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for the Commission, of the Convention on the Law of the Sea
and the New Ocean Regime

NATIONAL LEGISLATION AND REGULATIONS
RELATING TO THE CONDUCT OF MARINE SCIENTIFIC RESEARCH
BY NON-NATIONALS IN MARITIME ZONES
SUBJECT TO NATIONAL JURISDICTION

by

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The views expressed in this Document are those of the author and do not necessarily correspond to those of the IOC or Unesco.

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INTRODUCTION

The purpose of this study is to present in a factual way the provisions of available national laws and regulations in force with respect to the authorization and conduct of marine scientific research by non-nationals and by international organizations in maritime zones under national jurisdiction. The principal zones in question are the territorial sea, the continental shelf, exclusive fishing zones and exclusive economic zones.

Of roughly 135 coastal States in the world, virtually all claim a territorial sea, the breadth of which ranges from 3 to 200 nautical miles, and in some cases beyond. Some 25 countries claim an exclusive fishing zone which often extends to 200 miles offshore. A further 55 States claim an exclusive economic zone to 200 miles offshore. For some countries the continental shelf extends to a distance beyond 200 miles.

The sources for this study are the national laws, regulations and, to a lesser extent, administrative procedures, that explicitly address the issue of scientific research. The principal documentation consulted in the preparation of this report comprises: United Nations Legislative Series - National Legislation and Treaties relating to the Territorial Sea, the Contiguous Zone, the Continental Shelf, the High Seas and to Fishing and Conservation of the Living Resources of the Sea (Ser. B/15), United Nations, New York, 1970; National Legislation and Treaties relating to the Law of the Sea, (Ser. B/16), 1974, (Ser. B/18), 1976, and (Ser. B/19), 1980, United Nations, New York; New Directions in the Law of the Sea, Oceana Publications, Dobbs Ferry, N.Y., and British Institute of International and Comparative Law, London, Vol. V, 1977 (R. Churchill, M. Nordquist, and S. Lay, eds.), Vols. VII and VIII, 1980 (M. Nordquist, S. Lay and K. Simmonds, eds.), Vol. IX, 1980 (M. Nordquist and K. Simmonds, eds.), and Vol. XI, 1981 (M. Nordquist and K. Simmonds, eds.); A. Szekely, Latin America and the Development of the Law of the Sea: National Legislation, Vol. II, 1980, Oceana Publications, Dobbs Ferry, N.Y.; R. Schwarz, Die Wahrscheinlichen Auswirkungen Der 3. Seerechtskonferenz Der Vereinten Nationen Auf Die Zukünftige Meeresforschung Der Bundesrepublik Deutschland, Institut für Wirtschaftsforschung, Hamburg, 1982.

The main secondary source has been W. Scholz, "International Law and National Legislation", Marine Policy, Vol. 4, No. 2, 1980, pp. 91-127. Thus, the Law of the Sea Treaty, negotiated in the context of the Third United Nations Conference on the Law of the Sea, is beyond the scope of the present enquiry. Also excluded are those clauses that cover exploration and exploitation of natural resources, and

fisheries research, except in the sense that marine scientific research involves such things as the taking of samples of resources, whether living or non-living, for scientific purposes.

While laws and regulations are of equal legal effect, the laws examined tend to deal with the matter of scientific research in a general way, (e.g., whether prior consent is required) whereas regulations usually deal with such matters as the procedures for obtaining such consent and the conditions under which it may be granted. It is common for the law to provide for the issuing of regulations in pursuance of the purposes of the law. In a few cases countries have simply adopted administrative procedures for dealing with requests, without any formal regulations.

One half of the world's coastal States (67 of 135) are known to have laws and regulations of direct relevance to the question at hand. This is not to suggest, however, that States do not have other bases on which they exercise jurisdiction with respect to scientific research. In internal waters, for instance, that authority is vested in the coastal State by virtue of customary international law, and most States undoubtedly would require consent in advance for any research project in that zone.

As for other national maritime zones, lack of express mention of a claim to regulate, authorize and control marine scientific research should not be taken to mean that States could not, or indeed do not, exercise such jurisdiction within such zones. This is particularly true in the case of shelf research, where the 1958 Geneva Convention on the Continental Shelf has pertinent clauses, and may be directly applicable in some of those States that are parties to it. Only a few (13) States are known to make reference to marine scientific research in connection with the territorial sea; some 10 of 25 do so with respect to their exclusive fishing zones; 22 or more deal with shelf research, and some 35 of 55 with research in the economic zone. Some of the 67 countries mentioned in the body of this report have rules that apply to all or most of the zones over which they exercise sovereignty and/or jurisdiction; others may uniquely regulate research in a certain area (e.g., on the shelf) or research of a certain type (e.g., involving drilling). The 46 States may also be subdivided according to whether their laws are general (e.g., establishing the requirement of consent) or whether they also lay down the procedures and conditions to be observed; documentation is available on 13 States which have statutes, decrees and/or administrative procedures of a comprehensive, detailed nature.

Part A consists of a summary of the general legal framework as reflected in national legislation, on a zone-by-zone basis. Part B involves a comparison of the actual regulations, subject-by-subject. In Part C a country-by-country profile is presented. Finally, some brief conclusions are outlined.

PART A - THE GENERAL LEGAL FRAMEWORK

1. Territorial Sea

Brazil, Ecuador, Iceland and Romania are among those countries that expressly require permission for marine scientific research within their respective territorial seas. With the exception of Romania, these laws also prescribe the procedures and conditions for obtaining the authorization; these provisions are examined in Part B. Spanish regulations likewise apply to the territorial sea.

Malta and New Zealand have clauses enabling the Government to issue regulations pertaining to research in the territorial sea. Guatemalan law provides that laws and regulations shall be enacted for various activities in all maritime areas under Guatemalan jurisdiction; until such time as enacted, territorial sea regulations shall apply.

Grenada and Yemen (Democratic) are among those countries that expressly prohibit marine scientific research activities during innocent passage. Yemen and Romania expressly require permission for territorial sea research.

2. Exclusive Fishing Zone

There are several different approaches taken towards research in the fishing zones that many countries have proclaimed, usually to a distance of 200 miles. Fiji, Nauru and New Zealand, for example, may grant licenses for foreign fisheries research; in Nauru, at least, this may be granted subject to conditions. In Fiji, this applies to fisheries research in the exclusive economic zone. Canada, Ireland, Japan and Tuvalu may authorize the taking of fish for purposes of scientific research; in Tuvalu this may be conditional.

In the Bahamas marine scientific research in the exclusive fishing zone is subject to consent, with the terms and conditions laid down by regulation. In the German Democratic Republic research of living resources is subject to prior consent in the absence of an international agreement. In the case of Morocco, all research, scientific and/or archaeological exploration, is subject to prior authorization.

Finally, several countries have laws protecting endangered species; where the taking of these fish or animals in the marine environment is normally restricted or prohibited, provision is very often made for licenses allowing the taking of specimens for scientific research purposes. Examples of this are: for marine mammals generally - New Zealand and the United States; for whales - Australia and Canada; for dolphins - Guatemala; for dugong - Brazil, Cuba, Madagascar and Sri Lanka; for manatee - Zaire and Panama.

3. Continental Shelf

Of the more than 25 countries known to have legislation expressly mentioning shelf research, virtually all require consent for it. This, however, is done in many different ways, depending, for example, on whether a country has an economic zone, whether its shelf extends beyond that zone, etc..

Argentina and Brazil, both broad-margin States, have the same rules for research on their shelves as they have in all their other zones. Chile's research rules covering the zone out to 200 miles also apply to its shelf. Spain has rules common to research in all zones as well, and an implied consent provision for shelf (and economic zone) research.

A number of countries that have declared economic zones, at the same time make special mention of shelf research. The first group of such countries reserves the exclusive jurisdiction to authorize, regulate and control scientific research on their respective shelves; these include Burma, Guyana, India, Pakistan, the Seychelles and Sri Lanka. Icelandic law only refers to that country's "jurisdiction" in this domain and, as is the case for the territorial sea, the actual procedures and conditions for obtaining permission are inscribed in the same law. Burma, Guyana and India similarly mention that permission is required for shelf research. In addition to these countries, all those that have declared economic zones and that cover marine scientific research in that zone may be said to have regulations that effectively cover shelf and seabed research out to 200 miles.

Other countries that have declared exclusive economic zones have laws of direct relevance to shelf research: Yemen requires a permit for research in its zone, and states that it may "regulate, authorize and control scientific research" on its shelf. Norway, France and Portugal all have economic zones, although nothing expressly dealing with marine scientific research; Portugal and Norway nevertheless do have

the possibility of regulating this. These three countries do, however, regulate shelf research in separate regulations which require, inter alia, permission. Bangladesh has economic zone legislation in which consent is explicitly required for marine scientific research on the continental shelf.

Several other countries that have not established exclusive economic zones have requirements for shelf research. Canada, Sweden, the Soviet Union, Yugoslavia and Finland all require special permits. Denmark requires permission as well; such permission may be granted for the study of the natural resources of the shelf for the purposes of oceanographic research. The Netherlands requires an exemption from the normal licensing requirements for fundamental scientific research. Australia provides for authorization of the taking, for scientific purposes, of sedentary organisms.

Finally, the 1958 Geneva Convention on the Continental Shelf may be directly applicable in the legal system of certain countries that are Contracting Parties to the agreement. Article 5(8) of that Convention requires the consent of the coastal State "in respect of any research concerning the shelf and undertaken there". The same article goes on to state:

"Nevertheless the coastal State shall not normally withhold its consent if the request is submitted by a qualified institution with a view to purely scientific research into the physical or biological characteristics of the continental shelf, subject to the proviso that the coastal State shall have the right, if it so desires, to participate or to be represented in the research, and that in any event the results shall be published".

4. Exclusive Economic Zone

Of approximately 60 States examined that have exclusive-economic-zone laws, some 30 mention scientific research in one way or another. These laws usually deal with one or more of the following legal issues:

- a) jurisdiction of the coastal State;
- b) obligations of the researching State, and
- c) the powers of the coastal State to issue regulations.

Twenty countries have clauses in their economic-zone legislation by which they reserve the right to authorize, regulate and control scientific research activities within that zone. Fourteen of these countries claim "exclusive jurisdiction" in this respect: Barbados, Burma, Colombia, Guatemala, Guyana, India, Mauritania, Mauritius, Pakistan, Philippines, Seychelles, Sri Lanka, Viet Nam and Yemen (Democratic). The remaining six, Cuba, Iceland, Indonesia, Mexico, Sao Tomé and Príncipe, and Venezuela, refer to their "jurisdiction" over research.

In the case of the United States, within its 200-mile economic zone the President has decided not to assert jurisdiction over marine scientific research. As for the obligations imposed upon the researching State, 11 countries expressly require consent and/or a permit before marine scientific research may be undertaken: these are Barbados, Fiji, Iceland, Ivory Coast, Maldives, New Zealand, Pakistan, Seychelles, Venezuela and Yemen (Democratic). In the case of New Zealand, the license requirements are for fisheries research within the economic zone.

The laws of 15 coastal States with exclusive economic zones provide for the issuing of further regulations by decree or ordinance. For eleven of them (Barbados, Burma, Cape Verde, Guyana, India, Indonesia, Ivory Coast, Mauritius, Norway, Portugal, Seychelles, Western Samoa and Yemen), this appears to be optional; i.e., it amounts to enabling legislation, whereas, at least for Guatemala and Mauritania, it is mandatory. For Norway and Portugal, these regulations must be formulated in accordance with applicable rules of international law. The Dominican Republic's exclusive economic zone law stipulates that, within that zone, it shall regulate the investigation, exploration and exploitation of resources within the zone, and that the provisions of that act shall be applied in harmony with the relevant norms of international law and conventions in force on the subject, which shall apply to the economic zone insofar as they are not incompatible. In the case of Guatemala, until such time as regulations are adopted for the economic zone, regulations for the territorial sea shall apply. Surinam's economic zone law grants it rights in that zone over a number of activities; without prejudice to other provisions in the law, it can be decreed that the provisions of that law and instructions based thereon shall also apply to the conduct of scientific research and experiments. Finally, Togo mentions that it has control over exploration and exploitation in the zone.

PART B - DUTY TO PROVIDE INFORMATION TO THE COASTAL STATE
AND TO COMPLY WITH CERTAIN CONDITIONS

1. Introduction

Apart from those clauses mentioned in the previous Part that deal with such matters as jurisdiction, consent and regulations to be issued, roughly a dozen countries are known to have formal adopted procedures foreigners must follow to obtain permission, and/or to have established conditions under which this permission can be granted and according to which the project in question is to be carried out. Only in the case of Iceland are these requirements embodied in the maritime zones legislation itself; in all other cases they take the form of separate regulations, usually promulgated in an ordinance or decree. Four additional countries - Canada, France, Sweden and the United Kingdom - have issued instructions to potential researchers, either through diplomatic channels, e.g., Canada, or through the International Council for the Exploration of the Sea.

In some cases (e.g., Iceland) the research regulations apply uniformly to all zones under national jurisdiction. For Spain, there is a set of detailed rules applying equally to all zones, plus one or two further rules valid only for the exclusive economic zone and the continental shelf. Brazil stipulates that its regulations apply to, inter alia, its internal waters. In some cases certain rules are meant to apply to one particular area (e.g., Ecuador's Galapagos Islands) or to a particular type of activity, such as geophysical research.

2. Notification

Most countries with regulations or administrative procedures indicate how far in advance of the intended cruise a request must be submitted. Colombia and Sweden require 6 weeks, Ecuador 60 days, and Indonesia 2 months, while Argentina, Brazil, Chile, Iceland and Spain all require 6 months' notice. France requires 20 days for research offshore its European mainland and 25 days for its overseas departments and territories.

Iceland and Spain have implied consent provisions: in Iceland a decision will be taken 4 months in advance of a planned trip if consent is to be withheld; this applies to all requests, including those relating to the territorial sea. As

for Spain, an applicant can assume approval has been granted if no response has been received within 4 months of the request; the same applies to international organizations, which must also notify 6 months in advance.

Argentina has an implied refusal clause; that is, a ruling is to be made on requests within 60 days, and if the applicant has not received an answer within that period of time, permission must be considered denied.

Chile lays down that if more information is needed when considering an application, 30 days will be allotted for making the changes. Changes in plan and duration must also be notified 30 days in advance for approval.

3. Channels

It is not always clear what channels are to be used for applications to conduct research although Canadian, French, Swedish and United Kingdom procedures all call for use of diplomatic channels. For shelf research, Portugal requires permission from "competent ministerial authorities". Requests to Iceland for research in any zone must go to "Icelandic authorities concerned". For Brazil, the authorization must come from the President of the Republic.

An application to do research in Colombian waters must be made directly by the requesting agency to the Foreign Office, or through a Colombian Embassy; the request may also come from government channels in the requesting State. For Ecuador the request goes to the Defense Ministry, either directly or through an Ecuadorian Embassy. In many countries the Foreign Office passes the request on to other government departments for advice or decision. Argentina communicates directly with the applicant with respect to a decision, whereas Spain apparently communicates its decision to the requesting Embassy.

4. Description of Project

Virtually all countries for which information is available require, as a condition of consent, a basic description of the project, its nature, purposes and objectives, including how it is to be carried out. In the case of Chile, Sweden and the United Kingdom, this and all other necessary information are to appear on an official questionnaire.

5. Sponsor

Another common duty is to provide the name of the institution sponsoring the research. Sweden and the United Kingdom both ask for the "Operating Authority", or the owner if this differs. Ecuador insists that Galapagos research be sponsored or directed by a foreign government or international organization, as well as have Ecuadorian sponsors. Other Ecuadorian research requires at least Ecuadorian representatives of the foreign institute to be mentioned; Chilean law has a similar requirement and Indonesia also appears to require a local sponsor. Argentina asks for the name of the financing institution, whereas Brazil asks for a list of previous grants. Indonesia requires a letter from the funding institution guaranteeing sufficient funds for the project.

6. Researchers and Crew

Most countries require the name of the person in charge of the research and a list of the scientific crew. Some countries, such as Spain, Ecuador (at least for Galapagos research) and Greece, want the name of the captain and crew as well; for Greece the "status" of the crew must also be indicated. Chile and Indonesia want the nationality of each member of the technical crew to be indicated. In addition, Indonesia asks for biographies of all members of the scientific party, with a list of their publications, and a photo of each of them; there must also be letters of recommendation from some authority attesting to the expedition and its leader. Similarly, Argentina and Brazil require a statement as to the qualifications of the scientific personnel.

7. Methods and Means

Most countries for which information is available require information concerning scientific and technical operations to be performed; in other words, the types of investigation envisaged and/or the techniques to be employed. For Argentina this includes a timetable and any and all land-based operations envisaged. France also seeks information concerning land-based operations.

8. Vessels and Equipment

Virtually all countries for which regulations exist require information about equipment and instruments to be

used. Sweden and the United Kingdom ask whether the use of explosives is intended.

All countries examined stipulate that a description of the vessels involved must be forwarded, but there are differences as to the amount of information demanded. Four countries - Indonesia, Iceland, Spain and Greece - want to know the name of the vessel. Iceland also asks for the tonnage. Greece asks for "technical data" generally, while Iceland wants to know the type and class of vessel. Chile asks for the "character" of the vessel; for Indonesia this is "vessel characteristics". Argentina requires a photo of it, its sources of energy and radio frequencies. Information as to the latter is also demanded by France and Indonesia. Brazil wants to know the type of navigation used. Finally, a request to do research in Colombian waters must be accompanied by certificates of navigability and safety, as well as an account of anti-pollution measures taken.

9. Itinerary, Port Calls

Argentina requires the name of the last foreign port visited before undertaking the cruise. Chile and Colombia ask for the port of arrival; Ecuador does as well, but only with respect to Galapagos research. Chile wants to know the Chilean port from which the scientific programme will start; if this is other than Valparaiso, a fee is to be paid.

Most countries ask for an itinerary of the voyage. For Greece, this must take the form of a map, for Spain a nautical chart. Furthermore, countries such as Iceland, Brazil, Chile, Spain, Sweden and the United Kingdom, require an indication of the precise geographic areas in which activities are to be conducted.

Chile wants to know where the work sites will be; Brazil and Spain ask for charts indicating these sites. Argentina requires the location of land-based sites where it is intended to perform activities. Argentina and Chile also want to know the precise position of the vessel each day. Canada requires 48-hour notice of an alteration in the cruise plan.

As for port calls (apart from port of arrival), most countries do require such information in the application. Spain, by contrast, stipulates that research vessels not engaging in research in Spanish waters need authorization to enter Spanish ports; detailed information on this point must be submitted 15 days in advance of an intended visit.

Chile, Ecuador (for Galapagos research) and Indonesia demand the name of the last port, or port of departure. In the case of Chile, research vessels may only leave from one of three ports, except in very special cases. Argentina requires applicants to indicate the first foreign port they will visit after the cruise.

10. Duration

It is common to ask for details as to the proposed duration of the cruise, including dates of arrival and departure. For Spain and Argentina this extends to dates of stays in ports. Spain also requires dates of placement and removal of scientific equipment. In the course of the cruise itself, extensions must be requested 30 days in advance in the case of Chile.

11. Participation of the Coastal State

Virtually all countries examined provide for some form of cooperation with local scientists. Applicants for research in Argentina, for instance, must stipulate that accommodation is available for observers and experts, and that they will receive adequate accommodation and food; in addition, the Argentine authorities may require that such observers and experts be taken on board. Spain and Chile require a stipulation of the number of local scientists that can be received; Chile also asks for an indication of how they can realize their own investigation. Brazil demands that its scientists be given an opportunity to participate. Iceland asks applicants to indicate the anticipated participation of Icelandic authorities. France asks for an indication as to the number of French scientists invited to participate. Canada reserves the right to participate or be represented in the proposed cruise. Greece requires an understanding that Greek scientists are invited to follow the research. Colombia requires that observers be taken on board, their expenses to be paid by those undertaking the cruise. Those wishing to do research on Ecuador's coasts must undertake to collaborate in work of interest to Ecuador; for Galapagos research they must agree to take on board Ecuadorians and make a commitment to cooperate with Ecuadorian specialists.

Sweden and the United Kingdom both require statements of the names of local scientists with whom previous contact has been made, whether visits to ships in port by local scientists will be acceptable, and whether observers will be acceptable.

12. Reports, Results

Although most countries address the question of what reports are to be submitted to the appropriate authorities of the coastal State, the actual rules vary markedly in this domain from country to country.

Before leaving the country, Chilean authorities must receive a copy of all results obtained during the cruise. In addition, the cruise director must send a detailed report within 6 months of leaving the country. Colombia and Spain require a report on the research within 1 year of completion of the project.

Ecuador asks for a statement as to the use to be made of the results of the proposed research; the applicant must undertake to make available the complete results and conclusions, and must state the date on which this will be done. As far as Galapagos research is concerned, there must also be a report on the outcome of the cruise, and the findings and conclusions must be transmitted through diplomatic channels by a certain date.

For shelf research, Norway calls for a report without delay upon termination concerning the extent of the research and its execution; within a reasonable period of time a detailed report must be submitted on the results of the research. In addition, the license shall stipulate which reports are to be made while the research is in progress.

Greece requires simply that results be communicated to Greek authorities. Argentina demands access to interim and final results, whereas Brazil requires that results go to a government Ministry for whatever action is deemed necessary. Sweden and the United Kingdom ask for information about any relevant previous cruise, and previously published research.

13. Data, Samples

Brazil stipulates that it shall have access to all "information" produced. Argentina is to get a copy of the data or samples. Vessels researching in waters under Spanish jurisdiction must keep samples and irreproducible data for possible evaluation. Canada requires an exchange of scientific data when research is conducted in waters under Canadian jurisdiction.

France requires that data and samples be turned over as soon as possible. Chile stipulates that the right to take out of the country any type of material collected, filmed or taped, as well as any type of fossil material, is dependent upon prior authorization; furthermore, at any time, specialized entities can be asked to cooperate in evaluating the material. In addition, any and all material, information and data related to the investigation that is considered relevant may be kept by the authorities. Before leaving the country, all holotypes collected must be turned over; these will be sent to the Museum of Natural History. Chilean authorities are also required to ensure as far as possible that all or at least an important part of the processing and analysis of the data and the samples takes place on Chilean territory. Sweden and the United Kingdom seek an indication as to when research data is likely to be made available and, if so, how.

14. Publication

Only 5 countries are known to have incorporated any publication provisions in their regulations. Brazil's clause that it wants access to all "information" produced could be related to this matter. Greece simply stipulates that results are to be published. Spain demands copies of any research that has been published.

Argentina states that a decree embodying regulations shall, inter alia, lay down the period during which the authorities granting the authorization may not divulge information supplied to them by the researchers, with a view to safeguarding the researcher's rights to priority in publishing such information.

Norway has publication restrictions for shelf research: it may decide research results are to be published in a recognized scientific publication or in another manner acceptable to the competent authority. A reasonable number of copies is to be submitted as well.

15. Miscellaneous Provisions

There are a number of other rules for marine scientific research which only one or two countries require. Thus, Norway and Argentina both have clauses that state that marine scientific research must not unreasonably interfere with other legitimate uses; for Norway and Yugoslavia, this applies to shelf research. Shelf research in Norway must also be carried out in a safe manner, and the types of activities for

which licenses may be granted are stipulated in the law itself. In Denmark, a permit may be granted for living or non-living natural resource, oceanographic, or fishery research on the shelf.

As for decisions to either grant or refuse permission, Canada reserves for itself the right to negotiate the content of the proposed research or investigation. Chile will take into account national claims when the proposed research is to take place in border areas; vessels that have been granted permission may ask for special weather assistance, and must use assigned radio frequencies. In the case of Ecuador, a decision to permit research must normally state the conditions under which it may be undertaken, and a refusal must normally give the grounds on which it is based. However, authorization may be postponed or refused if the project is deemed contrary to national interests, in which case no explanation is required. Finally, an authorization may be cancelled and the captain required to leave.

Venezuela has a qualified consent regime for marine scientific research in its exclusive economic zone: while prior consent is required, such consent shall not be withheld unless the project is resource-oriented or unduly impedes economic activities. In a similar vein, for shelf research off the coast of Finland, if the request comes from a qualified institution with a view to purely scientific research into the physical or biological characteristics of the shelf, "the permission shall not be withheld if a special reason there does not exist". Icelandic law provides that in normal circumstances consent will be granted to requests to undertake research in the territorial sea, the exclusive economic zone and on the continental shelf if the application from another State or international organization is for peaceful purposes and in order to increase knowledge of the marine environment.

PART C - COUNTRY PROFILES

1. Argentina

Marine scientific research undertaken by foreigners in waters in which Argentina exercises sovereignty, as well as on the continental shelf, is covered by Act No. 20,849 of 23 May 1973 regulating Scientific and Technical Research Activities Conducted by Foreigners and International Organizations, and by Decree No. 4,915 of the same title and date.

According to the Act, prior authorization is required from the appropriate officials, and the Navy may supervise activities (Arts. 1, 2). Copies of data or samples and both interim and final results are to be turned over, access must be provided to all information derived from the project, and Argentina may appoint an observer to monitor the operators (Art. 3). The taking on board of Argentine experts may be required (Art. 4), and research activities must not unreasonably interfere with other legitimate uses (Art. 5). Infringements may lead to the revocation of the permit (Art. 6), and fines may be imposed (Art. 7).

The aforementioned Decree prescribes the procedure for making requests, lists all the information that must be supplied and lays down the conditions or commitments that must be assumed.

2. Australia

There are 25 Acts which touch upon marine activities in the Commonwealth. Of these, the most relevant are the Environment Protection (Sea Dumping) Act 1981; the Great Barrier Reef Marine Park Act 1975; the Fishing Industry Research Act 1969; the Antarctic Marine Living Resources Conservation Act 1981; the Australian Institute of Marine Science Act 1972; the Science and Industry Research Act 1949; and the Protection of the Sea (Civil Liability) Act 1981.

3. Bahamas

In its 200-mile fishing zone the Bahamas requires permits for foreign fishing that is conducted for marine scientific research purposes. Article 7 of the Fisheries

Resources Jurisdiction and Conservation Act (No. 13) of 16 June 1977 lays down that such a permit may be granted subject to terms and conditions.

4. Bangladesh

The Territorial Waters and Maritime Zones Act of 13 April 1974 makes licenses obligatory for marine scientific research "within the limits of the continental shelf" (Art. 7).

5. Barbados

Article 5 of the Maritime Boundaries and Jurisdiction Act of 25 February 1978 grants the Government of Barbados all rights in, and jurisdiction over, a 200-mile exclusive economic zone in respect of, inter alia, the authorization, regulation or control of scientific research. No one may conduct any research in this zone in the absence of either an agreement with the Government or a permit granted by the Cabinet (Art. 6). Regulations may be issued so as to carry into effect the provisions of the Act as they relate to marine scientific research (Art. 20).

6. Brazil

Decree Law No. 63,164 Governing Exploration and Research carried out on the Underwater Shelf of Brazil or in the Waters of the Territorial Sea and other Waters, of 24 August 1968, indicates the procedures and conditions for gaining permission to undertake research. Requests must be sent 180 days in advance (Art. 6), and must include detailed information (Art. 8). Results of research activities shall be reported to the authorities for whatever action is deemed necessary (Art. 2). Brazilian authorities exercise supervisory and observational functions (Arts. 10 and 11).

7. Burma

The Territorial Sea and Maritime Zones Law (No. 3) of 9 April 1977 requires prior express permission to undertake scientific research in the exclusive economic zone (Art. 20) and on the continental shelf (Art. 16). Burma maintains for itself the exclusive jurisdiction to authorize, regulate and control scientific research in these zones (Arts. 14, 18) and regulations may be issued for these purposes (Art. 24).

8. Canada

Clearance procedures permitting vessels to enter ports and/or waters under Canadian jurisdiction were circulated to all accredited diplomatic missions in May, 1983. These procedures stipulate that requests must be made at least 45 days in advance of the proposed cruise. An exchange of scientific data is required when research is conducted in waters under Canadian jurisdiction. Canada reserves the right to participate or be represented in the proposed project. It also reserves the right to negotiate the content of the proposed research or investigation. Once approved and in progress, 48-hours notice is required when alterations to the cruise program or itinerary are envisaged. A fishing license is required in all cases of fishing, sampling and other ichthyo-research related activities.

By virtue of the Coastal Fisheries Protection Regulation of 9 December 1976, licenses may be granted for the taking of fish by foreign fishing vessels in the 200-mile zone for purposes of scientific research.

9. Chile

The Reglamento de Control de las Investigaciones Cientificas y Tecnologicas Marinas Efectuadas en la Zona Maritima de Juridiccion, Decreto Supremo 711 de fecha 22 de Agosto de 1975, applies to a 200-mile maritime zone under national jurisdiction, including all waters, airspace, the continental shelf, the seabed and subsoil therein (Art. 1). Requests to undertake research in these zones must be made at least 6 months in advance, either through diplomatic channels or directly (Art. 1). Detailed information is required in the form of a questionnaire (Art. 2). Extensive conditions are also imposed concerning such matters as changes of plans (Art. 10), clearance of samples (Arts. 11 and 12), as well as those reports and results that must be turned over by the researcher(s) to the authorities before the vessel is permitted to leave the country (Art. 4).

10. Colombia

According to Law No. 10 establishing Rules on the Territorial Sea, the Exclusive Economic Zone, the Continental Shelf and other Provisions, of 4 August 1978, Colombia exercises exclusive jurisdiction over scientific research in the exclusive economic zone (Art. 8).

Decree Law 2349 of 1971 stipulates that requests must be made 30 days in advance, and must include detailed information on a number of points. There is also a requirement that a copy of findings and results of research must be forwarded within one year to the authorities.

11. Cuba

Article 2 of the Act concerning the Establishment of An Economic Zone, of 26 February 1977, gives Cuba jurisdiction with regard to scientific research to a distance of 200 miles.

12. Denmark

Act No. 259 of 9 June 1971, concerning the Continental Shelf, as amended in 1972, requires permission for the study of living organisms of the shelf; if the study of natural resources (non-living) is required for fisheries or oceanographic research, permission shall similarly be granted by the Ministry of Fisheries.

Other legislation dealing with marine scientific research and related aspects includes the Ordinance governing the Admission of Foreign Warships and Military Aircraft to Danish Territory, in Time of peace (No. 73 of 27 February 1976); the Raw Materials Act (Act No. 237 of 8 June 1977); the Promulgation of the Act on the Continental Shelf (Act. No. 182 of 1 May 1979); Mineral Resources (Greenland) Act (No. 585 of 29 November 1978); Order on Travels to and in Greenland (Order No. 226 of 21 May 1976).

13. Dominican Republic

Act No. 186 of 13 September 1967 on the Territorial Sea, Contiguous Zone, Exclusive Economic Zone and Continental Shelf, as amended on 4 April 1977, stipulates that within the exclusive economic zone the investigation, exploration and exploitation of resources shall be regulated (Art. 5). It is also stated that the provisions of the Act "shall be applied in harmony with the relevant norms of international law and conventions in force on the subject, which shall apply to the exclusive economic zone, in so far as they are not incompatible".

14.. Ecuador

The Regulations for the Granting of Permits to Foreign Vessels to Visit the Territorial Sea of Ecuador, its Coasts and Islands for the Purpose of Tourism or Scientific Research, of 17 February 1973, require written applications 60 days in advance for permission to do research. The Regulations further stipulate to whom the request must be made, what information must be furnished, and what undertakings must be made for permission to be given. Special conditions are established for geophysical research.

Galapagos research is covered by the Regulations on Issuance of Licenses to Foreign Vessels to Visit the Territorial Sea, the Coasts and Islands of the Galapagos Archipelago, which stipulate, inter alia, that the expedition must be sponsored or directed by a foreign government or an international organization, and includes provisions concerning reports and conclusions; the latter must be forwarded through diplomatic channels by a certain date.

15. Federal Republic of Germany

According to Article 1 of the Act of 24 July 1964 on Provisional Determination of Rights relating to the Continental Shelf, as amended on 2 September 1974, authorization is required for exploration of the mineral resources of the German continental shelf and all research activities relating to the continental shelf undertaken in situ.

16. Fiji

Within its 200-mile exclusive economic zone Fiji may, in accordance with Art. 12 of the Marine Spaces Act of 20 October 1977, issue licenses for the conduct of fisheries research programmes.

17. Finland

According to Law No. 149 concerning the Continental Shelf of 5 March 1965, permission may be granted to foreigners to "explore" the shelf. If the request comes from a qualified institution with a view to purely scientific research into the physical or biological characteristics of the shelf, "the permission shall not be withheld if a special reason thereto does not exist" (Art. 2).

18. France

The Décret No. 17-360 du 6 mai 1971 portant application de la loi No. 68-1181 du 30 décembre 1968 relative à l'exploration du plateau continental et à l'exploitation de ses ressources naturelles, provides, in Article 15, that permits may be granted to foreigners for purely scientific research of the continental shelf, especially for research into the physical or biological characteristics of the shelf.

For the exclusive economic zone, there does not exist a requirement for foreign vessels to require clearance for scientific research.

As for port calls and scientific operations in waters, ports and roadsteads under French sovereignty, the conditions under which prior consent may be given have been brought to the attention of various foreign embassies.

19. German Democratic Republic

The Decree of 22 December 1977 concerning the Establishment of a Fishery Zone of the German Democratic Republic in the Baltic Sea stipulates "that the use of research vessels to explore living resources shall be subject to prior approval unless otherwise provided in inter-governmental agreements between the German Democratic Republic and other States".

20. Greece

1978 regulations lay down that requests to undertake marine scientific research in the territorial sea or on the continental shelf must be made 2 months in advance. Detailed information is also required, as well as an understanding that Greek scientists are invited to follow the research, that the results will be communicated to the Greek authorities and that they will be published.

21. Grenada

Marine scientific research activities during innocent passage through the territorial sea are expressly prohibited in the Territorial Waters Act of 12 May 1978 (Art. 7).

22. Guatemala

By virtue of Legislative Decree No. 20-76 of 9 June 1976, concerning the Breadth of the Territorial Sea and the Establishment of an Exclusive Economic Zone, Guatemala has exclusive jurisdiction with respect to scientific research in its economic zone (Art. 3), and shall enact laws and regulations for all areas under national jurisdiction (Art. 5).

23. Guinea

The Décret No. 128/PRG/80 du Président de la République portant respectivement sur la limitation des eaux territoriales de la République populaire révolutionnaire de Guinée sur le contrôle des côtes, de la zone économique et sur les dispositions juridiques y relatives en vigueur dans les cas d'infraction, prohibits any infringement of the natural resources of the seabed and continental shelf, including unauthorized exploration for oil or other mineral resources (Art. 8).

24. Guyana

The Maritime Boundaries Act of 10 April 1977 gives Guyana exclusive jurisdiction to authorize, regulate and control scientific research in the economic zone (Art. 16) or on the continental shelf (Art. 10). Permission is required for any research within the exclusive economic zone (Art. 16), and "No person shall, except under and in accordance with the terms of a license or a letter of authority ... conduct any research within the continental shelf or drill therein ..." (Art. 11).

25. Honduras

The Law of 13 June 1980 (Decree No. 921 of the Military Junta of Government), which creates a 200-mile exclusive economic zone (Art. 1), gives Honduras jurisdiction and control in all matters relating to the regulation, authorization and conduct of marine scientific research (Art. 1). Such research shall be conducted only with prior consent and with the participation of a representative of the Government of Honduras whenever the latter deems it desirable (Art. 1).

26. Iceland

Law No. 41 of 1 June 1979, concerning the Territorial Sea, the Economic Zone and the Continental Shelf gives Iceland jurisdiction with regard to scientific research in the exclusive economic zone (Art. 4), and requires consent for scientific research in the territorial sea, the exclusive economic zone and on the continental shelf. In normal circumstances consent will be given if the application is from another State or international organization and is for peaceful purposes and intended to increase knowledge of the marine environment.

Consent may be withheld for applied research (Art. 9). The same law gives details as to the procedure for making requests, and the information to be submitted. There is also an implied consent clause (Art. 10).

27. India

The Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act of 1976 gives India exclusive jurisdiction to authorize, regulate and control scientific research in the exclusive economic zone (Art. 7) and on the continental shelf (Art. 6). Accordingly, no one may conduct any research within the continental shelf or exclusive economic zone or drill therein without permission (Arts. 7, 6).

The Government may make such provisions as it deems necessary with respect to authorization, regulation and control of the conduct of scientific research for the purposes of this Act (Art. 15).

28. Indonesia

Article 2 of the Declaration by the Government of the Republic of Indonesia concerning the Exclusive Economic Zone of Indonesia, proclaimed on 21 March 1980, states that Indonesia has and exercises jurisdiction with regard to marine scientific research.

Article 6 states that matters covered by the Declaration are to be further regulated by law and regulation.

1974 regulations stipulated in detail requirements for obtaining permission to undertake research in waters under Indonesian jurisdiction, including such matters as biographies and photos of scientific staff, letters of recommendation, Indonesian sponsorship, and the nationality of each participant.

29. Ireland

Under Section 4 of the Fisheries (Amendment) Act, 1962, the Minister for Fisheries and Forestry has the power to authorize any research for the purpose of the artificial propagation of fish for some scientific purpose or for the improvement or development of any fishery.

30. Italy

Article 2 of Act No. 613 of 21 July 1967 (Surveying and Production of Oil and Gas in the Territorial Sea and Continental Shelf), and Amendments to Act No. 6 of 11 January 1967 on the Surveying and Production of Oil and Gas; vest the right to explore the continental shelf and exploit its natural resources in the State. The same article provides for authorizations to explore the shelf for other purposes.

31. Ivory Coast

Law No. 77-926 of 17 November 1977, delimiting the Maritime Zones placed under the National Jurisdiction of the Republic of the Ivory Coast, stipulates that prior consent is required for marine scientific research in the 200-mile exclusive economic zone, under conditions to be established by a decree (Art. 6).

32. Japan

Law No. 31 of 2 May 1977, on Provisional Measures relating to the Fishing Zone, as amended in 1977, lays down that permission must be sought for the taking of plants and animals for the purposes of experiment or research (Art. 9).

33. Korea, Republic of

The Territorial Sea Law, 1977, establishes a territorial sea of 12 miles (Art. 1), and provides for innocent passage of foreign ships (Art. 25). The carrying out of research or survey activities during innocent passage is prohibited (Art. 5(2)11).

34. Malaysia

The Continental Shelf Act, 1966 (Act of Parliament No. 57 of 1966, 28 July 1966), vests the Government with all rights with respect to the continental shelf for the purpose of exploring the shelf and exploiting its resources (Art. 3). Exploration for these or other purposes without authorization is prohibited (Art. 4).

35. Maldives

Law No. 30/76 of 5 December 1976, relating to the Exclusive Economic Zone of the Republic of Maldives, makes consent a prerequisite for the conduct of marine scientific research (Art. 3). The zone extends anywhere from 37 to 310 nautical miles.

36. Malta

Article XXVIII of 1981, An Act further to Amend the Territorial and Contiguous Zone Act, 1971, allows for the "issuance of regulations with respect to marine scientific research and hydrographic surveys undertaken in Malta's 12 mile territorial sea.

37. Mauritania

Law No. 78,043 of 28 February 1978, establishing the Code of the Merchant Marine and Maritime Fisheries, gives Mauritania jurisdiction over marine scientific research in the zone between 70 and 200 nautical miles (Art. 185). Drilling on the shelf requires authorization (Art. 189).

38. Mauritius

According to the Maritime Zones Act, enacted on 31 May 1977, Mauritius has exclusive jurisdiction to authorize, regulate and control scientific research in the exclusive economic zone and on the continental shelf (Art. 7). No one may conduct any research without permission (Art. 7). In addition, designated areas may be proclaimed within the shelf or zone, and special provisions may apply to scientific research therein (Art. 8). Finally, regulations may be issued on the conduct of scientific research (Art. 15).

39. Mexico

Article 4 (IV) of the Law regulating the Eighth Paragraph of Article 27 of the Constitution relating to the Exclusive Economic Zone, of 13 February 1976, gives Mexico jurisdiction over scientific research.

As of 27 September 1983, requests to conduct marine scientific research in Mexico were covered by administrative procedures issued by the Ministry of Foreign Relations. At that time a Bill was also to be presented to Congress. This bill would apply the pertinent dispositions of the Law of the Sea Convention. The matter of scientific research by foreigners was also to be regulated in detail.

40. Morocco

The Dahir portant Loi No. 1 73211 du 2 mars 1973 fixant la limite des Eaux territoriales et de la zone de pêche exclusive marocaine, establishes a 70-mile fishing zone (Art. 4). Within that zone, all research, scientific and/or archeological exploration undertaken by foreign nations is subject to prior consent (Art. 6).

41. Nauru

Article 3 of the Marine Resources Act of 1978, which establishes a 200-mile fishing zone, stipulates that fisheries research is subject to prior consent in writing and in accordance with possible conditions.

42. Netherlands

The Continental Shelf Mining Law of 23 September 1965 requires an exemption for fundamental scientific research from the licensing provisions otherwise required (Sect. 2).

43. New Zealand

By virtue of the Territorial Sea and Exclusive Economic Zone Act of 26 September 1977, regulations may be issued concerning the conduct of scientific research within the territorial sea (Art. 8). In the exclusive economic zone, licenses are required for fishing research (Arts. 15, 23).

44. Nicaragua

Decree No. 372 of 2 December 1958 (Special Act on the Exploration and Exploitation of Petroleum) lays down that all deposits or natural supplies of petroleum which exist, in any state, on the surface or in the subsoil of the national territory, belong to the State (Art. 1). Exploration and exploitation of petroleum may be carried out only by virtue of exploration and exploitation concessions provided for in the Act (Art. 3).

45. Norway

Act No. 91 of 17 December 1976, relating to the Economic Zone of Norway, enables the King to issue regulations on marine scientific research, subject to the rules of international law (Para. 7). Shelf research is governed by the Royal Decree of Norway of 31 January 1969 establishing Rules relating to Scientific Research for Natural Resources on the Norwegian Continental Shelf. Licenses are required for such research (Sect. 3); they may be granted for specific operations (Sect. 7). There are detailed reporting and publication requirements.

46. Pakistan

The Territorial Waters and Maritime Zones Act of 1976 gives Pakistan exclusive rights and jurisdiction to authorize, regulate and control marine scientific research on the continental shelf (Art. 5) and in the exclusive economic zone (Art. 6). No one may conduct research in either of these zones, or drill therein without permission (Arts. 5 and 6).

47. People's Republic of China

Legislation governing marine affairs in China includes the Marine Environmental Protection Law, Regulations on the Exploitation of Offshore Petroleum Resources in Cooperation with Foreign Enterprises, and Aquatic Resources Reproduction Protection Regulations. These laws and regulations are closely associated with planned legislation on marine scientific research.

48. Phillipines

Presidential Decree No. 1599 Establishing an Economic Zone and for Other Purposes (of 11 June 1978) establishes a 200-mile exclusive economic zone (Sect. 1) within which the Phillipines has exclusive rights and jurisdiction with respect to scientific research (Sect. 2). It is prohibited to conduct any research except in accordance with the terms of any agreement entered into with the Republic of the Phillipines (Sect. 3).

49. Portugal

There is not at the present time any legislation in Portugal on the subject of marine scientific research and related matters. Decree Law No. 2/81 of 7 January 1981, which regulated marine scientific research in the exclusive economic zone, was declared unconstitutional by Resolution No. 30/82 of 27 January 1982.

50. Romania

Décret No. 39 du 28 janvier 1956 concernant la réglementation du régime des Eaux territoriales de la République roumaine forbids any type of research in Romania's 12-mile territorial sea without prior consent (Art. 6).

51. Sao Tomé and Principe

Decree Law No. 13/78 of 16 June 1978, which establishes a 200-mile exclusive economic zone, gives Sao Tomé and Principe jurisdiction over marine scientific research (Art. 4).

52. Seychelles

Article 7 of the Maritime Zones Act of 1 August 1977 gives the Seychelles exclusive jurisdiction to authorize, regulate and conduct scientific research in the 200-mile exclusive economic zone and on the continental shelf. Regulations may also be issued on this subject (Art. 15).

53. Spain

Royal Decree No. 799 of 27 February 1981 regulates the conduct of marine scientific research in the territorial sea, the exclusive economic zone and on the continental shelf. The Decree covers such questions as the procedure for obtaining permission, information requirements, reports and publication. Most of the provisions apply to all the zones; in addition, there is an implied consent regime for research in the exclusive economic zone and on the continental shelf.

54. Sri Lanka

The Maritime Zone Law No. 22 of 1 September 1976 gives Sri Lanka exclusive rights and jurisdiction to authorize, regulate and control scientific research in the exclusive economic zone (Art. 5) and on the continental shelf (Art. 6). Regulations may also be issued (Art. 12).

55. Sudan

Article 10 of the Territorial Waters and Continental Shelf Act, 1970, states that no one shall explore the continental shelf without the express approval of the Sudan.

56. Surinam

The Law containing the extension of the Territorial Sea of the Republic of Surinam and the Establishment of a Contiguous Economic Zone of 14 April 1978 gives Surinam sovereign rights over resource activity (Art. 4) and states that, without prejudice to this, it can be decreed that the provisions of this law and the instructions based thereon shall also apply to the conduct of scientific research and experiments (Art. 4).

57. Sweden

According to the Ordinance (1966:366) on Admission to the Swedish Territorial Sea by foreign state-owned vessels for non-commercial purposes, permission from the Government is required.

As of 1981, notification of an intention to explore the Swedish fishing zone for research purposes was required.

According to the Act (1966:314) on the Continental Shelf, permission is required for research on the shelf. The request is to be submitted to the Swedish Ministry of Foreign Affairs not less than 6 weeks before the vessel concerned is due to enter the area.

Permission to conduct scientific research in areas under Swedish jurisdiction may be imposed with certain restrictions or limitations.

58. Togo

Article 3 of the Ordonnance No. 24 du 16 août 1977 portant délimitation des eaux territoriales et création d'une zone maritime économique protégée reserves to Togo the right to explore and exploit all living and non-living natural resources.

59. Tuvalu

The Fisheries Ordinance of 1978 gives Tuvalu the power to authorize foreign scientific investigation, subject to possible conditions (Art. 19). On 10 January 1979 a 200-mile fishing zone was declared.

60. USSR

Special authorization is required for the conduct of research on the continental shelf, according to Article 2 of the Decision of the Presidium of the Supreme Soviet of the USSR concerning the Application of the Decree of the Presidium of the Supreme Soviet of the USSR concerning the Continental Shelf of 13 August 1969.

61. United Kingdom

The United Kingdom has no legislation dealing directly with marine scientific research. Each application by a foreign state to carry out research in waters under United Kingdom jurisdiction is treated on its own merits.

62. United States

The United States declared an Exclusive Economic Zone on 10 March 1983. Although international law would allow the United States to exercise jurisdiction over marine scientific research in the EEZ, the President of the United States has decided not to exercise that jurisdiction. The reason is to encourage marine scientific research and impose no unnecessary burdens on it.

The Exclusive Economic Zone of the United States is a zone contiguous to the territorial sea, including zones contiguous to the territorial sea of the United States, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands (to the extent consistent with the covenant and the United Nations Trusteeship Agreement), and United States overseas territories and possessions. The Exclusive Economic Zone extends to a distance 200 nautical miles from the baseline from which the breadth of the territorial sea is measured. In cases where the maritime boundary with a neighboring State remains to be determined, the boundary of the Exclusive Economic Zone shall be determined by the United States and other States concerned in accordance with equitable principles.

Research not concerning the continental shelf or undertaken there, may be conducted by any vessel beyond the territorial sea (3 nautical miles) without U.S. permission. The U.S. is a party to the 1958 Convention on the Continental Shelf and requires foreign vessels to request United States permission before conducting research concerning the continental shelf and undertaken there. Applications requesting permission to conduct research within the territorial sea and the continental shelf should be made to the Department of State, Office of Marine Science and Technology Affairs, Washington, D.C. 10520.

In 1977, the United States implemented the Fishery Conservation and Management Act which created a 200-mile fisheries zone. The establishment of an EEZ has not changed the existing policy with respect to fisheries. The Act

specifically excludes jurisdiction over marine scientific research, including fisheries research. However, the following specific activities are considered to be fishing within the meaning of the Act, and therefore requires a permit.

Any activity involving the catching, taking, or harvesting of fish in commercial quantities, or the use of gear capable of catching, taking, or harvesting fish in commercial quantities, including:

- 1) the conducting of tests of fishing gear; or
- 2) fishing carried out for the purpose of training fishermen.

However, when undertaken in full cooperation with the United States, even these specific activities shall not be deemed to be fishing and will not require formal U.S. permission. It is expected that fisheries research carried out in the U.S. zone will be conducted in full cooperation with the U.S. National Marine Fisheries Service (NMFS).

Research activities involving the taking, hunting, killing, capturing, or harassing of marine mammals, require a permit issued by the United States under the Marine Mammal Protection Act, if conducted within 200 miles of the United States coast.

Except as specified above for the Fishery Conservation and Management Act and the Marine Mammal Protection Act, there are no particular procedures required when submitting clearance requests for research requiring United States permission. Requests are usually received through diplomatic channels, but occasionally they are made to operating agencies or to the Department of State from individuals or agencies. Once received, the Department of State informs other agencies of the request, and if there are no problems, permission is given. Response time is on the order of one to two weeks. The U.S. appreciates receiving data collected, but this is not usually stated as a condition. However, the United States appreciates being invited to participate on research cruises, even though the invitation may be declined.

63. Venezuela

The law establishing an Exclusive Economic Zone along the Continental and Insular Coasts of the Republic, of 26 July 1978, gives Venezuela jurisdiction with regard to marine

scientific research (Art. 3) and stipulates that prior consent is required for such activities (Art. 9); consent will not be withheld unless the project is resource-oriented, involves drilling or artificial islands, installations and devices, or unduly interferes with economic activities (Art. 9).

64. Viet Nam

In a Statement of 12 May 1977, Viet Nam declared that it had exclusive jurisdiction with respect to scientific research in its 200-mile exclusive economic zone (Para. 3). Specific questions were to be dealt with in further regulations, in keeping with international law and practices.

65. Western Samoa

The Exclusive Economic Zone Act of 1977 establishes a 200-mile zone. Within this zone foreign fishing craft may be used for the purpose of fisheries research, subject to prior consent and in accordance with conditions (Art. 12).

Article 15 provides for the issuance of regulations for the conduct of scientific research within the exclusive economic zone.

66. Yemen (Democratic)

Act No. 45 of 15 January 1978, concerning the Territorial Sea, Exclusive Economic Zone, Continental Shelf and other Marine Areas, prohibits research during innocent passage (Art. 6). It gives Yemen exclusive jurisdiction to regulate and control scientific research in the exclusive economic zone (Art. 14). On the continental shelf Yemen may, to the exclusion of others, regulate, authorize and control scientific research (Art. 16). No one may undertake any scientific research, be it in the territorial sea, in the exclusive economic zone or on the continental shelf without permission (Art. 20), and regulations may be issued implementing the Act (Art. 23).

67. Yugoslavia

By virtue of Article 21 of the Law of 22 May 1965 on Yugoslavia's Marginal Seas, Contiguous Zone and Continental

Shelf, Yugoslavia exercises sovereign rights over the continental shelf relating to the exploration and exploitation of natural resources.

The exercise of these rights must not unjustifiably interfere with fundamental oceanographic or other scientific research open to publication (Art. 22).

Exploration or exploitation of natural resources of the continental shelf without authorization is prohibited (Art. 31).

CONCLUSION

An analysis of the documentation available for 67 countries reveals a rich body of municipal law governing the question of marine scientific research.

A broad spectrum of approaches are employed with respect to the authorization and conduct of such research. Different approaches from one country to the next are due in part to the varying status of the zones in question, (e.g., territorial sea vs. exclusive economic zone). Wide discrepancies in the breadth accorded to maritime zones also accounts for some of the variety. However, even where two countries may have similar maritime zones, the question of marine scientific research may well be broached in completely different fashion in their respective laws and regulations.

In light of the adoption of the Law of the Sea Convention, one might reasonably expect more and more countries to legislate in the important domain of marine scientific research. Of particular relevance in this regard is Article 155 in Part XIII of the Convention, which calls upon States to adopt reasonable rules, regulations and procedures to promote and facilitate such research.