition, which does not imply, in accordance with the Hydrocarbons Law (Law 17,319 and amendments 26,197 and 27,007), the granting of exploration rights, and is only limited to granting rights upon seismic prospecting studies on the platform and continental slope of the Argentine Sea, the exploration permit recognizes the right to request (according to the successful result of the exploratory work) an exploitation license.[1]

[1] Surface recognition permits imply the consequent obligation to generate information for a better evaluation of the resources of the seabed, do not grant exclusivity to permit holders and imply fewer work commitments. Some were granted by the Ministry of Energy in 2017 on the Continental Shelf in order to expand the geological knowledge of the resource, based on Resolution 131/70 of said Ministry of Energy, in accordance with the provisions of Law 17,319.

CAN_100 and CAN_108 areas are framed within the Exclusive Economic Zone (EEZ), while CAN_114 Area is outside the EEZ, but within the jurisdiction of the National State, in the case of the Continental Shelf, duly measured and explored, as to the requirements of the Convention on the Law of the Sea (UNCLOS), as explained in other sections of this chapter.

Notwithstanding the fact that some support activities may be required on land (medical evacuation services, heliports, logistical support, or waste discharge, if necessary), it is estimated that, in this instance of operations and given the characteristics of seismic tasks, specific provincial environmental authorizations shall not be required since they are common to maritime activities or usual logistics, not requiring special environmental authorizations other than those stipulated in the regulations on navigation and port operations. Ultimately, they are routine maritime operations that do not differ from those carried out by any other vessel that operates in National waters, and must comply with current administrative regulations applicable to routine vessel operations.

Given that the exploratory activity under study is restricted to obtaining seismic information and the analysis of environmental aspects, it is rather limited to the temporary impacts that the use of the rigging or streamers used and the sound and shock waves may have on marine biota, as the main environmental effects.

Strictly speaking, Argentine environmental standards, at the National level, are rather brief in terms of performance in offshore activities, and regulatory requirements in general are transpositions of the standards designed for continental activity. Depending on these circumstances and the forwarding rules that arise from international law applicable to environmental protection at sea, current rules are integrated and supplemented with the operator's own environmental management procedures, together with recommended practices developed by the industry and different international organizations.[2]

The prescriptive legal rules of the Argentine Republic are complemented and enriched with updated comparative experience through good practices and performance standards used in other jurisdictions with a track record in offshore activities, together with the best practices of oceanography and marine biology procedures applied to environmental protection associated with offshore activity.

In this sense, and given that the most common recommended practices advise having biologist observers on board in order to monitor the presence of marine mammals, there may be synergies with other areas of the National Administration devoted to research at sea and conservation of resources. Those areas such as the National Institute for Fisheries Research and Development (INIDEP), the Ministry of Agriculture, Livestock and Fisheries (SAGyP), Ministry of Environment and Sustainable Development (MAyDS), or research institutions committed to marine biology in the area of influence have ongoing programs that may present synergies with the observations made as a result of the Management Plan to be executed by Equinor.[3]

[2] It is appropriate to emphasize the environmental protection framework established in the law of the sea, based on articles 208 and 210 of the Convention on the Law of the Sea (UNCLOS), establishing guidelines for environmental control derived from the offshore operations. The first of these articles states that the coastal state is empowered to elaborate laws and regulations to prevent, reduce and control the pollution of the marine environment resulting from the exploration and exploitation of the seabed. It should be noted that national regulations "... shall not be less effective than international rules, standards, practices and recommended procedures ..." (Article 208, Section 3) Section 4 of Article 208 contains a programmatic order regarding the coordination of its policies at the regional level. CONVEMAR WAS INCORPORATED INTO THE ARGENTINE LEGISLATION BY LAW 24,543.

[3] It is worth mentioning the cases of the Argentine Institute of Oceanography (IADO) in Bahía Blanca or the Oceanography areas based in Mar del Plata, dependent on INIDEP. In this sense, it should be added what is

Although the South Atlantic has a close ecosystem link with the waters of Antarctica, and the Argentine Republic is an active part of the Antarctic Treaty set of rules and of the various protocols for the protection of the living resources of these waters, activities are clearly outside the legal limits of said agreement and the eventual presence of birds originating in polar waters is subject to other agreements or legal mechanisms in force. It is worth reviewing some international agreements related to the protection of marine and migratory species given their presence in the area of the granted permit.

2 METHODOLOGY

One of the first considerations to be made applies to the regulatory frameworks of the project. The exploration shall be carried out within the Argentine Exclusive Economic Zone (EEZ) in the case of CAN 100 and CAN 108 areas, and outside the EEZ when referring to CAN 114, but within waters superjacent to the Continental Shelf measured and registered before the Commission of the Continental Shelf in accordance with the International Law of the Sea. As has been said in previous paragraphs, the operations are carried out in waters far from the strip of provincial jurisdiction and without interactions with the coastal province (Buenos Aires), except for some logistics or support service related to routine activities of vessels operating in National waters. Consequently, jurisdiction corresponds exclusively to the Nation, with environmental approvals in charge of the corresponding agencies, with no intervention of the provinces.

Consequently, this chapter has been framed within National jurisdiction and applicable general and sectoral national legislation. The chapter begins with a description of the framework of jurisdictional competencies in the exploitation of natural resources according to the Argentine federal system, the hydrocarbon regulatory framework, and the international maritime protection treaties to which the Argentine Republic has adhered, particularly the Convention of the International Maritime Organization (IMO) on the Law of the Sea.

The chapter follows with a description of the National Environmental Legislation of direct or indirect application to operations, the specific regulations on hydrocarbon exploration including seismic surveys, those applicable to safety in navigation in general, and safety in operations in facilities or offshore activities in a specific way.[4]

Reference is also made to the sectoral legal frameworks other than those regulating hydrocarbon activity (maritime navigation, protection of fauna and fishing) to be taken into account due to the implications that they could have for the project, or to avoid eventual conflicts between the specific prospective activities of the project, and others such as fishing, which are carried out in the waters within its area of influence.

Although there is a significant number of sites of environmental interest or protected areas located on the continental coast, they are far from the project and do not require specific authorizations or permits. Taking into account that seismic activity does not imply the handling of substances or pollutant discharge and that the impacts are clearly transitory and linked to the generation of localized noise or vibrations, it is determined that they have no implications for the project. The equipment altering the seabed, such as towing gear or autonomous ROV-type equipment, or the like, shall not be used.

stated in the annexes to Joint Resolution 3/19 of the former Secretariats of the Government of Energy and Environment and Sustainable Development, published on November 27, 2019, which propose the presence of observers on board as a measure of the management plans to be presented together with the pertinent environmental studies.

[4] The seismic activity under analysis does not involve the use of naval facilities or devices, as is the case for prospecting (drilling of exploratory wells)

A section is dedicated to the Enforcement Authorities and their competences in regard to the authorization of the activity (s) and the approval of environmental requirements. There is currently no clear criterion for the coordination of roles by different competent bodies within the national administration in the Argentine Republic, as observed in comparative law where the cases of the North American lead agency or the English or Australian statutory consultee ensure a more coordinated transversal intervention.[5] Furthermore, some recent modifications in the application of the environmental assessment mechanisms at the national level, are awaiting greater detail and precision regarding the organization of the energy and environment portfolios in terms of the approval or environmental authorization of such activities, like the ones discussed here.

However, Joint Resolution 3/19 of the former Secretariats of Energy and Environment and Sustainable Development, sets up a framework for the presentation of environmental studies, their review and approval, along with subsequent monitoring and inspection. This standard has supplemented and integrated the procedures already in force for a long time at the National level, but has been conceived to be applied on the Continent.

Given the characteristics of the offshore operation, the project shall be monitored by the Ministry of Energy, dependent on the Productive Development portfolio and its subordinate agencies, along with the Hydrocarbons Sub-secretariat regarding permits for exploration and associated work, in accordance with the Hydrocarbons Law.[6]

The Argentine Coast Guard (PNA) is the Enforcement Authority in all environmental implications related to the operations of ships and naval devices in jurisdictional waters, and as regards international agreements that aim to protect the marine ecosystem by virtue of the Navigation Law including those international agreements drawn up within the IMO, to which Argentina has adhered.

[5] The North American Lead Agency is the Enforcement Authority with the central decision-making power for the project, which, regardless of the participation of other organizations in consultations or interventions, exercises a kind of “ancillary jurisdiction” in the processing. In Great Britain, the Statutory Consultee is the entity that must be previously consulted for an opinion that must be part of the final administrative decision. In Argentina there are instances of these mechanisms at the provincial level, for example, in Mendoza with mandatory sectorial opinions, or in Santa Cruz with the integration of evaluation commissions for projects that involve more than one regulatory sectorial framework.

[6] The organization chart reflects the changes introduced in the National Administration from the reorganization established by Decrees 174/18, 801/18 and 105/19. The organizational structure was approved by Administrative Decision of the Chief of Ministers (JGM) 511/19.

Likewise, mention should be made of the Ministry of Environment and Sustainable Development and its subordinate departments, the Secretariats of Climate Change, Sustainable Development and Innovation, of Environmental Policy in Natural Resources, and of Environmental Control and Monitoring, by virtue of the regulations enacted in the second half of 2019, regarding the application of the Environmental Impact Assessment (EIA) procedure in projects under the scope of the National Administration. These regulations and procedures contemplate an interaction circuit between the energy and environment portfolios in force through Joint Resolution 3/19 of the former Secretariats of Government of Energy and Environment, referenced in the previous paragraph.[7] These procedures are in the process of gradual application and adjustments due to their relatively new status as to the subject being regulated.[8] It should be noted that the National Directorate for Environmental Assessment, (dependent on the Secretariat for Climate Change, Sustainable Development and Innovation) shall play a key role in the analysis of the studies and the planned interaction with other public bodies.

3 INSTITUTIONAL ORGANIZATION AND ENVIRONMENTAL MANAGEMENT

3.1 THE ENVIRONMENT IN THE CONSTITUTIONAL REFORM AND THE DISTRIBUTION OF COMPETENCES IN THE FEDERAL SYSTEM AND ITS APPLICATION TO MARITIME SPACES

Article 41 of the Constitutional reform of 1994 expressly introduced the protection of the environment recognizing the inhabitants their right to enjoy a healthy environment. It also incorporated a specific method for the distribution of powers in the federal system, introducing the concept of “Minimum Protection Budgets”.

[7] Through Resolution 337/19, the former Secretariat for the Environment and Sustainable Development has drawn up guidelines for the execution of environmental impact studies and strategic environmental assessments, establishing the procedures for the application of the second method within the scope of the National administration in Resolution 434/19. To date, no progress has been made in the effective implementation of the Strategic Environmental Assessment (SEA) in the field of the national public administration, and the determination of the form and method of application is decided by the different agencies of the Executive Power. Strictly speaking and from the pure logic with which the use of SEA for plans and programs is proposed, international organizations such as the International Bank for Reconstruction and Development (IBRD), the Inter-American Development Bank (IDB) or the Organization of The United Nations for Food and Agriculture (FAO), or specialized departments in offshore matters in other countries should design a strategic evaluation for the entire campaign and activities associated with offshore activities (perhaps with a differentiation by areas or basins based on oceanographic conditions) in order to later outline the detailed management requirements, to which the individual permits of the operators or permit holders of each exploration area must adhere. This approach to an SEA by geographical area would allow, for example, to determine, on a macro scale, the dynamics of straddling fish, or the operation of fisheries of commercial interest, depending on climate conditions or the biological functioning of the species, in order to then have general guidelines according to the sea conditions at each site. See, Walsh, Juan Rodrigo, “***Hacia un Marco Regulatorio Ambiental para las Actividades en la Plataforma Continental Argentina”***, RADEHM, May-July 2017, Buenos Aires. Also see **“*Actividades Energéticas en la Plataforma Continental Argentina: Política Pública y Estrategias Regulatorias para la Protección del Ambiente*”**, Latin American Journal of Environmental Law, December 2017.

[8] The procedures begin with a project notice to be entered electronically in the TAD Platform of the National Administration. (see https://www.argentina.gob.ar/evaluacion-de-impacto-ambiental-proyectos-hidrocarburiferos-en-plataforma-continental)

Its incorporation was due to the need to establish a functional model for the distribution of competences between the Nation and the Provinces in order to incorporate the right to a healthy environment as one of the “new rights” on the one hand, and to preserve the sense of acceptance and strengthening of federalism as a political and legal value on the other, which has been one of the characteristic features of the 1994 reform.

Article 124 of the National Constitution (CN) has recognized the original power of the Provinces over the natural resources existing within their territory, which constitutes a guarantee to a fundamental pillar of our federalism. This original domain grants the Provinces the power of police and jurisdiction over their natural resources to regulate the uses of that asset and to exercise the control over them.

Article 41 of the National Constitution has established a "special rule" for the articulation and coordination between both levels of State, with the following objectives.

- Ensure a certain consistency or "minimum threshold" in the quality of the environment throughout the national territory, for all its inhabitants regardless regions and provinces. These Minimum Budget Laws apply throughout the territory. On the other hand, provincial and municipal legislation must be adapted to said minimum threshold or minimum budgets according to the principle of congruence embodied in the LGA (General Environmental Law); minimum budgets prevail over any provincial, municipal rule and / or resolution of any administrative body that opposes its principles and provisions.

- Guarantee respect for local diversity. The rule expressly leaves local jurisdictions safe from the powers of the Nation, due to the original control over the natural resources within their territory and the local jurisdiction regarding the power of the police over said resources and the environmental management. The Provinces and Municipalities are in charge of executing and applying the national environmental policy, regardless of the power of the national organisms over the project sector in their own federal matters.

However, this general rule for the distribution of competences in environmental matters, the National State (when it comes to federal organization) holds jurisdiction and exclusive competence in certain spaces, such as the maritime space (Exclusive Economic Zone and Continental Shelf) , beyond provincial jurisdictional waters.

In this particular case, the regulation of activities in the Exclusive Economic Zone (EEZ) is **under the responsibility of the National authorities** up to the outer limit of the waters subject to national jurisdiction, in accordance with current international law, despite repeated historical claims by the provinces with a maritime coastline to exercise their powers concurrently with the National Government.[9]

[9] The claims of the provinces with a maritime coastline, embodied through provincial legislation at the beginning of the 1990s, were rejected after several decisions made by the Supreme Court of Justice of the Argentine Nation (CSJN), in line with a consistent interpretation of the scope of the provincial jurisdictions, considering CONVEMAR provisions (Cases Harengus c / Santa Cruz and Total Austral c / Tierra del Fuego, among others).

This interpretation is the result of an analysis of the set of regulations that make up the Argentine Federal system based on Articles 41 and 124, the precepts of the Convention on the Law of the Sea, regarding jurisdictional spaces, and the various legislation on natural resources passed after the constitutional reform of 1994, including the reforms to the hydrocarbon rules that have reinforced the criterion of limiting the jurisdiction of the provinces to a 12-nautical mile strip adjacent to the coast equivalent to the territorial sea. It is interpreted that this distribution of competences in the Argentine federal system is the most coherent in terms of a congruent harmonization of national and provincial competences, according to the international commitments the Argentine Republic has undertaken, as a member of the global community of Nations.

3.2 JURISDICTION OVER MARITIME SPACES

Article 235 of the Civil and Commercial Code of the Argentine Legislation establishes that: *"*a) the territorial sea up to the distance determined by international treaties and special legislation, regardless of the jurisdictional power over the contiguous zone, exclusive economic zone and continental shelf, belong to the public domain, except as provided by special laws. Territorial sea is understood as the water, the bed and the subsoil*..."*

Although it was passed prior to the entry into force of the Unified Civil and Commercial Code, Law 23,968 of 1991, established, in its Annex I, the baselines of the Argentine Republic from which its maritime spaces are measured, determining that the waters located inside the baselines make up the interior waters of the Argentine Republic.

This same regulation divides the waters into territorial sea, Argentine contiguous zone and Argentine exclusive economic zone anticipating the rules established in International Maritime Law through the Montego Bay Convention on the Law of the Sea. To that effect, it determines twelve (12) nautical miles for the first, twenty-four (24) nautical miles for the contiguous zone, and two hundred (200) miles for the exclusive economic zone.

On the other hand, the rule refers to the continental shelf over which the Argentine Nation exerts sovereignty, and establishes that it comprises the bed and subsoil of the underwater areas that extend beyond its territorial sea and throughout the natural extension area of its territory to the outer edge of the continental margin, or up to two hundred (200) nautical miles measured from the base lines established in Art. 1 of the aforementioned Law, in cases where the outer edge does not reach that distance (Art. 6). Regarding the exploration areas included in the present analysis, national jurisdiction extends over the continental shelf, even beyond 200 nautical miles, taking into account its geography and underwater geological formation on the coasts adjacent to the Argentine maritime coastline.[10]

[10] It should be remembered that the continental shelf can extend up to 350 nautical miles from the baseline of the coast, in accordance with the provisions of Article 76 of UNCLOS (CONVEMAR). The continental shelf may not extend beyond 350 miles from the baseline from which the territorial sea is measured. See https://www.un.org/Depts/los/clcs_new/submissions_files/arg25_rev/20170317_ARGREV_SUMREC_COM.pdf y http://www.plataformaargentina.gov.ar/publicación-libro-el-margen-continental-argentino

In order to assert sovereign rights over the Continental Shelf, Law 24,815 created the National Commission for the Outer Limit of the Continental Shelf, under the scope of the Ministry of Foreign Affairs, which, together with the Argentine Navy and other science and technology organizations carried out seismic survey tasks in order to define the outer limits of the continental shelf, preparing the official cartography for deposit and registration with the UN, in order to safeguard potential jurisdiction claims over the continental shelf before the International community.

The Inter-ministerial Commission created by Law 24,815, prepared the studies and background information required for the formal presentation to the UN, in accordance with articles 76 to 85 of the Convention on the Law of the Sea, previously carried out in 2009, being finally adopted by the Commission on the Limits of the Continental Shelf in March 2016 with the consent of its expert members.[11]

The changes in the international territorial limits were reflected in the regulations with the passing of Law 27557as a consequence of the favorable decision to the Argentine claims adopted by the Boundaries Commission dependent on the CONVEMAR (UNCLOS), after the remarkable technical work of COPLA and the professionals and scientific teams that integrated it for two decades. This regulation, amending Law 23968, adjusts and updates the territorial limits in maritime spaces and the bed of the continental shelf to the fair claims of Argentina in accordance with international law and CONVEMAR (UNCLOS).

The UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (UNCLOS) was incorporated into domestic law in 1995 through Law 24,543. This Agreement constitutes the general framework for the regulation of all the activities carried out in the Exclusive Economic Zone, thus serving as support for the security measures adopted in the field of navigation, pollution control and authorization of offshore operations. Article 2 of UNCLOS establishes that the sovereignty of the coastal State extends beyond its territory and its internal waters and, to the adjacent sea strip named territorial sea in the case of the archipelago State and its archipelagic waters. The Argentine Republic bases its jurisdiction over the Continental Shelf on this founding international agreement.

For such purposes, it is worth highlighting that Art. 5 of Law 23,968 determines that *"The Argentine Nation exerts all its fiscal and jurisdictional, preventive and repressive powers, in tax, customs, health, exchange and immigration matters in this area, regardless of the partial or total exemptions that are legally determined ... ", highlighting the next paragraph" ... , the Argentine Nation is sovereign over the exclusive economic zone for the purposes of exploration and exploitation, conservation and administration of natural resources, both living and non-living of the superjacent waters to the seabed, and regarding other economic, exploration and exploitation activities of the area, such as the production of energy derived from water, currents and winds.*

International Law said nothing about the ownership of the domain and jurisdiction of Argentine waters, as regards the internal organization of the State considering its federal nature, that is, if said waters correspond to the Nation or the Provinces. For years, this situation has been the cause of controversy that, at this point, have been resolved peacefully by the case-law of the Supreme Court of Justice of the Argentine Nation (CSJN) and the recent modifications to the legislation on hydrocarbons.[12]

[11] See Walsh, Juan Rodrigo, ***"Hacia un Marco Regulatorio Ambiental para las Actividades en la Plataforma Continental Argentina"*,** Health, Safety and Environment Congress, IAPG, Buenos Aires, August 2016. Also, by the same author, ***"Hacia un Marco Regulatorio Ambiental para las Actividades en la Plataforma Continental Argentina"*, RADEHM, #** 13, May-July 2017.

[12] At first, Law 18,502 of 1969, recognized the jurisdiction of the provinces over the territorial sea adjacent to the coasts, up to a distance of three (3) nautical miles measured from the line of the lowest tides (Art. 1) and reserved the exclusive jurisdiction over the rest of the territorial sea to the National State (Art. 2). This regulation

In terms of hydrocarbon exploration and exploitation, the dispute regarding the dominance of the deposits located in the territorial sea has been clearly settled as of the enactment of Law 26,197, and afterwards with Law 27,007 which amended Hydrocarbon Law N ° 17,319. The criterion of exclusive national jurisdiction in the Exclusive Economic Zone and the Continental Shelf has been confirmed, hence, the provincial authority has been limited to territorial waters up to 12 nautical miles.

was revoked by Law 24,922 that regulates the Federal Fisheries Regime, which provides that the living resources that populate the interior waters and Argentine territorial sea adjacent to its coasts, are the domain of the provinces, with their marine coastline, and that they shall exert this jurisdiction for the purposes of its exploration, exploitation, conservation and administration up to twelve (12) nautical miles measured from the baseline (Art. 3), and declares that from those twelve (12) miles they are the exclusive domain and jurisdiction of the Nation. The solution of the Federal Fishing Law is consistent with CONVEMAR standards. Even before the enactment of the Federal Fisheries Law N° 24,145, on the federalization of hydrocarbons and the deregulation of oil activity, a solution similar to that of the fishing regulations was adopted, assigning the oil fields and regulatory power to the coastal provinces within 12 nautical miles. However, a doctrinal autonomous current interpreted, on the basis of Article 124 of the reformed Magna Carta, and considering the annulment of Law 18,502, that the domain and jurisdiction of the provinces extended to the waters adjacent to their coasts, concurrently with National powers. Despite these provincial claims, expressed many times through sectoral legislation with specific claims on maritime space up to the outer limit of 200 miles, constitutional case law has ended up limiting provincial powers to the territorial sea, consistently with the framework established for the exploitation of hydrocarbons and fishing resources. Thus, in “Total Austral SA v. Tierra del Fuego, Antarctica and the Atlantic Island” and “Pesquera del Atlántico Sur SA v. Province of Santa Cruz” verdict, the Supreme Court of Justice interpreted that the “maximum” provincial claims exceeded local powers in spaces reserved for national jurisdiction.

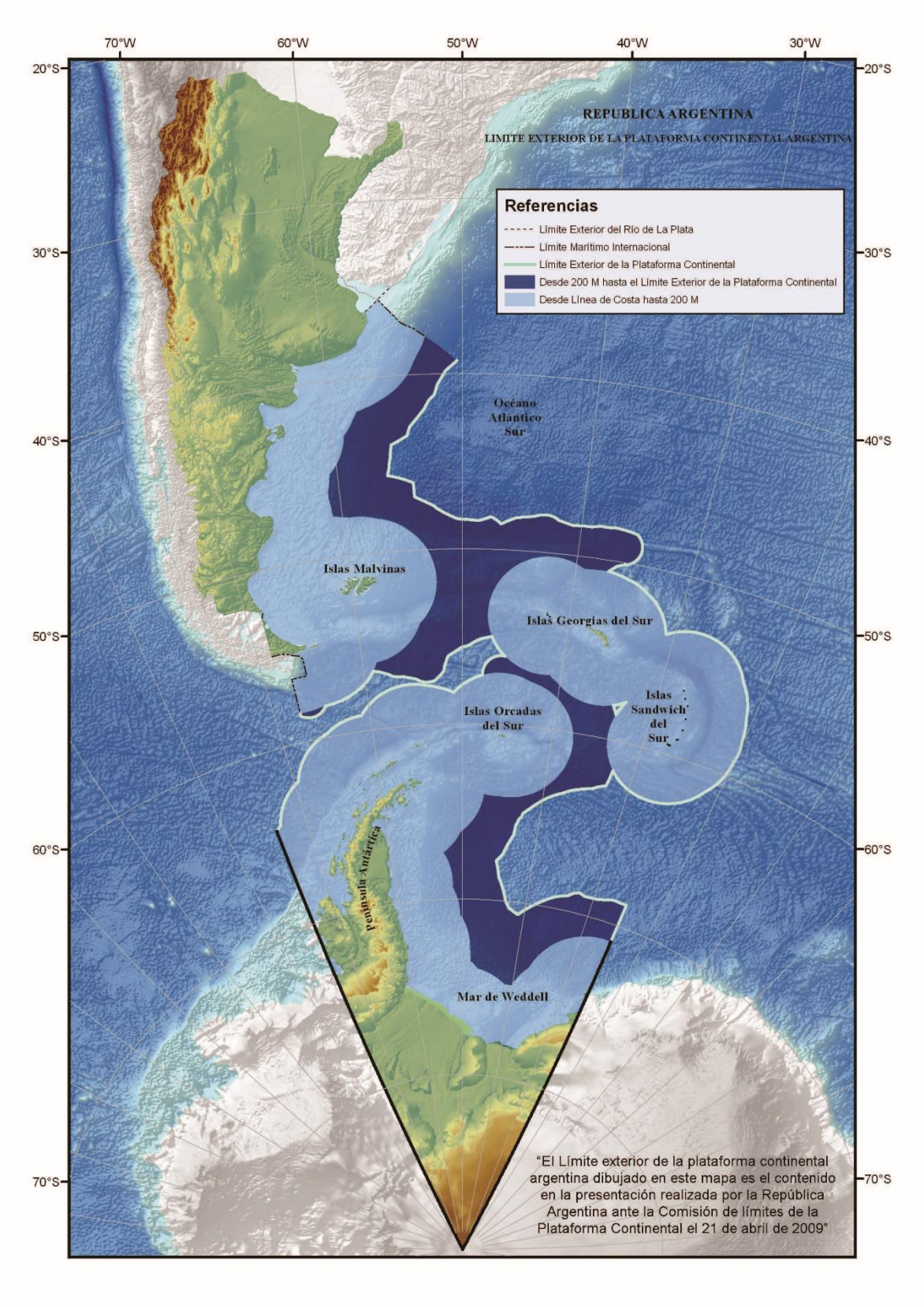

Figure 1. Map of the Argentine Continental Shelf.[13].

[13] Cortesía de la COPLA. Ver http://www.plataformaargentina.gov.ar/es/mapaPlataforma

Implications for the Project

There are no doubts regarding the jurisdiction of the Argentine Nation over the natural resources located in the project area, given that they are within two hundred (200) nautical miles belonging to the Argentine Exclusive Economic Zone, in the case of CAN_100 and CAN_108 areas, and beyond 200 miles for CAN_114 Area in waters superjacent to the Continental Shelf. Based on this, the competent national authorities such as the Ministry of Environment (through its departments), together with the Ministry of Energy shall take part in the approval of the impact study and, in general, the Argentine Coast Guard shall control the activities regarding the inspection of ships and safety of navigation and prevention of water pollution pursuant to Law 17,319 and its amendments. The procedure designed for the approval of environmental studies also includes a sectoral intervention by INIDEP, dependent on the Ministry of Agriculture, Livestock and Fisheries.

At the end of November 2019, Joint Resolution 3/19 of the former Secretariats of Energy and Environment, established a procedure for the approval of environmental impact studies for exploratory operations in waters and continental shelf, with subsequent monitoring and follow-up by the environmental portfolio. The provincial jurisdiction would only take part when a specific authorization is required for activities or support facilities on provincial land or provincial jurisdictional waters (eg: new heliports) that is not foreseen as part of the project.

The logistics operations associated with the seismic survey by ships and support services shall comply with and observe the requirements for port security and pollution prevention of the Argentine Coast Guard, in accordance with REGINAVE and the Maritime and River Digest, herein outlined, as well as the environmental requirements established by the Management Consortium of the Port of Mar del Plata (considered for logistics services), where appropriate.

4 MINIMUM ENVIRONMENTAL STANDARDS

According to Art. 41 of the National Constitution within the current environmental system, the Argentine Nation must dictate the minimum protection standards, and the Provinces shall be able to complement this legislation with more detailed regulations or even with stricter standards than those established. The minimum standard is a kind of "threshold" of environmental protection in force throughout the country and for all its inhabitants.

These regulations establish the minimum environmental quality standards and the management mechanisms or instruments that ensure certain basic parameters in the decision-making processes. These may be supplemented and / or improved by Provincial and local legislation. The doctrine differentiates two classes of minimum standards.

- ***Minimum substantial standards***: those that are stipulated to directly protect the quality of natural resources or define minimum parameters that must be observed by those anthropic activities likely to harm the environment. This is the case of discharge standards or quality parameters.

- ***Minimum institutional or procedural standards****:* those aimed at defining parameters regarding the management itself, such as: the EIA, environmental regulation, public hearing procedures or access to environmental information.

Clearly, there is no articulation possible between the national minimum standards and the corresponding complementary provincial regulations in offshore activities outside the jurisdictional waters of the provinces.

Therefore, the Laws of minimum standards shall directly govern every exploratory activity carried out in National Jurisdictional waters. Beyond the validity of the specific sectoral regulations applicable to the exploratory activity, their interpretation must consider the general terms contemplated in the minimum standards.

To date, the following minimum standard Laws have been enacted.

- Law 25,612: Minimum Standards for industrial waste and service activities.
- Law 25,670 PCBs: Minimum Standards for their management and disposal.
- Law 25,675: General Law of the Environment.
- Law 25,688: Environmental Water Management.
- Law 25,831: Minimum Standards for free access to environmental information.
- Law 25,916: Minimum Standards for the management of household waste.
- Law 26,331: Minimum Standards for the Protection of Native Forests.
- Law 26,663: Protection of Glaciers
- Law 26,815: Fire Management
- Law 27,279: Management of Phytosanitary Containers
- Law 27,540: Adaptation and Mitigation of the Effects of Climate Change

The minimum standards to be taken into account for this project are essentially the General Environmental Law, and to a much lesser extent, the Law on Access to Environmental Information. The rest have an impact on defined sectors or resources and outside the ecosystem scope of the project, or with regard to particular issues, such as waste. The Climate Change Adaptation Law, passed at the end of 2019, has not yet been regulated and, by its very nature, has the character of a general and programmatic framework for political actions and coordinated management from the State and with the participation of individuals, with little current direct impact on the project.

The main standard is the General Environmental Law (LGA) 25,675. This establishes the environmental quality standard that must be respected by current legislation (national, provincial and municipal), and complied with by any project in Argentine territory beyond local regulations. Likewise, any standard for the protection, evaluation and environmental management of the regulatory framework of an activity or sector (such as energy or oil in this case) must comply with environmental quality standards of the General Environmental Law.

Under this uniform protection, certain environmental management instruments prevail (Art. 8º, General Environmental Law), whose application is mandatory throughout the National Territory:

1. The environmental legal system of the territory.
2. The Environmental impact assessment.
3. The control system on the development of anthropic activities.
4. The environmental education.
5. The environmental diagnosis and information system.
6. The economic regulation for the promotion of sustainable development.

The minimum procedural requirements include the Environmental Impact Assessment procedure, Citizen Participation and the environmental information system, which are functionally integrated within the first.

The Law regulates these instruments in a general way, establishing the institutional “framework” for all regulation, be it of a sectoral nature, or of a general local nature.

The General Law also incorporates the concept of environmental damage and the priority obligation to “repair” any damage caused. Consequently, environmental impact assessments, the application of Environmental Management Plans and other aspects related to the prevention of this particular damage prevail, as well as the design and adoption of mitigation, compensation and restoration measures.

Citizen participation is today a fundamental base of sustainable management. According to Law 25,675, one of the objectives of Argentina's environmental policy is "... to promote social participation in decision-making processes ...". The Argentine Legal system has established three instruments to make it viable and ensure its effectiveness.

- The consultation and the public hearing (Law 25,675).
- The right of access to environmental information (Art. 41 of the National Constitution; Law 25,831).
- Environmental protection (Art. 43, of the National Constitution).

Law 25,675 integrates citizen participation into the EIA procedure on a mandatory basis and with a minimum standard through different instruments that are detailed below.

4.1 PUBLIC HEARING OR OTHER MECHANISMS OF CITIZEN PARTICIPATION

In cases where there is local legislation that provides for a public hearing or other participation mechanism, it is necessary to comply with the highest requirements established by the regulations of the different jurisdictions to fully comply with the process. In some cases, the instance is mandatory and optional in others. In the latter cases, it can be made "mandatory" by rule of Law 25,675.

The result of the public hearing is non-binding for the decision-making bodies and the enforcement authority. Nevertheless, the contrary decision to that of the enforcement authorities must be substantiated and made public (Art. 20, Law 25,675).

4.2 ACCESS TO ENVIRONMENTAL INFORMATION (LAW 25,831)

Sections c) and i) of Article 2, Law 25,675 establishes the objective of the National Environmental policy in order to: “...*Organize and integrate environmental information and ensure free access of the population to it*...”.

Law 25,831 on minimum standards for free access to environmental information sets up the minimum or quality standard regarding access to environmental information. This Law is fully applicable in every jurisdiction involved in the project, and all related information as to socio-environmental issues must be made available to the interested parties by whoever owns it, if required.

According to Law 25,831:

- The following are obliged to provide the required environmental information:

  1. the competent authorities of public bodies, at the national, provincial and municipal levels, be they centralized or autonomous bodies;
  2. companies providing public services (public, private or mixed).

- Information subject to public access: All information related to the project and linked to the state of the environment and the plans or programs for managing the environment.

- Concept of environmental information: all types of documents or information in any form of expression related to:

  1. "... the state of the environment or any of its natural or cultural components, including their reciprocal interactions, as well as the activities and works that may significantly affect them;
  2. "... policies, plans, programs and actions related to environmental management."

- Free-of-charge access to information: The information must be provided free of charge, and only the petitioner shall cover those expenses generated by the resources used for its replication.

- Applicant: Whoever requests the information is not obliged to show interest or a specific reason.

- Denial of access to information: it must be well founded. On the contrary, judicial action shall be required.

The minimum standards regarding access to information has been supplemented in 2016 with the enactment of Law 27,275, a general rule that requires the replication of information by the State in order to strengthen management transparency.[14] Strictly speaking, this system is not a standards regulation. However, there is a growing tendency in the national and compared Constitutional Law to "gather" access to information in a common area or place, as a central component in the defense of human rights, following the European experience of the Aarhus Convention, or the inter-American one with the adoption of a similar mechanism in Escazu, Costa Rica.

There are no obstacles to informing the public about the actions to be followed, especially when they do not pose significant risks to the environment once seismic prospecting good practices have been adopted. It should be noted that the framework of transparency and access to information constitutes a central element in the best practices of technical standards and procedures in force in Comparative Law. Furthermore, Joint Resolution 3/19 of the former Secretariats of the Government of Energy and Environment and Sustainable Development, contemplates the instance of citizen participation in the processing of the approval of environmental impact studies, prior to the issuance of the declaration by the environmental portfolio.

[14] Decree 1,172 / 03 established a program for public participation in decision-making processes, preceding the access to information regulation enacted in 2016.

Implications for the Project

Based on these criteria, the Environmental Impact Assessment (EsIA), the Environmental Management Plan (PGA) and all its related documentation can be made available to any interested party on a suitable site for consultation, as well as to satisfy any requirement of public entities. This availability of information to the public should be prior to the public participation hearing or consultation, in the event that an instance in this regard was established.

An issue to be resolved and that the sectoral legislation on national hydrocarbon matters does not clarify, is the way in which the instance of citizen participation is included in environmental procedures. Joint Resolution 3/19, which has already been mentioned, refers to citizen participation, in accordance with the provisions of the General Environmental Law, without considering particular details.

The procedures in the exclusive jurisdiction of the Nation are of a purely technical profile and have not contemplated a regulated procedure for the EIA until the passing of Joint Resolution 3/19, beyond the sequence of terms established in Resolutions 24 and 25 of 2004 (within which the process shall be directed in accordance with the aforementioned Joint Resolution).

4.3 ENVIRONMENTAL DAMAGE AND THE OBLIGATION TO RECOMPOSE

The obligation to repair environmental damage arises from Article 41 of the National Constitution, and is also "regulated" in the General Law of the Environment, together with the financial tools (insurance, fund, guaranty or similar) contemplated for the management of environmental risks. The General Law of the Environment established a generic definition of environmental damage in its Article 27, final paragraph: "...*Environmental damage is defined as any relevant alteration that negatively modifies the environment, its resources, the balance of ecosystems, or collective assets and values.*"

Environmental damage is closely related to the extension of the legitimacy to act in defense of the environment after the constitutional reform. The General Law of the Environment reflects this broad criterion to claim for the remediation of "collective" environmental damage through the incorporation of Article 30, first paragraph:

"...*Once the collective environmental damage has been produced, they shall have the legitimacy to obtain the recovery of the damaged environment, the affected person, the Ombudsman and the non-governmental environmental defense associations, as provided in Article 43 of the National Constitution, and the national, provincial or municipal State; likewise, the person directly injured by the harmful event that occurred in their jurisdiction shall be legitimized for the action of re-composition or proper compensation..."*

In order to set up mechanisms for the prevention of environmental damage, also providing for the existence of resources for its re-composition in the event with negative effects on the environment, Article 22 of the General Law refers to them in the following terms: "Any natural or legal person, public or private, who carries out activities that are risky for the environment, ecosystems and their constituent elements, must contract a proper insurance to guarantee the financing of the repair of the damage; likewise, depending on the case and the possibilities, it may integrate an environmental restoration fund that enables the implementation of repair actions*".*

4.4 THE ENVIRONMENTAL INSURANCE OF THE LGA (GENERAL LAW OF THE ENVIRONMENT) AND THE OFFSHORE OPERATION

Currently (despite many controversies), the environmental insurance established by Article 22 of the LGA is in force, which must be contracted by the person responsible for all risky activity capable of generating damage to the environment in the terms of Article 27 of the LGA, so that it has the backing of an insurance that provides sufficient protection to face the recovery of the environment or its replacement compensation, in case it is technically impossible to return the environment to its (*ex ante)* former state (Art. 22, Law 25,765 – GENERAL LAW OF THE ENVIRONMENT).[15]. According to Res. SAyDS 206/16, the MAyDS ENVIRONMENTAL RISK ASSESSMENT UNIT, is the competent area for the purposes of requesting and verifying compliance with the obligations established in article 22 of the General Law of the Environment No. 25,675.

Implications for the Project

In terms of damage, it is estimated that the activity, in view of its short -term nature and rather limited risk levels, does not represent major problems for seismic work, nor does it represent risk situations for the environment that require special measures, beyond the precautions regarding the protection of the marine fauna and the eventual interference with species of fishing interest, these being able to be controlled by considering the seasonality and biological functioning of the species present in the prospecting area. In fact, the aforementioned Joint Resolution 3/19 of the Secretariats of Energy and Environment, contemplates, in its legal bases, the intervention of INIDEP or the Ministry of Fisheries within the framework of the powers assigned by the Federal Fisheries Law 24,922.

In our opinion, offshore activity is not included among the aforementioned regulations regarding the mandatory nature of environmental insurance, since the obligation to repair environmental damage shall be safeguarded, with insurance coverage that covers the risks of ships and naval artifacts, established in current international law.

Even less can environmental insurance be considered applicable as it is currently proposed, since seismic activity does not entail risks contemplated in the current regulations on environmental insurance, focused on the contamination of soil and water with substances and / or residues and the effects on species have in fact been excluded, along with other types of effects on the cultural heritage, which are difficult to quantify and due to the complexity of being insurable objects.

5 ARGENTINA AND INTERNATIONAL COMMITMENTS

Various international instruments commit and oblige the Argentine Republic to comply with aspects that concern the protection of the environment in general and the aquatic environment in particular. These obligations are accepted from the approval of each Treaty or Convention by Law of the National Congress.

[15] However, there is currently considerable uncertainty in the market regarding the policies available, despite the efforts made by the MAyDS in 2016 to clear up doubts regarding the application of the different regulatory resolutions issued by the former SAyDS 177 / 2007, 178/2007, 303/2007, 1.639 / 2007,1.369 / 08, 481/11, 256/2016, 204/18 and 388/18 clearly designed for the industrial activity itself or for transporting dangerous goods by land. Decree 447/19 has reformed Decree 1638/12, establishing the alternatives and methods that environmental insurance may have (surety or risk transfer insurance).

International law limits the internal law of Argentina once the agreements or conventions are approved and ratified by our country through Laws that internalize them. Numerous multilateral commitments have been made in matters of environmental protection that acquire supra-legal status in our internal law and constitutional status in the case of violating human and personal rights.

5.1 INTERNATIONAL AGREEMENTS APPLICABLE TO OFFSHORE EXPLORATORY ACTIVITY

Among the multilateral commitments on environmental protection related to offshore activity, the Multilateral Treaties with Environmental Impact Effects (AMUMAs) stand out.

The Multilateral Treaties with Environmental Impacts Effects are global agreements for the protection of the environment and they are included more for illustrative purposes as a "guide" for environmental policy than because of their direct and concrete implications in the project.

5.1.1 Climate Change Convention, Kyoto Protocol and Paris Agreement

Law 24,295 approves the United Nations Framework Convention on Climate Change. This agreement establishes a cooperation commitment between the States parties to stabilize the concentrations of greenhouse gases in the atmosphere to prevent anthropic interference in the climate system enabling the natural adaptation of ecosystems to climate change. Law 25,438 approves the Kyoto Protocol, which defines certain mechanisms to implement the measures agreed upon and the emission reduction commitments for certain countries under a shared responsibilities system according to the amount of emissions generated. Towards the end of 2015, Law 27,270 approves the Argentine ratification of the Paris Agreement, an international program that changes the international strategy on climate change, seeking to limit the increase in global temperature for the 21st century.

5.1.2 Convention on Biological Diversity

Law 24,375 approves the Convention on Biological Diversity and provides, as one of the general measures for the conservation and sustainable use of biological diversity, the integration of conservation strategies into sectoral or inter-sectoral plans, programs and policies (Article 6º). Likewise, it establishes that States must promote adequate and environmentally sustainable development as a concrete measure in those areas adjacent to protected areas.

5.1.3 Ramsar convention

This Convention was approved by the Argentine Republic by Law 23,919 in 1991. Law 25,335 approves the Amendments to Articles 6 and 7 adopted by the Extraordinary Conference of the Contracting Parties in Regina (Canada) in 1987. It was aimed at the conservation of wetlands due to the importance (at an international level) of the value of the natural properties of the ecosystems included, with respect to their richness in biological diversity, their importance in the ecological balance and their productive capacity. The international legal body recognizes that those migratory birds that seek shelter and cross different borders in their seasonal migrations, must be considered an international resource. Likewise, the application of this Convention is closely linked to other international agreements, such as the Convention on Biological Diversity or, more specifically, the Convention on the Conservation of Migratory Species, the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES) or other regional agreements analyzed in subsequent paragraphs referring to the preservation of fauna.

Implications for the Project

The global agreements mentioned do not have major implications for the project, given their global nature and general framework for more active policies. The Biodiversity Convention obliges the parties to adopt measures for the defense of ecosystems, including aquatic ecosystems. Pursuant to the provisions of this agreement, programs such as the Patagonian Coastal Zone Management Plan (PMZCP) have been addressed in previous decades, with the support of UNDP (United Nations Development Program) and the World Environment Fund (known in English as Global Environment Facility –GEF-), considering international waters its focal point.

It has also been the legal basis for the creation of programs such as marine protected areas like those of the Burwood Bank in the southern sea or various marine conservation areas on the coasts and adjacent seas of Patagonia.

In any case, the Biodiversity Agreement reinforces the initiative and the management of carrying out an EIA in order to adopt the precautions for the preservation of avifauna and marine mammals.

The UN Framework Convention on Climate Change and the Paris Agreement are general obligations that, in principle and beyond any questioning towards the development of fossil fuels, do not represent objections to the project. However, it is worth mentioning that in the Categorization and Scope Report (IF-2020-43049058-APN-DEIAYARA # MAD) it has been required to evaluate the impact due to the emissions of Greenhouse Gases (GHGs) resulting from navigation activities, as well as the emissions of atmospheric pollutants produced by the ship's combustion, using the methodology proposed in Chapter 3 of the "2006 IPCC Guidelines for national greenhouse gas inventories" in the implementation of the aforementioned international agreements.

5.2 MULTILATERAL TREATIES RELATED TO THE PROTECTION OF THE SEA AND AQUATIC SPACES

The Argentine Republic is party to a set of multilateral agreements drawn up within the International Maritime Organization (OMI). Many of them are mainly aimed at protecting the environment or maritime safety issues and are specifically relevant to the project, both in terms of preparation and operation.

Almost all these agreements have had, in addition to formal parliamentary approval with the aforementioned constitutional implications, a reception in domestic law through the regulatory powers conferred on the Argentine Coast Guard according to the Navigation Law and its organic Law.

Based on this, the Navigation, Maritime, Fluvial and Lacustrine Regulations, known as REGINAVE (previously Maritime and Fluvial Digest), recently updated by PEN 770/19 Decree, contemplates most of these requirements from international law, either through its "nationalization" and transposition to the internal legal plexus as a national rule, either by referring to the recommendations and good practices established by the IMO, in the absence of positive National regulations.

This reference to international standards, often with a marked technical profile, should be taken into account in the protection of marine mammals from sound impact in seismic operations, given the lack of internal standards for offshore operations and the general reference that exists in international law to IMO guides, which are recommended practices of professional organizations or other similar international organizations.

Notwithstanding other agreements in force, the main agreements with environmental implications for the project and associated maritime operations are as follows.

- International agreement to prevent pollution of seawater by hydrocarbons -OILPOL- approved by Law 21,353.
- Agreement on the Prevention of Marine Pollution by Discharge of Wastes and Other Substances, approved by Law 21,947.
- International Convention on Intervention on the High Seas in Cases of Accidents that Cause Pollution by Hydrocarbons - approved by Law 23,456.
- International Agreement to Prevent Pollution from Ships, MARPOL 1973/78, and its Annexed Protocols approved by Law 24,089.
- OPRC Agreement (International Agreement on Cooperation, Preparation and Fight Against Oil Pollution (Law 24,292).
- United Nations Convention on the Law of the Sea –CONVEMAR-, approved by Law 24,543.
- Protocol of 1992 that amends the International Convention on Civil Liability derived from Damage due to Oil Pollution -CLC- (London-1969), approved by Law 25,137.
- Protocol of 1992 that amends the International Convention on the Constitution of an International Fund for Compensation for Damage due to Oil Pollution -FUND Convention- (London-1971), approved by Law 25,137.
- Agreement on Ballast Water and Bilge Sediments Management approved by Law 27,011.

The 1982 Montego Bay Convention on the Law of the Sea, in addition to setting the international rules regarding the limits of the territorial sea, contiguous zone and exclusive economic zone adopted by the Argentine Republic, and serving, as has been indicated, as the basis for the delimitation of competences between the Nation and the Provinces in matters of natural resources (Law 24,145, 26,197 and 27,007 which regulate hydrocarbons, or 24,922 that regulates fishing), provides the legal support for the regulation of offshore activities in the exclusive economic zone under national jurisdiction of the coastal states, as well as the exploitation of the continental shelf.

The following chapters and sections of CONVEMAR of Part V referring to the Exclusive Economic Zone (EEZ) influence the offshore exploration activity.

In accordance with Article 56, the coastal state has sovereign rights for the exploration, exploitation, conservation and administration of natural resources, "… both living and non-living, of the waters superjacent to the seabed and of the bed and subsoil of the sea…" as well as the production of energy from the wind or currents. Based on this, the coastal state exerts jurisdiction over the set up and use of artificial islands, facilities and structures (Inc. bi.i.) and over matters of protection and preservation of the marine environment.

Regarding the protection of maritime ecosystems, CONVEMAR establishes a series of relevant considerations for offshore activity in general and the seismic survey in particular through its Section XII. Notwithstanding the generic obligation to adopt measures aimed at reducing or eliminating pollution on the part of the coastal states, Article 194 establishes that they must, among other issues, prevent pollution from facilities and devices used in exploration of the natural resources of the seabed and its subsoil. The last subsection of this Article establishes the duty of the States party to the Convention to safeguard rare or vulnerable ecosystems and species and other forms of decimated, threatened or endangered marine life.

Based on these Articles, the Argentine Coast Guard, for example, issued Ordinance 12/97, establishing special protection zones on the Argentine maritime coastline.

The provisions of Article 198 and 199 are of potential implication for the activity, and should be taken into account for the purposes of the eventual obligation to notify other possible affected parties regarding situations of imminent risk of contamination to other affected parties, or the pertinent international organizations, and the need to elaborate contingency plans and cooperation in the cases of contamination.

Similarly, Articles 208 and 210 establish guidelines for environmental control derived from offshore operations. The first of these Articles places the coastal state at the head of the powers to draw up laws and regulations to prevent, reduce and control pollution of the marine environment resulting from exploration and exploitation of the seabed. It is noteworthy, as we have mentioned in previous paragraphs, that national regulations"... shall not be less effective than international rules, standards, practices and recommended procedures ..." (Art. 208, Subsection 3).

Article 210 also empowers coastal nations to enact laws and regulations to prevent, reduce and control pollution of the marine environment by discharges. Like Article 208, Subsection 5 of Article 210 establishes that national regulations should not be less effective than global rules and standards.

The interpretation of these broad powers that the National State holds to establish regulations on discharge matters requires, given the references to international law and accepted international standards, a review of the parameters in force in the rest of the world and particularly those regions with offshore activity background.

It should be noted, in the first place, that the discussion is current and that the applicable criteria are based on scientific risk analysis and a work of debate between state organizations and representatives of the industry. In this regard, it is worth highlighting the work carried out by Regional Conventions (Mediterranean, North Sea, etc.), specialized international organizations (IMO, United Nations Environment Program -UNEP-), national legislation (United Kingdom, Brazil) and the contributions of representative organizations (United Kingdom Offshore Operators Association -UKOOA-, United Kingdom) or the Argentine Institute of Petroleum and Gas -IAPG- (Argentina).

Regarding prospecting and surface surveys, the Argentine legislation has been designed for the continental space with little reference to the activity at sea as to the measures to be taken in matters of seismic survey, with the exception perhaps of the initiatives undertaken in recent years from the call for the Offshore Round in 2017.

Within this framework, international law, especially CONVEMAR, offers a response from the regulatory technique in cases of absence of national standards, by referring to comparative law and the most advanced technical standards in environmental management. According to this, the industry takes into account some of these criteria or performance standards in the current circumstances of the activity on the Argentine Continental Shelf, as is the case of the guidelines of the Joint Nature Conservation Committee of the United Kingdom, among others.[16]

Implications for the Project

The set of international standards incorporated into the Argentine regulatory plexus, have a particular impact on offshore exploratory operations. CONVEMAR and MARPOL Annexes prevail as to relevance and applicability.

CONVEMAR contains the basic guidelines of public international law relating to the sea and other conventions must be interpreted in accordance with the general framework established therein. Likewise, Part XII, on the Protection and Preservation of the Marine Environment, must be taken into account setting up the framework for internal legislation.

It is important to highlight that the international framework applicable to activities on the continental shelf contains a general method of addressing environmental issues with reference to good practices and technical standards in constant state of development by scientific, academic, state or business organizations, thus allowing a continuous and iterative update according to the progress of scientific knowledge.

CONVEMAR, on the other hand, establishes a generic obligation to draw up contingency plans and adopt anti-pollution measures that must be included in the PGA.

6 NAVIGATION LAW AND REGULATIONS

The Navigation Law No. 20,094 regulates all legal relationships originated in water navigation, covering ships and naval artifacts, the latter being “any other floating construction auxiliary to navigation but not intended for it, although it may move on the water in short stretches for the fulfillment of its specific purposes” (Art. 2).

By the previous definition, the constructions that are built on the marine platform to carry out the hydrocarbon exploration activity shall be considered "naval artifacts" in the terms of the Law within this legal framework. The vessels affected by seismic survey activity shall be considered ships, rather than a naval device.

The following are other sections of the Navigation Law to be taken into account in the development of the project:

- Title II, Chapter II, Sections 1 and 2; Administrative rules of the ship and the naval artifact, individualization, registration and nationality, Sections 5 and 6 referring to the conditions of safety and suitability of ships and artifacts and the inspection regulations by the competent authorities, Section 7, referring to the security certificates required by the Argentine Coast Guard (as required by international conventions), Section 8 on the mandatory documentation of all ships or naval devices;

[16] *Joint Nature Conservation Committee Guidelines* (2010 Version, revised in August 2017). See https://hub.jncc.gov.uk/assets/e2a46de5-43d4-43f0-b296-c62134397ce The entity is a non-state public body invested with powers in matters of advice on fauna and natural resource management, acting as a technical advisory entity in specific management areas of activities at sea.

- Title III, Chapter III, Section 6, referring to marine insurance, which shall be lined up with the requirements of insurance against pollution provided for in International Law.

On the other hand, it should be noted that the enforcement authority of this legal system is the Argentine Coast Guard (PNA), as expressed in Law 18,398 modified by Law 20,325, inasmuch as it establishes that the PNA is in charge of the security police service of navigation and the security and judicial police service.

In this way, the PNA takes part in matters related to the control of ships and naval devices, as well as in the issuance of regulations aimed at prohibiting the pollution of river, lake and maritime waters by hydrocarbons or other harmful or dangerous substances, and verify compliance, among other things. Likewise, it applies international conventions on the safety of navigation, goods and human life at sea.

This authority, with exclusive technical capacity in operations of ships and naval devices within jurisdictional waters, has incorporated international standards into the plexus of REGINAVE.

6.1 REGINAVE

REGINAVE constitutes the central regulation of maritime, river and lake activity, based on the aforementioned Navigation Law and the different international agreements entered into in domestic law, with the formal legislative approval of the international instrument in some cases, while in others, with the incorporation of the terms of the treaty, without having a formal approval.[17]

The following sections of REGINAVE are important:

- Title I, Chapter IV, on fire and flood fighting systems;
- Title II, Chapter IV on conditions, inspections and safety certificates; Chapter VI on the management of the ship's operational safety and for the prevention of pollution;
- Title IV, Chapter IX of water pollution.
- Title VIII (incorporated by Decree 1886/83), Chapter I, Section 6 “Special requirements for platforms”.

On the other hand, it should be noted that by Law 22,190 the water pollution prevention system was approved to replace a previous one, which was essential for the legal framework that currently prevails, strongly integrated into international law.

Decree 962/98 created the National System for the Preparation and Fight against Coastal, Marine, River and Lake Pollution by Hydrocarbons and other Harmful and Potentially Dangerous Substances. Both standards embrace both ships and naval artifacts, being applicable to the project whose details are established in the regulations set by the maritime authority, the Argentine Coast Guard, herein below described.

[17] REGINAVE was approved by Decree 4516/73, which is periodically updated, being Decree 770/19 the most recent.

6.2 MARITIME ORDINANCES OF THE ARGENTINE COAST GUARD (PNA)

The rules grouped and updated in REGINAVE, to which we have referred in the preceding paragraphs, are dynamically updated and adjusted, working as a Digest or systematic arrangement of navigation regulations. The REGINAVE is also complemented with specific regulations issued by the highest authority of the Argentine Coast Guard, or by technical subordinate agencies. Some of the most relevant rules for the exploratory activity at sea, or for the vessels involved in the process are herein below described:[18]

- Maritime Ordinance 01/80. This Ordinance establishes the requirements to be met by those interested in carrying out any discharge included in the terms of the 1972 London Convention, applicable to dredging authorization requests. It is estimated that it has no impact on seismic activity.
- Maritime Ordinance 06/80. Prevention of pollution, discharge of waste and other substances.
- Maritime Ordinance 3/81 sets up the verification and check procedure prior to the unloading of hydrocarbons between ships.
- Maritime Ordinance 2/88. It lays down the requirements and safety zones for navigation in waters where naval facilities or devices operate. his standard, is still in force and, although it was conceived for floating or semi-submersible naval devices used in campaigns several decades ago, it has become a reference for seismic operations.
- Maritime Ordinance 01/93. Maritime Ordinance 01/93 includes checklists for pollution prevention in bulk loading and unloading of hydrocarbons or noxious liquid substances in ports, terminals, platforms or mono-buoys.
- Ordinance 07/97. It lays down the format that the Hydrocarbon Registry Book shall have in order to comply with MARPOL requirements.
- Ordinance 8/97 contains the requirements established by the IMO, to obtain the certificates required by the International Code of Ship Operational Safety and Pollution Prevention. This Code was approved by the IMO, pursuant to the requirements of the SOLAS Convention and requires the implementation of a Safety Management System by the ship owner company and the ship, subject to review and external audits by the PNA (Argentine Coast guard). The certificate is valid for 5 years with mandatory intermediate audits.
- Ordinance 01/98 states the procedures and authorizations necessary for the use of chemical products to fight spills. This regulation revokes Ordinance 01/95.
- Ordinance 08/98 establishes the framework for contingency plans at the national level, under the coordination of the PNA (Argentine Coast Guard). The vessel operator shall draw up a Contingency Plan for approval by the Argentine Coast Guard, including articulation with the remaining private or public entities. No greater applicability is foreseen for the project.

[18] Not all of the technical standards applicable to ship operations, security measures, training for onboard personnel and safety at sea are set forth. Their compliance is carried out in identical terms to any ship activity, regardless of whether they are affected or not to seismic prospecting.

- Ordinance 02/98, incorporates the amendments first introduced by the 1978 Protocol to MARPOL and Annex V referring to the management of waste on board ships and naval artifacts, supplemented by IMO resolutions (Resolution MEPC 65 (37), adopted in 1996. The labeling of different types of common or absorbable household waste is required (in terms similar to Urban Solid Waste), to be made public to both crew and passengers, together with the drawing up of a waste management plan, a record book of garbage management and a garbage or food disposer, depending on the tonnage. These requirements are subject to periodic inspection by the PNA.
- Ordinance 05/99 contains the requirements that companies registered in the Argentine Coast Guard must comply with for the provision of services to third parties for the control of spills of hydrocarbons and other toxic or dangerous substances for the environment. The registration requirement is based on the National System for the Prevention of Spills in the sea and coastal areas created by Decree 962/98, administered by the PNA (Argentine Coast Guard).
- Maritime Ordinance 03/00 establishes the models of international certificates that certify the conditions for the prevention of pollution, according to international rules contained in MARPOL.
- Maritime Ordinance 01/03 refers to the requirements that waste incinerators on board naval devices and ships must meet for the disposal of solid waste generated on ships, in accordance with the corresponding MARPOL Annex. These incinerators may not be used for the destruction of certain hazardous waste such as PCBs, PVC plastics or hydrocarbon mixtures.
- PNA Provision 42/05. It establishes new requirements for fire-fighting systems, updating the requirements contained in Article 104.0103 of REGINAVE (modified by PEN 418/04 Decree).
- Maritime Ordinance 2/08. It establishes a ban on the use of asbestos in new facilities on ships and naval devices operating in Argentine waters.
- Maritime Ordinance 2/12. It sets up the requirements for the application of Annex VI of MARPOL on gaseous effluents. This standard (see provision UR 93/12 PNA of 11/19/12) transposes the technical provisions of the IMO referred to Annex VI of MARPOL, duly incorporated by the 1997 Protocol, not yet ratified by Congress).
- Maritime Ordinance 01/14. Rules on waste management and other discharges to the sea. This Ordinance is complementary to the London Convention on dumping and establishes a “negative” list of substances that under no circumstances can be thrown into the sea, with another “positive” list that requires a case-by-case analysis.
- Maritime Ordinance 03/14. It describes the system of certificates for protection and prevention of contamination by dirty waters (greywater).
- Maritime Ordinance 07/15. It establishes the requirements for environmental protection guards on board.
- Ordinance 6/16. It applies noise standards on board the vessels based on the Code adopted by SOLAS.
- Maritime Ordinance 5/17 refers to the operation of heliports and the interface work between helicopters and ships.

- Maritime Ordinance 7/17 states the “Regulations for the Control and Management of Ballast Water and Sediments of Ships, Naval Artifacts or other Floating Constructions”[19]
- Argentine Coast Guard Provision 01/18. It adopts MEPC Resolution 295(71) “2017 Guidelines for the Implementation of Annex V of the MARPOL Agreement”, of the Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO), for the purposes of its integration into the national technical-legal framework. The standard is linked to the management of waste on board and is also related to Ordinance 2/98 of the PNA.
- Maritime Ordinance 8/18 “Treatment of cultural heritage”. This Regulation is an adaptation to maritime and underwater conditions of the objectives of preservation of cultural heritage, in accordance with Law 25,743 (analyzed in other paragraphs) and more specifically, the UNESCO Convention on underwater heritage, ratified by Argentina through Law 26,556.
- Maritime Ordinance 4/19. It determines a coordinated program of unified recognition and certification of pollution prevention for ships of the Argentine merchant navy sailing in jurisdictional waters.

Next, the demands and requirements applicable to offshore exploratory activity are represented in graphical and synthetic form, with regard to the management of effluents, gaseous emissions and waste management, based on the international standards outlined, and their incorporation o transposition into domestic law.

[19] Based on these requirements, the Argentine Coast Guard has prepared a Manual of Good Practices to prevent the entry of exotic species. See https://www.argentina.gob.ar/prefecturanaval/epecies-exóticas-invasoras

Table 1. Summary Table of Standards and Regulations Applicable to the Management of Effluents, Emissions and Waste in Ships and Naval Devices

Type of Effluent or Waste	International Treaty	National Legislation	Argentine Coast Guard Regulation	Comments
Effluents and Liquid Discharges	CONVEMAR as a general framework. OILPOL and MARPOL 73/78 (Annexes I, II and IV). BALLAST Agreement (Ballast Water)	Law 20094 and REGINAVE (Decree 770/19). Law 24543 (CONVEMAR). Law 21353 (OILPOL ratification), Law 24089 (MARPOL ratification) Law 24292 (OPRC Agreement). Law 27011 (Ballast Water Management and Bilge Sediment Management)	Maritime Ordinances 3/81, 1/14, 3/14, 7/17, 4/19	In principle, other national or provincial regulations are not applicable to naval devices, except in the case of accumulation on board and unloading at port facilities.
Gaseous Emissions	CONVEMAR as a general framework. MARPOL 73/78 (Annexes VI)	Law 20094 and REGINAVE (Decree 770/19)	Maritime Ordinances 1/03 (on-board incinerators for Urban Solid Waste), 2/12 (incorporates provisions equivalent to Annex VI)	The 1997 protocol to MARPOL has not been formally ratified by Congress, however its regulations have been accepted by the Argentine Coast Guard in response to its regulatory powers
Solid Waste	CONVEMAR as a general framework. MARPOL 73/78 (Annexes V). London Convention on Discharges and Waste at Sea (LC72)	Law 20094 and REGINAVE (Decree 770/19). Law 21947 (ratification LC 72)	Maritime Ordinances 1 and 6/80, 2/98, 3/00, 1/14, 4/19	The labeling of different types of common or absorbable household waste is required (in terms similar to Urban Solid Waste), to be made public to both crew and passengers, together with the drawing up of a waste management plan, a record book of garbage management and a garbage or food disposer, depending on the tonnage
Special Solid Waste	London Convention on Discharges and Waste at Sea (LC72)	Law 20094 and REGINAVE (Decree 770/19). Law 21,947 (ratification LC 72)	Maritime Ordinances 1 and 6/80 (regulatory of the London Convention)	The 1996 protocol to the London Convention has not been formally ratified by Congress

7 HYDROCARBON ACTIVITY

Law 17,319 modified by Laws 26,197 and 26,741, and later by Law 27,007, regulates liquid and gaseous hydrocarbon deposits located in the territory of the Argentine Republic and on its continental shelf.[20] As stated above, the deposits located up to twelve (12) nautical miles from the shoreline defined in Law 23,968 belong to the provincial states with a maritime coastline pursuant to the provisions of the Constitution in accordance with Article 124 , while those located beyond twelve (12) nautical miles and up to the outer limit of the continental shelf are subject to the National State, based on sovereign rights recognized by International Law.

The enforcement authority of this regulatory frame is the Secretariat of Energy, dependent on the Ministry of Productive Development, through the Sub-secretariat of Hydrocarbons, by virtue of Decree 7/19, which reorganized the National Administration provided for in the Law of Ministries.

Next, the environmental regulations issued by the energy area (or its predecessors), applicable to the activity of hydrocarbon exploration, prospecting and the corresponding environmental requirements are developed. As previously described, detailed prescriptive standards for exploratory activity in maritime waters have not been developed to date. Furthermore, as occurs in other areas with a high degree of technical complexity and advances in technical knowledge, there is a trend towards a regulation model based on performance models and risk assessments.[21]

7.1 RULES AND PROCEDURES TO PROTECT THE ENVIRONMENT (EXPLORATION STAGE): BACKGROUND

Through Resolution 105/92, the Secretariat of Energy of the Nation approved rules and procedures to protect the environment during the stage of exploration and exploitation of hydrocarbons, taking place both in continental areas and on the marine platform.

Broadly speaking, the standard required two types of basic procedures.

- Previous Environmental Study.
- Monitoring of Works and Tasks.

Next, the standard stipulated requirements to be fulfilled in each of the stages; exploration; drilling and exploration; development and exploitation. Although a general reference was made to the application on the continent and in jurisdictional waters, the text of the regulation itself made it clear that it was conceived for the terrestrial environment. There is no mention of the precautions to take into account, for example, the protection of marine fauna in seismic prospecting tasks.

[20] Law 26,197 was designated as "Short Law" in the jargon of lawyers and experts in the energy world who were active at the time of its preparation. The term included the alternatives under debate when modifying the hydrocarbon law, a more extensive option that contemplated a broader and more comprehensive reform, known as the "Long Law", and another, which was finally adopted, that was limited to recognizing the formal transfer of domain of resources to the provinces, following the provisions of Law 24,145 on the federalization of hydrocarbons, a standard in line with the text incorporated in the reform of the Magna Carta in 1994.

[21] See Walsh, Juan Rodrigo, "*Hacia un Marco Regulatorio Ambiental para las Actividades en la Plataforma Continental Argentina"*, RADEHM, May-July 2017, Buenos Aires, mentioned above.

Resolution 105/92 was a valuable predecessor in environmental regulation, following the prevailing logic at the time, as environmental requirements constituted an additional requirement to the formal presentations to be made, without major consequences or practical effects, because the legislation tended to assimilate environmental information to the rest of regulatory standards to which the activity was subjected, without it having major practical implications in terms of management or the core of the activity.

7.2 ENVIRONMENTAL IMPACT ASSESSMENTS AND ENVIRONMENTAL MONITORING REPORTS

The antecedent of Resolution 105/92 has been the basis for the subsequent elaboration of the current national environmental regulations for the exploratory activity. Through Resolution 25/04, Annex I of the Ministry of Energy approves the "Regulations for the Presentation of Environmental Studies Corresponding to Exploration Permits and Hydrocarbon Exploitation Licenses" **applicable to both continental areas and marine platform.**

As of its issuance, Resolution SE 252/93, which had duly approved the Guidelines and Recommendations for the Execution of Environmental Studies and Monitoring of Works and Tasks, was declared void, a complementary regulation to the aforementioned Resolution 105/92 of the Ministry of Energy.

7.2.1 Environmental Impact Assessment

Resolution SE 25/04 establishes in which specific tasks within the aforementioned stages the study must be presented, as well as the deadlines that must be taken into account for its presentation and the structure that must be observed during its development.

The standard requires the presentation of a prior environmental impact study - it includes the exploration and exploitation stage - for each of the following tasks.

- Drilling of exploratory wells. Deadline for submission: twenty (20) days before starting any type of work prior to drilling itself.
- Seismic Surveying. Deadline for submission: thirty (30) days before starting any type of work.
- Construction of new facilities (it includes the construction of batteries, treatment and injection plants, pumping and compression stations). Deadline for submission: thirty (30) days before construction begins.
- Abandonment of facilities. Deadline for submission: within the annual monitoring report (to be developed later) corresponding to the period in which it is carried out.

On the other hand, and in relation to the new licenses granted on exploration permits, it is indicated that the related environmental studies must be submitted along with the development program and investment commitments in accordance with Art. 32 of Law 17,319.

It is necessary to observe the provisions of point 3 b) of Annex I regarding the structure to be followed for the preparation of the environmental assessment.

7.2.2 Environmental Monitoring Report

Resolution SE 25/04 defines the Environmental Monitoring Report as an integral part of the Environmental Impact Assessment and as its main source of review. In this way, the Environmental Monitoring Plan must be developed continuously throughout the year, and an annual report must be presented under the conditions established in point 3 c of Annex I.

It is worth remembering that, as mentioned above, Resolution SE 105/02 required the presentation of a Works and Tasks Monitoring Report during the exploration stage on an annual basis. However, as of the enactment of Resolution SE 25/04, it is understood that the Work and Task Monitoring Report was renamed the Environmental Monitoring Report.

These general regulations were applied in a generic way to activities in the Argentine sea in a similar way, despite not having been conceived for the particular offshore circumstances.

When the so-called “Offshore Round” was launched between 2017 and 2018, complementary regulations were drawn up for calls for bids to carry out seismic work in the Argentine sea. Decree 872/18 established the framework for the call with guidelines that aim to attract risk investment from the national and foreign scope, contemplating, for example, the possibility of submitting differences or disputes to international arbitration mechanisms. Based on this call, regulatory resolutions were issued referring to different aspects, including environmental considerations applicable to prospecting and exploration operations.

Annex II of Resolution 65/18, states the requirements to be included in the Tender Documents to be used in the call for the bidding process.[22] The bidding documents contain much detail regarding the legal formalities to be complied with by the bidders, in regard to fees, royalties, minimum tasks to be observed, etc. Article 14 of the Annex refers to various general considerations in environmental matters, referring, as was indicated in previous paragraphs, to the considerations derived from international law, good practices and the "best practices" on the subject.

No detailed prescriptive requirements are established regarding the authorizations to be obtained by bidders, and even references to the abandonment of wells are included, a situation that is not imaginable for prospecting or exploration work that does not involve exploratory drilling.[23]

[22] Amended by SGE 28/19 and 65/19 resolutions.

[23] The Bid specifications establish the following requirements in article 14:

> *14.1. The LICENSEES shall develop the activities object of this PERMIT and / or LICENSE consistently with the conservation and protection of the environment and any other resource, for which they shall be obliged to use the best available techniques to prevent and mitigate the negative environmental impacts. In turn, LICENSEES shall also make a rational use of natural resources.*
>
> *14.2. The LICENSEES must implement an Environmental Management System designed according to recognized international models for the activities regarding this PERMIT and / or LICENSE, which includes an evaluation and risk management.*
>
> *14.3. The LICENSEES shall comply with the legal and regulatory provisions of the ARGENTINE REPUBLIC and the corresponding International Agreements and Treaties, signed and ratified by the ARGENTINE REPUBLIC and the specific guidelines in force properly stated by the APPLICATION AUTHORITY.*
>
> *The standards and guides to be issued by the APPLICATION AUTHORITY shall follow the standards or guides of good environmental practices of international application, such as: AMERICAN PETROLEUM INSTITUTE (API), INTERNATIONAL ORGANIZATION FOR STANDARIZATION (ISO), and INTERNATIONAL MARITIME ORGANIZATION (IMO).*

In September 2019, and in order to establish a framework for the articulation of policies and management measures around the interaction of hydrocarbon and fishing activities, the hydrocarbon and fishing sub-secretariats depending on the energy and agriculture portfolios respectively, created a Working Group to address the issues that arise in the management of both areas. This initiative is embodied in Joint Provision 1/19 signed between the aforementioned sub-secretariats, and, no specific management measures or recommendations for the activity have been prepared as of the date of this document.[24]

Joint Resolution 3/19 of the former Secretariats of Government of Energy and Environment and Sustainable Development, established a specific framework for the processing of environmental studies for exploratory activities in the Argentine Sea, beyond the 12 miles of provincial jurisdictional waters, foreseeing (at least in the legal bases) an intervention of the agriculture and fishing portfolio, the evaluation and approval by the Environment Department and the Monitoring and Control by Energy, the latter counting on the assistance of the Environment Department. In accordance with the established procedure:

- The Project Notice (according to Annex III) is presented for pre-categorization before the Ministry of Energy. This is then sent to MAyDS for a final categorization. Depending on the nature and complexity of the projects, they may be subject to an ordinary or simplified EIA.
- Once categorized, the MAyDS analyzes and evaluates the technical studies, prior to the issuance of an Environmental Impact Statement (EIS) (following the performance guidelines established in the annexes and giving intervention to the fishing area).[25] (Article 3).
- MAyDS receives a preliminary report from the Ministry of Energy and, where appropriate, shall request the issuance of an Opinion from SAGyP, who shall give technical intervention to INIDEP if deemed pertinent.[26]
- Article 6 of Annex I contemplates an instance of citizen participation, which may be a hearing or a consultation process, using the digital platforms in force and elaborated by the modernization area of the state (currently non-existent), being able to consider that some work is carried out today by the Ministry of Strategic Affairs. The environmental authority may require more information or data if deemed necessary.
- Prior to the issuance of the EIS, the energy area shall issue a Final Review Opinion.

14.4. The LICENSEES shall be held accountable for the environmental liabilities that are generated as a consequence of oil operations and shall cover the costs of the remediation actions that may arise.

14.5. The LICENSEES shall carry out the activities related to the abandonment of the wells they drill, and all costs and expenses shall be their sole responsibility. In addition to the applicable regulations, the LICENSEE undertakes to adopt those practices commonly accepted by the international community in this type of abandonment tasks, such as those stated by the International Entities mentioned in ARTICLE 14.3.

[24] The standard, among its foundations, refers to the framework of international law in force and applicable to the protection of maritime waters and their living resources, the Federal Fisheries Law 24,922 and the programmatic request arising from Law 27,007 to create a uniform regulation in environmental matters among the different jurisdictions.

[25] The way of intervention of the fishing area does not expressly arise from the aforementioned Resolution, whether through the Ministry or INIDEP.

[26] This is recorded in Annex I of the Joint Resolution. Strictly speaking, the Resolution is issued by two bodies to regulate a procedure in which a different organization to those who developed the process participates. Beyond the obvious competition that the fishing area has, it is interpreted that the deadlines established in the resolution shall not apply and it may even be administratively silent, with the consequent legal uncertainty in the response of the DIA.

- Once the EIS is issued, the Ministry of Energy shall perform the monitoring and control, and may involve the MAyDS, if necessary.

The administrative circuit for obtaining the EIS is herein below displayed.

The applicable regulatory requirements for obtaining the EIS are shown below, in accordance with the regulations in force for the application of the EIA in projects subject to authorization by national entities and in waters under exclusive national jurisdiction, in accordance with Joint Resolution 3/19 of the SGAyDS and the SGE, also taking into account Provision 1/19 of the SSE and the SSP. The EIS does not exclude the enforcement of other specific regulatory frameworks, applicable to maritime activity and subject to Law 20094 and its regulations, including applicable international conventional standards. The table illustrates the interactions and flowchart for the simplified procedure corresponding to the project under analysis.

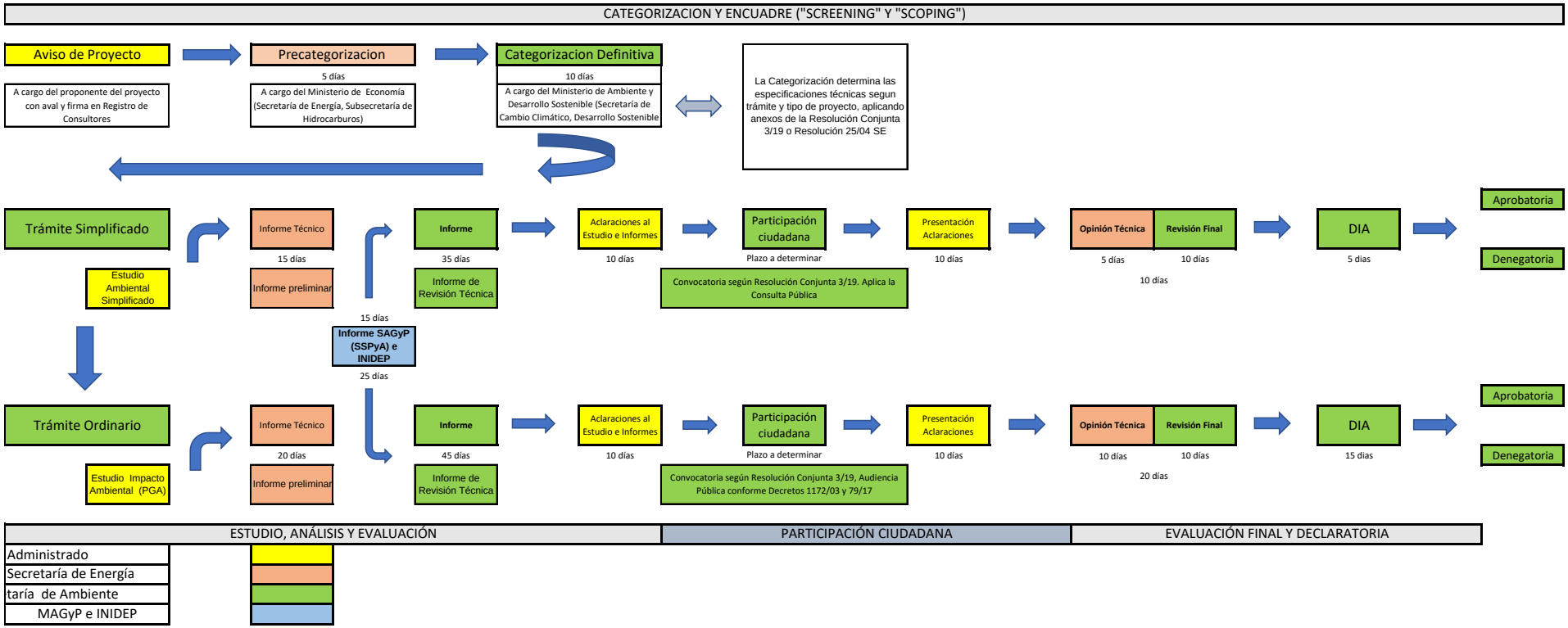

Figure 2. Flowchart of interactions between authorities in obtaining environmental approvals.

Diagram Translation

From left to right

Screening and Scoping/

Project Notice. In charge of the proponent of the project with endorsement and signature of the Register of Consultants.

Pre-categorization. In charge of the Ministry of Economy, Secretariat of Energy, Sub-secretariat of Hydrocarbons

Final Categorization. In charge of the Ministry of the Environment and Sustainable Development (Secretariat of Climate Change and sustainable Development)

The categorization determines the technical specifications according to the procedure and type of project, applying Annexes of Joint Resolution 3/19 or Resolution 25/04 SE (Ministry of Energy)

Simplified Procedure

Simplified Environmental Assessment

Technical Report/Preliminary Report/Report/Technical Revision Report/Clarification of the Assessment and Reports/Citizen Participation/ Deadline to be determined/Presentation of Clarifications/ Call according to Joint Resolution 3/19. It applies to Public Consultation/ /Technical Opinion/Final Revision/DIA/Approval/Refusal

SAGyP Report and INIDEP/Ordinary Procedure/Environmental Impact Assessment PGA/Technical Report/Preliminary Report/Report/Technical Revision Report/Assessments and Reports Clarifications/ Citizen Participation/ Deadline to be determined / Presentation of Clarifications/ Call according to Joint Resolution 3/19 and Public Hearing according to Decrees N°1172/03 and 79/17/ Presentation of Clarifications/ Technical Opinion/Final Revision/ DIA/Approval/Refusal

Assessment, Analysis and Evaluation

Citizen Participation

Final and Declaratory Evaluation

Administered

Ministry of Energy

Secretariat of Environment

MAGyP and INIDEP

Implications for the Project

The regulatory framework at the national level, established by the Ministry of Energy through the aforementioned resolutions of 2004, constitutes a generic framework for the presentation of technical studies, following the scheme of Resolution 105/92 of the Ministry of Energy (SE). Although they are applicable both on the continent and on the continental shelf and slope and for all instances of activity, there are no major considerations or frames of reference for offshore activity. In fact, and as it has been analyzed, the existing references are almost all to aspects on land, such as those made on the opening of seismic plunges or the removal of vegetation.

At this point, the forwarding criteria established in the framework of international law of the sea for environmental protection should be applied, in particular CONVEMAR (UNCLOS), to which we have referred in previous paragraphs. In this way, any gap in the internal legal framework can be effectively filled.

On the other hand, given the characteristics of offshore activity, the technique established by international treaties referring to the protection of the sea, referring to technical rules, the "state- of -the -art", recommended practices, or standards developed by technical or professional bodies based on performance criteria, allows a dynamic update of practices and environmental management, incorporating advances in science and knowledge of environmental dynamics in maritime spaces. In fact, the Specifications used for the Offshore Round in environmental matters, launched by Decree 872/18 and its complementary resolutions specify this, with a reference to technical standards of organizations such as IMO, API or ISO, these being merely examples. In this sense, the use of guides such as those prepared by the JNCC for seismic activities is consistent and aligned with the regulatory requirements applicable to the continental shelf.

In this sense, it should be noted that offshore activity, depending on the variations in oceanographic, climatic and technological conditions that exist between different basins and regions in the world, is ideally suited for this type of regulation, based on performance standards, risk criteria and management guidelines. Due to its characteristics and high complexity, regulations of a prescriptive and formal type are perhaps not the most advisable.

Regarding seismic surveys, Argentina's formal regulations, at the national level, must necessarily be complemented with comparative law regulations and technical standards that reflect advances in scientific knowledge, particularly in the field of marine biology. This is where the characteristics of international environmental law, with an emphasis on the application of the best available criteria and cross-references to technical standards, allow an effective integration of gaps in national prescriptive legislation.[27]

Based on the forwarding criteria established in CONVEMAR and other international instruments, it is recommended to integrate the environmental study with the most consolidated and recent good practices regarding offshore seismic activity. The good practices of the Joint Nature Conservation Commission of the United Kingdom (JNCC) of August 2017 have been taken as a reference.[28]

There are other guidelines and good practice guides that can reference and support the work of EIA in a complementary way, such as the standards of the International Union for Conservation of Nature (IUCN), recommendations of Greenland, New Zealand and the National Oceanic and Atmospheric Administration (NOAA) of the United States.[29]

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[27] Some recently drafted environmental regulations in the field of energy, or public works such as dredging or port facilities, have adopted the criterion of referencing the recommended procedures with norms or technical standards in force in comparative law. The Annexes to Joint Resolution 3/19 reinforce this regulatory technique mentioning several good practices and international technical organizations with recognized experience in applied science and conservation of natural resources.

[28] See JNCC *"Guidelines for minimizing the risk of injury and disturbance to marine mammals from seismic surveys",* Aberdeen, UK. The guidelines were prepared by the JNCC, a statutory consultee, as described, in order to facilitate the integration of the considerations raised in the European Union Directives on the conservation of protected species and habitats implemented in British legislation. (2007 and 2009 amendments to the 1994 Natural Habitats regulations and the 2007 Offshore Marine Conservation Regulations, 2009, 2010 and 2017 amendments, currently in force. See http://www.legislation.gov.uk/uksi/2017/1013/contents/made).

[29] See Nowacek, Douglas and Southall, Brandon *"Effective planning strategies for managing environmental risk associated with geophysical and other imaging surveys*", IUCN, 2016, also Nowacek and others *"Responsible Practices for Minimizing and Monitoring Environmental Impacts of Marine Seismic Surveys with an Emphasis on Marine Mammals",* Aquatic Mammals Journal 2013, *39*(4), 356-377, DOI 10.1578/AM.39.4.2013.356). See also from NOAA's Office of Protected Resources and the National Marine Fisheries Service "*Final Scoping Report for EIS Environmental Impact Statement on Effects of Oil & Gas Activities (Seismic and Exploratory Drilling) in the Arctic Ocean", Washington, NOAA, 2010.*

In general, there is a coincidence between the guidelines regarding the use of risk assessment mechanisms, taking into account the presence of marine species and mammals in the work area, the correct characterization of the dynamic populations based on food chains, seasonality, dimensioning ecologically sensitive areas and the qualified observers on board to carry out detections prior to the start of each seismic course. There are also "slow start" mechanisms in order to scare away the proximity of specimens in the work area.

There is clearly a field of work where the preparation of the EIS can benefit and receive feedback from scientific and technical areas, both academic and NGOs in the generation of basic information, contributing with elements arising from the monitoring tasks during the works. These synergies can also serve to consolidate the social legitimacy of prospecting actions.

Most of the guides and recommendations arising from the comparative analysis include references to stakeholder consultation and participation. The uncertainty regarding the demand for citizen participation (not specified in the resolutions of the former Secretariat of Energy) and what is established in the LGA, is settled in the Project Categorization report (IF-2020-43138780-APN-DEIAYARA #MAD) where the MAyDS states that considering the type of project, a public hearing is mandatory.

Regarding the applicable administrative circuit, the framework for offshore activities is generic and follows broadly, beyond the references cited to good practices and performance standards arising from comparative law, the scheme of resolutions 24 and 25 of 2004, of the former Secretariat of Energy, with the amendments introduced by Joint Resolution 3/19 of the former Secretariat of Government of Energy and the Environment. In the absence of provincial authorities on environmental matters, before whom to process environmental authorizations and approvals of environmental impact studies, it is interpreted that in this case, the presentations must be made before the Energy Authority, for its subsequent transfer to the departments of the Ministry of Environment for the evaluation and timely issuance of the Environmental Impact Statement.[30]

7.3 PROCEDURES FOR REPORTING ENVIRONMENTAL INCIDENTS

Resolution 24/04 of the Ministry of Energy regulates the procedure that the operators of the exploration and exploitation areas must observe, in order to inform of the occurrence of some type of environmental incident in the oil field area.

The main reason for the change of regulations was to establish a differentiation between incidents considered "major" and "minor", something that the previous rules did not include.

In this way, the hydrocarbon operating companies are obliged to report the occurrence of major incidents - according to the definition contemplated in Annex I - that have affected or may affect human, natural and / or socio-economic resources, within a period of twenty-four (24) hours.

Likewise, there is an obligation to present a final report of the incident before the aforementioned body, within thirty (30) days of the completion of the environmental incident control tasks. The provisions of Annex II which approves the standards for reporting environmental incidents must be observed.

[30] The resolutions issued in the framework of the Offshore Round and the granting of seismic surveys permits (without granting of exploration areas) only refer to the Enforcement Authority as regards environmental studies, without further details. This uncertainty has been partially resolved with the approval of Joint Resolution 3/19 already mentioned.

On the other hand, in the event of minor incidents, which are those not included in the previous category, the operating companies must document and record them, keeping them at the Sub-secretariat of Fuels disposal.

Implications for the Project

Strictly speaking, the format of this resolution does not include the activities achieved by offshore seismic operations. Notwithstanding this, and given that good practices include on-board monitors, activities should be documented and any type of incident involving birdlife can be duly documented and included in the final reports.

8 CONSERVATION OF BIOLOGICAL DIVERSITY

These paragraphs show a brief overview of the rules and instruments that protect biological diversity and fauna as one of the most sensitive aspects in offshore seismic activity.

Regarding the application of the Convention on Biological Diversity, through Resolution 91/2003 of the National Secretariat of Environment and Sustainable Development, the final Document of the National Biodiversity Strategy is approved, aimed at increasing the level of Requirement of EIA standards for those activities that may affect biological diversity, and at setting up procedures for the inclusion of biodiversity conservation guidelines in the design of other sectoral policies. This Strategy was updated in 2017 with the approval of Resolution 151 of the former Secretariat of Environment and Sustainable Development (SAyDS) with the approval of an Action Plan for 2016-2020.

This Convention, to which we have referred in the international environmental agreements section, and approved by Law 24,375, establishes theme areas of actions aimed at achieving its aims by the States.

Among the decisions made, the criterion of sustainable use of marine living resources, known as the Jakarta Mandate, and the basic principles of the work programs have been adopted, including the effects of extractive activities on said resources.

Other instruments to be considered in the environmental management of seismic survey activities and proactive management measures in accordance with the environmental management plan are the following:

- Law 26,107, approving the Agreement on the Conservation of Albatrosses and Petrels (Canberra – 2001). MAyDS is the enforcement authority of this agreement. Article 3 is worth highlighting among its provisions, which states that the signatory countries must adopt the following measures:

  "… *a) conserve and, where possible and appropriate, restore habitats that are important to albatrosses and petrels; b) develop and apply measures to avoid, neutralize, cancel; minimize or mitigate the adverse effect of activities that may interfere with the conservation status of albatrosses and petrels* …".

- Law 23,094. Declaratory law of the Southern Right Whale as a natural monument, subjecting it to the special regulations of Law 22,351 of National Parks, Natural Monuments and National Reserves, in the area of Argentine jurisdictional waters..." (Art. 1º).

- Law 25,052. Regulation banning the hunting of killer whales in nets or by forced stranding. Although this law was created to protect the coastal populations of orcinus orca, there is a general command to protect this species, including mutatis mutandis its care during exploratory activities on the continental shelf.

- Law 25,577. This rule generically prohibits the catch of cetaceans throughout the territorial sea and the Exclusive Economic Zone, regardless of scientific research exceptions.

- Law 25,290. Approving standard of the Agreement on the Application of the Provisions of the United Nations Convention on the Development of the Sea of December 10, 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, adopted in New York.

In this list of international conventions and agreements, the set of contracts signed in the framework of the Antarctic Treaty is left out of consideration, as the planned actions are outside the territorial scope of application.

9 FISHING

Fishing activity is important in the Exclusive Economic Zone and the Argentine sea. With regard to fishing activity in Argentina, Federal Fishing Law 24,922 introduces a new system of regulation of fishing resources that, until the enactment of said rule, were legally supported by fishing permits granted by the former Ministry of Agriculture, Livestock, Fishing and Food (SAGPyA) and its complementary resolutions.

The Federal Fisheries Law (LFP) establishes a more active role for the State and focuses on the rational use of the fishing resource. It is governed by the following guidelines:

The State is the head of the fishing resource (fish as public domain assets), and prohibits the exploitation of individuals who operate with precarious permits from the Administration, subject to the following conditions:

- Maximum allowable catches.
- Administration system by quantification.
- Agreed National Fisheries Policy: through an intra-federal body, the Federal Fisheries Council, created for this purpose and made up of the Nation and the provinces with a maritime coastline.
- Scientific information system for the control and monitoring of fishing exploitation and to provide the established limitations with technical content.
- Financial system: by creating a fund with contributions from the fishing sector.

It is worth mentioning what is established in Joint Provision 1/19 of the Sub-secretariats of Hydrocarbons and Fisheries, dependent on the Energy and Agriculture and Fisheries portfolios respectively. The regulation enables the creation of a working group to share and deepen the knowledge of the interactions between both activities, promoting good practices and conservation measures in order to mitigate any conflict situation between fishing and exploratory activity.[31] The Working Group must prepare annual plans and a report with the progress achieved within 60 days of its creation in September 2019.

Implications for the Project

The seismic prospecting activity does not have major impacts. Therefore, the international management measures to protect marine fauna and fish species should be applied. Furthermore, Joint Resolution 3/19 of the energy and environment portfolios, which has been mentioned in this chapter, contemplates an intervention of the fishing area, without further details of its methodology.

The Environmental Management Plan should ensure a fluent dialogue with organizations such as INIDEP, the Federal Fisheries Council (COFEPESCA), and the Nation's agriculture and fisheries portfolio, in order to design a management plan that considers the fishing closures, coordination with commercial fishing activities, and, perhaps more importantly, closures or exclusion times due to the life cycles of species present in the work area.

10 PROMAR PROGRAM

There is a final consideration regarding some public policies aimed at promoting research and development in marine and coastal areas. In this sense, the enactment of Law 27,167 towards the end of 2015, creator of the National Program for Research and Productive Innovation in Argentine Maritime Spaces (PROMAR), constitutes an emblematic example of these policies aimed at promoting the sustainable development of the resources of the sea, its monitoring and conservation, and the integration of scientific research activities with technological development and an integrated and cross management of activities related to maritime work.

Implications for the Project

The impacts of seismic activity on biodiversity are the most relevant, in particular the use of airguns and the sound impacts on marine mammals. The review of the most important agreements applicable to the protection of marine fauna is indicative of the species to be considered in the on-board observation and monitoring tasks to be included in the Environmental Management Plan. The importance of initiatives such as PROMAR is highlighted, as an institutional framework in which to seek synergies between the gathering of information, for example, for the environmental baseline and the provision of data obtained as a result of the observation tasks on board to the science and technology system devoted to research on the continental shelf. It is understood that this "virtuous" feedback of data and information, in addition to improving the quality of environmental management in the short and medium term of the company itself, generates an intangible value in terms of social and environmental authentication of the activity.

[31] The roles of the ad hoc Working Group are, among others: "… a) Coordinate the generation, compilation and / or systematization of data and technical reports useful for the coordination of fishing activities and hydrocarbon exploration. b) Prepare and propose to the fishing and hydrocarbon exploration authorities, several plans and programs for the interaction of hydrocarbon exploration and fishing activities on the Argentine continental shelf, under an ecosystem approach to strengthen control and monitoring systems of the productive activities in the Argentine Sea, c) Serve as an area of interaction around the relevant sectoral public policies of competence of the participating organizations …"

11 PROTECTED AREAS

Law 22,351, which establishes the National Parks regulations, governs at the national level. Among the classification of the different types of areas to be protected, the Law provides for "Natural Monuments" understood as areas, things, living species of animals or plants of aesthetic interest or historical or scientific value to which absolute protection is granted. Law 23,094 was enacted based on this rule, declaring the Southern Right Whale as a natural monument, as mentioned in the preceding paragraphs.

In recent years and coinciding with conservation criteria that are beginning to be imposed in today's world, the Argentine Republic has adopted a proactive policy of conservation of maritime and coastal spaces, enacting Law 27,037 that sets up the National System of Natural Marine Protected Areas.[32] The following are examples of said Areas:

- Law 26,875. Creation of the Namuncurá or Burwood Bank areas.
- Law 26,817. Creation of the Makenke Inter-Jurisdictional Marine Park between the Nation and the Province of Santa Cruz.
- Law 26,818. Creation of the "Isla Pingüino" Inter-Jurisdictional Marine Park, between the Nation and the Province of Santa Cruz.
- Law 26,446. Creation of the Southern Patagonia Inter-Jurisdictional Coastal Marine Park, between the Province of Chubut and the Nation.

Implications for the Project

There is no doubt that Argentina's conservation policy, together with the lines of associated scientific research have been oriented towards coastal spaces, in line with international trends, evidenced by the Sustainable Development Goals, adopted by the UN in 2015, or the priorities agreed by IUCN in Hawaii in 2016.

The creation of the system of marine protected areas, together with the PROMAR research program, is proof of this. However, the analyzed protected areas are far from the area of operations and no conflict with seismic operations is foreseen.

There are some suggestions regarding the exchange of information related to avifauna and the possible synergies between the information gathered by the observers and biologists on board and the public or private technical scientific system with research programs in the Argentine Sea.

12 PROTECTION OF CULTURAL HERITAGE

According to Law 25,743 for the protection of archaeological and paleontological heritage, archaeological and paleontological materials found through excavations belong to the State with jurisdiction over the discovery site. In this regard, it is worth bearing in mind that "... any natural or legal person who undertakes excavations in order to carry out construction, agricultural, industrial or other similar work, is obliged to report to the competent authority the discovery of the site and of any archaeological object or paleontological remains found in the excavations, being responsible for their conservation until the competent authority takes over...".

This standard is complemented by Law 26,556, approving the UNESCO Convention on the Protection of Underwater Heritage, adopted in Paris in 2001, regardless of the Argentine Coast Guard regulations on the protection of heritage on the seabed.

[32] Decree 402/17 grants the National Parks Administration jurisdiction over these marine protected areas.

Implications for the Project

There are areas of the seabed that are particularly protected due to their historical interest (such as Law 25,546 which states that the area where the "ARA General Belgrano" cruise ship remains is a National historic place) which are far from the project area.

If shipwrecks or sites of cultural or scientific interest were detected, communication methods in accordance with the regulations and protocols described, based on good practices in force at a comparative level would be advisable.

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