

REPORT
of the
INTERNATIONAL TECHNICAL CONFERENCE
on the
CONSERVATION OF THE LIVING RESOURCES OF THE SEA

18 April to 10 May 1955, Rome



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I. INTRODUCTION

1. The General Assembly on 14 December 1954 adopted resolution 900 (IX), which reads as follows:

The General Assembly,

Considering that the International Law Commission has proposed for the consideration of the General Assembly draft articles¹ covering certain basic aspects of the international regulation of fisheries, and considering also that that Commission has not yet concluded its study of related questions,

Having regard to the fact that the problem of the international conservation of fisheries involves matters of a technical character which require consideration on a wide international basis by qualified experts,

Being of the opinion that an international technical conference should be held in the near future to consider the problems of fishery conservation and make recommendations thereon,

Recalling that, by resolution 798 (VIII) of 7 December 1953, the General Assembly, having regard to the fact that the problems relating to the high seas, territorial waters, contiguous zones, the continental shelf and the superjacent waters are closely linked together juridically as well as physically, decided, consequently, not to deal with any aspect of those topics until all the problems involved had been studied by the International Law Commission and reported upon by it to the General Assembly,

Having regard to the fact that the technical studies relating to the conservation, protection and regulation of fisheries and other resources of the sea are also closely linked to the solution of the problems mentioned in the preceding paragraph,

1. *Requests* the Secretary-General to convene an international technical conference at the headquarters of the Food and Agriculture Organization of the United Nations on 18 April 1955 to study the problem of the international conservation of the living resources of the sea and to make appropriate scientific and technical recommendations which shall take into account the principles of the present resolution and shall not prejudice the related problems awaiting consideration by the General Assembly;

2. *Invites* all States Members of the United Nations and States members of the specialized agencies to participate in the Conference and to include among their representatives individual experts competent in the field of fishery conservation and regulation;

3. *Invites* the interested specialized agencies and inter-governmental organizations concerned with problems of the international conservation of the living resources of the sea, to send observers to the Conference;

4. *Requests* the Secretary-General to arrange for the necessary staff and facilities which would be

required for the Conference, it being understood that the technical services of Governments of Member States and the technical and secretarial services of the Food and Agriculture Organization shall be utilized as fully as practicable in the arrangements for such a conference;

5. *Requests* the Secretary-General to circulate the report of the Conference for information to the Governments of all States invited to participate in the Conference;

6. *Decides* to refer the report of the said scientific and technical Conference to the International Law Commission as a further technical contribution to be taken into account in its study of the questions to be dealt with in the final report which it is to prepare pursuant to resolution 899 (IX) of 14 December 1954.

2. In pursuance of the above resolution, the International Technical Conference on the Conservation of the Living Resources of the Sea convened at the headquarters of the Food and Agriculture Organization of the United Nations on 18 April 1955. It held twenty-four plenary meetings and concluded its work on 10 May 1955.

3. The Governments of the following forty-five States sent representatives:²

Argentina	Greece	Panama
Australia	Guatemala	Paraguay
Belgium	Honduras	Peru
Brazil	Iceland	Poland
Canada	India	Portugal
Chile	Indonesia	Spain
China	Israel	Sweden
Colombia	Italy	Turkey
Costa Rica	Japan	Union of South Africa
Cuba	Korea,	Union of Soviet So-
Denmark	Republic of	cialist Republics
Ecuador	Mexico	United Kingdom
Egypt	Monaco	United States of
El Salvador	Netherlands	America
France	Nicaragua	Uruguay
Germany	Norway	Yugoslavia
Federal		
Republic of		

4. The Governments of the following six States sent observers:² Bolivia, Ceylon, Dominican Republic, Romania, Thailand and Venezuela.

5. The Food and Agriculture Organization of the United Nations and the United Nations Educational, Scientific and Cultural Organization were represented by observers.

² The names of the representatives, alternates and advisers of the Governments are listed in annex B, as are also the names of observers from Governments, specialized agencies and inter-governmental organizations.

¹ See *Official Records of the General Assembly, Eighth Session, Supplement No. 9*, document A/2456, paragraph 94.

6. The following inter-governmental fishery organizations were represented by observers:

General Fisheries Council for the Mediterranean
Indo-Pacific Fisheries Council
Inter-American Tropical Tuna Commission
International Commission for the Northwest Atlantic Fisheries
International Council for the Exploration of the Sea
International North Pacific Fisheries Commission
International Pacific Halibut Commission
International Pacific Salmon Fisheries Commission
International Whaling Commission
Permanent Commission for the Exploitation of the Maritime Resources of the South Pacific
Permanent Commission under the 1946 Convention for the Regulation of Meshes of Fishing Nets and the Size Limits of Fish

7. The Conference elected the following officers:

Chairman: Klaus Sunnanaa (Norway)
Deputy Chairman: Francisco V. García Amador (Cuba)
Vice-Chairmen: Francis F. Anderson (Australia)
B. N. Chopra (India)
Umberto d'Ancona (Italy)
Motosuku Fujinaga (Japan)
José Alvarez del Villar (Mexico)
Luis Edgardo Llosa (Peru)
Pedro Díaz de Espada (Spain)
Konstantin Babaian (Union of Soviet Socialist Republics)
Ronald Wall (United Kingdom)
William C. Harrington (United States of America)

8. Mr. James Baster of the United Nations Secretariat was Executive Secretary of the Conference.

9. The Conference appointed a Credentials Committee consisting of representatives of the following States: Brazil, Canada, Egypt, Indonesia, Japan, Mexico, the Netherlands, Poland and the Union of South Africa. The Committee held two meetings and submitted a report to the Conference.

16. Conservation is essential in the development of a rational exploitation of the living resources of the seas. Consequently, conservation measures should be applied when scientific evidence shows that fishing activity adversely affects the magnitude and composition of the resources or that such effects are likely.

17. The immediate aim of conservation of living marine resources is to conduct fishing activities so as to increase, or at least to maintain, the average sustainable yield of products in desirable form. At the same time, wherever possible, scientifically sound positive measures should be taken to improve the resources.

10. The Conference also elected a Nominations Committee, which was composed of the representatives of Argentina, Canada, France, Greece, India and Poland. This Committee was given the function of proposing Vice-Chairmen for election by the Conference. It held two meetings.

11. The Conference set up a General Committee, consisting of the Chairman, Deputy Chairman and the ten Vice-Chairmen, whose function was to advise the Chairman on the conduct of the work of the Conference. The Committee held twenty-three meetings.

12. The provisional agenda was adopted by the Conference, which also adopted, with certain amendments, the provisional rules of procedure proposed by the Secretary-General.³

13. The Conference had before it an extensive technical documentation, listed in annex D, the chief items of which are published in a supplement to this report.

14. The Conference considered all the items on its agenda. The General Committee was authorized to prepare a draft report for the Conference and for this purpose elected three Drafting Sub-Committees composed as follows:

- (a) Drafting Sub-Committee I, on item 9 of the agenda: representatives of Canada, Colombia, Indonesia, Norway and Poland;
- (b) Drafting Sub-Committee II, on items 10 and 11 of the agenda: representatives of Australia, Mexico, Netherlands, Union of Soviet Socialist Republics and United States;
- (c) Drafting Sub-Committee III, on item 12 of the agenda: representatives of Ecuador, France, India, Union of Soviet Socialist Republics and United States.

15. The result of the deliberations of the Conference is summarized in the following sections of the report. Reservations of the delegations of Chile and Peru to sections VI and VII of the report and reservations of the delegation of Ecuador to all sections of the report appear in annex A.

³ For the agenda, see annex C. For the rules of procedure, see A/CONF.10/4/Rev.1.

II. OBJECTIVES OF FISHERY CONSERVATION

18. The principal objective of conservation of the living resources of the seas is to obtain the optimum sustainable yield so as to secure a maximum supply of food and other marine products. When formulating conservation programmes, account should be taken of the special interests of the coastal State in maintaining the productivity of the resources of the high seas near to its coast.⁴

⁴ At its 19th plenary meeting on 5 May, the Conference decided, by a vote of 18 against 17, with 8 abstentions, to include this sentence in its report: see A/CONF.10/SR.19.

III. TYPES OF SCIENTIFIC INFORMATION REQUIRED FOR A FISHERY CONSERVATION PROGRAMME

19. Effective conservation of any resource of the sea requires scientific information, based on statistical records of the amount and kind of fishing and of resulting catches, and on integrated research on the biology and conditions of existence of the resource. It is therefore essential that any nation engaging in sea fishing collect adequate statistical records of fishing effort and catch; it should also conduct pertinent biological and other investigations, to serve as a basis for ensuring the conservation of the resource being exploited. Since both the determination of the need for conservation measures and the selection of adequate and effective measures often depend on having data over a long period of time, it is most desirable that adequate records be collected, and biological and other research be conducted, from the beginning of the development of a fishery.

20. Scientific information is required in order to provide answers, for a given fishery resource, to the following problems:

(a) Whether regulation of the amount, manner or kind of fishing may be expected to produce desirable changes in the amount of the catch or its quality (It is important to determine whether the amount, manner and kind of fishing are such that regulation would maintain or improve the quantity or quality of the sustainable catch, because only in this case is the application of regulatory measures indicated. In order to make such a determination it is often necessary to consider also the fluctuations in the fish population resulting from the effects of environmental factors unconnected with amount, manner or kind of fishing);

(b) If conservation measures are indicated, the particular measures to be adopted to produce the effects desired;

(c) The measures, other than control of amount, manner or kind of fishing, to be undertaken to improve the quantity or quality of the catch.

21. The scientific information required will include some or all of the following types:

(a) Extent of separation of the fishery resource into independent or semi-independent populations, which constitute the natural biological units of the resource to be dealt with by a conservation programme;

(b) Magnitude and geographic ranges of the populations constituting the resource, as a basis for effective investigation and regulation, since these need to be applied over whatever sea areas are occupied by the populations to be conserved;

(c) Pertinent facts respecting the life history (such as growth, mortality rates, migration, recruitment, etc.), ecology, behaviour and population dynamics of the species constituting the resource, including fluctuations in abundance and variations in distribution and behaviour which are due to changes in the biotic and abiotic factors of the environment, and which are independent of the amount of fishing, and including the inter-relationships of the community of organisms of which the exploited species forms a part;

(d) Effects of the amount, manner and kind of fishing on the resource and on the quantity and quality of the sustainable average catch to be obtained from it;

(e) Relationships of the resource to other species which are members of the same ecological community and are being exploited simultaneously by the same fishing equipment.

22. The degree of elaboration of the scientific investigations required to solve the conservation problems presented by particular resources, or in particular areas of the sea, is extremely variable. In some cases quite simple investigations will be adequate to determine the need for application of conservation measures, and to indicate appropriate measures to be applied. In other cases very detailed and extensive investigations will be necessary. The requirements of each case must be determined on scientific evidence.

IV. TYPES OF CONSERVATION MEASURES APPLICABLE IN A CONSERVATION PROGRAMME

23. Several general types of measures may be applied in a conservation programme, under each of which there are several specific types of measures which may be used, depending on the nature of the resource and the way in which it is harvested:

(a) Regulation of the amount of fishing to maintain or to increase the average sustainable catch, by

(i) Directly limiting the amount of the total catch by fixing a maximum annual catch;

(ii) Indirectly limiting the amount of the catch by closed seasons and closed areas, or by the limitation of fishing gear and ancillary equipment;

(b) Protection of sizes of fish, the conservation of which will result in a greater average catch or a more desirable quality, by

(i) Regulation of fishing gear to achieve differential capture of specified sizes;

(ii) Prohibition of landing of fish below a specified size, and requiring their return to the sea alive, if this is technically practicable;

(iii) Prohibition of fishing in areas where, or seasons when, small fish predominate;

(c) Regulations designed to assure adequate recruitment:

(i) Control of the amount of fishing by any of the means indicated under (a) above to ensure adequate spawning stock;

(ii) Differential harvesting of different sizes of fish, by any of the means indicated under (b) above to lower the fishing rate on immature fish;

(iii) Prohibition of fishing in spawning areas or during spawning seasons;

(iv) Preservation and improvement of spawning grounds;

(v) Differential harvesting of sexes to achieve a desirable sex ratio in the population (This type of measure is not generally applicable, but has been applied to some crustacea, mammals and fishes);

(d) Measures for improvement and increase of marine resources:

- (i) Artificial propagation;
- (ii) Transplantation of organisms from one biogeographical area to another, with due precaution against adverse effects;
- (iii) Transplantation of young to better environmental conditions.

V. PRINCIPAL SPECIFIC INTERNATIONAL FISHERY CONSERVATION PROBLEMS OF THE WORLD FOR THE RESOLUTION OF WHICH INTERNATIONAL MEASURES AND PROCEDURES HAVE BEEN INSTITUTED

25. In various regions of the world, agreed international measures and procedures have been instituted for the resolution of specific international fishery conservation problems. This section of the report reviews the existing international conservation organizations in the North Atlantic, South Atlantic, Mediterranean, Indo-Pacific, North Pacific and South Pacific regions and in the Antarctic Ocean and other whaling areas. It also states the principles which have been developed in the formation of these various organizations.

Review of existing international conservation organizations

26. International arrangements for the conservation of particular resources, or for the conservation of resources in a particular area, have been made in many parts of the world. While some of these arrangements provide only for required research, others provide also for the recommendation and/or application of conservation measures. There is a total of eleven such councils and conventions involving forty-two different States. Some of the States are members of more than one council or convention so that membership of the eleven organizations totals seventy-eight.⁵

North Atlantic

27. The International Council for the Exploration of the Sea, established in 1902, provides for the co-ordination of the scientific research of most countries in northern and western Europe on the fish stocks of the North Sea and the Baltic and those in the North-East Atlantic and the Greenland waters. Membership is open to all nations having an interest in the area.

28. The 1946 Convention for the Regulation of Meshes of Fishing Nets and the Size Limits of Fish is an arrangement among thirteen nations of Europe for the application of specific conservation measures. These measures are based on the scientific advice of the International Council for the Exploration of the Sea, which is given through a liaison committee appointed by the Council.

29. Canada, Newfoundland, the United States and France organized the North American Council on Fishery Investigations, which was active from 1920 to 1938, to co-ordinate their scientific research in the North-West Atlantic, operating on the pattern of the International Council for the Exploration of the Sea.

⁵ See A/CONF.10/L.4/Rev.1, included in the supplement to this report.

24. The determination of which of these measures should be applied in a given conservation programme will depend on the details of the life history, ecology, population dynamics and behaviour of the species constituting the resource and on the technical nature of the fishing. The efficient application of conservation measures requires adequate prior scientific investigation of these matters. Recommendations for regulations should be made only on the basis of such investigations.

This North American Council provided a background for the subsequent establishment of the International Convention for the North-West Atlantic Fisheries.

30. The International Convention for the North-West Atlantic Fisheries, which came into force in 1950, relates to the sea fisheries of the North-West Atlantic Ocean, and is open to all nations who participate in the fisheries of this region and to the adjacent coastal States. Since some nations are not concerned with problems in the entire region, it is divided into sub-areas, within which the investigation and conservation of the fish resources are the concern of panels consisting of representatives of interested States, that is, States fishing in the sub-area and States adjacent to it. The Commission established under the Convention develops the necessary programmes and co-ordinates the research which is done by member Governments. Recommendations for regulations are made by the Commission on the basis of proposals from the appropriate panels, and become effective for a given sub-area when accepted by the government members of the panel for such sub-area.

South Atlantic

31. There are no international arrangements in this area, except for whaling, discussed separately below.

Mediterranean

32. The International Commission for the Scientific Exploration of the Mediterranean was organized in 1919. Its function is to co-ordinate the scientific research in this sea, both oceanographical and biological, but without particular reference to fisheries.

33. The General Fisheries Council for the Mediterranean, organized in 1952, and sponsored by the Food and Agriculture Organization of the United Nations (FAO), is an association of Mediterranean States for the purpose of co-ordinating research and development activities related to the fisheries of this sea. It has at present eleven members. There is a liaison committee between this Council and the International Commission founded in 1919.

Indo-Pacific

34. The Indo-Pacific Fisheries Council is another FAO-sponsored Council, for the co-ordination of research, conservation and development of the fisheries (both inland and marine) of this region. It was founded in 1949 and is open to all nations of the region; it has at present sixteen members.

North Pacific

35. The Fur Seal Treaty of 1911 between Japan, Russia, Canada and the United States is the earliest example of a convention for the conservation of a single resource. This Convention, which has resulted in the rebuilding and management of the fur seal herds of the North Pacific, provided particularly for the cessation of pelagic sealing. Although the treaty was terminated in 1941, following the withdrawal of Japan, the United States and Canada have continued the management of the herds in the eastern North Pacific, and the Soviet Union has continued to manage those to the west. Negotiation of a new convention is expected in the near future.

36. The International Pacific Halibut Convention, negotiated between the United States and Canada in 1923, established a Commission which, with its own research staff, undertook the necessary investigations of their halibut fisheries in the North-West Pacific. In 1930 the Commission was given authority to regulate the fishing on the basis of its scientific findings, as well as to continue the research necessary for a continuing conservation programme, to make possible the attainment of the maximum sustainable catch.

37. The International Sockeye Salmon Convention of 1937, between the United States and Canada, provided for a Commission which, with its own research staff, should investigate the sockeye salmon spawning in the Fraser River watershed. After some years of investigation the Commission recommended the construction of certain fishways, and after eight years of such investigations had authority to regulate and to take action to conserve and rebuild those salmon populations. It is now in its eighteenth year of operation and currently conducts both research and management of the fishery.

38. The International North Pacific Fisheries Convention was recently negotiated between Japan, Canada, and the United States and entered into force in 1953. It is concerned with stocks of fish in the convention area under substantial exploitation by two or more contracting parties. It does not include salmon stocks of the North-West Pacific since neither Canada nor the United States fish such stocks. Research is conducted by the national research agencies, which are co-ordinated by the Commission established by the Convention, but the Commission may employ its own scientific staff if necessary. Decisions and recommendations for regulations are confined to the contracting countries engaged in the exploitation of a given stock on a substantial scale. Under this Convention, States which have not engaged in substantial exploitation of certain stocks of fish agree to abstain from fishing those stocks where it can be shown that all the following conditions are satisfied: (a) more intensive exploitation will not provide a substantial increase in yield, (b) the stock is under conservation regulation and (c) is subject to extensive scientific study designed to discover whether the stock is being fully utilized, and what conditions are necessary for maintaining its maximum sustained productivity.

39. The Inter-American Tropical Tuna Convention, operating in the tropical and sub-tropical eastern Pacific, was negotiated in 1949 between Costa Rica and the United States to obtain scientific information respecting the tunas and tuna bait-fishes in the tropical and sub-tropical eastern Pacific, required as a basis

for maintaining the populations of those fishes at levels which will permit maximum sustainable catches. The treaty is open to adherence by all nations having an interest in the fishery. Panama adhered in 1953. The Commission established by this Convention conducts scientific investigations with its own staff, and makes conservation recommendations based on the research results.

South Pacific

40. The Permanent Commission for the Exploitation and Conservation of the Maritime Resources of the South Pacific, which was inaugurated in 1954 between Peru, Ecuador and Chile, has broad terms of reference. It proposes to (a) unify fishing and whaling regulations of the three countries, (b) promote scientific investigations, (c) compile statistics and exchange information with other agencies and (d) co-ordinate the work of the three countries in all matters pertaining to the conservation of the living resources of the sea.

Antarctic and other whaling areas

41. The International Convention of 1946 for the Regulation of Whaling, to which seventeen nations now adhere, established in 1949 a Commission which co-ordinates and reviews research of member Governments, reviews and evaluates scientific findings, and makes conservation regulations on the basis of those findings. It is concerned with the conservation of whales in all areas where whaling is conducted.

42. The Permanent Commission for the Exploitation and Conservation of the Maritime Resources of the South Pacific, mentioned above, regulates whaling and the conservation of whales in the South-East Pacific.

Principles of international conservation organizations

43. The older research and management conventions operating with permanent commissions have been highly successful in restoring and maintaining the productivity of international resources. In general, the newer conventions are making encouraging progress in this direction. Experience in the international conservation of living marine resources reflected in the foregoing organizations has led increasingly to the incorporation in conservation conventions of certain basic provisions in the application of conservation programmes. The more important of such provisions are:

(a) A sufficiently large geographical area within which research and regulation are to be carried out to encompass the entire range of the populations constituting the resource or resources with which the convention is concerned;

(b) All interested nations, both the fishing nations and the adjacent coastal States, are included in the international organizations responsible for conservation of a given resource, or in a given region;

(c) Adequate scientific research, carefully evaluated as outlined in sections III and IV of this report, for determining the need for conservation measures, and the formulation of the particular measures to be applied;

(d) Continuing research and review;

(e) Where international organizations are granted regulatory powers, these powers are sufficiently broad to ensure the full application of all suitable conservation

measures which have been arrived at on the basis of adequate scientific investigations;

(f) Facilities for adjusting and revising the convention to meet changing conditions in the fishery and to take advantage of advancing technical and scientific knowledge;

(g) Clear rules conveying the rights and duties of the member States, the conservation measures to be recommended, the functions of the commissions

set up under the convention, and the authority of these commissions to regulate or recommend regulations, and how these recommendations shall be handled;

(h) Facilities to obtain advice from the interested public, through advisory committees or otherwise, regarding the applicability and practicability of management programmes, and measures and facilities to inform the public concerning the work of the commission, its objectives and accomplishments.

VI. APPLICABILITY OF EXISTING TYPES OF INTERNATIONAL CONSERVATION MEASURES AND PROCEDURES TO OTHER INTERNATIONAL FISHERY CONSERVATION PROBLEMS

Problems of the coastal State—extent of interest and responsibility

44. Two trends of thought became apparent during the Conference, as to the place of coastal States in the matter of conservation. All agreed that conservation measures adequate both from the technical and scientific points of view should, where needed, be introduced in the areas in question in order to prevent all those in the various countries who are concerned with the fisheries from causing a decrease in the sustainable yield of the resources.

45. According to one group, however, the coastal State has a special interest in the measures of conservation to be applied. Within this group, the points of view expressed concerning the rights and duties of the coastal State covered a wide range. These varied from the proposal which was accepted by the Conference⁶ and appears in section II, paragraph 3, of this report, that the coastal State be regarded as having a special interest in the conservation of the living resources of the sea adjacent to its coasts, to the proposal that the coastal State alone should be entrusted with control and conservation measures in areas near its coast, with no necessary limitation except that the measures should be in accord with the general principles of a technical character adopted at the Conference, and should be based on the maintenance of the existing ecological system in a given maritime zone. The view was also expressed that, in considering the application of conservation measures, the people nearest to, and dependent on, the resources for food should be given first consideration. These views result from the argument that the coastal State has a special interest and responsibility for the conservation of the biological wealth near its shores and that it is in consequence the best qualified to be entrusted with the task of conservation.

46. It was also emphasized in the discussions in this connexion that the special interests of the coastal State should be regarded as related to the resources or stocks which the States concerned aim to conserve through efforts which they make, or through the various measures which they may take, as for example the development of fisheries by artificial means, such as acclimatization, the improvement of the natural environment of the fishery, etc.

47. According to the other group, the coastal State should refrain from adopting any conservation measures

for high seas fisheries applicable to the nationals of other countries, without the agreement of the other States concerned. This view proceeds from the consideration that conservation measures should be based on scientific and technical evidence, that the coastal State is not necessarily better qualified than other States concerned to assess scientific truth, and that all States concerned should be entitled to supply pertinent scientific evidence and to have it considered on an equal footing, with a view to formulating adequate conservation measures.

48. In the plenary meeting of 7 May a proposal concerning the situation of the coastal State was presented by the delegations of Cuba and Mexico.⁷ The Conference on this occasion declared itself (by a vote of 21 to 20 with 3 abstentions) not competent to deal with this proposal. The vote was taken on the motion by the delegation of Norway that the Cuban-Mexican proposal was outside the scope of the Conference.⁸

49. *Existing procedures.* Many of the present fishery conservation conventions may be adhered to by any interested State. This provides an opportunity for the coastal State to participate in the work and decisions of the commission operating under the convention. The International Convention for the Northwest Atlantic Fisheries, particularly, provides that each contracting party with coastline adjacent to a sub-area may be represented on the panel for that sub-area, whether or not it fishes in that sub-area.

Problems relating to the operation of conventions, including procedures of operation

50. Failure of all States concerned to participate in the preparation, negotiation and establishment of international fishery conservation conventions impedes or limits progress in achieving the objectives of conservation. Furthermore, commissions functioning under such conventions are handicapped in their operation when all States concerned do not participate in the scientific research and investigation undertaken with a view to achieving the objectives of the convention.

51. The commissions are also handicapped if the conventions do not clearly and fully define the rights and duties of the member countries and do not contain precise stipulations both as to the procedures and the conservation measures to be recommended and applied. This includes definition of the duties and authority of the commissions with respect to the kinds and appli-

⁶ By a vote of 18 to 17, with 8 abstentions. The discussion is recorded in A/CONF.10/SR.19.

⁷ See A/CONF.10/L.40, formerly A/CONF.10/GC.1/Rev.1.

⁸ The discussion is recorded in A/CONF.10/SR.21.

cation of conservation measures, or with respect to the recommendation of such measures. It was also considered that the commissions cannot be most effective and expeditious in progressing towards their objectives unless they are given considerable latitude as to the specific conservation measures which they may apply or recommend for application. Too severe a limitation of their authority can result in a reduction in their effectiveness and delay in achieving results.

52. *Existing procedures.* Some present conventions are so framed that new measures can be adopted at any time when necessary for achieving the desired objectives.

53. Some are open-ended so that any concerned State may adhere; other conventions include all of the countries engaged in the exploitation of the fish stock or stocks covered by the conventions. These conventions, in addition, generally specify clearly the competence of the commissions for which they provide, and include rules for their operation. The majority of the conventions give their commissions considerable latitude with respect to determination of the specific conservation measures which they may use.

Biological or geographic coverage of conventions

54. Lack of co-operation by any State participating in fishing on the stocks of fish or in the areas covered by the conventions may result in the conventions becoming ineffective. Scientific evidence clearly demonstrates that effective conservation management of a stock of fish cannot be achieved unless all States engaged in substantial exploitation of that stock come within the management system.

55. *Existing procedures.* Present conventions generally cover:

(a) One or more stocks of marine species, which can be separately identified and suitably regulated; or

(b) A specified area, in cases where the identification of stocks mentioned in the preceding paragraph is impossible in practice, because of the interdependence of several species or for any other reason.

Problems involved in reaching agreement on conservation measures and procedures

56. Failure to reach agreement on the conclusion to be drawn from a given set of data has sometimes resulted in conservation programmes being inadequate or ineffective.

57. In most instances, disputes can, of course, be settled by the bodies set up by the convention to co-ordinate and direct the conservation measures to be adopted. The utility of such bodies is beyond question, but their role is necessarily limited to the purposes for which they were set up. There may be occasional disagreements in such bodies which prevent or impede the development and implementation of an effective conservation system. Such disagreements might be roughly grouped into three general categories: (a) concerning questions of a legal or juridical nature; (b) concerning questions of a scientific and technical character; (c) concerning other questions.

58. *Existing procedures.* Problems covered in category (a) can be handled in the first instance through diplomatic channels and then if necessary by recourse to existing international juridical procedures.

59. One method of handling a problem in category (b) was included in the North Pacific Fisheries Convention. This Convention provides that in the event the Commission operating under the Convention fails, in a reasonable period of time, to reach agreement on the conclusions from certain research work, bearing upon a problem of special importance, the question shall be referred to a committee of competent and neutral (impartial) scientists selected by the contracting parties. The majority decision of the committee determines the recommendations to be made by the Commission.

Problems created by new entrants into a fishery under conservation management

60. An established conservation programme can be made ineffective by the participation of nationals of a State newly entering into the exploitation of the stock of fish, with no commitment to observe the regulations. Three aspects of this problem are considered.

Case 1

61. A special case exists where countries, through research, regulation of their own fishermen and other activities, have restored or developed or maintained stocks of fish so that their productivity is being maintained and utilized at levels reasonably approximating their maximum sustainable productivity, and where the continuance of this level of productivity depends upon such sustained research and regulation. Under these conditions, the participation of additional States in the exploitation of the resource will yield no increase in food to mankind, but will threaten the success of the conservation programme. Where opportunities exist for a country or countries to develop or restore the productivity of resources, and where such development or restoration by the harvesting State or States is necessary to maintain the productivity of resources, conditions should be made favourable for such action.

62. *Existing procedures.* The International North Pacific Fishery Commission provides a method for handling the special case mentioned above. It was recognized that new entrants in such fisheries threatened the continued success of the conservation programme. Under these circumstances the State or States not participating in fishing the stocks in question agreed to abstain from such fishing when the Commission determines that the stock reasonably satisfies all the following conditions:

(a) Evidence based upon scientific research indicates that more extensive exploitation of the stock will not provide a substantial increase in yield;

(b) The exploitation of the stock is limited or otherwise regulated for conservation purposes by each party substantially engaging in its exploitation; and

(c) The stock is the subject of extensive scientific study designed to discover whether it is being fully utilized, and what conditions are necessary for maintaining its maximum sustained productivity. The Convention provides that, when these conditions are satisfied, the States which have not engaged in substantial exploitation of the stock will be recommended to abstain from fishing such stock, while the States engaged in substantial exploitation will continue to carry out the necessary conservation measures. Meanwhile, the abstaining States may participate in fishing other stocks of fish in the same area.

Case 2

63. A somewhat different case was discussed, involving new entrants into a fishery which a coastal State is regulating for conservation purposes, and when existing scientific evidence indicates the necessity of continuing such regulations for conservation purposes.

64. *Existing procedures.* In general this conservation problem can be handled if the new entrant should declare itself ready to observe the conservation regulations in force and undertake to co-operate with the other States concerned in carrying out the relevant programme of research and management.

Case 3

65. A variation of this problem exists where the intensive exploitation of offshore waters adjoining heavily fished inshore waters, by a new fishing operation initiated either by the coastal States or by another State, considerably affects the abundance of fish in the inshore waters.

66. *Existing procedures.* The conservation aspect of the problem is taken care of if the entire area in which the stocks are fished, including both the inshore and offshore portions, is included within a single conservation system and is subjected to conservation regulations adequate to maintain the maximum sustainable yield.

Problems of effective enforcement

67. Some conventions provide that joint regulations shall be enforced on fishermen only by officials of their own government.

68. Other conventions have special provisions for the enforcement of regulations. The North Pacific Halibut Convention, the Pacific Sockeye Salmon Convention and the North Pacific Fishery Convention provide that authorized officers of any Contracting Party may enforce on the high seas the regulations promulgated by the Commission, with respect to the nationals of any Contracting Party, such nationals being then dealt with in their own country.

Areas and species not covered by present conservation conventions

69. Apart from those fisheries discussed in Section V, sea fisheries are at present not subject to international measures of conservation. Examples of such fisheries range from newly discovered resources in the initial phase of exploitation to continually worked fisheries which have begun to show signs of depletion. According to the nature of the problems associated with them, these fisheries could be grouped in four categories. Examples are here suggested which would probably fall within each category:

(a) Fisheries which have been newly or partially developed and which are capable of substantial expansion, for example, Mid-Pacific tunas;

(b) Old established fisheries which are apparently being fully exploited, but in the case of which scientific information is inadequate to suggest the need for conservation measures, for example, Rastrelliger (Indo-Pacific mackerel);

(c) Fisheries in separated or contiguous areas depending upon the same species, where further expansion of a particular fishery may result in depletion of

others, for example, Sciaenid and Polynemid fisheries of the Arabian sea; Hilsa fisheries of the Bay of Bengal;

(d) Fisheries which are already showing signs of overfishing, requiring conservation measures at national and international levels, for example, in particular, North-West Pacific sockeye salmon.

70. The Inter-American Tropical Tuna Commission, already referred to, is an instance where an international conservation policy has already been formulated for the exploitation of a fishery of comparatively recent origin. Such early action has, however, been exceptional. In many cases several fisheries have been exploited for centuries, but the absence or inadequacy of statistics and other scientific data makes it difficult to suggest conservation measures (e.g., several Indo-Pacific fisheries). In such cases, especially in countries where the fishing industry is not sufficiently advanced, it would be very useful if the scientific facts listed in section III could be gathered on a continuing basis both at national levels and when necessary by co-operative research projects at international levels.

71. Fisheries under category (c) of paragraph 69 present special problems of conservation. In areas where two or more nations are engaged in fishing on what is basically the same resource, but by different methods, in different areas, in different environments, or on different age groups of the same species, management programmes can be worked out by agreement between the nations concerned. Where inshore fishing has been traditional, new problems are introduced by intensive offshore fishing either by new enterprises in the same country or by other countries having superior experience and equipment.

72. Category (d) of paragraph 69 includes fisheries of certain areas where intensive fishing has been taking place for many years. Conservation measures have been enforced by certain countries bordering these areas but there is no agreed policy of conservation or uniform method of enforcement by all the countries concerned, to keep the yield from these waters at the highest sustainable level. Closed seas and small gulfs, as well as other areas, may present conservation problems of vital interest to the countries in the immediate neighborhood.

73. Many areas of the oceans, although exploited by several countries, are still without any agencies for the study of conservation problems and the development of conservation measures by agreement. The material presented at the Conference does not appear adequate to make a full appraisal of these, but some of the areas requiring attention, and the fisheries concerned, are summarized in the following list:

AREA	SPECIES ⁹
North-West Pacific	Fur seal (<i>Callorhinus ursinus</i>)
	Pacific salmon (Genus <i>Onchorhynchus</i>)
	Herring (<i>Clupea pallasii</i>)
	Sardine (<i>Sardinops melanosticta</i>)
	Flat fishes (Several genera and many species)
South-East Pacific	Anchovies (<i>Engraulis ringens</i>)
Mediterranean	Trawl fisheries

⁹ This list covers only species mentioned in the Conference and is not to be considered as complete.

AREA	SPECIES ⁹	AREA	SPECIES ⁹
Norih-East Atlantic	Herring (<i>Clupea harengus</i>)	Arctic seas	Seals and other aquatic mammals (<i>Phoca groenlandica</i> , <i>Cystophora cristata</i> , <i>Erignathus barbatus</i> , <i>Odobenus rosmarus</i> and others)
Baltic	Plaiice (<i>Platichthys platessa</i>)	Various seas	Shrimp resources developed in recent years
	Flounder (<i>Pleuronectes flesus</i>)		
	Salmon (<i>Salmo salar</i>)		
	Cod (<i>Gadus callarias</i>)		

VII. GENERAL CONCLUSIONS

74. The Conference notes with satisfaction conservation measures already carried out in certain regions and for certain species at the national and international level. International co-operation in research (including statistical investigation) and regulation in the conservation of living resources of the high seas is essential. The Conference considers that wherever necessary further conventions for these purposes should be negotiated.

75. The present system of international fishery regulation (conservation measures) is generally based on the geographical and biological distribution of the marine populations with which individual agreements are concerned. From the scientific and technical point of view this seems, in general, to be the best way to handle these problems. This system is based upon conventions signed by the nations concerned.

76. From the desire expressed during this Conference by all participating nations to co-operate in research, and from the guidance given by existing conventions, it appears that there are good prospects of establishing further conservation measures where and when necessary. Having regard to these considerations and the existing principles dealt with under Section V, "Principles of International Conservation Organizations," the Conference considers that the following should be taken as the guiding principles in formulating conventions:

(a) A convention should cover either:

- (i) One or more stocks of marine animals capable of separate identification and regulation; or
- (ii) A defined area, taking into account scientific and technical factors, where, because of intermingling of stocks or for other reasons, research on and regulation of specific stocks as defined in (i) is impracticable;

(b) All States fishing the resource, and adjacent coastal States, should have opportunity of joining the convention and of participating in the consideration and discussion of regulatory measures;

(c) Conservation regulations introduced under a convention should be based on scientific research and investigation;

(d) All signatory States should so far as practicable participate directly or through the support of a joint research staff in scientific research and investigation carried out for purposes of the convention;

(e) All conventions should have clear rules regarding the rights and duties of member nations, and clear operating procedures;

(f) Conventions should clearly specify the kinds or types of measures which may be used in order to achieve their objectives;

(g) Conventions should provide for effective enforcement.

77. Nothing in these guiding principles is intended to limit the opportunity of States to make agreements on such other fishery matters as they may wish, or to limit the authority or responsibilities of a State to regulate its fisheries on the high seas when its nationals alone are involved.

78. The Conference considers that conventions, and the regulatory measures taken thereunder, should be adopted by agreement among all interested countries. The Conference draws attention, however, to the problems arising from disagreements among States as to scientific and technical matters relating to fishery conservation. Such disagreements may arise as to:

(a) The need for conservation measures or the nature of any measures to be taken; and

(b) The need to prevent regulatory measures already adopted by one State or by agreement among certain States from being nullified by refusal on the part of other States, including those newly participating in the fishery concerned, to observe such measures.

79. A solution to such problems might be found through:

(a) Agreement among States to refer such disagreements to the findings of suitably qualified and impartial experts chosen for the special case by the parties concerned, with the subsequent transmittal of the findings, if necessary, for the approval of the parties concerned, and

(b) Agreement by all States fishing a stock of fish to accept the responsibility to co-operate with other States concerned in adequate programmes of conservation research and regulation.

80. The Conference recognizes that a problem is created when the intensive exploitation of offshore waters adjoining heavily fished inshore waters, by a new fishing operation initiated by another State, considerably affects the abundance of fish in the inshore waters. This conservation problem is taken care of when the entire area is included in a conservation system involving the concerned States, and is subject to conservation regulations adequate to maintain the maximum sustainable yield. However, when no such system exists, overfishing may occur before suitable arrangements and regulations can be developed. Opinion in the Conference was more or less evenly divided as to the responsibility of the coastal State under such circumstances to institute a conservation programme for the fisheries concerned, pending negotiations of suitable arrangements. This problem requires further study.

81. It was the consensus of the Conference that it was not competent to express any opinion as to the appropriate extent of the territorial sea, the extent of the jurisdiction of the coastal State over fisheries, or the legal status of the superjacent waters of the continental shelf.

82. The question of the special interests, rights, duties and responsibilities of coastal States in the matter of the conservation of the living resources of

the sea was discussed in the Conference. The opinion of the Conference on these matters, and on the question as to whether the Conference was competent to consider them, was more or less evenly divided.

83. It is understood that any recitals or explanations of any treaties or other formal Acts to which any of the States represented at this Conference are parties are not to be considered as legal interpretations of such treaties or formal Acts.

ANNEX A

Reservations of the delegations of Chile, Ecuador and Peru

STATEMENT BY THE DELEGATIONS OF PERU AND CHILE

The delegations of Peru and Chile abstain from voting on the conclusions contained in sections VI and VII of the Final Report, because they consider that, in some respects, their content exceeds the competence of the Conference as defined in the convening resolution of 14 December 1954 of the General Assembly of the United Nations, and because in substance they mainly reflect the trend of thought of a group in the Conference which did not hold a decisive majority. In any case, the delegations of Peru and Chile maintain the primacy of the regulations on conservation of the living resources of the sea contained in their respective national legislations and in the international conventions to which they are parties.

The delegations of Peru and Chile request that this explanation of their vote should be recorded in the report of today's session and in the Final Report of the Conference.

Rome, 10 May 1955

STATEMENT BY THE DELEGATION OF ECUADOR

The delegation of Ecuador places on record that it approves section VI of the Final Report on the under-

standing and with the assurance that the said section is exclusively descriptive in character and merely describes the various views held in the Conference, without making recommendations or formulating resolutions of any kind. Such, indeed, was the intention of Sub-Committee III from which it originated, and which drafted and presented it, and the Chairman of that Sub-Committee so stated when he submitted the section for examination by the Conference. Moreover, a similar statement was made by the Chairman of the plenary session at which it was discussed.

The delegation of Ecuador, in giving its approval, likewise places on record its reservation that such approval expressly leaves unimpaired any relevant constitutional and legal dispositions adopted by the Republic of Ecuador, and any stipulations of the conventions to which it has acceded, and the unshakable attitude it has taken in defence both of the inalienable rights of coastal States and of their marine resources. It makes the same reservation with regard to Section VII of the Final Report of the Conference, and to all the other sections in the Report.

Rome, 10 May 1955

ANNEX B

Attendance at the Conference¹

States that sent representatives

ARGENTINA

Representative:

Erasto Villa, Enviado Extraordinario y Ministro Plenipotenciario, Embajada Argentina, Roma

Alternate:

J. M. O. Alvarez de Toledo, Consejero, Embajada Argentina, Roma

AUSTRALIA

Representative:

Paul McGuire, Her Majesty's Envoy Extraordinary and Minister Plenipotentiary for the Commonwealth of Australia to the Republic of Italy, Rome

AUSTRALIA (continued)

Alternate:

Francis F. Anderson, Director of Fisheries, Sydney, N.S.W. (*Vice-Chairman of the Conference*)

Advisers:

James Thomson, Senior Research Officer, C.S.I.R.O., Division of Fisheries, Cronulla, N.S.W.

Christian Fitzherbert, Secretary to the Australian Minister, Australian Legation, Rome

John Kirtley, Third Secretary, Australian Legation, Rome

BELGIUM

Representative:

Charles Gilis, Technicien, Ministère de l'Agriculture et des Pêcheries, Ostende

Adviser:

Edgard Lux, Adjoint, Ambassade de Belgique, Rome

¹ Names and titles are in each case given in the language of registration at the Conference.

BRAZIL

Representative:

Arizio de Viana, Ministre pour les Affaires Economiques, Ambassade du Brésil, Rome

CANADA

Representative:

John L. Kask, Chairman, Fisheries Research Board of Canada, Department of Fisheries, Ottawa

Alternate:

S. V. Ozere, Assistant Deputy Minister of Fisheries, Department of Fisheries, Ottawa

Adviser:

Alfred Pick, Counsellor, Canadian Embassy, Rome

CHILE

Representative:

Abdón Parra, Embajador Extraordinario y Plenipotenciario de Chile en Italia, Embajada de Chile, Roma

Alternate:

Moisés Hernández, Director General de Pesca y Caza, Valparaíso

Adviser:

Helmut Heinsen, Viña del Mar

CHINA

Representative:

Fah-Hsuen Liu, Director, Institute of Fishery Biology, Zoology Department, National Taiwan University, Taipei

Alternate:

Ken-Shen Wei, Chargé d'Affaires, Chinese Embassy, Rome

COLOMBIA

Representative:

Carlos Echeverri Herrera, Consejero, Embajada de Colombia, Roma

Alternate:

Antonio Oviedo, Consul General de Colombia, Roma

COSTA RICA

Representative:

José Angel Cato, Ministro Plenipotenciario, Roma

CUBA

Representative:

Francisco V. García Amador, Embajador, Miembro de la Comisión de Derecho Internacional, Ministerio de Estado, Habana (*Deputy Chairman of Conference*)

Alternate:

Miguel Espinosa, Consejero Encargado de Negocios de Cuba en Italia, Embajada de Cuba, Roma

Advisers:

Ilcilio Leoni, Representante Permanente de Cuba ante la FAO, Roma

Archibald Durland, Funcionario de Ministerio de Agricultura, Habana

Secretary:

Karel Pichardo, Vice-Consul, Consulado de Cuba, Roma

DENMARK

Representative:

B. Dinesen, Permanent Under-Secretary of State, Ministry of Fisheries, Copenhagen

Alternate:

Age Vedel Taning, Director, Danish Institute for Fisheries and Marine Research, Charlottenlund

Advisers:

Paul Hansen, Director, Greenland Fisheries Investigations, Charlottenlund

Kristian Djurhuus, Chairman of the local Government of the Faeroe Islands, Copenhagen

A. Schreiber, Fisheries Counselor, Legation of Denmark, Bern

ECUADOR

Representative:

Dr. Enrique Ponce y Carbo, Miembro de la Junta Consultiva de Relaciones Exteriores, Abogado, Profesor de Derecho, Embajada del Ecuador, Roma

Alternate:

Alberto Coloma-Silva, Ministro Consejero, Embajada del Ecuador, Roma

Adviser:

Lt. Commander Héctor A. Chiriboga, Chief of Hydrographic and Oceanographic Department, Ecuadorian Navy

EGYPT

Representative:

Mohamed Zudhi, Directeur de l'Institut d'Hydrobiologie, Alexandrie

EL SALVADOR

Representative:

Ernesto Trigueros, Encargado de Negocios de El Salvador en Italia, Embajada de El Salvador en Roma

FRANCE

Representative:

André Alloy, Directeur des Pêches Maritimes, Ministère de la Marine Marchande, Paris

Alternates:

M. Perier, Chargé de la Réglementation au Ministère de la Marine Marchande, Paris

Claude Beguin-Billecocq, Chef de Division du Ministère des Affaires Etrangères à Paris

Advisers:

Aristide Québric, Président du Comité Central des Pêches Maritimes

Louis Faure, Chef de Laboratoire à l'Institut des Pêches Maritimes, Paris

Léopold Soublin, Président de la Fédération des Armateurs à la Pêche, Paris

GERMANY, FEDERAL REPUBLIC OF

Representative:

Gerhard Meseck, Chief of Fisheries Department, Ministry of Food and Agriculture, Bonn

Advisers:

Johannes Lundbeck, Director, Institute of Fisheries Research, Hamburg

GERMANY, FEDERAL REPUBLIC OF (*continued*)

Berthold Freyberg, Director, German High Seas Fisheries Association, Cuxhaven

GREECE

Representative:

Christos Serbetis, Directeur de la Pêche, Ministère de l'Industrie, Athènes

GUATEMALA

Representative:

Miguel Q. Asturias, Embajador de Guatemala, Roma

Alternate:

Rodolfo Rivera-Ariza, Ministro Consejero, Embajada de Guatemala, Roma

HONDURAS

Representative:

Arturo López Rodezno, Ministro de Honduras, Roma

ICELAND

Representative:

David Olafsson, Director of Fisheries, Reykjavik

Alternates:

Jon Jonsson, Director, Fisheries Research Institute, Reykjavik

H. G. Andersen, Permanent Representative of Iceland on the North Atlantic Council, Paris

INDIA

Representative:

B. N. Chopra, Fisheries Development, Adviser to the Government of India, Ministry of Food and Agriculture, New Delhi (*Vice-Chairman of the Conference*)

Alternate:

N. Kesava Panikkar, Chief Research Officer, Central Marine Fisheries Research Station, Mandapam Camp, S. India

INDONESIA

Representative:

Sutan Mohammad Rasjid, Ambassador Extraordinary and Plenipotentiary of the Republic of Indonesia, Rome

Alternate:

Gusti Mohammed Charidji Kusuma, Deputy Head of Sea Fisheries Department of the Ministry for Agriculture, Djakarta

Advisers:

Agus Kartono, Sea Fisheries Expert at the Sea Fisheries Directorate of the Ministry for Agriculture, Djakarta

R. Soetijo, Agricultural Attaché, Embassy of the Republic of Indonesia, Rome

Djailin Tamin, First Secretary, Indonesian Embassy, Rome

Umar Jadi, First Commercial Secretary, Ministry of Economic Affairs, Indonesian Embassy, Rome

F. Salim, Secretary, Indonesian Embassy, Rome

R. A. S. Hardojo, Secretary, Indonesian Embassy, Rome

ISRAEL

Representative:

Eliahu Sasson, Envoy Extraordinary and Minister Plenipotentiary of Israel, Rome

ISRAEL (*continued*)

Alternate:

Shimon Yallon, Commercial Attaché, Israel Legation, Rome

Adviser:

Shabtai Rosenne, Legal Adviser, Ministry of Foreign Affairs, Rome

ITALY

Representative:

Umberto d'Ancona, Président, Conseil Général des Pêches pour la Méditerranée, près FAO, Rome (*Vice-Chairman of the Conference*)

Alternates:

Carlo Maldura, Directeur du Laboratoire Central d'Hydrobiologie, Rome

Agostino Benazzo, Premier Secrétaire de Légation, Ministère de Affaires Etrangères, Rome

Advisers:

Raffaele Cusmai, Chef, Division de Travail et Bateaux de Pêche, Ministère Marine Marchande, Rome

Giorgio Bini, Rome

Mme. Gabriella Giacometti, Ministère de l'Agriculture, Laboratoire Central d'Hydrobiologie, Rome

Antonio Sparta, Direttore dell'Istituto Talassografico di Messina, Messina

JAPAN

Representative:

Senjin Tsuruoka, Counsellor, Ministry of Foreign Affairs, Tokyo

Alternates:

Motosuku Fujinaga, Chief of Research Division, Fisheries Agency, Japanese Government, Tokyo (*Vice-Chairman of the Conference*)

Saburo Kimoto, Chief of Fourth Section, Treaties Bureau, Ministry of Foreign Affairs, Tokyo

Mitsugi Yamashita, First Secretary, Embassy of Japan, Rome

Adviser:

Hiroaki Aikawa, Professor, Kyushu University, Fukuoka

KOREA, REPUBLIC OF

Representative:

Pyo Wook Han, Korean Minister to the USA, Korean Embassy, Washington, D.C.

Alternates:

Choul Keun Chee, Director-General, Bureau of Fisheries, Office of Marine Affairs, Seoul

Suk Heun Yun, Chief of First Section, Political Bureau, Ministry of Foreign Affairs, Seoul

MEXICO

Representative:

Ramón Beteta, Embajador en Roma

Alternates:

José Alvarez del Villar, Jefe de Piscicultura, Secretaría de Marina, Mexico City (*Vice-Chairman of the Conference*)

Jorge Castañeda, Consejero del Servicio Exterior Mexicano, Mexico City

MONACO

Representative:

Jacques Reymond, Envoyé extraordinaire et Ministre plénipotentiaire de Monaco, Rome

Adviser:

Gerard Belloc, Sous-Directeur, Musée Océanographique de Monaco, Monte Carlo

NETHERLANDS

Representative:

G. Lienesch, Director of Fisheries, Den Haag

Alternate:

B. Havinga, Director, Scientific Fisheries Institute, Amsterdam

Adviser:

F. van der Dussen, Legal Adviser, Ministry of Agriculture, Den Haag

NICARAGUA

Representative:

F. Medina, Ministro Plenipotenciario cerca de la Santa Sede, Roma

NORWAY

Representative:

Klaus Sunnanaa, Director General of Fisheries, Bergen
(*Chairman of Conference*)

Alternates:

Gunnar Rollefson, Director of Institute of Marine Research, Directorate of Fisheries, Bergen

Olav Lund, Chief of Division, Directorate of Fisheries, Bergen

G. M. Gerhardsen, Norwegian School of Economics and Business Administration, Bergen

Johannes Selleg, Director, Ministry of Fisheries, Oslo

PANAMA

Representative:

Rafael Vallarino, Embajador de Panamá en Italia, Roma

PARAGUAY

Representative:

Aníbal Fernández, Primer Secretario de Legación y Consul General, Legación de Paraguay, Roma

PERU

Representative:

Diómedes Arias-Schreiber, Embajador, Roma

Alternate:

Luis Edgardo Llosa, Contralmirante de la Armada Peruana, Ministerio de Marina, Lima (*Vice-President of the Conference*)

Advisers:

Cristóbal Vecorena, Director de Pesquería y Caza, Ministerio de Agricultura, Lima

Manuel Elguera, Presidente, Sociedad Nacional Pesquería, Lima

Enrique del Solar, Asesor Técnico de la Sociedad Nacional de Pesquería, Lima

POLAND

Representative:

Jan Bilinski, Directeur de l'Administration Centrale des Pêcheries de Mer, Szczecin

Alternate:

Walerian Ciegiewicz, Directeur Adjoint de l'Institut Maritime de Pêche, Gdynia

Adviser:

Mme Eleonora Ratuszniak, Conseiller au Ministère des Affaires Etrangères, Varsovie

Interpreters:

Mme Marion Wieczorek, Attaché de l'Ambassade de Pologne, Rome

Tadeusz Wisniewski, Secrétaire de l'Ambassade de Pologne, Rome

PORTUGAL

Representative:

Alfredo de M. Ramalho, Directeur de l'Institut de Biologie Maritime, Lisbonne

SPAIN

Representative:

Jaime Alba, Consejero Económico, Embajada de España, Roma

Alternate:

Antonio Pedrosa, Jefe Nacional del Sindicato de Pesca, Madrid

Advisers:

Pedro Díaz de Espada, Ingeniero Industrial, Director Técnico de PYSBE, San Sebastián (*Vice-Chairman of the Conference*)

Angel Fernández, Secretario General, Federación Armadores, Madrid

Félix Bragado, Asesor, Federación Armadores Española, Madrid

SWEDEN

Representative:

Jöran Hult, Director-General, Board of Fisheries, Gothenburg

Alternate:

C. W. Hessle, Chief of Section, Board of Fisheries, Gothenburg

Advisers:

Sture Petré, Head of Legal Department, Ministry for Foreign Affairs, Stockholm

Claes König, First Secretary, Swedish Legation, Rome

TURKEY

Representative:

Ekrem C. Barlas, Director General, Meat and Fish Department, Ankara

Advisers:

Suat Özoran, Ministry of Economy and Commerce, Ankara

Erdogan Akyüz, Fisheries Biologist, Meat and Fish Department, Istanbul

UNION OF SOUTH AFRICA

Representative:

C. G. du Plessis, Assistant Director of Fisheries, Capetown

UNION OF SOVIET SOCIALIST REPUBLICS

Representative:

Konstantin Babaian, Head of Chief Department of Fish Protection and Fisheries, Ministry of Fish Industry, Moscow (*Vice-Chairman of the Conference*)

Alternates:

Aleksandre Bogdanov, Assistant Professor, Institute of Fisheries, Moscow

Dmitri Kolesnik, Ministry of Foreign Affairs, Moscow

Petr Moiseev, Professor, Director of the Pacific Institute of Fisheries and Oceanography, Vladivostok

Advisers:

Lev Zenkevitch, Professor, Corresponding Member of the USSR Academy of Sciences, Moscow

Vladimir Naumov, Assistant Professor, Scientific Director of Research Institute of Sea Fisheries and Oceanography, Moscow

Konstantin Smetanin, Assistant Professor of the Research Institute of Sea Fisheries and Oceanography, Moscow

Interpreters:

Valentin Kouznetsov, Ministry of the Fish Industry of the USSR (Translation Staff), Moscow

Oleg Dobrovolsky-Dolivo, Ministry of the Fish Industry of the USSR (Translation Staff), Moscow

Secretary:

Miss Antonina Zhmykhova, Ministry of the Fish Industry of the USSR, Moscow

UNITED KINGDOM

Representative:

Ronald Wall, Fisheries Secretary, Ministry of Agriculture, Fisheries and Food, London (*Vice-Chairman of the Conference*)

Alternates:

T. F. S. Hetherington, Assistant Secretary, Scottish Home Department, Edinburgh

Michael Graham, Director, Fisheries Research, Ministry of Agriculture, Fisheries and Food, London

C. E. Lucas, Director, Marine Laboratory, Aberdeen

Adviser:

Miss Joyce Gutteridge, Assistant Legal Adviser, Foreign Office, London

Secretary:

Miss N. Y. Matthew, Ministry of Agriculture, Fisheries and Food, London

UNITED STATES OF AMERICA

Representative:

William C. Herrington, Special Assistant for Fisheries and Wildlife to Under Secretary of State, Department of State, Washington, D.C. (*Vice-Chairman of the Conference*)

Alternates:

Arnie J. Suomela, Assistant Director, Fish and Wildlife Service, US Department of the Interior, Washington 25, D.C.

Oscar E. Sette, Director, Pacific Ocean Fishery Investigations, Honolulu, Hawaii

Advisers:

Lansing Collins, First Secretary, US Embassy, Rome

Milton J. Lindner, Fishery Adviser, American Embassy, Mexico City

UNITED STATES OF AMERICA (*continued*)

Fred Taylor, Foreign Affairs Specialist, US State Department, Washington, D.C.

Edward W. Allen, US Commissioner, International North Pacific Fisheries Commission, International Pacific Halibut Commission, Seattle

Wilbert M. Chapman, Director of Research, American Tunaboat Association, San Diego, California

URUGUAY

Representative:

José G. Lissidini, Embajada de Uruguay, Roma

Alternate:

Fernando Rivero Devoto, Consejero, Roma

YUGOSLAVIA

Representative:

Miljenko Grubelić, Directeur de la Pêche, Zagreb

Alternate:

Tomo Gamulin, Directeur de la Station Océanographique, Dubrovnik

Advisers:

Tonko Soljan, Directeur, Institut océanographique, Split

Otnar Karlovac, Institut océanographique, Split

Ljubisa Sekulić, Conseiller au Ministère des affaires étrangères, Belgrade

Simé Zupanović, Assistant à l'Institut océanographique, Split

Vladislav Brajković, Professeur à l'Université, Zagreb

States that sent observers

BOLIVIA

Enzo Cerlini, Consul de Bolivia, Rome

CEYLON

Herbert Hulugalle, Minister for Ceylon in Rome

DOMINICAN REPUBLIC

Cirilo Castellanos, Primer Secretario, Embajada de la República Dominicana, Roma

ROMANIA

Andrei Jianu, Troisième Secrétaire, Légation de Roumanie, Rome

THAILAND

Chitti Tirabaedya, Second Secretary of the Royal Thai Legation, Rome

VENEZUELA

José Campbell, Embajada de Venezuela, Roma

Specialized agencies and inter-governmental organizations that sent observers

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, Italy

D. B. Finn, Director, Fisheries Division

E. Hess, Chief, Fisheries Technology Branch

G. L. Kesteven, Chief, Fisheries Biology Branch

F. E. Popper, Chief, Fisheries Economics Branch

FOOD AND AGRICULTURE ORGANIZATION (*continued*)

E. Abensour, Chief, Legislative Service
P. Moral López, Senior Legal Research Officer,
Legislative Service
S. J. Holt, Fisheries Biology Branch
B. F. Osorio Tafall, Regional Fisheries Officer for
Latin America

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND
CULTURAL ORGANIZATION
Paris, France

Werner Moller, Programme Assistant, Department of
Natural Sciences

GENERAL FISHERIES COUNCIL FOR THE
MEDITERRANEAN
c/o FAO, Rome, Italy

M. J. Girard, Secretary

INDO-PACIFIC FISHERIES COUNCIL
Bangkok, Thailand

N. Kesava Panikkar, Chief Research Officer, Central
Marine Fisheries Research Station, Mandapam
Camp, S. India
Milton Lobell, Fisheries Adviser, Department of Fish-
eries, Bangkok

INTER-AMERICAN TROPICAL TUNA COMMISSION
La Jolla, California, U.S.A.

M. B. Schaefer, Director of Investigations²

INTERNATIONAL COMMISSION FOR THE NORTHWEST
ATLANTIC FISHERIES
Halifax, Nova Scotia, Canada

Erik M. Poulsen, Executive Secretary

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF
THE SEA

Charlottenlund Slot, Charlottenlund, Denmark
Arni Fridriksson, Secretary-General²

² Also acted as technical adviser to the United Nations
Secretariat.

INTERNATIONAL NORTH PACIFIC FISHERIES
COMMISSION

Vancouver, B.C., Canada
Milton C. James, Executive Director

INTERNATIONAL PACIFIC HALIBUT COMMISSION
Seattle, Washington, U.S.A.

Henry A. Dunlop, Director of Investigations

INTERNATIONAL PACIFIC SALMON FISHERIES
COMMISSION

New Westminster, B.C., Canada
L. A. Royal, Director of Investigations

INTERNATIONAL WHALING COMMISSION
c/o Ministry of Agriculture, Fisheries and Food,
London, England

G. J. Lienesch, Vice-Chairman

PERMANENT COMMISSION FOR THE EXPLOITATION AND
CONSERVATION OF THE MARITIME RESOURCES OF THE
SOUTH PACIFIC

Santiago de Chile, Chile
Julio Ruiz, Secretary-General

PERMANENT COMMISSION UNDER THE 1946 CONVEN-
TION FOR THE REGULATION OF MESHES OF FISHING
NETS AND THE SIZE LIMITS OF FISH

c/o Ministry of Agriculture, Fisheries and Food,
London, England

R. G. R. Wall, President
G. Rollefson, Vice-President

Secretariat of the Conference

James Baster, United Nations Department of Economic
and Social Affairs, Executive Secretary
Yuen-Li Liang, United Nations Legal Department,
Legal Officer
Philomena Guillebaud, United Nations Department of
Economic and Social Affairs, Executive Assistant

ANNEX C

Agenda adopted by the Conference

1. Opening of the Conference by the representative of the Secretary-General
2. Election of the Chairman
3. Adoption of rules of procedure
4. Appointment of a credentials committee
5. Adoption of the agenda
6. Election of a Deputy Chairman
7. Report of the Credentials Committee
8. Election of Vice-Chairmen
9. Objectives of fishery conservation
10. Types of scientific information required for a fishery conservation programme, for example:
 - (a) Extent of separation of the fishery resource into independent or semi-independent populations ("conservation management units")
 - (b) Magnitude and geographical range of the populations constituting the resource
 - (c) Pertinent facts respecting the life history, ecology and behaviour of the species constituting the resource
 - (d) Effects of intensity and kind of exploitation on the resource
 - (e) Relationships of the resource to other species being exploited simultaneously

11. Types of conservation measures applicable in a conservation programme
12. Principal specific international fishery conservation problems of the world and measures and procedures applicable and being applied for their solution:
 - (a) Problems for the resolution of which agreed international measures and procedures have been instituted in the following areas:
 - (1) North Atlantic
 - (2) South Atlantic
 - (3) Mediterranean
 - (4) Indo-Pacific
 - (5) North Pacific
 - (b) South Pacific
 - (7) Antarctic and other whaling areas
 - (b) International conservation problems requiring solution in the above-mentioned areas and elsewhere
 - (c) Applicability of existing types of international conservation measures and procedures to pending problems
13. International conservation problems for the resolution of which existing types of international measures and procedures are not adequate and possible means of resolving them
14. Other business
15. Adoption of the report of the Conference

ANNEX D

List of Technical Papers submitted to the Conference

Section I. General Background Papers

1. "Types of Scientific Information Required for a Fishery Conservation Programme, and Types of Conservation Measures Applicable in a Conservation Programme" by Milner B. Schaefer. Document A/CONF.10/L.1.
2. "Concepts of Conservation" by Michael Graham. Document A/CONF.10/L.2.
3. "Pertinent Aspects of the Life History of Given Resources of the Sea in Relation to the Physical Environment" by the United Nations Educational, Scientific and Cultural Organization. Document A/CONF.10/L.3.
4. "International Fishery Conservation Problems and Solutions Developed in Existing Conventions" by William C. Herrington and John L. Kask. Document A/CONF.10/L.4.
5. "International Fisheries Convention 1946" by C. E. Lucas. Document A/CONF.10/L.5.
6. "Identification of Types of International Fisheries Conservation Problems for the Handling of which the Governments Concerned have not yet Developed or Agreed upon Measures or Procedures" by G. L. Kesteven and S. J. Holt. Document A/CONF.10/L.6.
7. "A First Approximation to a Modern Theory of Fishing" by Michael Graham. Document A/CONF.10/L.7.

Section II. Papers submitted by International Fishery Organizations

1. "Conservation Problems in the Northwest Atlantic and Related Activity of the International Commission for the Northwest Atlantic Fisheries (ICNAF)" by Erik M. Poulsen. Document A/CONF.10/L.8.
2. "The Contribution of Oceanographic Research to Fisheries Science" by G. L. Kesteven. Document A/CONF.10/L.9.

3. "Scientific Investigation of the Tropical Tuna Resources of the Eastern Pacific" by Milner B. Schaefer. Document A/CONF.10/L.11.
4. "Management of the Halibut Fishery of the North-eastern Pacific Ocean and Bering Sea" by Henry A. Dunlop. Document A/CONF.10/L.13.
5. "The International Fraser River Sockeye Salmon Fishery" by Loyd A. Royal. Document A/CONF.10/L.17.
6. "The International Whaling Commission" by Remington Kellogg. Document A/CONF.10/L.18.
7. "Note on the General Fisheries Council for the Mediterranean (GFCM)" by M. J. Girard. Document A/CONF.10/L.22.

Section III. Other Papers

1. "Stock and Recruitment" by W. E. Ricker. Document A/CONF.10/L.10.
2. "The Conservation of Biological Resources in Coastal Waters" by G. Belloc. Document A/CONF.10/L.12.¹
3. "Fluctuations in the Commercial Fish Population of the Northwest Pacific in Relation to Meteorological and Oceanographic Conditions, Fishery Operations and other Factors" by P. A. Moiseev. Document A/CONF.10/L.14.
4. "The Biological Appraisal of the Ocean and the Problem of Transoceanic Acclimatizations" by L. A. Zenkevich. Document A/CONF.10/L.15.
5. "Comments on the Principle of Abstention" by William C. Herrington. Document A/CONF.10/L.19.
6. "Fishery Problems and Fishery Conservation in Italy" submitted by the Italian Delegation. Document A/CONF.10/L.20.
7. "Migrations of the Sardine (*Sardinia pilchardus Walb*) in Relation to the Zooplankton" by T. Gamulin. Document A/CONF.10/L.25.

¹ This paper is in French, with a summary in English.

8. "Pertinent Facts Respecting the Life History, Ecology and Behaviour of the Important Species Constituting the Fishery Resources in the Seas around Japan" submitted by the Japanese Delegation. Document A/CONF.10/L.26.
9. "Information Concerning the Importance of Conservation of Stocks of Fish and Sea Mammals in Arctic Waters" by Paul Hansen. Document A/CONF.10/L.31.
10. "Productivity and Intensity of Exploitation of the Adriatic" by Sime Zupanović. Document A/CONF.10/L.32.
11. "Comments by the Korean Delegation on the Paper submitted by the Japanese Delegation (A/CONF.10/L.26)." Document A/CONF.10/L.33.
12. "Certain Observations on the Output of the Marine Fisheries of Egypt" by Mohamed Zudhi. Document A/CONF.10/L.35.²
13. "Comments by the Japanese Delegation on the Paper Submitted by the Korean Delegation (A/CONF.10/L.33)." Document A/CONF.10/L.38.

² This paper is in French only.