

UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION

INTERGOVERNMENTAL CONFERENCE ON OCEANOGRAPHIC RESEARCH
convened by Unesco

Copenhagen, 11 - 16 July 1960

R E P O R T

I

1. The Intergovernmental Conference on Oceanographic Research, convened in pursuance of resolution 2.42 adopted by the General Conference of Unesco at its tenth session, met in Copenhagen in the Danish Parliament Building, Christiansborg Castle, from 11 to 16 July 1960.
2. The following States were represented by a delegation: Argentina, Australia, Belgium, Brazil, Canada, China, Colombia, Cuba, Denmark, Ecuador, Finland, France, Federal Republic of Germany, India, Indonesia, Iran, Israel, Italy, Japan, Korea, Monaco, Netherlands, New Zealand, Nicaragua, Norway, Peru, Philippines, Poland, Spain, Sweden, Switzerland, Union of Soviet Socialist Republics, United Kingdom, United States of America and Viet-Nam. The Holy See sent an observer.
3. Representatives of the United Nations, the International Atomic Energy Agency, the United Nations Food and Agriculture Organization, the World Meteorological Organization and the Intergovernmental Maritime Consultative Organization took part in the Conference, together with representatives of the following other intergovernmental organizations: International Commission for the Scientific Exploration of the Mediterranean Sea, Indo-Pacific Fisheries Council, South Pacific Commission, Commission for Technical Co-operation in Africa South of the Sahara and the International Council for the Exploration of the Sea.
4. The following non-governmental organizations sent observers: International Council of Scientific Unions (ICSU), the ICSU Special Committee on Oceanic Research, Pacific Science Association, International Association of Physical Oceanography of the International Union of Geodesy and Geophysics.
5. The Conference was opened by the Head of the Danish delegation, Dr. Steemann Nielsen. Mr. Jørgen Jørgensen, Danish Minister for Education, welcomed the delegates on behalf of the Danish Government. The Director-General of Unesco also addressed the Conference, stressing the importance of its work for the development of an international programme in the marine sciences.
6. The Conference set up its Bureau as follows:

President:	Vice-Admiral A. H. Vedol (Denmark)
Vice-Presidents:	Captain D. B. E. R. Bagnati (Argentina) Professor H. Lacombe (France) Dr. D. N. Wadia (India) H. E. Mr. A. Matsui (Japan) Professor E. Fedorov (Union of Soviet Socialist Republics) Mr. R. N. Quirk (United Kingdom) Dr. James H. Wakelin Jr. (United States of America)
Rapporteur:	Professor H. Lacombe (France)

7. The Conference adopted its agenda and Rules of Procedure. In connexion with the adoption of the Rules of Procedure, the USSR delegation made a declaration concerning the list of States invited to take part in the Conference, with special reference to the representation of China and the omission of certain other delegations from the list. After a discussion, during which the delegates of Korea, the United States of America and China challenged statements made in that declaration, the Conference took the view that in such matters it should abide by the decisions of the General Conference and the Executive Board of Unesco concerning the dispatch of invitations to the present Conference.

II - GENERAL

8. The Conference began its work with a general review of oceanographic research problems and the possibility of solving them by concerted international action. Several delegations and the representatives of the International Atomic Energy Agency and the United Nations Food and Agriculture Organization took part in the discussion. In his capacity as a participant in the Preparatory Meeting held in Paris in March 1960 and as a member of the International Advisory Committee on Marine Sciences, a member of the delegation of the United States of America drew attention to and commented upon the recommendations put forward by the Preparatory Meeting, pointing out that they had been supported by the International Advisory Committee on Marine Sciences, at its last session in Copenhagen on 8 and 9 July 1960.

9. For the examination of certain items on its agenda the Conference, after a preliminary discussion in plenary session, appointed three working groups with the task of preparing draft resolutions to be submitted to it for approval.

The working groups were constituted as follows:

Working Group I: Australia, India, USSR, United Kingdom and United States of America, under the chairmanship of the United States representative, with the representative of Australia as rapporteur.

Working Group II: Canada, Colombia, France, Italy, Japan, Philippines, USSR, under the chairmanship of the representative of Japan, with the representative of France as rapporteur.

Working Group III: Australia, Denmark, India, Japan, USSR, under the chairmanship of the representative of India, who also acted as rapporteur.

10. The Bureau of the Conference was also requested to prepare certain drafts.

11. Although the Conference had to deal with technical questions, some of them complex and of a delicate nature, its work was marked by a spirit of perfect co-operation, thanks to which it was able to adopt resolutions without resorting to the voting procedure provided for in its Rules of Procedure.

III - CONSIDERATION OF THE ITEMS OF THE AGENDA

Item 1: Needs and value of oceanic research and surveys.

International co-operation in oceanography.

Promotion of oceanographic research at the international and national level.

12. The general discussion afforded an opportunity for a general survey of this question. The Conference made a point of emphasizing, in a formal declaration, both the paramount importance of oceanic investigations for the progress of science, the peaceful utilization of the oceans and the welfare of mankind, and the need for concerted international action in this field. This declaration is attached to the present report as Appendix A.

Item 2: Research and surveys programme

13. Annex III of the report of the Preparatory Meeting in Paris was considered by the Conference, which expressed approval of it in general. The Conference also considered an information paper on the same item, prepared by the USSR delegation (document ICOR/8), and adopted a resolution which is reproduced as Appendix B.1 to the present report.

Item 3: General measures of standardization and intercalibration of methods and equipment

14. The Conference took as a basis for discussion a draft resolution submitted by the USSR delegation. Some difficulties were pointed out but they were settled by consultation between various delegates, and a revised draft resolution submitted by the delegations of Australia and the USSR (document ICOR/5 Rev.) was approved by the Conference. This resolution is reproduced as Appendix B.2 to the present report.

Item 4: Data centres and exchange of data

15. The discussion on a draft resolution submitted by the USSR delegation revealed general agreement, particularly regarding the maintenance of the world data centres "A" and "B", a measure already recommended by the Preparatory Meeting in Paris, and the need, in planning any future action, to take into account the results of the discussions to be held in Helsinki by the International Union of Geodesy and Geophysics and the Special Committee on Oceanic Research. As a result of this discussion, the Conference entrusted Working Group III with the preparation of a draft resolution, which was considered and then approved with a few minor changes, in plenary session. This resolution is reproduced as Appendix B.3 to the present report.

Item 5: Training programme

16. The general discussion of this item bore on paragraphs 14 and 15 of the report of the Preparatory Meeting in Paris (document UNESCO/NS/163), and on a draft resolution submitted by the USSR delegation (document ICOR/7). The Conference was also given a general account of Unesco's proposed programme and budget in the field of marine sciences. There was general agreement as to the advisability of developing training by all possible means, particularly through a substantial increase in the number of fellowships, and as to the major part that should be played by Unesco in dealing with this problem at the international level. Many delegations entered the discussion to emphasize certain special aspects of the problem in various countries. Working Group II was instructed to gather all these observations together and to submit a draft resolution. This was adopted by the Conference in the form in which it appears in Appendix B.4 to the present report.

Item 6: The problem of the joint operation of international vessels

17. The Conference based its discussion of this item on paragraphs 16 to 26 of the Preparatory Meeting's report. Many delegates laid stress on the legal, financial and technical problems which they felt would be raised by the use of an international oceanographic vessel under Unesco auspices, but the discussion bore mainly on the comparative advantages - so far as the training of future oceanographers and the development of oceanography were concerned - of using available funds for each of the following two purposes: (a) operation of an international oceanographic vessel; (b) increase in the number of fellowships and experts and improvement of the equipment available to oceanographic training and research institutions.

Nearly all delegates approved the principle of the international vessel, both for its scientific value and as a symbol of international co-operation. But although some delegates supported proposal No. 1 made by the Preparatory Meeting in paragraph 25 of its report (use of a training vessel whose operating costs would be met from Unesco's budget), several others thought it too early to embark on such a project, though they acknowledged that it would be valuable at a later stage once training programmes for oceanographers were well advanced. The Bureau of the Conference merged the various points of view in a draft resolution which was adopted by the Conference. It is reproduced as Appendix B.5 to the present report.

Item 7: Organization of immediate joint action.
Legal and administrative measures to be adopted.

18. The Conference based its preliminary discussion of this item on the recommendations concerning the establishment of an International Oceanographic Commission, contained in paragraph 29 of the Preparatory Meeting's report, and approved their substance, while broadening and defining more clearly the basis on which States would take part in this Commission. It instructed Working Group I to consider the draft statutes for the Commission submitted by the USSR delegation. In so doing it also considered amendments to this draft, proposed by the United States delegate. The Working Group then submitted to the Conference a draft resolution, with draft statutes attached, which the conference adopted with slight changes. The text adopted is reproduced as Appendix B. 6 to the present report.

19. During the discussion of Article 2 of the draft statutes, which concerns the composition of the Commission, the USSR delegation voiced the view that membership of the Commission should not be confined solely to Member States of any organization in the United Nations system. While noting this reservation, the Conference took the view that in such matters it should abide by the practice followed by the United Nations and other organizations in the United Nations system.

20. The Conference also approved two recommendations concerning the Commission put forward by Working Group I. The first related to consultation of the Commission's Bureau regarding the appointment of the Director of the Unesco Office of Oceanography, should the appointment be made after the establishment of that Bureau. The second suggests any decision that might be taken by the United Nations Administrative Committee on Co-ordination in the matter of co-ordination between the Secretariats of the Specialized Agencies in the field of oceanography should be borne in mind when making the administrative arrangements for the Commission.

21. The Conference further approved another draft resolution concerning other questions considered at the Preparatory Meeting which were also dealt with in paragraph 29 of that Meeting's report. The resolution adopted first advocates the establishment within the Unesco Secretariat of an office of Oceanography which might include members of the staff of the United Nations Food and Agriculture Organization and other interested organizations of the United Nations system. It also recommends that action be taken in the field of oceanography to co-ordinate the work of the various organizations in the United Nations system and that of other intergovernmental and non-governmental organizations. This resolution is reproduced in Appendix B. 7 to the present report.

IV - QUESTIONS NOT ON THE AGENDA

22. The Conference's concern, from both the human and the scientific standpoints, about the dangers resulting from pollution of the oceans and seas, became apparent on the very first day of the Conference after a statement on the subject had been made by the representative of the International Atomic Energy Agency. The desire to put forward a recommendation on this question led to the joint presentation of a draft resolution by the delegations of Japan, USSR and the United States of America; it is reproduced in Appendix B. 8 to the present report in the form in which it was finally adopted.

23. After the adoption of this resolution, the United Kingdom delegation raised the question whether it would be possible for the Conference to consider a new version of the resolution more in line with his Government's point of view. The President having pointed out that final approval had already been given to a text on the subject, the Conference decided against re-opening the discussion. The United States delegation announced that it was in agreement both with the resolution adopted (Appendix B. 8) and with the new version proposed by the United Kingdom delegate. The delegation of Japan expressed a preference for the latter version, though without going back on its support for the version already adopted. The USSR delegation stated that, as a gesture of goodwill, it had abandoned its original wording and had agreed to submit the version already adopted. It would revert to its initial proposal if a new version were to be discussed. At the request of several delegations, the Conference decided that its report should contain a reference to this discussion together with the draft proposed by the United Kingdom delegation, which is accordingly reproduced as Appendix B. 9 to the present report.

24. Lastly, the Conference approved a draft resolution which was submitted by the Danish delegation after the reports of Working Groups I and II had been adopted. This resolution is reproduced as Appendix B, 10 to the present report.

25. The list of participants is given in Appendix B, 11.

APPENDICES

A. DECLARATION ADOPTED BY THE INTERGOVERNMENTAL CONFERENCE ON OCEANOGRAPHIC RESEARCH

The Intergovernmental Conference on Oceanographic Research meeting in Copenhagen from 11 to 16 July 1960

Aware of the importance of oceanic investigations for the progress of science, the peaceful utilization of the oceans and the welfare of mankind;

Considering that the development of oceanic investigations requires the concerted action of States and international organizations;

Adopts this Declaration:

The oceans, covering some 70 per cent of the earth's surface, exert a profound influence on mankind and indeed upon all forms of life on the earth. The oceans are inexhaustible sources of water and heat, and control the climate of many parts of the world. As barriers between populated land masses, the seas have markedly affected the development of human institutions, yet as routes of communication they have had equally far-reaching effects on the diffusion of culture. The seas have great potential as a source of food, raw materials and energy. Along some coastal boundaries, land must be protected against the sea, along others it must be reclaimed and in our harbours, estuaries and coastal regions there are many problems that require scientific research.

In order properly to interpret the full value of oceans to mankind they must be studied from many points of view. While pioneering research and new ideas usually come from individuals and small groups, many aspects of oceanic investigations present far too formidable a task to be undertaken by any one nation or even a few nations.

Because the high seas are of value to all mankind it is appropriate that their scientific study for peaceful purposes be undertaken in concert by the international community of nations. Moreover, the planetary character of many phenomena and processes in the oceans requires world-wide observations. These can only be accomplished by concerted action.

The varied problems encountered in the study of the oceans demand research involving a wide variety of scientific disciplines. Scientists trained in these diverse disciplines must be enabled to carry out different types of investigations on the sea with full and free discussion and interchange of their results and conclusions.

To secure progress in oceanic investigations there is a need both for concerted action by States and for co-operation between international bodies. As an essential instrument for furthering progress in this important field, the Conference recommends setting up within the framework of Unesco an Intergovernmental Oceanographic Commission to facilitate the concerted action of Member States of the Commission.

Other recommendations of the Conference, with regard to the programmes of the proposed Intergovernmental Oceanographic Commission, and of the international agencies and governmental and non-governmental organizations concerned, are contained in the resolutions of the Conference.

B. RECOMMENDATIONS ADOPTED BY THE INTERGOVERNMENTAL CONFERENCE ON OCEANOGRAPHIC RESEARCH

1. RESEARCH AND SURVEYS PROGRAMME

The Intergovernmental Conference on Oceanographic Research,

Approving in general Annex III of the report of the Preparatory Meeting (document NS/163, Annex III),

Taking into account the experience acquired during the International Geophysical Year in the composition of programmes of the joint oceanographic investigations concerned with certain scientific problems, and

Having received the Information paper (ICOR/8) submitted by the delegation of the USSR,

Recommends that the experts of States which are willing to participate in the international oceanographic programmes study the said Information paper and take it into account when preparing their own suggestions for the international programme;

Recommends that suggested programmes be submitted to the Office of Oceanography of Unesco by States which intend to acquire membership in the Intergovernmental Oceanographic Commission, prior to the first session of the Commission, preferably early in 1961.

2. MEASURES FOR THE STANDARDIZATION AND INTERCALIBRATION OF METHODS AND EQUIPMENT USED IN OCEANOGRAPHIC RESEARCH

The Intergovernmental Conference on Oceanographic Research,

Considering the complexity and diversity of the methods and equipment used in the various countries for oceanographic research and the need to standardize and intercalibrate them,

Resolves:

1. To request Unesco to co-operate in the work of the Special Committee on Oceanic Research, the International Council for the Exploration of the Sea, and other bodies which are actively considering and adopting measures for the standardization and intercalibration of the methods and equipment used in oceanographic research and, if necessary, to set up specialized working parties on:

physical and chemical oceanography
marine biology
marine geology.

2. To request present working parties and any new working parties to prepare practical proposals for the application of standardization and intercalibration measures and to submit them in 1961-1962 to the Office of Oceanography of the Department of Natural Sciences of Unesco Secretariat;

3. To request the Director-General of Unesco to include appropriate estimates in the budget of Unesco for this purpose.

3. DATA CENTRES

The Intergovernmental Conference on Oceanographic Research,

Having recognized the importance of free and expeditious interchange of oceanographic data of all kinds for the success of international programmes, and other oceanographic tasks;

Having reviewed the experience gained by the working of world data centres established during the International Geophysical Year 1957-58,

Recommends that

1. All States make every effort to publish oceanographic data and distribute them to all interested institutions.

2. The system of data exchange established through world data centres in the Union of Soviet Socialist Republics and the United States of America during the International Geophysical Year should be continued in future, having in mind that the effectiveness of these Centres could be improved to cover all aspects of oceanography by the Governments concerned.

3. Data obtained by vessels and institutions participating in international oceanographic programmes should be exchanged in addition by other means such as specialized data centres and direct interchange between participating vessels and institutions.

4. The volume and nature of data to be exchanged and the conditions for such direct exchange should be recommended by the proposed Intergovernmental Oceanographic Commission.

5. The dispatch of data should be done as expeditiously as possible.

6. The periodical publication of catalogues of data deposited with the Data Centres should be recognized as an essential function of these Centres.

7. The question of depositing collections and distributing biological reference material in connection with international oceanographic programmes should be further examined by the Intergovernmental Oceanographic Commission, when established.

8. Unesco should consider giving appropriate assistance to data centres concerned with international oceanographic programmes.

4. TRAINING PROGRAMME - REPORT

Recommends:

I. That the number of fellowships financed by Unesco be appreciably increased so as to offer greater training facilities for such specialists;

II. That provision be made for training persons with an adequate basic education and some general knowledge of the marine sciences as specialists in the following branches:

1. physical oceanography
2. marine meteorology
3. marine chemistry
4. marine geology
5. marine biology;

III. That such specialists be trained in countries in which oceanography is well developed and which are prepared to instruct them. The training could take one or more of the following forms:

- (1) Participation in oceanographic expeditions organized by the various countries or by Unesco;
- (2) Courses at institutions of higher education;
- (3) Fellowship (or post-graduate) courses of a certain length at research establishments or institutions of higher education;
- (4) The organization in interested countries of short training courses and courses of lectures by qualified visiting professors and specialists.

IV. That Unesco be requested to organize a conference of Deans of Science Faculties or of Professors concerned from all regions of the world to study ways and means of developing at universities research and instruction in the marine sciences and related branches of knowledge;

V. That Unesco be requested to address an urgent appeal to Governments to ensure that young potential students of the marine sciences are offered the prospect of stable employment and an assured career;

VI. That, in view of the present shortage of oceanographers qualified for senior posts, due caution be exercised when considering the establishment of new centres for instruction or research.

5. PROPOSED UNESCO OCEANOGRAPHIC VESSEL AND THE
OCEANOGRAPHIC TRAINING PROGRAMME OF UNESCO

The Intergovernmental Conference on Oceanographic Research,

Considering that the proposal for an international oceanographic vessel to be sponsored by Unesco requires further study;

Convinced, at the same time, that the training of oceanographers should be developed by all possible means,

Recommends that the General Conference of Unesco at its eleventh session invite the Director-General to request the proposed Intergovernmental Oceanographic Commission to study with the aid of the Special Committee on Oceanic Research the desirability and feasibility of Unesco chartering or acquiring an oceanographic training and research vessel, in comparison with other possible methods that might be employed by Unesco in a comprehensive world-wide programme of training for oceanographers particularly in countries where oceanographic activities are in early stages of development, and to take the results of this study into account in preparing the Programme and budget proposals of Unesco in Marine Sciences;

Recommends further that Governments strongly support a marked increase in Unesco's programme for training oceanographers and that the proposed funds budgeted in 1961-62 for a training vessel be maintained in Unesco's budget for other oceanographic training activities.

6. ESTABLISHMENT OF AN INTERGOVERNMENTAL
OCEANOGRAPHIC COMMISSION

The Intergovernmental Conference on Oceanographic Research,

Having considered the organization of immediate joint action and the legal and administrative measures to be taken,

Considers that the character of the scientific investigation of the oceans to be undertaken with a view to acquiring a better knowledge of the nature of the oceans and their resources calls for a concentration of effort and the co-ordination of the activities of the States concerned and of the international organizations;

Bearing in mind the recommendation adopted by the preparatory meeting on the need to establish an Intergovernmental Oceanographic Commission,

Recommends that the General Conference of Unesco at its eleventh session to be held at Paris in November-December 1960 establish an Intergovernmental Oceanographic Commission (IOC) on the lines specified in the annexed draft statute:

DRAFT STATUTES

OF THE

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION

Article 1

The Intergovernmental Oceanographic Commission (IOC) shall be established within Unesco. Its purpose shall be to promote the scientific investigation of the oceans, with a view to learning more about their nature and their resources, through the concerted action of the Member States of the Commission.

Article 2

1. Membership of the Intergovernmental Oceanographic Commission shall be open to all Member States of Unesco, the Food and Agriculture Organization, the United Nations, and other Agencies of the United Nations which are willing to participate in oceanographic programmes which require concerted action by them.

2. Member States of the above-mentioned organizations shall acquire membership on the Commission by notifying the executive head of one of the organizations to which they belong that they are willing to participate in oceanographic programmes which require concerted action. Any such notice shall be transmitted to the Director-General of Unesco.

3. Any member of the Commission may withdraw from it by giving notice of its intention to do so to the Director-General of the United Nations Educational, Scientific and Cultural Organization or in the case of a State which is not a member of Unesco to the executive head of the organization of which such a State is a member, who shall transmit such notice to the Director-General of Unesco. Such notice shall take effect at the end of the first session of the Commission which follows the date on which notice has been given, or, if notice has been given during the course of a session of the Commission, at the end of that session.

Article 3

The Commission shall be convened, as a rule, annually, except that other intervals between sessions may be determined by the Commission. Each Member State shall have one vote and may send at its own expense such representatives, advisers and experts as are required to the sessions of the Commission. The Commission shall determine its own rules of voting and procedure.

Article 4

1. The Commission shall consider and recommend international programmes for oceanic investigation together with the necessary steps for their execution which call for concerted action by the Member States of the Commission. The Commission shall review results of scientific investigation and define the basic problems requiring international co-operation.

2. The Commission shall also recommend, in accordance with the international programmes of oceanic investigation as recommended, the nature, forms and methods of exchange of oceanographical data through world data centres, specialized data centres and by other means.

Article 5

1. The Commission may create, for the examination and execution of specific projects, committees composed of members interested in such projects.

2. The Commission may delegate to any such committee all or any of its powers with respect to the project for which the committee was created.

Article 6

1. During the course of each annual session the Intergovernmental Oceanographic Commission shall elect a chairman and two vice-chairmen, who shall together constitute the Bureau of the Intergovernmental Oceanographic Commission in between sessions and throughout the following annual session. The term of office of the members of the Bureau shall commence at the end of the session of the meeting during which they have been elected and expire at the end of the next annual session. The Bureau may be convened if necessary between meetings at the request of the Director-General of Unesco or of one of the members of the Bureau.

2. During the interval between sessions the Bureau of the Commission shall perform such functions as may be assigned to it by the Commission.

Article 7

1. Representatives of Member States of Unesco, the Food and Agriculture Organization, the United Nations and other Agencies of the United Nations system which are not members of the Commission may participate in meetings of the Commission without the right to vote.

2. Representatives of the organizations of the United Nations system may participate in meetings of the Commission without the right to vote. The Commission shall determine the conditions under which other intergovernmental organizations and non-governmental organizations shall be invited to participate in meetings of the Commission without the right to vote.

Article 8

1. The Secretariat of the Commission shall be provided, under the authority of the Director-General, by the Department of Natural Sciences of Unesco which shall make available to the Commission such personnel and material as shall be necessary for its work. The Secretariat shall be headed by the Director of the Unesco Office of Oceanography. Members of the staff of the Food and Agriculture Organization and other interested organizations of the United Nations system may be added to this personnel by agreement with these organizations.

2. The Commission Secretariat shall be responsible for servicing the meetings of the Commission.

3. The Secretariat shall ensure the day-to-day co-ordination of the implementation of the international programmes of oceanic investigations recommended at the sessions of the Commission and shall also fix the date of the next session of the Commission, under instructions from the Bureau, and take the necessary steps for the convening of the session.

4. The Secretariat shall collect from the Member States of the Commission and from various international organisations concerned suggestions for international programmes of oceanic investigation and shall prepare them for consideration at the next session.

5. In addition to its duties for the Commission, the Secretariat shall actively co-operate with the Secretariats of the Food and Agriculture Organization, the World Meteorological Organization (WMO) and other Agencies of the United Nations system engaged in the study of the oceans.

Article 9

The international programmes of oceanic investigation recommended by the Commission to the Member States for their concerted action shall be carried out with the aid of the resources of participating Member States, in accordance with the obligations that each State is willing to assume. However the Commission may also recommend to Unesco and other Specialized Agencies activities related to the training of oceanographers, assistance to countries in promoting oceanographic investigation, exchange of experience, and expenditure entailed in connexion with the unification and standardization of means and methods of oceanographic research. These activities, if accepted by the Specialized Agencies shall be financed by those Agencies in accordance with their respective constitutions and regulations.

Article 10

The Commission shall submit reports on its activities to the General Conference of Unesco and shall request the Director-General of Unesco to transmit copies of these reports to all other interested Agencies of the United Nations system.

Article 11

The present Statutes shall enter into force upon their approval by the General Conference of Unesco.

7. OTHER INTERNATIONAL ACTION

The Intergovernmental Conference on Oceanographic Research having proposed the establishment of an Intergovernmental Oceanographic Commission, bearing in mind Unesco's own oceanographic programmes and being aware of the important rôles being played by other Specialized Agencies of the United Nations system in facilitating concerted action in the field of oceanography, recommends that the General Conference of Unesco at its eleventh session:

1. Request the Director-General of Unesco to establish an Office of Oceanography with a director and necessary personnel including provision that members of the staff of the United Nations Food and Agriculture Organization (FAO) and other interested organizations of the United Nations system may be added to this personnel by agreement with these organizations.

2. Request the Director-General of Unesco to consult with, and co-ordinate Unesco oceanographic activities with the United Nations and other Agencies of the United Nations family, such as the Food and Agriculture Organization, the World Meteorological Organization, and the International Atomic Energy Agency and other intergovernmental agencies and international non-governmental organizations having consultative arrangements with Unesco, for the promotion of the implementation of international oceanographic programmes and for assistance to the Intergovernmental Oceanographic Commission (IOC).

3. Authorize the Director-General of Unesco to define in negotiation with the International Council of Scientific Unions (ICSU) and the Intergovernmental Oceanographic Commission (IOC) the working relationships between the Intergovernmental Oceanographic Commission and the Special Committee on Oceanic Research, which committee should be the scientific advisory body for the Office of Oceanography of Unesco and therefore should receive appropriate financial support from Unesco.

8. POLLUTION OF THE OCEANS AND SEAS BY RADIOACTIVE AND OTHER HARMFUL AGENTS

The Intergovernmental Conference on Oceanographic Research,

Mindful of the hazards due to, and harmful effects of, pollution of the oceans and seas from radioactive materials and other harmful agents;

Recalling the recommendations of the United Nations Conference on the Law of the Sea in 1958 with respect to the pollution of the oceans and the air space above,

Considers it essential:

(a) That States, the International Atomic Energy Agency, and other organizations concerned should continue to take without delay all steps in their power to prevent the pollution of the oceans and seas from radioactive material and other harmful agents;

(b) That all States should co-operate with the competent international organizations in taking measures for the prevention of pollution of the seas or air space above, resulting from any activities with radioactive materials or other harmful agents;

(c) That States, the International Atomic Energy Agency and other organizations should intensify their research programmes and investigations on the matters contained in paragraphs (a) and (b) above.

9. POLLUTION OF THE OCEANS AND SEAS BY RADIOACTIVE AND OTHER HARMFUL AGENTS

(Alternative text submitted by the delegation of the United Kingdom.)

The Intergovernmental Conference on Oceanographic Research,

Mindful of the hazards due to, and effects of, pollution of the oceans and seas from radioactive materials and other agents;

Recalling the recommendations of the United Nations Conference on the Law of the Sea in 1958 with respect to the pollution of the oceans,

Considers it essential:

(a) That States, the International Atomic Energy Agency, and other organizations concerned should continue to take without delay all steps in their power to prevent the pollution of the oceans and seas from radioactive material and other agents;

(b) That all States should co-operate with the competent international organizations in taking measures for the prevention of pollution of the seas, resulting from radioactive materials or other agents;

(c) That States, the International Atomic Energy Agency and other organizations should intensify their research programmes and investigations into ways to keep the radioactive material and other agents in the oceans and seas to a level below that harmful to human welfare.

10. NATIONAL PROMOTION OF THE SCIENCE OF OCEANOGRAPHY

The Intergovernmental Conference on Oceanographic Research,

Bearing in mind that the national organization of the science of oceanography varies greatly from one country to another; that some countries must be considered to have organized this science on an adequate basis, whilst others have not; that even in several countries which in the past have played an important rôle in oceanography, this science now must be considered to be in real danger of steadily decreasing in importance owing to the lack of an organization that meets the needs of our present time, particularly as regards facilities for educating and training young students in the different branches of oceanography; and that oceanographical institutes cannot survive if the necessary recruitment of scientists does not take place;

Recommends: that countries in which the science of oceanography is at present not organized on an adequate basis take steps to promote this science in order to be able to participate fully in international oceanographic work and for their own benefit.

11. LIST OF PARTICIPANTS

A. DELEGATES

Argentina/Argentine

Capt. Nav. D. R. H. R. Bagnati, Head of Delegation,
Jefe del Servicio de Hidrografia Naval, Marina de Guerra, Buenos Aires.
Capt. Nav. L. R. Capurro, Marina de Guerra, Buenos Aires.
Tte. Nav. R. O. Rennella, Marina de Guerra, Buenos Aires.

Australia/Australie

Dr. G. F. Humphrey, Head of Delegation,
Chief, Division of Fisheries and Oceanography, CSIRO,
Dr. W. Gardner Davies, Permanent Delegate to Unesco.

Belgium/Belgique

Dr. Louis Dufour, Meteorologist.

Brazil/Brésil

Capt. Frag. P. de Castro Amoreira da Silva, Marina de Guerra, Rio de Janeiro.

Canada

Dr. William M. Cameron, Director of Oceanographic Research,
Department of Mines and Technical Surveys, Ottawa.

China/Chine

Prof. Chu Tsu-You, Head of Delegation, 64 Park Road, Taipei, Taiwan,
National Taiwan University.

Prof. Wang Yeh-Chun, Professor of Chinese, Naval PG School.

Colombia/Colombie

Dr. A. Garcia Herrera, Ambassador of Colombia in Denmark.

Cuba

Dr. Ignacio Fiterre, Cuban Ambassador in the Netherlands.

Denmark/Danemark

Mr. H. E. Steemann Nielsen, Head of Delegation,

Doctor of Science, Professor, Danish High School of Pharmacy.

Vice-Admiral A. H. Vedel, Honorary Doctor, University of Copenhagen.

Commander C. H. A. Madsen, Director, Hydrographic Service.

Dr. Erik Berthelsen, Director, Danish Institute for Fisheries and Marine Research.

Dr. H. R. Gislø Spørck, Professor, University of Copenhagen.

Dr. G. A. Wright Thorson, Professor, University of Copenhagen.

Marine Biologisk Laboratorium, Helsingør.

Mr. Helge Thomsen, Government Meteorologist,

Meteorological Institute, Copenhagen.

Dr. A. F. Bruun, Lecturer in Oceanology, University of Copenhagen.

Mr. Torben Wolff, M.Sc. (Observer).

Ecuador/Equateur

Mr. Bolivar Paredes, Chargé d'Affaires of Ecuador.

Finland/Finlande

Dr. Ilmo Hela, Head of Delegation,

Director, Institute of Oceanography, Institute of Marine, Helsinki 2.

Mr. Olli Kaila, Ambassador of Finland in Denmark.

France

Prof. H. Lacombe, Head of Delegation,

Professor of Oceanography at the Museum of Natural History; Expert of the French
National Commission of Unesco.

Mr. R. Pacque, Secretary of the Oceanographic Committee at the "Délégation générale à
la Recherche scientifique". 109 rue de l'Université, Paris VII.

Capt. de Corvette M. Ainaut, Oceanographic Museum, Monaco.

Mr. M. Pérès, Professor at the Faculty of Sciences of Marseilles; Director of Endoume
Marine Station.

Mr. F. Rouillon, Secretary at the Ministry of Foreign Affairs.

Direction générale des affaires culturelles et techniques.

Federal Republic of Germany/République Fédérale d'Allemagne

Dr. Günther Böhnecke, Head of Delegation,
Chief, Hydrographic Institute, Hamburg.
Prof. Eugen Seibold, Institute for Geology and Paleontology, Kiel University.
Prof. G. Dietrich, Institute for Oceanography, Kiel,
Institute for Oceanography, Kiel.
Dr. Arwed Meyl, Deutsche Forschungsgemeinschaft, Bad Godesberg.

India/Inde

Dr. D. N. Wadia, Head of Delegation,
Geological Adviser, Dept. of Atomic Energy, New Delhi.
Dr. N. K. Panikkar, Fisheries Development Adviser,
Department of Agriculture, Ministry of Food & Agriculture, New Delhi.

Indonesia/Indonesie

Dr. Gatot Rahardjo, Expert in Marine Biology.
Institute of Oceanographic Research, Djakarta.

Iran

Youssef Nabavi, Technical Inspector of the National Society of Fisheries of Iran.

Israel/Israël

H. E. Mr. Dvi Avnon, Head of Delegation,
Israel Ambassador to Denmark.
Mr. David Neev, Head of the Quarternary and Marine Geology Department,
Geological Survey of Israel, Jerusalem.
Prof. Heinz S. Steinits, Professor of Zoology,
Hebrew University, Jerusalem.

Italy/Italie

Prof. Umberto d'Ancona, Head of Delegation,
Professor of Zoology, University of Padua; Director of the National Centre of Oceanographic Studies.
Capt. Ernesto Debrazzi, Director of Italian Hydrographic Institute of the Navy.

Japan/Japon

H. E. Mr. A. Matsui, Head of Delegation,
Japanese Ambassador in Sweden, Member of the Executive Board of Unesco.
Mr. M. Toda, Counsellor at the Japanese Embassy in Paris, Permanent Delegate to Unesco. Embassy of Japan, Paris.
Dr. K. Sugawara, Professor at the University of Nagoya.
Dr. Y. Miyake, Professor at the Pedagogical University of Tokyo,
Kybiku University, Tokyo.
Professor M. Uda, Tokyo Fisheries University,
Tokyo Fisheries University, Minato-Ku, Tokyo.

Korea/Corée

Mr. Choul Keun Cho, Head of Delegation,
Chairman of Fisheries Committee, Korean National FAO Association.
Prof. Moon Ki Chyung, Professor, Dongguk University, Seoul; Head, Agriculture and Fisheries Division, National Academy of Sciences; President, Oceanographic Society of Korea.

Monaco

H. E. Mr. César Solamito, Head of Delegation; Minister Plenipotentiary.
Member of the International Commission for the Scientific Exploration of the
Mediterranean Sea. Palais Princier, Monaco-Ville.
Capt. de Frégate Louis Grinda.
Mr. Thorvald Them, Consul-General of the Principality of Monaco, Copenhagen.

Netherlands/Pays Bas

Dr. P. Groen, Head of Delegation, Royal Netherlands Meteorological Institute.
Royal Netherlands Meteorological Institute, De Bilt.
Dr. H. Postma, Zoological Station, Den Helder.
Den Helder.
Dr. I. H. E. Ferrier, Ministry of Education, Arts and Sciences.
Ministry of Education, Arts and Sciences, The Hague.

New Zealand/Nouvelle Zélande

Dr. J. W. Brodie, Director, Oceanographic Institute.
Department of Scientific & Industrial Research, Wellington.

Nicaragua

H. E. Col. R. E. Perez-Luna, Ambassador, Permanent Delegate to UNESCO.
Unesco House, Place de Fontenoy, Paris VII.

Norway/Norvège

Prof. Hakon Mosby, Head of Delegation,
President, International Ass. of Physical Oceanography. Geofysisk Institut, Bergen.
Dr. Gunnar Rollesen, Director, Institute of Marine Research,
Institute of Marine Research, Bergen.

Peru/Pérou

Dr. Edgardo de Habich, Acting Chargé d'Affaires for Peru in Denmark.
Embassy of Peru, Gyrlingsvej 13A, Hellerup, Copenhagen.

Philippines

Dr. Deogracias Villadolid, Head of Delegation,
Director, Biological Research Center, National Institute of Science and Technology,
National Science Development Board, Manila.
Comm. Constancio Legaspi, Bureau of Coast and Geodetic Survey, Manila.

Poland/Pologne

Mr. E. Dworkin, Counsellor, Polish Embassy in Denmark.
Embassy of Poland, Gentofte, Copenhagen.

Spain/Espagne

Capt. Frag. M. Rodríguez-Rey, Head of Delegation,
Secretary-General, Instituto Espanol de Oceanografía, Madrid.
Mr. M. Oliver Masueti, Instituto Espanol de Oceanografía, Palma de Mallorca.
Mr. E. Soco Serrano, Instituto Espanol de Oceanografía, Madrid.

Sweden/Suède

Prof. Börje Kullenberg, Head of Delegation, Oceanographic Institute.
Box 1038, Göteborg 4.
Miss Kristina Byrde, Meteorologist.
Swedish Meteorological and Hydrological Institute, Fridhemsgatan 9, Stockholm K.

Switzerland/Suisse

Mme. K. Mangold-Wirz, Doctor of Sciences, Zoological Institute of Basle.

USSR/URSS

Mr. Eugeni Fedorov, Head of Delegation;
Chief Scientific Secretary of the Moscow Academy of Sciences of the USSR.
Vice-Admiral Andreevich V. Tchekourov, Head of the Hydrographic Service,
Gertsena Street 41, Leningrad.
Prof. Wladimir G. Kort, Director of the Institute of Oceanography of the USSR Academy
of Sciences.
Mr. Stepan G. Kornsev, Deputy Chief of the Foreign Department of the USSR Academy
of Sciences (Secretary).
Mr. Macar E. Ivanov, Deputy Director of the Main Office for Hydro-Meteorological Service.
Pavlika Morosova Str. 12, Moscow.
Commodore Constantin P. Ryzhkov, Hydro-Meteorological Service.
Pavlika Morosova Str. 12, Moscow.
Dr. Vikenty P. Zaitsev, Director of the All-Union Institute.
Prof. Leo A. Zenkevitch, Chairman of the National Committee on Oceanography, Academy
of Sciences, Moscow.
Mr. Anatoly V. Jounov, Ministry of Foreign Affairs.

U. K. /Royaume Uni

Mr. R. N. Quirk, C. B., Head of Delegation;
Under-Secretary, Office of the Minister for Science.
Dr. G. E. R. Deacon, C. B. E., F. R. S., Director, National Institute of Oceanography.
Mr. D. N. F. Hall, Director, East African Marine Fisheries Research Organisation.
Box 668, Zanzibar.
Commander F. W. Hunt, M. B. E.,
Hydrographic Dept., Admiralty, London.
Mr. A. G. Lee, D. S. C., Ministry of Agriculture, Fisheries and Food,
Fisheries Laboratory, Lowestoft.

U. S. A. /E. U. A.

Dr. James H. Wabelin Jr., Head of Delegation,
Assistant Secretary, Navy (Research and Development).
U. S. Navy, Washington D. C.
Rear Admiral Arnold Karo, Director, Coast and Geodetic Survey.
Dept. of Commerce, Washington D. C.
Dr. Donald L. McKernan, Director, Bureau of Commercial Fisheries,
Dept. of Interior, Washington D. C.
Dr. Roger Revelle, Director, Scripps Institute of Oceanography.
La Jolla, California.
Mr. William H. Littlewood, Assistant, Scientific Attaché, U. S. Embassy, Stockholm
(Advisor).
Dr. John Lyman, National Science Foundation (Advisor).
National Science Foundation, Washington 25.
Mr. James Sincorian, Office of International Economic and Social Affairs (Advisor).
Dept. of State, Washington D. C.
Mr. Merrill H. Sappington, Spec. Asst. to the Head of Delegation (Observer).

Mrs. Janice S. Gemmell, Private Secretary to the Head of Delegation (Observer).
Dr. A. E. Maxwell (Observer).
Dr. Dixi Lee Ray, Assoc. Prof. of Zoology; Consultant to National Science Foundation
(Observer).
Capt. John I. Hardy, U.S. Navy (Observer).

Viet-Nam/Viêt-nam

Mr. Nguyen Dinh Hung, Director of the Institute of Oceanography of Nha Trang.

Holy See/Saint Siège

Prof. Paul Demeur, Catholic University of Louvain (Observer).

B. REPRESENTATIVES

United Nations (UN)

Mr. Dik Lehmkuhl, Deputy Director, UN Information Centre, Copenhagen.

International Atomic Energy Agency (IAEA)

Prof. Salvetti, Director of the Division of Research & Laboratories.
Dr. M. Saiki, Division of Health, Safety & Waste Disposal.
Mr. I. Roberts, Division of Health, Safety & Waste Disposal.

Food & Agriculture Organisation (FAO) and IPFC

Dr. D. B. Finn, Director, Fisheries Division.
Mr. S. J. Holt, Chief, Fisheries Biology Branch.
Dr. J. O. Traung, Chief, Fishing Boat Section, Fisheries Division.
Mr. T. Laevastu, Fisheries Biologist, Fisheries Division.
Mr. A. Orbanaja, Chief, International Agency, Liaison Branch.

World Meteorological Organisation (WMO)

Mr. Helge Thomsen, President of CMM.
Det Danske Meteorologiske Institut, Charlottenlund.

Inter-Governmental Maritime Consultative Organisation (IMCO)

Mr. Ove Nielsen, Secretary-General of the Inter-Governmental Maritime Consultative
Organisation. Chancery House, Chancery Lane, London W. C. 2.

C. OBSERVERS

(1) Intergovernmental Organisations

International Commission for the Scientific Exploration of the Mediterranean Sea (ICSEM)

H. E. M. César Solamito, Minister Plenipotentiary. Monaco.

Indo-Pacific Fisheries Council (IPFC)

see FAO Delegation

South Pacific Commission (SPC)

Mr. Bolivar Paredes, Chargé d'affaires of Ecuador in Denmark.

Commission for Technical Co-operation in Africa, South of the Sahara (CTCASS)

Dr. E. Postel,
Institut des Pêches Maritimes, Casablanca.

International Council for the Exploration of the Sea (ICES)

Dr. Gunnar Rollesen, Director, Institute of Marine Research, Directorate of Fisheries.

(2) Non-governmental Organizations

International Council of Scientific Unions (ICSU)

Dr. R. Fraser,
ICSU Secretariat, Paleis Noordeinde, The Hague.
Ing. gén. H. Laclavère.

Special Committee on Oceanic Research (SCOR)

Mr. Robert G. Snider, Co-ordinator of the Indian Ocean Working Group of SCOR.

The Pacific Science Association (PSA)

Mr. Thomas S. Austin, Bureau of Commercial Fisheries.
U.S. Fish & Wildlife Service, P.O. Box 3830, Honolulu, Hawaii.

International Association of Physical Oceanography (IAPO)

Prof. Hakon Mosby, President of IAPO,
Geofysisk Institut, Bergen, Norway.
Prof. Börje Kullenberg, Oceanographic Institute, Box 1038, Göteborg 4, Sweden.

D. SECRETARIAT

(1) UNESCO
Unesco House, Place de Fontenoy, Paris VI

Dr. V. Veronesi, Director-General
Prof. V. Kovda, Representative of the Director-General,
Director, Dept. of Natural Sciences.
Dr. H. Saba, Legal Adviser
Dr. H. Roderick, Deputy Director, Dept. of Natural Sciences.
Mr. C. Lussler, Asst. Legal Adviser
Dr. A. Pérez-Vitoria, Secretary of the Conference
Dr. Howell-Rivero, Asst. Secretary of the Conference.