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COMMITTEE ON THE PEACEFUL USES OF THE SEA-BED AND THE OCEAN
FLOOR BEYOND THE LIMITS OF NATIONAL JURISDICTION

SUB-COMMITTEE III

SUMMARY RECORDS OF THE THIRD TO THE FOURTEENTH MEETINGS

held at the Palais des Nations, Geneva,
from 28 July to 27 August 1971

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| <u>Chairman:</u> | Mr. VAN DER BEEKEN | Belgium |
| <u>Rapporteur:</u> | Mr. IGUCHI | Japan |

Note: The list of participants is to be found in documents A/AC.138/INF.5 and
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ABBREVIATIONS

| | |
|--------|----------------------------------------------------------------------|
| ACC | Administrative Committee on Co-ordination |
| FAO | Food and Agriculture Organization of the United Nations |
| GESAMP | Joint Group of Experts on the Scientific Aspects of Marine Pollution |
| IAEA | International Atomic Energy Agency |
| IMCO | Inter-Governmental Maritime Consultative Organization |
| IOCC | Intergovernmental Oceanographic Commission |
| LEADER | Long-term and Expanded Programme of Oceanographic Research |
| OECD | Organization for Economic Co-operation and Development |
| UNCTAD | United Nations Conference on Trade and Development |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| WHO | World Health Organization |

SUMMARY RECORD OF THE THIRD MEETING

held on Wednesday, 28 July 1971, at 3.15 p.m.

Chairman: Mr. van der MESEN Belgium

ORGANIZATION OF WORK

The CHAIRMAN said that, since the Sub-Committee had only held two meetings in March 1971, no further note by the Chairman had been prepared.

He had suggested at that time that there should be a general debate, primarily for the purpose of dealing with certain questions relating to the limits of the Sub-Committee's terms of reference. Those terms of reference derived from General Assembly resolution 2467 (XXIII)^{1/} and from the Agreement on the Organization of Work of 12 March 1971. They related essentially to the preservation of the marine environment (including the prevention of marine pollution) and to scientific research and the preparation of draft treaty articles thereon.

At first sight, it would appear that four questions arose: one was to consider, when drawing up treaty articles, whether they should be articles for insertion in the general conventions on the law of the sea - the four 1958 Conventions,^{2/} which were open to revision - articles which would crystallize the substance of more specialized conventions drawn up by other United Nations bodies. Another possibility would be to prepare a special convention on the marine environment and perhaps another on scientific research, which would then be a full convention.

The second question related to pollution, and was whether the Sub-Committee's task was to draft texts applicable to the high seas or to the whole surface of the sea, including territorial waters. Pollution could hardly be expected to recognize frontiers and the problem might well have to be dealt with on a more general basis.

^{1/} see A/AC.138/SR.45

^{2/} Convention on the High Seas; Convention on Fishing and Conservation of the Living Resources of the High Seas; Convention on the Territorial Sea and the Contiguous Zone; Convention on the Continental Shelf.

The third question which also concerned pollution, was: should the Sub-Committee only study pollution due to the exploitation of the sea-bed and the ocean floor or pollution in general? Pollution of the earth certainly seemed to be outside its competence, unless delegations thought otherwise.

The last question related to scientific research and whether it should be concerned with the sea-bed and the ocean floor or with the high seas as a whole.

The answers to those questions depended partly on the conclusions reached by the two other Sub-Committees and on the work done by other United Nations bodies such as the United Nations Conference on the Environment and the Inter-Governmental Maritime Consultative Organization (IMCO), which was now drawing up a convention on pollution.

The CHAIRMAN proposed that the Sub-Committee should take those questions up in the general discussion and did not think it possible to go beyond that discussion stage at the current session.

LETTER FROM THE SECRETARY-GENERAL OF THE UNITED CONFERENCE ON THE ENVIRONMENT

Mr. STEINER (Secretary of the Sub-Committee) read out a letter from Mr. Strong, Secretary-General of the United Nations Conference on the Environment, to the Chairman of the Committee.

Mr. Strong regretted that he had been unable to participate in the Committee's work in March 1971. Since then, activities relating to marine pollution had advanced. He was awaiting with interest the forthcoming Stockholm Conference scheduled to meet in 1972. The Preparatory Committee for that Conference was ready to provide Sub-Committee III with any information it might need: for example, certain guidelines on the preservation of the marine environment might shortly be drawn up.

Mr. Strong drew the attention of the Chairman of the Committee to the meeting of the Inter-Governmental Working Group on Marine Pollution held in London from 14 to 18 June, the report of which was annexed to his letter. (A/Conf.48/IWGMP.I/5).

The United Nations Conference on the Environment should make a great contribution to the success of the Conference on the Law of the Sea planned for 1973.

Mr. Strong's representative for questions relating to the prevention and control of marine pollution was Mr. Baum, who could provide liaison between Sub-Committee III and the secretariat of the Conference. The Work of the Preparatory Committee and of Sub-Committee III would be complementary.

The CHAIRMAN suggested that the Sub-Committee should request the Chairman of the Committee to send a letter to the Secretary-General of the Conference on the Environment, stating that Sub-Committee III would be very pleased if Mr. Baum were requested to provide direct liaison between the Sub-Committee and the secretariat of the Conference.

It was so decided.

GENERAL DEBATE - MARINE POLLUTION

Mr. BAUM (Secretariat) said that the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction had been concerned for some time with the grave problem of marine pollution. In 1970 the Secretary-General had prepared a report entitled "Marine pollution and other hazardous and harmful effects which might arise from the exploration and exploitation of the sea-bed and ocean floor and of the sub-soil thereof beyond the limits of national jurisdiction"^{3/}.

The particular mandate of Sub-Committee III was to bring many aspects of the problem into focus and accelerate the formulation of a new body of international law to combat the threat to the seas and the oceans.

Marine pollution was a problem which was now of concern to almost all organizations within the United Nations system. The Inter-Governmental Maritime Consultative Organization (IMCO) had participated in the preparation of conventions on oil spills from tankers and was in the process of organizing a major conference on pollution from ships, to be held in 1973. The Food and Agriculture Organization of the United Nations (FAO) had held an important technical conference on marine pollution and its effects on living resources and fishing in December 1970. The International Atomic Energy Agency (IAEA) was concerned with pollution from the disposal of radioactive wastes and the World Health Organization (WHO) was primarily concerned with the pollution of coasts and the contamination of sea-food. Lastly, the preservation of the marine

^{3/} Official Records of the General Assembly twenty-fifth Session, Annexes, Agenda item 25, doc. A/7924.

environment was one of the central topics on the agenda of the forthcoming United Nations Conference on the Environment, to be held in Stockholm in June 1972. In view of the very large number of activities in progress, the Subcommittee would perhaps wish to be informed of some of the more recent developments in that field.

He wished first of all to draw attention to the fact that at its current session the Economic and Social Council had just finished its consideration of the Secretary-General's report on prevention and control of marine pollution (E/5003). The Council had found the report to be of considerable value and had suggested that it should be transmitted to the General Assembly at its next session.

The report had been prepared pursuant to General Assembly resolution 2566 (XXIV). It reviewed the present state of scientific knowledge of marine pollution and surveyed national, regional and international instruments and institutions dealing with marine pollution, prevention and control. It contained a number of recommendations and, among the activities of the various organizations within the United Nations system, particular stress was laid on the work of the Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP), and the marine pollution component in the Long-Term and Expanded Programme of Oceanic Research (LEPOR) of the United Nations Educational, Scientific and Cultural Organization (UNESCO).

In accordance with the same General Assembly resolution, Governments had been asked for their views on the desirability and feasibility of an international treaty or treaties on the subject. The replies from forty-four Governments could be found in document ESA/ECOSOC/LI/Misc.1; they all reflected the same concern over the threat posed by marine pollution.

It was clear that scientific knowledge on the subject of pollution was still rather fragmentary. It appeared, however, that the greater part of materials polluting the sea originated on the land and that only to a minor degree was pollution caused by marine activities as such. Preservation of the marine environment was thus part and parcel of the more general problem of safeguarding the human environment.

Reporting on the work of the Intergovernmental Working Group on Marine Pollution, which had convened in London in June 1971, he said the meeting had been attended by government representatives from thirty-three countries, fourteen of which were developing countries; the participants included lawyers, scientists, technical experts and administrators. They had stressed the need to approach the problem from three angles - the scientific, the legal, and the institutional - and to seek solutions at the national, the regional and the international levels. A distinction had been drawn between the limited measures that might be adopted at the 1972 Conference and implemented in the more or less immediate future, and those that could only be put into effect gradually and over much longer periods of time.

The United States delegation had submitted to the Working Group a draft convention on regulation of transportation for ocean dumping (A/Conf.48/IWGMP.I/5 Annex V). The Group would examine that draft in greater detail at its 2nd meeting, which was to be held at Ottawa in November 1971. The Secretary-General of the United Nations had invited all Member States to examine the draft convention and to send their comments to the Conference secretariat before the Ottawa meeting.

The the London meeting, the participants had emphasized the role of regional measures in the field of pollution prevention. There appeared to be a possibility of concluding agreements for such areas as the North Sea, the North-East Atlantic and the Mediterranean. Such agreements would be extremely valuable for two reasons: the guidelines and criteria adopted in one region might prove applicable to other regions, and regional agreements had long been recognized as forming a practical and solid basis for global monitoring and detection systems. The USSR delegation had submitted a paper on an agreement relating to the Gulf of Finland (A/Conf.48/IWGMP.I/5, Annex XI). That scheme included several significant points: criteria for disposing of pollutants; legal bases for implementing controls; national activities in coastal waters and over the continental shelf, including the registration and monitoring of pollution; regional co-operation for such activities in the high sea areas; optimum models for environmental forecasting; and standardization of methods and techniques.

In addition, a number of Mediterranean countries had submitted to the Group a note (A/Conf.48/IWGMP.I/5, Annex VII) concerning the advisability of a regional agreement for the Mediterranean, which would cover pollution prevention and scientific and technical co-operation, set standards and create monitoring networks. If the Stockholm Conference agreed on the various concepts and guidelines contained in the draft convention on regulation of transportation for ocean dumping and in the regional agreements, those texts might usefully serve as a point of departure for the more general and comprehensive work to be done by the Conference on the Law of the Sea and its preparatory bodies.

At the London meeting, the experts had also made a start on the task of determining what was needed in terms of long-term planning to preserve the marine environment and had reached agreement on the types of pollutants calling for urgent preventive action by the international community and on the major sources of those pollutants where action could be effectively applied. There had been general agreement on the primary importance of national action and of internationally agreed guidelines which would provide many nations with a basis for initiating their own measures.

With regard to the registration and monitoring, it had generally been felt that an international registry of wastes discharged into the marine environment should be related to specific agreements, such as a convention on regulation of transportation for ocean dumping, but that there was also a need for information on the production of specific pollutants to expedite scientific research and monitoring programmes. The countries which had attempted to compile such a registry had encountered many technical difficulties. The elements of a global marine monitoring system were now under consideration by the UNESCO International Oceanographic Commission, within the framework of LEPOR.

It had been decided that, at its second meeting, the Group would examine in greater detail the question of training, equipment and other forms of assistance in respect of marine pollution prevention.

The first meeting of the Intergovernmental Working Group had brought out the complexity of the problem and had demonstrated that action had to be taken at many levels. The meetings of the Working Group should help to clarify a number of outstanding questions and thus be of assistance to the Sub-Committee in discharging its mandate.

In conclusion, it should be borne in mind that the problems of marine pollution would have to be dealt with at three levels, national, regional and global. Solutions would have to be provided by scientists, lawyers, technical experts and economists. The Secretary-General had given a broad description of the problems which arose in that field in his report on prevention and control of marine pollution (E/5003). That report gave a broad picture of the information currently available on scientific, institutional and legal aspects of the problem, as well as on the activities of the United Nations family as a whole.

Lastly, it was clear that the law could not await the results of science in order to preserve the marine environment and that mankind might well be forced to take positive action before the scientists could deliver definitive answers to the problems which arose.

Mr. PROHASKA (Austria) requested that the Chairman's statement should be circulated to participants so that they could take a position on the problems he had raised.

Mr. BEESLEY (Canada) supported the Austrian representative's proposal. Canada had suffered directly from the effects of pollution, and was therefore particularly interested in the problem, which was related to all the legal and other questions with which the Committee and the Sub-Committee were concerned. The problem of pollution raised all the legal, political and economic issues which the Conference on the Law of the Sea would have to face. If a coastal State adopted specific measures on fishing vessels, vessels of the national fleet or ocean drilling vessels, only the type of vessel concerned would be affected. But if a coastal State took steps to protect its marine environment, those measures would concern all types of vessels, whether they were navigating on the high seas, in the contiguous zone, in territorial waters, or in inland waters.

If one accepted the argument for the progressive extension of jurisdiction, which Canada did not, it would be seen that there were problems affecting not only the sea-bed but superjacent waters. Even if that argument were not accepted and only the problem of exploitation of the sea-bed were considered, the activities of water-borne vehicles engaged in drilling and exploration would have to be taken into consideration. With a few exceptions such as the laying of submarine cables, all possible types of activity that might be undertaken on the high seas or within the limits of national jurisdiction would have to be dealt with together.

Canada had therefore from the outset considered the questions placed before Sub-Committee III as the most important of all those with which the Committee had to deal. If a solution was not found to certain pollution problems, the resultant dangers would threaten not only the States Members of the United Nations but the survival of the whole of mankind. His delegation intended to revert to the question in detail in plenary session.

The 1972 Stockholm Conference on the Environment would be concerned with pollution and the related scientific, technical and other problems. But what Canada expected from the Conference was that it would adopt a declaration of legal principles that could later serve as the basis for a convention, in the same way as the Declaration on Principles Governing the Activities of States in the Exploration and Use of Outer Space (General Assembly resolution 1962 (XVIII)) had led to the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space. (General Assembly Resolution A/Res. 2222 (XXI)).

A working group had tried unsuccessfully in New York to draw up such a declaration of legal principles. Canada had on that occasion submitted a draft declaration which had not been accepted. Certain legal principles, which seemed obvious to his delegation, had been disputed, some delegations refusing to recognize, for example, that a State had no right to pollute the environment of another State or to pollute the environment beyond the limits of its national jurisdiction and refusing to accept as a consequence that the State concerned should be held responsible for the pollution caused in either case. Nevertheless, a start had been made, and there was no need to be discouraged, since there were signs that principles which had been strongly disputed at the Working Group's session in New York were now gradually gaining acceptance.

In addition to the Stockholm Conference, the IMCO Conference and the Conference on the Law of the Sea could provide useful material for the Sub-Committee. But, although the Sub-Committee had to concern itself with the formulation of rules, rules alone would not solve the problems of the environment, and States should back them up by co-operating voluntarily in a whole range of activities and particularly in organizing a system of measures for monitoring pollution. In that connexion, it would be useful for the Stockholm Conference

to draw up a programme of concerted and co-ordinated action to be carried out on a purely voluntary basis. National experience had shown that legal provisions against pollution were not always strictly applied or faithfully observed and that the problem could not be dealt with merely by adopting such provisions.

IMCO was the organization technically qualified to draw up regulations on shipping, particularly for maritime traffic. Its decisions were admittedly not always perfect, and the 1969 Brussels Convention ^{4/} in particular left much to be desired, since it protected shipping States more than the environment itself. Nevertheless, it might be hoped that IMCO would draw up technical regulations to put into effect the legal principles that might be adopted at the Stockholm Conference.

The Conference on the Law of the Sea, which should preferably be held after the IMCO Conference, should lead to a convention on the control of pollution of the marine environment, independently of the rest of the environment, with which the Stockholm Conference would be mainly concerned.

What Canada would like to see was a convention of universal application to establish certain minimum rules. Certain special rules should, however, be established on a regional basis, since some solutions would obviously not be applicable to all parts of the world or to all types of problems that might arise.

His delegation intended to put forward proposals in due course and would meanwhile hold exchanges of views with other delegations. The nature of the pollution problem was well explained in paragraph twenty-four of the report of the Secretary-General on the prevention and control of marine pollution (E/5003). That paragraph drew attention to the need for supplementing international action by a regional approach to the problem. That approach had already been adopted in some cases. For example, a system had been set up to control pollution caused by off-shore operations in the North Sea area and a similar system was being organized in the Baltic Sea. Canada was collaborating with other States

^{4/} IMCO Publication, Sales No: IMCO 1970.3

in the protection of the Pacific region against pollution. It had also, together with the United States, tackled the problem of the pollution of the North American Great Lakes, on which an agreement was at present being drawn up.

It should nevertheless be pointed out that, apart from a few conventions drawn up by IMCO and a few bilateral or multilateral treaties, there was little on which to base such agreements. Among the precedents, it was worth mentioning the 1909 Treaty by which Canada and the United States had undertaken not to pollute each other's boundary waters. It had taken fifty years to become fully aware of the dangers of pollution and only very recently had anything really been done to control the pollution problem; that was abundant proof that rules were only one of the means to be adopted and that their adoption alone was not enough.

There had been a number of encouraging developments since the Committee's last session, in particular the session of the Working Group at New York, which he had already mentioned, and a joint meeting under the auspices of IMCO and the Preparatory Committee for the Conference on the Environment concerning dumping at sea. In that connexion Canada welcomed the fact that the United States had submitted a draft proposal for the prohibition of dumping. If a State wished to dispose of noxious materials, it should sink them in its own waters and not in those of other countries. The Netherlands Government was to be commended for having towed back to its own waters a vessel in difficulties that might have polluted the high seas.

It was also encouraging that a conference held in Malta in June-July 1971 had had the same views as the London meeting concerning dumping on the high seas.

He wished to stress the importance of finding a global solution to the pollution problem, with national measures supporting multilateral action. Canada, for its part, had established a Department for the Environment and there had for some time been a legal section in the Canadian Ministry of External Affairs concerned with the environment law. Canada had also adopted legislation against pollution, particularly of the air, of water and of the waters of the Arctic region. It had also undertaken bilateral action in co-operation with its northern and southern neighbours, in particular to regulate the navigation of petrol tankers on its west coast. Other countries should, in his opinion, take similar action.

Paragraphs 1 to 4 of the report on the prevention and control of marine pollution (E/5003) well illustrated the complexity of the problem. But since it

was established that much or even most pollution came from the air, it was obvious that multilateral action was not enough and that every country should undertake individual internal action. However, as Canada had pointed out, there was more to the matter than just codification, and unless the Sub-Committee tackled the problem very seriously it might find itself left behind by events and the rules drawn up would not be all they should be. In his delegation's opinion, the solution was not to establish a super-agency with all the powers of the Security Council, ICAO, IMCO and other organizations but to draw up a convention that would be a multilateral and universally accepted basis and clearly define duties and responsibilities. But while the system to be established should be determined by multilateral action, the powers of execution should be delegated by the international community to the coastal States which should be responsible for administering the system. In no case could there be unilateral action by the coastal State concerned.

The meeting rose at 5.5 p.m.

SUMMARY RECORD OF THE FOURTH MEETING

held on Thursday, 29 July 1971, at 3.25 p.m.

Chairman:

Mr. VAN DER ESSEN

Belgium

GENERAL DEBATE - MARINE POLLUTION (continued)

Mr. EVENSEN (Norway) said that the protection of the marine environment was of fundamental importance, not only because the sea was a source of food and an important means of transport, but also because it was a vital element in the ecology of the Earth. It was therefore quite natural that the threat of pollution should actively concern the United Nations and the specialized agencies, and evidence of that concern was to be found in the report of the Secretary-General on the prevention and control of marine pollution (E/5003), the report of the Joint Group of Experts on the Scientific Aspects of Marine Pollution (A/CONF.48/IWGMP.I/Inf.2- GESAMP III) and the report of the Inter-governmental Working Party on Marine Pollution on its first session (A/CONF.48/IWGMP.I/5). The last-mentioned report contained in an annex draft conventions submitted by the United States of America and Canada respectively on the discharge of pollutants into the oceans. To prevent and control marine pollution, action at the national level was not enough; international action was required.

Pollutants could be classified into the following categories: domestic sewage, industrial and agricultural effluents, waste discharged from ships, the results of the exploration and exploitation of the mineral resources of the seabed, radio-active waste, waste from thermal power plants and military pollution through dumping of poisonous gases and explosives.

In his opinion, the Sub-Committee could not restrict its work to the high seas or to international waters beyond the limits of national jurisdiction. It should consider the environment as a whole and consequently deal also with pollution originating from the land. The question had been asked whether an overall convention covering all forms of marine pollution should be drawn up, or whether it would not be better to proceed step by step and deal gradually with the various sources of pollution, beginning with the most dangerous, or whether it would not be better still to deal with the problem at regional level. In his opinion, it would be premature to decide which path to follow at the present stage. That decision should be taken by the United Nations Conference on the

Environment scheduled for 1972 in Stockholm. For the time being, the Sub-Committee should content itself with indicating a general course of action and stating general principles. Later on, possibly after the Stockholm Conference, it could prepare one or more official instruments laying down the main guidelines for marine pollution control. Later still, more specific regional or bilateral agreements might be drawn up on the basis of those instruments, when Governments considered such action necessary. As the representative of the Secretariat had indicated at the third meeting, specific regional agreements of limited scope could serve as a basis for the setting up of a world-wide monitoring system. It might be appropriate for the Sub-Committee to recommend or encourage the conclusion of such agreements.

He then turned to some sources of pollution and the preventive or corrective measures which the Sub-Committee could recommend.

Domestic sewage and agricultural and industrial effluents included most types of pollution and the situation was becoming more and more serious as a result of the population explosion and urban concentration. Yet virtually nothing had been done at the international level to counter that danger. At the national level, countries had shown themselves rather reluctant to adopt any form of legislation. The Sub-Committee should set minimum international standards, accompanied by guidelines, which would impose on the contracting parties to any convention an obligation to enact the necessary legislation. He had no specific suggestions to make, but he wished to give some indication of what the guidelines might be. The contracting parties should take, within their territory and within areas under their jurisdiction, all possible action which might eliminate or at least mitigate all forms of air, water or land pollution attributable to households, industry or agriculture which were liable to harm the marine environment. Such action should include in particular regulation of the production, distribution and use of organic chemicals, fuel, pesticides, detergents, fertilizers and substances containing lead or other heavy metals. Action at the regional level should also be encouraged and rules stricter than the minimum standards should be envisaged.

With regard to pollution caused by waste discharged by ships, the problem was becoming worse with the increase in the size of tankers which discharged oil from their tanks on the high seas. That was the only form of pollution for which effective international action had been taken or was contemplated through

IMCO. A convention had been signed in London in 1954,^{1/} and the latest amendments to it adopted in 1969,^{2/} outlawed in principle the cleaning of tanks on the high seas. Furthermore, following the Torrey Canyon disaster, two conventions had been adopted in 1969 on the accidental discharge of oil by ships.^{3/} There were also certain regional agreements of the same kind and, in October 1971, the Nordic countries would meet at Oslo to conclude a regional agreement for the control of that form of pollution. They had already passed several national laws on the subject. International agreements of a more general nature could be expected to be drawn up at the Stockholm Conference. If they were not, the Sub-Committee should deal with that important matter, concentrating on the main guiding principles for action and leaving it to IMCO to tackle the purely technical aspects.

Pollution due to the exploration and exploitation of the mineral resources of the sea-bed was a recent phenomenon, the dangers of which had perhaps been underestimated by the Secretary-General in its report (E/5003). Drilling for oil on land was already considered a risky enterprise. In off-shore drilling the risks were still greater, which meant that rigorous safety standards were needed. Yet there were no provisions of that kind in international law and hardly any in municipal law. It should, however, be noted that the Norwegian Government was preparing a comprehensive safety code governing the production of oil, its storage on the continental shelf and the laying of pipelines. In that field also, it would be premature for the Sub-Committee to draw up a detailed code. It would be preferable to lay down standards and general guidelines, so that, on the one hand, the exploration and exploitation of the ocean floor would be conducted in such a way as to avoid any damage to the marine environment and, on the other, that the necessary safety standards would be observed. In many respects, the new activities on the continental shelf offered scope for the conclusion of regional agreements, on the basis of which international safety standards could be drawn up. A group of experts could possibly be established within the United Nations to draw up standards and model laws to govern such activities.

^{1/} International Convention for the Prevention of Pollution of the Sea by Oil, 1954 - United Nations Treaty Series, vol. 527, p.3.

^{2/} See document E/5003, paragraph 195.

^{3/} IMCO publication Sales No. IMCO 1970.3.

As far as nuclear pollution was concerned, the Sub-Committee could merely lay down general - though strict - principles, as the International Atomic Energy Agency had already done a great deal to prevent that type of pollution and there was no point in trespassing on its territory.

Referring to the use of the marine environment for military purposes, to dispose of poisonous gases or explosives, he reminded the Sub-Committee of the very firm position adopted by the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor at its thirty-eighth meeting in August 1970.^{4/} If the Convention drawn up at the Stockholm Conference did not contain appropriate provisions, the Sub-Committee would probably have to draw up general principles for the control of such pollution.

Mr. RUIZ-MORALES (Spain) said that he had some general comments to make on the problem of protecting the marine environment, and would explain his Government's position, in reply to the questions put by the Chairman of the Sub-Committee at the previous meeting.

The problems involved in protecting the marine environment were closely connected with the basic concept of the safety of the seas, understood as a necessity for human life and the ecological balance. This was a very important concept, for the sea covered 70 per cent of the world's surface, so that any alteration in its biological balance had repercussions throughout the biosphere, with a corresponding impact on human life.

It was becoming urgently necessary to adopt measures to deal with the increasingly serious problems posed by the contamination of the environment in general and of the marine environment in particular. The achievements of science had revealed how fragile the marine environment was, and hence how necessary it was to protect its biological equilibrium. The price of technological progress was high. Appropriate measures were therefore needed at the national, regional and international levels.

Spain fully shared the general concern over those problems, for much of its coastline, which was nearly 5,000 miles long, was on the Mediterranean, a sea with special hydrological features (narrow outlet to the ocean, absence of tides and high salinity) which increased the dangers of pollution.

^{4/} Official Records of the General Assembly, Twenty-Fifth Session, Supplement No. 21 (A/8021)

Spain was at the junction of two important sea routes and a large proportion of world traffic passed its coasts. The Straits of Gibraltar was one of the world's busiest waterways. Spain was therefore particularly exposed to the risk of pollution which could affect economic activities along the coasts (fishing and tourism) and the coasts themselves.

Spain had passed national legislation to prevent pollution. At the international level, it was in favour of regional and world co-operation.

Spain, in its special position as a State "particularly exposed to the risk of pollution", had realized that other geographically isolated States had the same problems. Such common concern helped to forward work in the area in question, for instance, preparations for the United Nations Conference on the Law of the Sea scheduled for 1973.

There were many different causes and sources of pollution. It would not be the best solution to do away with just one source, such as pollution from the exploration and exploitation of the sea-bed and the ocean floor beyond the limits of national jurisdiction. The problem had to be tackled as a whole, using the latest scientific knowledge. The fact that such knowledge was limited should not diminish the Sub-Committee's enthusiasm, nor restrict the scope of international regulations. In that problem, law must come before science.

Recent scientific research had made it possible to identify the most dangerous sources of pollution and effective measures to counter them must be adopted immediately. New scientific knowledge need not affect the basic rules adopted, for it could be made the subject of a protocol separate from the proposed convention or conventions, which could be revised periodically, say every three years.

The problem had to be dealt with globally and not sectorally, since the provisions to be adopted could not be limited to the high seas. It was now realized that pollution of the sea was essentially a result of man's activities in other areas (on land, in inland waters and in the territorial sea).

The relation between the various sources of pollution should be an important factor in determining the extent of the Sub-Committee's competence. There were no boundaries between the various parts of the globe, and marine pollution had to be anticipated and combated whether it resulted from activities on land, or in inland or territorial waters, or beyond.

He hoped that that answered the questions put by the Chairman of the Sub-Committee as guidelines for the general debate.

Appropriate solutions must be promptly found. Without prejudice to the work done by other organizations, particularly by the Stockholm Conference on the Environment and its Intergovernmental Working Group on Marine Pollution (IWGMP) the broad lines of an international convention on the protection of the marine environment could be studied in the Sub-Committee forthwith.

The first step should be to consider major guidelines namely, basic rules which could yield positive international law on the subject. If the Sub-Committee could agree on such basic rules, it would greatly help the progress of the Committee's work.

The point of departure should be the recognition that all States had an obligation under international law to protect the marine environment and remove any danger of pollution. On that point he agreed with the representative of Norway. Those basic rules were in fact rules of jus cogens. The justification for them lay in the basic rights and freedoms of man, and in particular, his right to his environment as an aspect of the fundamental right to life. There were some important consequences of that principle. States should, in accordance with international law and the state of scientific knowledge, forestall and prevent pollution on land and in inland and in territorial waters. A second obligation was to punish acts contrary to such provisions or to the objective pursued. In the identification of those consequences, they would obviously have to take account of the rules of international law applicable to the various parts of the sea. The result would be a series of measures that the States could justifiably adopt.

The second guiding principle was that of the peaceful co-operation of all States with a view to the protection of the marine environment. Such co-operation had two specially important aspects: the first was the exchange of scientific and technical information and knowledge and international assistance to States exposed to the danger of pollution, an aspect of the utmost importance to the developing countries, for it enabled them to benefit directly from the information and aid provided by developed countries and favoured joint action; the second was the collaboration of States that was necessary to ensure effective vigilance and control of marine areas so that action taken by any State in a particular zone of the sea would benefit the entire international community.

The third basic rule was the right of the State to defend itself against the risk of the pollution of its coasts or the sea areas under its jurisdiction. That rule was based on the general idea of the self-defence of States against any threat to the security of their population or to their economic resources, and it had two main aspects: the prevention of possible pollution of the marine environment and the fight against pollution of the marine environment or the coast that had already taken place and was threatening the State's interests.

The prevention of pollution concerned not only coastal States but indirectly all States, since all had an interest in protecting the marine environment. Clear and specific legal provisions were required for the necessary self-protection measures. A balance must be struck between the coastal States' need to protect the community and the interests of all countries concerned with shipping. Such measures should be suited to their purpose and must obviously not hinder peaceful navigation or innocent passage. The adoption of such measures must be effected without discrimination of any kind and must be brought to the attention of all States.

A marine environment protection area of reasonable breadth could usefully be established contiguous to territorial waters. The coastal States could adopt and apply measures to prevent the pollution of that area and to protect it. In return, they should watch over the area in the interests of the international community.

A further guiding principle was that of the international liability of States regarding acts prejudicial to the protection of the marine environment, an aspect which had been mentioned by the Canadian representative. That principle followed from the first of the principles enunciated, since every obligation implied a liability. The Sub-Committee's task in that regard would be particularly difficult because of the manifold economic interests involved in the various uses made of maritime areas. Nevertheless, any system of rules entailed an economic cost which countries would have to be prepared to pay in order to guarantee the survival of human life.

There were two aspects of the question to be noted. First, the risk of pollution must be prevented: the best method would be to create an international certificate of responsibility which would constitute an international guarantee controlled by the States against the risk of pollution in the event of an accident. It could apply to the sources of pollution in the transport of toxic or dangerous

substances by sea and in the passage of ships using nuclear power, and also in exploration and exploitation activities in the international area of the sea- and ocean-bed. Secondly, States had a duty to protect the marine environment in all the areas under their jurisdiction, in accordance with paragraph 14 of General Assembly resolution 2749 (XXV).

Finally, he stressed the need, in view of the urgency and importance of the question, for the Sub-Committee to adopt universal rules for the protection of the marine environment considered as a whole. All marine areas should likewise be covered in the Sub-Committee's work on the subject.

Mr. MOTT (Australia), after reminding members of the terms of reference given to the Sub-Committee under General Assembly resolution 2750 C (XXV) and the Committee's decision of 12 March 1971^{5/} on the organization of its work, said that he would for the moment speak on the preservation of the marine environment, and later refer to the question of scientific research.

The long-term significance of the Committee's work for the international community at large was undeniable, because effective solutions must quickly be found to problems which were increasing in size as technology advanced, and the formulation of satisfactory legal rules to protect the marine environment must not fall too far behind the capability of modern industry. Guidelines for the Sub-Committee's work were set forth in paragraphs 12 and 13 of General Assembly resolution 2749 (XXV), to the content of which he referred.

The preservation of the marine environment had been under consideration by the United Nations and some of the specialized agencies for several years and a certain degree of duplication and fragmentation was inevitable, despite the differing interests of the agencies concerned. However, the United Nations Conference on the Environment to be held at Stockholm in 1972 would provide an opportunity for the detailed exploration and co-ordination of principles and policies.

The Conference on the Law of the Sea might be expected to have the results of the Stockholm Conference before it and on that basis its task might be to formulate rules of international law concerning the preservation of the marine environment. That code need only be a short one, but it should provide a

^{5/} See A/AC.138/SR.45.

workable legal framework into which the results of the work done by the Stockholm Conference and other bodies concerned could easily be inserted.

After listing the different types of pollution of the marine environment - land, sea or air pollution - he pointed out that articles 24 and 25 of the 1958 Convention on the High Seas^{6/} contained provisions requiring the parties to take steps to prevent the pollution of the marine environment by oil or the dumping of radioactive waste, but that the Convention did not include measures of implementation or even consultation. Experience had also shown that it was imperative to consider the formulation of more effective rules of international law which would inter alia give coastal States the right to exercise effective control over ships on the high seas in a broad zone contiguous to their territorial seas, so as to prevent pollution of their coastlines and damage to the marine environment.

It was particularly desirable that coastal States should have that power in three specific sets of circumstances: first, when waters presented particular hazards to marine traffic (for example, in straits); second, when marine traffic was unusually heavy (for example, around headlands); third, when natural phenomena and wild-life and such objects as off-shore installations required particular protection.

Australia already had legislation, both state and federal, dealing with pollution control, mainly derived from international conventions on the subject. A recent instrument was the Navigation Act (No. 2) 1970, part VII A of which provided machinery for preventing and dealing with the pollution of the coast and coastal waters and reefs by oil escaping from ships. The Act, however, did not at present extend to foreign ships outside the territorial sea.

Action had also been taken recently by other Governments to guard against marine pollution, but Australia felt that the inadequacy of limiting to the territorial sea the power of the coastal State to take measures against pollution from foreign ships was indicated by the wreck of the large oil tanker Oceanic Grandeur off the north coast of Australia early in 1970. As the ship had at the time been within the Australian territorial sea, which had a three-mile limit,

^{6/} United Nations Treaty Series, vol. 450, p.82.

Australia had been able to take action to prevent pollution, but it would not have been able to do so if the vessel had been on the adjacent high seas, which might have had very serious consequences.

As to pollution from substances other than oil, two questions would seem to be emerging as appropriate for attention. They were those of prohibiting the disposal of noxious substances in the oceans and of regulating the disposal of all other materials. The coastal State should be given a wider responsibility to protect the marine environment from the consequences of shallow dumping. In areas further off shore, other procedures for control should be developed. His delegation therefore proposed that the subjects for discussion in the Sub-Committee should include the general question of the disposal of all kinds of materials in the sea, including the more specific aspects of ocean dumping.

That problem was linked to a difficult question which would have to be faced at some stage, namely, the degree to which the international rules adopted should require the observance, within national territories, of certain minimum standards concerning activities such as the use of pesticides and the discharge of industrial wastes that could lead eventually to pollution of the seas.

The possibility of damage to the marine environment from the exploration and exploitation of the resources of the sea-bed would presumably be examined by Sub-Committee I in the context of the international régime and machinery, but Sub-Committee III would also have to discuss the problem in the context of the preservation of marine environment. It should consider in that connexion damage resulting not only from commercial operations but also from purely scientific research, particularly research involving deep drilling.

A subject for early consideration by the Sub-Committee under that heading was that of the appropriate body to exercise authority within the various areas of jurisdiction over the sea-bed. Within its territorial sea, of course, the coastal State had full sovereignty over the subjacent sea-bed; it would also have the power to control sea-bed operations within the limits of its national jurisdiction. If an intermediate zone was eventually established by treaty, the coastal State would be likely to exercise its rights in that zone in conjunction with the international régime. Beyond that intermediate zone, control would be in the hands of the international body.

From that point of view, much would depend on the nature of the recommendations made in regard to the régime and its area of application. Australia would like the Committee or one of the specialized agencies to develop

a set of rules relating to sea-bed activities. First, there should be a series of precautionary measures, including a clearly defined chain of responsibility, effective regulatory and safety provisions, monitoring of the effects of operations on the environment and inspection procedures. To those would be added a set of emergency plans, on the basis that any resource development project must have such plans agreed to by the international authority or by the coastal State, or by both, as appropriate. Those plans should cover the action to be taken in the event of emergencies and should set out the likely availability of materials and equipment to meet contingencies. Lastly, provisions must be made for liability for damage. That question would be considered in Sub-Committee I, but Sub-Committee III must ensure that liability for damage through pollution was adequately covered.

In regard to the question of damage to the marine environment from the air, there again the problem might arise whether the formulation of international law should not entail obligations to take domestic action. His delegation hoped that that matter would also be discussed by the Sub-Committee.

To sum up concerning preservation of the marine environment, he said first that the Committee should take into account the work being done and the proposals made in other United Nations bodies working in that field. Specifically technical problems should be handled in the relevant specialized bodies or, in the case of sea-bed operations, perhaps by a subsidiary technical body of the Committee. The Committee itself should prepare draft articles on the type of powers to be exercised and the authority that should exercise them.

Secondly, his delegation would like to see the development of rules of international law that would ensure that a coastal State had the right to exercise effective control over ships on the high seas in a broad zone contiguous to its territorial seas, in order to prevent pollution of its coastline and damage to the marine environment. Those rules should be clear and precise and one of their main purposes would be to promote orderly and safe navigation of the high seas, without providing a basis or excuse for undue hindrance to the right of freedom of passage on the high seas.

Thirdly, a set of rules should be developed to guard against damage to the marine environment by sea-bed operations, with a clear statement of who should exercise those powers outside the territorial sea and how they should be exercised.

Fourthly, his delegation thought that the process of seeking international agreement on measures to control specific forms of pollution and the research and discussion necessary as a preparation for such agreements should be left wherever possible to the specialized bodies already established.

Mr. ROSSIDES (Cyprus) said that of all the important problems of the law of the sea, pollution was the most urgent.

Recent scientific studies and reports were making everyone more and more aware of the danger of upsetting the balance of the natural environment. Contrary to what had happened in the past, the technological methods used today were likely to destroy that balance and thus endanger man's health and very existence. In fact, at the present rate, the critical stage had already been reached and a catastrophe would inevitably occur within a very short time.

His delegation therefore strongly supported the previous speakers who had called for an international treaty covering the main aspects of the pollution of the marine environment, establishing international standards and making it compulsory for States to adopt anti-pollution legislation at the national level.

After referring to the different types of land, sea and air pollution likely to cause damage to the marine environment, he said that it was necessary not only to control the ways of disposing of wastes likely to cause pollution, but also to restrict the manufacture of articles likely to lead to the production of harmful wastes. The survival of the human race was at stake and the question was therefore international in scope.

With regard to the statement by the Canadian representative at the previous meeting to the effect that, if a country wished to discharge waste into the sea, it should do so in its own territorial waters and not in another part of the seas and oceans, he said that the waste could easily be carried out of the territorial waters into which it had been discharged. He therefore interpreted the Canadian representative's proposal as a measure to prevent any discharge and not an encouragement to discharge waste into territorial waters.

His country had no highly developed industry and therefore little tendency to pollute its territorial waters, but it was exposed to pollution from outside, particularly because the Mediterranean was a closed sea, which some people said was rapidly dying. Cyprus therefore fully supported any measures to protect the marine environment as a whole and the Cypriot Government was contemplating special legislation to protect its environment as effectively as possible.

The first priority was to adopt as rapidly as possible an international treaty which would lay down obligations for all States concerning the protection of the marine environment. There was no time to lose, because the problem was not one that could be discussed in a leisurely fashion from year to year. Steps must be taken immediately, even before the Conference on the Environment and the Conference on the Law of the Sea.

Although the problem was essentially a global one, it could not be solved without the conclusion of regional arrangements and in any case, States should, in their own interests, take steps to protect their own marine environment as soon as possible.

Mr. MYRSTEN (Sweden) proposed that the Sub-Committee should invite the Secretary-General of the Stockholm Conference on the Human Environment to inform it about the progress of preparatory work in the field of the preservation of the marine environment.

The Swedish proposal was adopted.

The meeting rose at 5.5 p.m.

SUMMARY RECORD OF THE FIFTH MEETING
held on Monday, 9 August 1971, at 3.25 p.m.

Chairman: Mr. VAN DER ESSEN Belgium

STATEMENT BY THE SECRETARY-GENERAL OF THE UNITED NATIONS CONFERENCE ON THE ENVIRONMENT

The CHAIRMAN recalled that at its preceding meeting, Sub-Committee III had decided to ask the Secretary-General of the United Nations Conference on the Environment, who was on a short visit to Geneva, to describe the marine pollution problems which the 1972 Stockholm Conference on the Environment was to consider.

Mr. STRONG (Secretary-General of the United Nations Conference on the Environment) thanked the Chairman and members of the Sub-Committee for their invitation. He was especially pleased to have been asked to address the Committee because it and the Stockholm Conference were fighting a common enemy, namely marine pollution.

The Secretary-General of the United Nations had said, with regard to the Stockholm Conference, that environmental problems were the concern of all men and must be dealt with through concerted action by all nations. That was particularly true in the case of marine pollution, which knew no boundaries. It attacked industrialized nations, developing regions, coastal areas and deep sea ocean space. Moreover, it was caused mainly by man's activities not on sea but on land.

The Stockholm Conference could not provide final solutions for all problems. At the minimum, however, he hoped that it would reach an agreement to prevent at least some of the more serious consequences which could already be perceived, and also agree on comprehensive plans for action in future years. It was at Stockholm that it was hoped to erect the knowledge base, principles and machinery required to cope with the emerging marine pollution problems. The preparatory work for that challenge had been entrusted to the Intergovernmental Working Group on Marine Pollution. The representative of the Stockholm Conference for questions of marine pollution, Mr. Baum, had already informed Sub-Committee III at its third meeting of the Working Group's proceedings, and the report of its first session (A/CONF.48/IWGMP.I/5) had been made available to it. The preparatory work to date had focused on formulating the extent to which guidelines and criteria might be established to assist governments in the prevention and control of marine pollution. The Working Group hoped to recommend specific action for governmental adoption at the Conference. Its approach was scientific, legal and institutional and it considered the problems in the light of national, regional and global perspectives.

The work being done by Sub-Committee III under its broad mandate, with its focus on the preservation of the marine environment and freedom of scientific research, could be supported and complemented by that preparatory work. The secretariat of the Stockholm Conference would also carefully consider the views of the Sub-Committee. It was hoped that the preparatory work and the agreements reached at Stockholm would lay some groundwork for drafting treaty articles in Sub-Committee III.

He was convinced that substantial progress would soon be made in the control of marine pollution. He therefore considered that the maintenance of the effective liaison already established between the work of the Sub-Committee and that of the Conference was a matter of the highest priority.

GENERAL DEBATE - MARINE POLLUTION (continued)

Mr. IGUCHI (Japan) thanked Mr. Strong for his statement and wished him a fruitful stay in Japan, which he was to visit shortly.

The views he was about to express should not be taken as the definitive position of the Japanese Government, but as a provisional view of his delegation in the hope of improving the identification of priority issues within the purview of the Sub-Committee.

The law of the sea was at a historic turning point, where the basic assumption of the oceans' unlimited absorptive capacity for waste was being challenged. Unfortunately, understanding of the ocean environment was fragmentary; his delegation therefore supported the strengthening of international activities in scientific research on the high seas and the territorial seas, in order to obtain a better knowledge of the sensitive life stages of marine animals and plants, the rates of degradation and diffusion of toxic materials, the harmful impact of such toxic substances upon marine animals and plants at their various life stages and the accumulation of poisonous elements in animals at higher trophic levels through the food chain. However, as Mr. Baum had said at the third meeting, law could not await the results of science in order to preserve the marine environment.

The Japanese delegation had reservations concerning the latest proposal by the representative of Malta on the future ocean space, but congratulated him on his suggestion that the future ocean space treaty should include a provision for proclaiming a regional or a world ecological emergency in the event of imminent danger of contamination of extensive areas of the international sea. There was probably a consensus in the Committee in favour of the preparation of global and regional conventions to protect the marine environment. Some relevant instruments

already existed - a few general provisions in the 1958 Conventions on the High Seas^{1/} and on the Continental Shelf,^{2/} an international convention for the prevention of the pollution of the sea by oil [1954 London Convention,^{3/} as amended in 1969 (E/5003 p.193)] and two conventions concluded at Brussels in 1969,^{4/} one relating to intervention on the high seas in cases of oil pollution casualties, the other on civil liability for oil pollution damage. The existing instruments on oil pollution must be fully implemented. IAEA had prepared guidelines for the disposal of radio-active waste into the sea; it was also considering international registration of the release of such waste into the sea. There was no international regulation for the control of other noxious substances, in spite of their alarming effects. Careful consideration should be given to the possibility of formulating a broad principle to be applicable to a wide range of sources and routes of pollution - discharges into rivers and along the coast, air transport, disposal from ships and exploitation of the sea-bed. Some proposals had been formulated on the last two points and they should be carefully studied.

The mandate of the Sub-Committee was so wide that it must necessarily work in co-operation with FAO, UNESCO, WHO, WMO, IMCO, IAEA and IOC. It should also closely co-ordinate its working arrangements with those of the Intergovernmental Working Group on Marine Pollution, whose activities had been described by Mr. Baum.

The Japanese Government had for a long time been concerned at the damaging effects of pollution on fishery resources, upon which Japan was very dependent. In 1970, it had enacted an epoch-making law which not only enforced the strict control of oil discharge by ships adopted by IMCO in 1969, but also prohibited in principle all kinds of discharge of waste materials from ships and marine installations unless they were proved harmless. In that respect, Japan had perhaps one of the most developed national legislations in the world. However,

1/ United Nations Treaty Series, vol.450, p.82

2/ United Nations Treaty Series, vol.499, p.311

3/ Ibid, vol. 327, p.3

4/ IMCO Publication, Sales No. IMCO 1970.3.

the seas surrounding Japan were not so contaminated as the Mediterranean and the North Sea, and Japan would like to learn from the experience acquired in marine pollution control in other regions. It attached great importance to regional co-operation, although it thought that a regional treaty should be based on international endorsement. He also emphasized the need to standardize national legislation on marine pollution from the land and from the air through guidelines incorporated in international conventions. With regard to the discharge of noxious substances from ships and pollution arising from the exploration and exploitation of the continental shelf and international sea-bed, the Committee was the most appropriate forum to co-ordinate the studies and proposals made by the Conference on the Environment, and by FAO, UNESCO, IMCO and IOC. It should pay greater attention to the preparatory work of the 1972 Stockholm Conference and the 1973 IMCO Conference. As soon as it had obtained sufficient information from those bodies, the Sub-Committee could proceed, for example, with the drafting of treaty articles on the protection of the marine environment from the effects of the exploration and exploitation of the sea-bed, both within and beyond national jurisdiction. The relevant articles in the Conventions on the High Seas and on the Continental Shelf would have to be supplemented and the Sub-Committee should see that national legislation, regional arrangements and global conventions were harmonized and reinforced each other.

With reference to the four questions which the Chairman had put to the Sub-Committee at the third meeting his delegation considered that in view of the general character of pollution, the measures adopted in territorial waters must be interlinked with those concerning the high seas, and the steps for the sea-bed with those relating to superjacent waters. The relationship between internal and territorial waters might have to be reconsidered. The mandate of the Sub-Committee was open to the widest possible interpretation and it did not confine the task to merely drafting articles for the control of marine pollution arising from exploration and exploitation activities in the international sea-bed area. The possibility of drawing up a global convention applicable to all kinds of pollution might be considered; it might be more feasible, however, to include in such a convention - one after another - only pollutants upon which agreement had been reached by the countries concerned. In any case, the control of radio-active waste should still be left to IAEA.

Another approach to the control of marine pollution was the establishment by a coastal State of a pollution zone in the high seas. He had grave doubts as to the merits of such a formula. The most effective solution for the elimination of pollution was to control the pollutants at their source. That called for regional and international co-operation, since pollutants could only be controlled at the source with the co-operation of the States concerned. There must be mutual assistance between the scientific research, data acquisition, exchange and registration of information and monitoring required in the control of marine pollution; and that would entail a co-ordinated approach on a regional and a global scale. No State could carry out that work independently. The unilateral proclamation of a pollution zone was not a realistic formula.

One of the most effective methods of avoiding the damages caused by accidents to ships was to agree upon strict safety standards; and that could only be achieved through international co-operation. His delegation doubted whether the enforcement of international regulations to be adopted in that respect could be delegated entirely to the coastal States concerned. It was not possible to standardize every aspect of the legislation of contracting and non-contracting parties, particularly detailed enforcement regulations concerning judicial proceedings and punitive measures. To subject foreign ships to varying national laws enforced over extensive areas of the high seas, arbitrarily partitioned, would create a high degree of tension. It would be unwise to discard the principle of flag-State jurisdiction simply because it was traditional.

Lastly, he drew attention to the problem of liability for damage caused by the release of harmful substances from ships, and for damage resulting from the exploration of the international sea-bed. Guidance must first of all be obtained from the existing international convention such as those adopted in Brussels in 1969. In the drafting of legal principles at the Stockholm Conference, due regard must be paid to the complicated issues concerning the protection of the marine environment and the practical value of principles applicable to those types of liability. Moreover, the Committee must, as laid down by the General Assembly in Resolution 2749 (XXV) adopt rules in conformity with the international régime to be established. The exact nature of the régime would have to be known before rules could be formulated concerning pollution arising out of the exploration and exploitation of the international area.

In conclusion, he repeated that both regional and international co-operation amongst States and international organizations was essential before an effective system for the control of marine pollution could be decided upon. Unilateral measures could only lead to friction.

Mr. GREBOVSKI (Union of Soviet Socialist Republics) said that the present-day world was witnessing immense progress in all fields of science and technology. That progress was above all the result of the very important basic scientific research carried out by many countries in all fields of science. Some of that research related to the world's oceans, their surface, water content, the atmosphere above them and the depths of the ocean floor. It had covered the major fields of marine science - oceanography, geology, geophysics, geochemistry, hydrochemistry, hydrobiology, etc. A whole series of scientific discoveries had been made, resulting in a better knowledge of the world's oceans, an evaluation of their natural wealth and the solution of many problems that until recently had seemed insoluble.

The Soviet Union, France, the United States of America and many other countries had laid the material foundations for practical exploitation of the world's oceans and their resources for industrial purposes; and such exploitation was now beginning. Even the Committee's partial examination today of the problems of world exploitation of the sea-bed and its resources would have been impossible without the considerable progress made in the basic sciences. Today success in one science depended largely on progress in others. For instance, space research had resulted in the use of new methods in ocean research. Space devices orbiting the earth were used to determine the temperature of the surface of the ocean and the seas, and to re-transmit scientific data supplied by the telemetric buoys which were the prototypes of a world ocean data system designed to improve navigational techniques. Progress in telemetering, cybernetics, methods of electronic data collection and processing and many other subjects contributed to progress in the study of the ocean. Thus progress in the basic sciences served the interests of all mankind and represented a considerable contribution by States engaged in research which benefited the international community. It should be noted that scientific research which created conditions for progress in all fields had no immediate commercial results in itself. It was in that respect that scientific research differed, for example, from prospecting and exploration carried out for immediate economic ends, such as the discovery of mineral deposits for industrial uses. While industrial

prospection was justified by the revenues which it was later possible to obtain from exploiting the various minerals, scientific research in itself produced no immediate returns.

Moreover, scientific research in the world's oceans was very costly. It entailed the use of ships with the most modern and sophisticated instruments, equipment and techniques, special laboratories, the most up-to-date computers, the design of extensive and highly complex apparatus, the use of very costly materials and the training of highly qualified specialists.

Although that expenditure was not justified by any immediate returns, governments engaged in research contributing to the advancement of science were spending considerable sums on developing such research and on training specialists, engineers, technicians and auxiliary staff. The Soviet Union knew from experience the cost of scientific research on the world's ocean.

The cost of research in those fields underlined the importance of international co-operation in organizing and undertaking research. Almost all countries could make a contribution in one form or another to the development of scientific knowledge about the world's oceans. Some could place funds, equipment, instruments, vessels and specialists at the disposal of the international community; others could provide ships specially designed for scientific research; others again could provide aid in other forms.

He went on to describe his country's achievements in basic research. For many years the USSR had been making a study of the world's oceans. In particular, a great deal of work had been done on a combined study of the ocean and the atmosphere on formulation of theoretical ocean traffic models, methods of mathematical experimentation with computers, the theory of internal movements caused by various kinds of disturbances due to turbulence in the ocean and the higher strata of the atmosphere, and other trends in physical oceanography.

Much had been done to collect data on the relief and tectonics of the Atlantic, Pacific and Indian Oceans, on the basis of which new bathymetrical maps for certain ocean areas had been drawn. The Soviet Union had undertaken research on the earth's crust and the upper layers of the various structures of the ocean, particularly the Pacific. It had prepared a monograph on the tectonics of the Atlantic Ocean floor in which the geomorphology of the floor and the structure of the earth's crust had been studied by means of seismic, gravimetrical and magnetic data.

The Soviet Union was taking part in the long-term oceanographic research programme of the Intergovernmental Oceanographic Commission (IOC) under the auspices of UNESCO, and in other international programmes such as the study programmes on the Kuroshio, the Caribbean Sea and adjacent zones, the Mediterranean, the north-eastern region of the Central Atlantic and the South Seas. It was also taking part in the world system of ocean stations set up by the IOC.

The Soviet Union was concerned that the developing countries should take an active part in research on the world's oceans. It hoped that specialists and technicians from those countries would be invited to take part in scientific expeditions and other studies organized by other governments. It was prepared to invite them to take part in its own programmes. It had, in fact, already welcomed scientists and specialists from developing and other countries on board its scientific research ships.

The five-year plan for the development of the national economy of the USSR over the period 1971-1975 provided for scientific studies on oceanology, the physics of the atmosphere and geography, with a view to rational exploitation of natural resources, particularly those of the sea and the ocean. The plan also provided for a study of scientific methods of conserving and transforming nature with a view to the improvement of the natural and human environment, and better exploitation of natural resources.

The Soviet Union had long been concerned with the present international law on the freedom of the high seas. The principle of the freedom of the high seas was a firm foundation for developing international co-operation between governments and concentrating their endeavours to study the world's oceans multilaterally in the interests of the whole of mankind. Science was destined to play an important part, for instance, in protecting and increasing fish and other resources; but science itself needed legal guarantees. That was why the Soviet Union had formulated draft articles of a treaty concerning the activities of the various countries on the ocean floor (A/AC.138/43), designed to guarantee the freedom of scientific research in that area. The draft treaty also provided for international collaboration in scientific research on the resources of the sea-bed and its sub-soil, particularly through participation in international scientific research programmes, publication of programmes and results of scientific research, especially by international bodies, and co-operation in measures that would give the developing countries, among others, the possibility of taking part in scientific research on the sea and ocean.

His delegation was aware that scientific research differed widely from industrial prospection of the resources of the sea-bed. Scientific research was of vital importance in advancing research on useful minerals from the sea-bed, but industrial prospection aimed only at discovering exploitable minerals. Because of that difference, the two kinds of activity should be covered by different régimes.

General scientific research should not be subject to any restriction, but industrial prospection might be covered by a different legal régime and be carried out under the control of the international agency responsible for sea-bed activities.

During the discussion it had been proposed that the Committee should consider questions concerning the scientific research activities of States in the ocean, and should establish special standards for such activities. That proposal seemed to be unnecessary. A number of international bodies, in particular the IOC, were at present elaborating rules of international law for scientific research in the ocean. The IOC, for instance, was working on a draft convention on the legal status of ocean data collection systems. The Committee should not undertake similar work and should not trespass on the preserves of those bodies, which had far-reaching experience and large numbers of specialists. His delegation believed that the Committee should concentrate its attention on questions concerning the industrial prospection of sea-bed resources, and should try to find suitable ways of collaborating with institutions dealing with scientific research on the ocean.

Since his statement had dealt only with questions relating to scientific research, he reserved his delegation's right to make a further statement concerning its position on the question of preventing marine pollution.

Mr. DIGGS (Liberia) said that he greatly appreciated the statement made by the Secretary-General of the Stockholm Conference on the Environment, who had rightly emphasized that the problem of pollution was of world-wide importance, and that marine pollution was only one aspect of it. It should be noted, too, that marine pollution was caused not only by refuse from ships but also from the air and from the shore.

As the increase in pollution was the direct result of technological progress, it was obvious that the highly industrialized countries had an increasing responsibility in the matter; but the more the developing countries became industrialized, the greater would be their share of the responsibility also, and

they might be less well-equipped to face the problem than the more developed countries. It was therefore imperative that preventive measures should be taken without delay at the international level.

It was also important to stress that water acted as a carrier for many infectious diseases, for example the El-Tor form of cholera which was causing such ravages at present. The Secretary-General himself had referred, in paragraph 11 of his Report on the prevention and control of marine pollution (E/5003, page 7), to the health risks presented by the micro-organisms brought into the sea with untreated sewage. Countries which obtained their drinking water - or water for other purposes - from desalinization plants along the coast, should have some assurance that that method of treating sea water was sound.

His country supported the principle of freedom of scientific research on the sea-bed for peaceful purposes, but could not agree that that freedom should be absolute - i.e. that it should be free of all controls which would guarantee its harmlessness. The proposal made by the USSR delegation for international participation in scientific research on the sea-bed would reassure all those who feared that they might be adversely affected by it, particularly the developing countries.

The damage caused by accidents to oil-tankers on the high seas was so great that his delegation thought it would be advisable to consider giving their crews special training in the prevention of pollution.

Moreover, the destruction of marine fauna was particularly unfortunate for countries whose population obtained their protein mainly from the sea.

Mr. STEVENSON (United States of America) said that he would be making a longer statement at a later meeting, but wished now to express his delegation's thanks to the Secretary-General of the Stockholm Conference on the Environment. He proposed that the representative of IMCO should be asked to state what aspects of the problem of pollution would be considered at the IMCO Conference in 1973.

Mr. SULEIMAN (Libya) said that the statement by the Secretary-General of the United Nations Conference on the Environment would undoubtedly contribute to the success of the work of the Sub-Committee, which had a key role to play in preparing the measures to be taken at both the international and the national levels. In his delegation's view, the study of such measures should be comprehensive, covering the entire ocean area (including territorial waters) and

all forms of pollution, whatever the source: domestic and industrial waste, discharge of oil, disposal of toxic or radioactive matter, and exploration and exploitation operations carried out in the high seas or in territorial waters. In each case, the technical co-operation of the specialized agencies, such as IMCO, WHO, FAO, UNESCO and IAEA, should be obtained.

His own country, which was a major petroleum exporter and whose population was largely concentrated on the Mediterranean coast, was seriously concerned by pollution by oil. It hoped that the IMCO Conference in 1973 would succeed in laying the foundations for a satisfactory agreement on that subject. It also welcomed the opportunity which the Stockholm Conference would give the international community to discuss problems of such importance to mankind as a whole.

The existing legal instruments for the control of marine pollution were clearly summarized in the report of the Secretary-General (E/5003). It was obvious that national regulations provided the necessary basis for international standards and that they should be rigorously applied. But regional agreements should not be neglected, as they had already proved their worth and were at present probably more effective than international conventions based on an as yet ill-defined law of the sea. For that reason, his Government was making a detailed study of the possibility of concluding an agreement between the Mediterranean countries for the control of pollution and the promotion of scientific co-operation and assistance. The establishment of regional training centres would be very useful to the developing countries, which were seriously handicapped by the lack of specialized staff. It would also be desirable for each Government to establish a permanent liaison body to ensure co-ordination between the three levels - national, regional and international.

Mr. BUSH (Intergovernmental Maritime Consultative Organization) said that in 1969 his organization had decided to convene a conference in 1973 to draw up an agreement to control pollution of the sea, land and air by ships and other equipment operating in the marine environment. The main aim of the 1973 Conference was to eliminate, if possible by the end of 1975 but certainly by the end of the decade, deliberate pollution of the seas by oil and at the same time to minimize accidental discharge or spillage of pollutants. His organization was dealing with deliberate and accidental pollution by ships and with pollution caused by the use of other equipment operating in the marine environment. In that connexion it regarded the 1972 Stockholm Conference as part of a concerted

plan whereby the States members of the organizations in the United Nations family would meet to specify subjects for consideration by the appropriate conference or conferences that would follow, and to organize the work, which would take a great many years to complete.

His organization was considering a revision of the 1954 International Convention for the Prevention of Pollution of the Sea by Oil, the purpose of such revision being to create technically efficient and enforceable means of eliminating deliberate pollution by oil. The conference would also consider ways and means of eliminating intentional marine pollution by other cargoes, namely dangerous cargoes other than oil. It would also deal with accidental discharge or spillage of oil and other dangerous or noxious substances. The aim was to minimize the risk of accident, which was very great in view of the fact that, by the time of the 1973 Conference, there would be more than 400 oil tankers of over 200,000 deadweight tons in operation. That Conference would consider such means as tank size limitation, regulation of general ship design and development of equipment to facilitate the salvaging of cargo after an accident. It would also study methods of cleaning the sea after an accident.

IMCO foresaw the preparation of an instrument dealing with the carriage of dangerous cargoes from the standpoint of protecting the marine environment, its living resources and its amenities, and of a fifth instrument dealing with the disposal of ship-generated waste.

The 1973 IMCO Conference would study the establishment of a set of enforcement measures for incorporation in existing or future conventions, as appropriate, as well as of a procedure for the speedy amendment of standards and regulations to ensure that conventions remained abreast of technological progress.

After describing the various forms of action undertaken by his organization to control pollution, he said that such action was designed to achieve the safer operation of ships and other equipment used in the marine environment. The risk of accident was an important factor in marine pollution and if ships and off-shore drilling rigs met safety requirements, the risk of accident and pollution would be greatly reduced. With regard to tanker routing, IMCO was drawing up recommendations well in advance of the inclusion of the relevant provisions in treaties or conventions.

IMCO was ready to co-operate with other international agencies in controlling pollution; an intergovernmental working party on marine pollution had, for instance, met in June 1971 at the organization's headquarters in preparation for the Stockholm Conference. In its work for the prevention of accidental or wilful pollution of the sea by oil and other substances, his organization had no wish to take the place of other organizations or to pre-empt sectors of activity where concerted action at the inter-agency level was obviously necessary in the interests of effectiveness.

The meeting rose at 5.45 p.m.

SUMMARY RECORD OF THE SIXTH MEETING

held on Wednesday, 11 August 1971, at 3 p.m.

Chairman: Mr. ESPINOSA VALDERRAMA Colombia

In the absence of the Chairman, Mr. Espinosa Valderrama (Vice-Chairman)
took the Chair.

GENERAL DEBATE - MARINE POLLUTION (continued)

Mr. ARCHER (United Kingdom) said his delegation hoped that oceanographic research for peaceful purposes could be pursued with the minimum of constraint. Freedom in that field could easily be reconciled with international co-operation, in accordance with the principles set forth in paragraph 10 of the Declaration of Principles governing the Sea-Bed and the Ocean Floor in General Assembly resolution 2749 (XXV). It was because pure scientific research had revealed the existence of resources in the sea-bed that the Committee was now meeting and preparing for the 1973 Conference on the Law of the Sea. That research had been prompted, not by the possibility of economic return, but by the curiosity of marine geologists and geophysicists. Manganese nodules had been discovered long before they had had the remotest economic significance by one of the most famous oceanographic expeditions undertaken in the nineteenth century. As a result of free publication of the results of scientific research, there was increasing knowledge of the distribution of those nodules, of the fact that they might contain appreciable quantities of copper, nickel and cobalt and of the variations in the density of distribution of the nodules on the floors of the oceans and in the concentration of those metals in the nodules from place to place and with depth.

Knowledge of the transition between the continental margin and the ocean floor over the whole world had arisen from studies using geophysical techniques. Free scientific research, sometimes in close collaboration with coastal States, had made it possible to study continental margins such as those off Africa or South America. This had led to the identification of sedimentary basins with hydrocarbon potential on the shelf and to an awareness of the possible presence of hydrocarbons beneath the slope and rise. Marine geologists and geophysicists had, however, still to study the forces shaping the continental margins, and research might later lead to full benefit being derived from the resources locked in them. During the past twenty-five years, informal collaboration of different countries in organizing expeditions and the excitement of exploring the unknown had led to revolutionary ideas about the origin of the earth's crust and global tectonics. The free exchange of ideas and data and the results of that research had led to the hypothesis that

Europe, including the United Kingdom, and Africa were moving away from North and South America respectively. The theories born of that research explained the origin of the major mountain belts of the world, the large rift systems and the distribution of rock types and sediments in relation to the environment in which they had first been produced. Using those theories as working hypotheses, land geologists could obtain a better understanding of how the structures of the territories were formed, and their search for economic minerals would thus be more successful.

The explorers who organized and led a scientific expedition should have every freedom to change their plans in order to take immediate advantage of changing circumstances to pursue promising new lines of investigation. The leader of a scientific expedition could not therefore be asked to announce his itinerary in advance nor be subjected to all sorts of regulations which restricted his freedom of movement. To subject him to over-restrictive rules or to compliance with a large number of complicated formalities might well discourage him and leave the initiative to exploiters and limited interests. The leader of a marine scientific expedition could be trusted to avoid unnecessary disturbance of the marine environment and in particular pollution. It was in fact the scientists themselves who had recognized that restrictions might have to be placed on deep exploratory drilling even where that was carried out for purely scientific purposes, because they realized the risks of pollution. For an international authority or a coastal State to allow research to proceed unhindered in no way implied that it was handing over to others its rights to regulate the exploitation of any resources discovered as a result. The benefits to the international community from the results of oceanographic scientific research were so important that it should do everything possible to encourage the growth of marine science and exercise great caution before imposing frustrating regulations which might lead to a diminution of both national and international research efforts. Scientific research was likely to obtain better results if it was carried out in an atmosphere of trust rather than one of suspicion. It was not inconceivable that scientific expeditions would tend to be concentrated in the areas where they would enjoy the greatest freedom in preference to those where their activities would be restricted. His delegation therefore found the Uruguayan representative's proposals (A/AC.138/SC.I/SR.13) unacceptable, because they limited the freedom of scientific research. It also considered the provisions of articles 17, 18 and 19 of the working paper on the

régime, submitted by some Latin American States (A/AC.138/49) to be unduly restrictive. Such proposals would be met with dismay by marine scientists who, whatever their nationality, were not willing to recognize the right of an international authority to decide whether scientific research could be carried out and to supervise a scientific research programme undertaken in the international zone at all times and at all stages of its execution.

His delegation proposed that topographical and hydrographical expeditions should remain outside the scope of any convention. A distinction should be made between prospecting, the purpose of which was to locate mineral occurrences of possible economic importance, and scientific exploration, which had no specific economic objective. Such a distinction was sometimes difficult to make, but could be facilitated by considering the nature of the organization involved in the research, which might be a commercial enterprise or a university or government research establishment, such as the United Kingdom National Institute of Oceanography.

Mr. GOWLAND (Argentina) said that as his delegation had made general comments on the organization of the Sub-Committee's work in March 1971, he would confine himself to the specific questions put by the Chairman in document A/AC.138/SC.III/L.3.

The guidelines to be followed by the Sub-Committee with regard to the conservation of the marine environment were contained in General Assembly resolutions 2749 (XXV) and 2750 (XXV). Everyone was now aware that pollution, due to scientific and technological progress originally intended to promote the welfare of mankind, constituted a grave threat to the marine environment; the international community was increasingly conscious of the need for adequate international measures to protect the food resources of the seas and oceans and the health of coastal populations against pollution.

There had recently been various studies on the question. Attention should first be drawn to the report of the Secretary-General on the prevention and control of marine pollution (E/5003), which, after defining the eight main categories of pollutants, describing legal methods of marine pollution control and reviewing the activities of the United Nations system, had drawn very pertinent conclusions and made valuable recommendations. As the Economic and Social Council had considered, it would be very desirable for that document to be transmitted to the General Assembly at its twenty-sixth session.

Marine pollution had also been the subject of several General Assembly resolutions, in particular resolution 2566 (XXIV), under which the Secretary-General had invited Member States to submit their comments and suggestions. Argentina had complied with that request and, as was stated, in document ECOSOC/L/MISC.1, had emphasized the need to consider the question in the light of the next conference on the law of the sea. The Secretary-General of the United Nations Conference on the Environment had also made an interesting statement to the Sub-Committee at its fifth meeting, in which he had clarified certain points in the report of the first session of the Inter-Governmental Working Group on Marine Pollution, held in London from 14 to 18 June 1971 (A/CONF/48/IWGMP.I/5). In particular, a careful study should be made of the table in annex XIV to that document, in which the categories of pollutants were listed in order of harm per GESAMP criteria, and the appropriate action to be taken was indicated.

It was clear that, in drafting the appropriate international instruments to be submitted for consideration by the 1973 Conference on the Law of the Sea, the Sub-Committee should take as a basis the work of the Stockholm Conference, the conclusions reached by the FAO Technical Conference on Marine Pollution and its Effects on Living Resources and Fishing, held at Rome from 9-18 December 1970, and the guidelines formulated by the IMCO/FAO/UNESCO/WMO/WHO/IAEA Joint Group on the Scientific Aspects of Marine Pollution (GESAMP).

As early as 11 June 1970, the Committee had had before it a report by the Secretary-General on "marine pollution and other hazardous and harmful effects which might arise from the exploration and exploitation of the sea-bed and ocean floor and of the sub-soil thereof beyond the limits of national jurisdiction"^{1/} in which it was rightly pointed out that coastal States exercising their sovereignty over territorial waters had exclusive authority to adopt pollution control measures.

On 17 May 1971, the Secretary-General had transmitted to the Economic and Social Council a progress report prepared by the Intergovernmental Oceanographic Commission (IOC) on the up-dating and implementation of the long-term and expanded programme of oceanic exploration and research (E/5017). That report made the very sound suggestion that the comprehensive outline of the scope of the expanded programme (at present known as LITEPOER) should be simplified. It would be very useful if the

^{1/} Official Records of the General Assembly, Twenty-fifth Session, Annexes, agenda item 25, document A/7924.

resolutions adopted by the Bureau and Consultative Council of IOC at their joint meeting at Bordeaux in March 1971, referred to in the document, could be distributed in the Committee's various working languages, particularly Nos. 1, 4, 5, 14 and 15. It would also be useful if the report of the Group of Experts on Long-term Scientific Policy and Planning, mentioned in paragraph 15(a) of the report, could be distributed and if more details could be provided of the system of global investigation of pollution in the marine environment mentioned in paragraph 15(g) and of the way in which IOC members and bodies were notified of the information transmitted by their Chairman to the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction, to ensure that the information transmitted was complete and covered the different points of view upheld in IOC, and even opposition, when there was any. The more information that was available to members of the Committee, the more chances there would be of a successful outcome to their work.

Similarly, his delegation hoped that consideration could be given to the request made by the United States delegation at the second meeting of the Sub-Committee in March 1971 that every member of the Committee should have the text of the treaties and other documents drafted by other international and intergovernmental organizations dealing with marine pollution and scientific research. IMCO, in particular, was making an important contribution in that respect: the three conventions signed under its auspices had made it possible to deal with pollution by oil; the conference it was to convene in November 1971 would, it was hoped, result in the establishment of a compensation fund for full indemnification of the victims of such pollution; and it was planning to convene another conference in 1973 to discuss all aspects of the problem of marine pollution. It would perhaps be desirable for members of the Committee to be acquainted with the most important documents of the ninth session of the IMCO Sub-Committee on Marine Pollution, held in London from 10 to 14 May 1971.

The Argentine delegation believed that the Sub-Committee, in close collaboration with Sub-Committee I, should discuss the establishment of standards concerning pollution due to exploration and exploitation of the sea-bed in areas beyond national jurisdiction. In the light of the list compiled by Sub-Committee II, it should, in accordance with paragraphs 2 to 6 of resolution 2750 C (XXV), draft articles for the Conference on the Law of the Sea due to be held in 1973 to ensure the protection of areas both within national jurisdiction and in the high seas against pollution, whatever its origin. The regional aspect should also be kept in mind.

Scientific research should not be carried out in a haphazard way but should be subject to conditions that would enable the international community to confirm its scientific nature at any time. To that end, consideration might be given to requiring States carrying out scientific research to make a prior declaration and to circulate the results through international channels readily accessible to all States. Moreover, the rules applicable to scientific research must be in conformity with the principle laid down in General Assembly resolution 2749 (XXV). Scientific research must not infringe the present provisions of international law, particularly those relating to the continental shelf. The consent of the coastal States should be required for activities undertaken in, or concerning, that area. The 1958 Conventions clearly distinguished scientific research on the continental shelf from the other forms of oceanographic research referred to in article 5 of the Convention on the Continental Shelf.^{2/} In particular, research concerning the continental shelf, which was regulated by article 5, paragraph 8, of the Convention on the Continental Shelf and which involved express recognition of the rights of the coastal State, must be clearly distinguished from research in the areas of the seabed beyond the limits of national jurisdiction, which, in accordance with resolutions 2749 and 2750 (XXV), would be covered by the international régime to be established. In the case of scientific research in the other parts of the ocean, a distinction must also be drawn between waters under the jurisdiction of the coastal State and those beyond that jurisdiction. There were general standards on that subject which the Sub-Committee must examine under its terms of reference with a view to bringing them up to date and completing them in the form of projects for recommendation to the Conference on the Law of the Sea.

The Argentine delegation considered that, before that Conference, no international meeting should adopt any resolutions or principles concerning scientific oceanographic research that might modify the present régime. General Assembly resolution 2750 (XXV) empowered the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor to deal with problems of the sea as a whole.

General Assembly resolution 2560 (XXIV), provided that any exploration or research carried out under the long-term and expanded programme recommended by IOC should be exclusively scientific in nature and that such activities falling under the national jurisdiction of a State should be subject to the previous consent of

^{2/} United Nations, Treaty Series, vol.499, p.311.

such State, in accordance with international law. The distinction between scientific research and prospecting for industrial and economic purposes, which had been emphasized by the Soviet representative at the fifth meeting was not always correctly made, as could be seen from the comprehensive outline of the scope of the expanded programme established by IOC (A/7750). That distinction appeared logical, and in that connexion he agreed with the representative of Liberia that care must be taken to see that scientific research did not serve the sole interests of the maritime Powers undertaking it.

He wished to draw attention to the position adopted by the Latin American States concerning marine pollution and the legal aspects of scientific research. That position had been set out in the Lima declaration of 8 August 1970 and in the resolutions adopted at Lima, the text of which had been circulated by the Committee on the Peaceful Uses of the Sea-Bed in document A/AC.138/28. Because of its long coastline and extensive continental shelf, Argentina attached very great importance to those matters.

Miss LOPEZ-ORTEGA (Mexico) said that the problem of pollution had caught the world unawares and had left mankind almost or wholly at a loss to know how to tackle it. It could not be solved on the basis of present international standards. Pollution was worse in some regions than in others, but in a few years' time it might well spread to all the oceans. Industrial development had helped to aggravate the situation. It was therefore urgently necessary for the industrialized countries to take appropriate measures to stop the pollution of the sea, but in so doing their action should not raise a barrier to the development of the countries in process of industrialization. One of the measures to be taken would be to establish a description of pollutants in order of harmfulness, so that suitable control measures could be taken.

Those pollutants included, firstly, agricultural and industrial wastes, which presented an extremely serious problem. States should be obliged to process such wastes before discharging them into the sea. Then came oil tanker accidents and fuel waste discharged by other vessels. The consequences of accidents to nuclear-powered ships or submarines would also be catastrophic.

With respect to pollution caused by exploration and exploitation of the sea-bed, particularly serious problems were involved in extracting heavy minerals such as lead, zinc, copper and nickel. Military operations at sea also deserved mention; because

of the secrecy surrounding such operations the characteristics of the substances used were unknown. Pollution of the sea by the atmosphere was also important, especially by substances such as DDT, lead and mercury.

A very serious danger was created by the chlorinated hydrocarbons, which could be concentrated by marine organisms.

In view of all those dangers, the Mexican delegation believed that the Sub-Committee could work out minimum legal standards for an international régime to govern State activities causing marine pollution. It attached special importance to the Peruvian proposal, reproduced in the annex to the report on the first session of the Intergovernmental Working Group on Marine Pollution (A/Conf.48/TWGMP.I/5), that the developing countries should take part in the protection of the marine environment, receiving appropriate training, various forms of technical assistance, and the necessary equipment.

Independently of what might be done by the Stockholm Conference, Sub-Committee III could already begin preparing a draft of general principles for the conservation of the marine environment. It might adopt general guidelines and work out draft articles with a view to the adoption of an international convention, which should contain a basic rule concerning the preservation of the sea-bed. The convention should cover nuclear oil and other pollutants. In its work, it should take into account the two Brussels conventions^{3/} on intervention on the high seas in cases of oil pollution casualties and on civil liability for oil pollution damage. It should also attach special importance to the right of States to protect themselves against the risk of pollution affecting their coasts and economic resources, and to international co-operation in scientific research on that field. An important aspect of the Sub-Committee's work would be to determine the international responsibility of States which committed acts that conflicted with the requirements for protection of the marine environment.

The meeting rose at 4.35 p.m.

^{3/} IMCO Publication, Sales No.: IMCO, 1970.3.

SUMMARY RECORD OF THE SEVENTH MEETING

held on Tuesday, 17 August 1971, at 3.20 p.m.

Chairman: Mr. GEBRE-KIDAN Ethiopia

In the absence of the Chairman, Mr. Gebre-Kidan (Ethiopia), vice-chairman, took the chair.

GENERAL DEBATE - MARINE POLLUTION (continued)

Mr. JEANNEL (France) said that he wished to make a few comments on the problem of pollution and on the action to be taken by the Sub-Committee.

To discuss the substance of the question of pollution meant first to study all possible preventive measures and then to consider the means of effecting reparation in cases where damage was caused.

The methods proposed in both cases were based on considerations of principle, on which delegations often differed. With regard to the prevention of pollution, his delegation accepted the idea that among other possibilities the Sub-Committee was entitled to consider the sources of marine pollution as a whole, whether on land or on the seas. While he did not think that the Sub-Committee should draft comprehensive conventions covering all types of pollutants, he considered it essential at the present stage for members to have an over-all picture of marine pollution and to take account of the diversity of pollutants.

In order to combat marine pollution in all its forms, action could be taken at two levels: the national and the international. Much had been said about the unilateral measures that States could take to protect the marine environment, and examples of national legislation had been given. His delegation could perfectly well conceive of a system in which coastal States would be granted the right by the international community to act in order to protect both their own environment and the marine environment as a whole. However, it hesitated to approve of a type of action that was primarily unilateral, for two sets of reasons. In the first place, anarchy might develop in shipping if every country arrogated to itself the right to police marine communications on the basis of criteria of which it would be the sole judge. Such a situation would also be dangerous, since ships driven from one part of the sea would cause congestion in others which were under more flexible regulation. However, his delegation was not only thinking of the direct effects for foreign vessels. It also feared the effects which unequal treatment might have on the economies of various countries if the solution of the problems of pollution were to be left to the discretion of individual States.

If all the sources of pollution were considered, including those on land, it would be seen that a full range of preventive measures would be very expensive and would have to be carefully incorporated in economic development plans. It would be neither easy nor agreeable for a State to impose costly anti-pollution measures on its industries while neighbouring countries refused to do the same. It would be entirely inadmissible for a State to be able to exercise on the seas rights of control which it itself would fix, while refusing to take on land the necessary precautions to prevent the pollution of its rivers and inland waters. The only way, therefore, to tackle pollution on a global basis was through international action. That type of action had been well described by the Japanese representative and other speakers at earlier meetings of the Sub-Committee. Mention had been made of the London Convention of 1954^{1/} and the Brussels Convention of 1969^{2/} and of the need to lay down strict safety standards for ships and navigation.

With regard to a particular aspect of international action, namely, regional co-operation, he said that any international regulation would have little chance of being effectively applied if its provisions involved flagrantly unequal treatment for different countries. Regulations creating uniform obligations and governing the whole of pollution activities could have very different consequences, according to the geographical situation or the level of development of the various countries. Industrialized countries could afford the financial costs of the means required to combat pollution. A developing country, however, might fear that the adoption of such regulations would act as a brake on its industrialization.

That situation was well known and all representatives would remember the arguments which had been raised by the majority of developing countries in connexion with the preparation of the Stockholm Conference on the Environment in 1972. It was therefore necessary to prepare general agreements which were as balanced and as realistic as possible in order to offer some chance of ratification. He also considered it necessary to develop formulas for regional co-operation. It was at the regional level that difficulties and differences in development among neighbouring countries could best be ascertained and that equitable solutions could be found to those problems. Among neighbouring countries at a similar economic level, co-operation in respect of anti-pollution measures would help to bring industrial and commercial competition under control. Among neighbouring countries

^{1/} United Nations, Treaty Series, Vol. 327, p.4.

^{2/} IMCO Publication, Sales No.: IMCO 1970.3.

at different stages of economic development, such co-operation would help to make it possible to find financially acceptable solutions.

Within the framework of the European Community, the Six, joined by nine other countries, had included specific measures for the control of pollution in their programme relating to scientific and technical research policies.

The situation was different in the Mediterranean. The countries in that region were at different levels of development, but co-operative action was possible. That action took place primarily under the joint auspices of the Inter-Governmental Oceanographic Commission (IOC) of UNESCO and the International Commission for the Scientific Exploration of the Mediterranean Sea. In connexion with the latter, his country had been entrusted with the task of preparing a preliminary report on an operational plan for pollution control in the Mediterranean.

The Mediterranean offered particularly good opportunities for regional co-operation in the sense that it was easier to localize the typical sources of pollution there than in the oceans.

The action proposed was as follows: a review of the existing situation, concentrating on a limited number of zones which appeared to be the most affected; development of a monitoring system; preparation of a general plan forecasting trends in the development of industrial, agricultural and tourist activities and allowing for the proposal in good time of all measures capable of ensuring the protection of the environment in the development zones. The action to be taken differed according to the type of pollutants and should lead to measures against those responsible for pollution. Lastly, the report would examine the important problem of the cost of pollution control.

Referring to the meeting of the Inter-Governmental Working Group on Marine Pollution, held in London in June 1971, he said that the representatives of Algeria, Cyprus, France, Italy, Malta, Morocco, Spain, Turkey, the United Arab Republic and Yugoslavia had recommended the signature of an agreement in the field of technical and scientific co-operation and had clearly expressed their confidence in regional co-operation, which could subsequently lead to a global system.

The question of compensation for damage caused by pollution was of a different nature and raised two legal problems: the nature of the liability and the attribution of liability. With regard to the first, a trend was now developing in favour of accepting a principle of objective liability, a principle which had been recognized by the 1969 Brussels Convention on Civil Liability. While providing for

objective liability, the Convention placed a ceiling on the maximum amount payable where the shipowner was not really at fault. Under the terms of the Convention, shipowners were also required to maintain insurance or other financial coverage. It would be well to determine whether such a type of liability could be extended in respect of hydrocarbons to exploitation of the sea-bed and more generally to pollution caused by other pollutants or whether consideration should be given to a system of liability based on the concept of fault.

With regard to the second problem, that of attribution of liability, his delegation wished to warn the Sub-Committee against the dangers of certain hasty conclusions. The Brussels Convention which raised the principle of strict liability did not attribute such liability to States. It was a "private law" convention which provided that shipowners had to pay compensation for damage caused by them, but did not make States liable for such damage. In his delegation's opinion, that solution was reasonable and the only one that would make it possible to bring pressure to bear on those responsible for pollution and compel them to assume certain obligations.

The Sub-Committee must not confuse the liability of those who caused pollution with the liability of the State. Nor should it confuse recommendations to States with the attribution of liability. In international law, the liability of a State could be involved only as a result of its failure to respect or to carry out the provisions of a convention to which it was a party. His delegation could not accept the general principles proposed in certain statements that States were responsible for any damage caused to the environment by events occurring in a zone under their jurisdiction. It was obvious that it would be very difficult, if not impossible, to apply such a principle, but his delegation had thought it necessary in any case to stress the classical rule of international law. He wished to make it clear, however, that his delegation was quite prepared to participate in the preparation of conventions providing for obligations to be borne by States.

It remained for the Sub-Committee to determine the practical way in which it would carry out its work. His delegation's view in that respect could be summarized in two propositions. First, the Sub-Committee should think in terms of international regulations. As he had already pointed out, it was necessary for every State to operate in close co-operation with other members of the international community. If a coastal State took action within an area adjacent to its coast, the limits of

which were fixed by international agreement, that State would also have to apply preventive measures of an international nature. In other words, the coastal State should be regarded as holding powers delegated to it by the international community and agreed upon by all countries as a whole.

With regard to the question of how to draw up international regulations in respect of the prevention of all forms of pollution, he had already drawn attention to the importance of the development of regional co-operation and its integration into a world system.

In more limited fields, more specific and more immediate efforts could be made at the international level. As far as pollution by hydrocarbons was concerned, the provisions of the 1954 Convention should be made more strict and States should be urged to ratify the Brussels Conventions of 1969.

His delegation attached considerable importance to the strengthening of rules governing the safety of marine navigation, since it was essential to attack the causes of accidents rather than their effects. The number of tankers continued to increase and it was necessary to develop international co-operation with a view to defining compulsory routes in highly frequented zones, standardizing the qualifications of crew members and improving the external assistance provided to vessels.

He did not think that the Sub-Committee would be able to draft detailed articles of a convention in the very near future, since it would have to await the results of the various activities undertaken by IAEA, IMCO and other bodies concerned with the preparation of the Stockholm Conference on the Environment.

In his delegation's view, in addition to the general debate which would undoubtedly enable a complete list of sources of marine pollution to be drawn up, the Sub-Committee might formulate general recommendations which would help the Conference on the Environment and the IMCO Conference to establish international standards.

In order to facilitate its own work, the Sub-Committee needed to have better information, in a practical and concise form, on the present status of provisions and draft international agreements in the field of the prevention and control of marine pollution. He wondered whether it would be possible for the Secretariat to issue a publication containing the texts of the 1958 Geneva and the Brussels Conventions and of draft agreements discussed within the framework of IAEA, IMCO

and the Conference on the Environment and to submit it to the Sub-Committee the following year. In that connexion, he entirely supported the proposal made by the Argentine representative at the sixth meeting.

His delegation believed in the freedom of scientific research and thought that freedom in that field could easily be reconciled with the need for international co-operation. It had, therefore, willingly supported paragraph 10 of the Declaration of Principles. In its view, however, co-operation could be developed only in a climate of confidence and any system of control which would increase the amount of paperwork and bureaucracy and surround research activities with an atmosphere of suspicion would give rise to well-founded objections on the part of scientists.

Mr. MCKERNAN (United States of America) pointed out that the United States draft convention on the international seabed area^{3/} dealt with the preservation of the marine environment in several articles and proposed the establishment of an international seabed resource authority to prescribe rules and recommended practices for the protection of the environment from harmful seabed activities.

The report of the first session of the Intergovernmental Working Group on Marine Pollution (A/CONF.48/IWGP.1/5) held in London in June 1971 in preparation for the Stockholm Conference on the Environment indicated the intention of that Conference to deal comprehensively with the subject of the preservation of the marine environment. The Intergovernmental Maritime Consultative Organization had also been active in that area. In 1969, it had adopted two conventions designed to reduce the adverse consequences of oil spills by providing compensation for victims and by recognizing the right of coastal States to take preventive action beyond their national jurisdiction to mitigate the consequences of any grave and imminent threat of pollution damage.

IMCO was also drafting a convention to supplement the 1969 Liability Convention by establishing a fund, financed by oil-importing companies, that would greatly increase the recoveries available to victims of oil pollution. The fund would also provide some relief to shipowners from the financial burden of insurance required to meet the liability limits established by the 1969 Liability Convention. In order

^{3/} Official Records of the General Assembly, Twenty-fifth Session, Supplement No. 21 (A/8021), Annex V.

to prevent the occurrence of pollution, his country was urging that such relief should not be available to ships that did not comply with the safety and operating standards adopted by IMCO. His delegation considered that the IMCO Conference on Marine Pollution to be held in 1973 would have a bearing on the task of the Sub-Committee and that it would be important to keep in close touch with the IMCO authorities as the work of the respective Conferences progressed.

The FAO Technical Conference on Marine Pollution and its Effects on Living and Fishing, convened in Rome in December 1970, had made it possible to gather considerable scientific information and had emphasized the need for intensified action in the fields of scientific research, monitoring and improvement of administrative and legislative machinery to arrest the deterioration of the marine environment.

Members were aware that several Governments had taken or were in the process of taking steps at the national level to prevent pollution. The United States Government was also taking such steps and additional funds had been made available for the development of improved techniques to prevent and clean up oil spills and to provide more effective surveillance of pollution. The United States Congress was considering a number of anti-pollution laws, including one that would prohibit unregulated ocean dumping by vessels flying the United States flag or vessels of any other countries carrying material from the United States. In addition, President Nixon had requested the approval by the United States Senate of the two IMCO Conventions on oil pollution and approval of the pending amendments to the 1954 Convention for the Prevention of Pollution of the Sea by Oil. The United States had also presented a draft convention on the regulation of transportation for ocean dumping (A/CONF.48/IWGP.I/5, annex V). to the first session of the Intergovernmental Working Group of the Stockholm Conference on the Environment. It was his understanding that that draft convention had been well received and he suggested that copies of the Working Group's report, which included the draft convention, should be circulated to the members of the Sub-Committee.

The recent report of the Joint Group of Experts on the Scientific Aspects of Marine Pollution had identified three broad sources of ocean pollution: the land, marine activities and the air. The report had also concluded that there were three serious sources of pollution from the land: river discharges; discharge through coastal pipelines such as sewage and industrial waste; and agricultural runoff.

Control of pollution from the land, which was by far the main cause of ocean pollution, must come largely from national legislation and local action. An international convention incorporating guidelines and standards for such national pollution legislation would be universally beneficial in preserving the marine environment.

The second most important source of marine pollution came from various marine activities. Dumping by ships and barges caused serious inshore pollution and was the subject of the draft convention submitted by the United States to the Working Group of the Stockholm-Conference.

The third type of ocean pollution involved the transfer of pollutants to the ocean from the atmosphere and was a growing problem which the Sub-Committee would no doubt wish to consider.

The International Atomic Energy Agency had formulated standards for the disposal of radioactive wastes in the sea. It was clearly the competent agency in that field.

There was much to learn about pollution and polluting agents, and it would be many years before adequate scientific knowledge could be accumulated about the effects of pollution upon the marine environment. In some instances, therefore, it would be necessary to apply controls both nationally and internationally before adequate scientific proof of the dangers of particular pollutants was available. Some controls were immediately necessary and increased research into the effects of various kinds of pollution on the marine environment and living resources would undoubtedly reveal the need for others.

With regard to the first of the questions raised by the Chairman at the third meeting, his delegation believed that the Sub-Committee's first task was to assess the continuing efforts of all other intergovernmental groups dealing with ocean pollution. The Sub-Committee's second task would be to identify and deal with items not adequately dealt with by the Stockholm and IMCO Conferences.

As to the Chairman's second question, it was his delegation's view that the Sub-Committee's deliberations should result in adequate provisions for controlling pollution both within territorial waters and on the high seas and that internationally agreed standards were particularly desirable.

With regard to the Chairman's third question, he had already at the second meeting given his delegation's views on the types of pollution within the competence of the Sub-Committee.

Lastly, his delegation considered that operative paragraphs 2, 6 and 7 of the General Assembly resolution 2750 C (XXV) made clear the Assembly's desire that the Sub-Committee's competence should extend to research in the seas as well as on the sea-bed.

It was his delegation's view that the Sub-Committee must take into account the technical information being gathered by the various specialized agencies and also consider the work of other groups such as IMCO and the Conference on the Environment. In the light of those activities, the Sub-Committee should draft such articles as it deemed necessary to provide an adequate international legal framework for dealing effectively with the problem of marine pollution. He suggested that the Sub-Committee should be prepared at its next session, possibly in the spring of 1972, to consider the drafting of articles which would deal with pollution of the ocean as a result of exploration and exploitation activities on and under the sea-bed.

With regard to the second task given to the Sub-Committee - scientific research in the ocean - his delegation reiterated its view that such research should not be hampered and should be conducted with a view to open publication for the benefit of all. During recent decades, scientific inquiry into the ocean had greatly increased the understandings of biological and mineral resources of the ocean and the sea floor. The continued acquisition of fresh information would have an important bearing on man's future welfare and might well have a determining effect on the capacity of mankind to cope with the growing problems of pollution and to develop the technology required to make full use of both the living and non-living resources available in the oceans. Of course, scientific research, along with man's other activities at sea, must be executed with regard to the rights of others. It was for the Sub-Committee to develop useful guidelines for the conduct of ocean research which would ensure the protection of the rights of all.

Mr. PARDO (Malta) said that in the Sub-Committee's work on the prevention of the marine environment, it was very important to adhere strictly to the terms of reference formulated by the General Assembly. They indicated clearly that the Committee's task encompassed the preservation of the ocean space as a whole and that its deliberations should be focused on the preservation of the marine environment both within and outside national jurisdiction. His delegation could not agree that the Committee's task was limited to a consideration of the legal rules required for the prevention of marine pollution alone or that in view of the preparations for the

Stockholm Conference on the Environment and the IMCO Conference, the Committee should concentrate on pollution arising from the exploration and exploitation of the sea-bed. It was impossible to separate such pollution from that arising from other far more important sources.

According to General Assembly resolution 2581 (XXIV), operative paragraph 2, the main purpose of the 1972 Conference on the Environment was to serve as a practical means to encourage, and to provide guidelines for, action by Governments and international organizations designed to protect and improve the environment. The representative of IMCO had said at the fifth meeting that his organization regarded the Stockholm Conference as part of a concerted plan whereby States Members of the United Nations would meet to specify subjects for consideration by the appropriate conference or conferences that would follow. It was therefore not intended to draft binding rules concerning the preservation of the marine environment, which was the task of the Committee.

It would be impossible to await the results of the IMCO Conference, first, because it would not be convened before 1973 and secondly, because it would deal only with the control of pollution of the sea by ships and other equipment operating in the marine environment. Moreover, the constitution of IMCO made no reference to science or the use or misuse of the environment, whether land, sea or air. In recent years, however, IMCO, without the endorsement of the General Assembly, had markedly changed the scope of its work. It was no longer content to deal with the useful but limited technical matters for which it had been created, but now regarded itself as the maritime specialized agency of the United Nations, with very special functions with regard to protection of the environment, including even the atmosphere. That development filled a vacuum in the present United Nations structure and would be of unqualified benefit to all countries, were it not that other United Nations agencies also aspired to play a major role in the control of marine pollution. That situation entailed complicated co-ordinating arrangements, upon which he had commented in the ECOSOC Committee for Programme and Co-ordination and the Economic and Social Council. IMCO was also largely controlled by the major maritime nations, which, despite their recent concern for the prevention of pollution of the sea, retained an even greater concern for navigation. It therefore appeared desirable for the Committee to proceed with its work, taking due account of the useful technical activities of IMCO.

There was also no justification for awaiting the results of IAEA's activities on radio-active wastes, which had been continuing for some time without any substantial results.

In recent years, a number of measures had been taken by States to abate pollution and some regional and general multilateral conventions had been adopted for the control of certain types of pollution. Too many organizations both inside and outside the United Nations system were eager to provide forums for the negotiation of technical conventions on different aspects of marine pollution. The Committee's role, however, was broader. Taking as a starting point articles 24 and 25 of the 1958 Geneva Convention on the High Seas,^{4/} his delegation believed the Committee's primary obligation to be the precise formulation of a small number of broad legal principles to be included either in a general convention on ocean space or in whatever international instrument eventually emerged from the 1973 Conference on the Law of the Sea, which could provide the legal basis for all future measures of international co-operation for the preservation of the marine environment and for more detailed technical conventions.

The marine environment was threatened not merely by pollution but by imprudent use of advanced technology and by new uses of the sea not necessarily causing pollution. Man's technological capability to drastically change the natural state of the marine environment far from the site of his intervention was potentially the gravest threat to the marine environment at the present time and was totally unrecognized in international law. It was now possible, and from a national standpoint might be desirable to divert major rivers from flowing into the sea or to block or divert ocean currents. Such a use of technology was perfectly legitimate under present international law, but could have disastrous consequences for other countries. The threat was serious enough to warrant examination of a new principle of international law, which might be formulated thus:

"No State may use its technological capability in a manner that may cause significant and extensive change in the natural state of the marine environment without obtaining the consent of the international community.

"Non-compliance with this obligation shall make the offending party legally responsible when substantial injury is caused to the interests of other States or to those of the international community".

^{4/} United Nations, Treaty Series, vol. 450, p.82.

The Sub-Committee should in due course consider the possibility of adopting a legal provision on that question for incorporation in any treaty adopted by the 1973 Conference of the Laws of the Sea.

Unique species of flora, fauna and marine life in remote islands and atolls were threatened not by pollution but by lack of protection from the access of vandals and collectors. The news that Aldabra was to be administered by a United Kingdom scientific foundation was welcome, but not enough. Hundreds of coral islands and reefs throughout the world must be preserved as a common heritage for future generations. Several States had established marine parks, but the meagre national financial resources allocated to such ventures made effective preservation of the flora and fauna of remote islands and reefs under their control impossible. If other countries followed the United States in placing such areas at the disposal of the future international institutions for the sea-bed, an international network of marine reserves could be built up which would be of great scientific interest for future generations. His delegation therefore suggested that the Sub-Committee should examine the possibility of drafting treaty articles enabling the international machinery to accept free donations from States of areas of particular scientific interest.

If the definition of pollution in document E/5003 was accepted, it was obvious that marine pollution was not only a global problem but a complex phenomenon with inter-related economic, technological, political and legal aspects. Since it derived not only from activities in the seas or on the sea-bed but also from activities on land and in the air, it would obviously be ludicrous to confine consideration of the problem to pollution due exclusively to the exploration and exploitation of the resources of the sea-bed. It was also evident that articles 24 and 25 of the 1958 Convention on the High Seas provided an entirely inadequate framework for international co-operation with regard to the effective control of such pollution. His delegation urged their replacement by a general rule which could be formulated in the following terms:

- "1. Every State shall take effective measures to prevent pollution of the marine environment caused by human activities of whatever nature in its land territory, internal waters, and in the airspace above.
2. Every State has the obligation to take all reasonable measures of regulation and control to prevent its nationals and vessels flying its flag from creating in the marine environment pollution which causes

substantial injury to the interests of other States and to those of the international community. Non-compliance with this obligation shall make the offending party legally responsible.

3. Every State shall co-operate with the competent international organizations and institutions in the adoption and enforcement of international standards and regulations for the prevention of pollution of the marine environment."

The adoption of those general rules for incorporation in any future treaty might create an adequate framework for the elaboration of more detailed conventions or of regional conventions dealing with the control of various causes of pollution.

The task of formulating the various rules he had suggested should be started as soon as possible.

Since the Sub-Committee's terms of reference concerned the preservation of the marine environment, it might wish to express its concern about the consequences for the marine environment of the Pacific of the recent series of nuclear weapon tests at Mururoa. It would be recalled that in 1970 the Committee had protested at the proposed dumping of certain harmful substances in the Atlantic. He understood that at Mururoa the flora and fauna had been virtually destroyed and that the effects of the repeated series of tests were being felt as far away as Tahiti. He believed that certain countries bordering on the Pacific had already expressed their concern in that respect. His delegation was ready to joint with others in drafting a balanced expression of views on that subject, which it thought would add credibility to the Sub-Committee's work.

Mr. ONKELINX (Belgium) said that the discussion in the Sub-Committee had produced general agreement that new international standards were indispensable if the dangers of pollution were to be prevented and scientific research on the sea-bed was to be organized on a world-wide scale. It had become evident that the choices before the Committee, and later the Conference, in those respects would depend both on work being done in the other two Sub-Committees and on international action taken by other bodies. That should not, however, prevent the Sub-Committee from continuing to discuss the subjects.

As regards the four questions put by the Chairman at the beginning of the session (A/AC.138/SC.III/SR.3), it might be premature to give a definite reply to the first question, which would depend on the conclusions of the other two Sub-Committees. If the prevention of pollution was to be the responsibility of Governments, it might be desirable to state those responsibilities in amendments

to certain articles of the 1958 Conventions and in the future convention on the sea-bed. If, on the other hand, it was considered necessary to establish an international organization responsible for defining and implementing the policy, a separate convention should be drafted. A separate convention on scientific research did not, however, appear necessary.

With regard to the second question, he agreed with other speakers, in particular the Canadian representative, that it would be impossible to legislate without taking into account all sources of pollution, land pollution being at present far from the least important. That attitude should in no way be interpreted as questioning the principles of sovereignty over territorial waters. International regulations appeared necessary, however. His delegation inclined toward the establishment of an international office, the precise terms of reference of which would be established during the discussion and which would be responsible for formulating the over-all policy, leaving regional bodies to implement and control it. With regard to territorial seas, those regional bodies could make recommendations to the coastal States or even give them instructions. The adoption of individual national policies could lead to international disorder and ineffectiveness.

In reply to the third question, his delegation considered that the Sub-Committee should study pollution in general, in the light of the over-all approach he had already advocated, but respecting the fields of action of the different international organizations. Since pollution due to the exploitation of the sea-bed had not been studied at the international level as thoroughly as pollution from other sources, the Sub-Committee might recommend that it should be given priority at the Committee's next session.

In reply to the fourth question, his delegation considered that the Sub-Committee's work should be restricted to scientific research on the sea-bed. Freedom of research on the superjacent waters was implicit in the 1958 United Nations Conventions, although it would be impossible to avoid some overlapping. Scientific research in the territorial seas and on the continental shelf had been studied in 1968 by a legal working group of the Intergovernmental Oceanographic Commission.

Particularly with regard to the continental shelf, the Sub-Committee should take into account the work of that group when reviewing some of the principles set forth in the 1958 Conventions.

Mr. ZAFERA (Madagascar) said that, before answering the questions put by the Chairman at the third meeting of the Sub-Committee, he wished to give his delegation's point of view on the two subjects which the Sub-Committee had been asked to consider. The first was marine pollution. His country's position was determined not only by its particular interests but also by those of the whole international community. Madagascar, with its 5,000-kilometre coastline, practically without tides, subject to trade winds for half the year and to tropical depressions during the other half and with an almost constant east-west current, was particularly vulnerable to the effects of pollution in the Indian Ocean. That possibility had been increased since large tankers had been forced to pass off its coasts by the closure of the Suez Canal. It therefore considered that the most urgent action to be taken was to draw up a treaty specifically concerned with oil pollution, with the possibility for States to extend it to other pollutants. The second step was the establishment of an international compensation fund, the principle of which had been adopted in Brussels in 1969, to provide compensation for damage due to marine pollution. Studies on the effective control of accidental pollution should be intensified and attention drawn to the advantages for countries lacking adequate equipment of pooling their resources and co-ordinating their pollution prevention and control activities, perhaps on a regional basis.

Pollution resulting from exploitation of the sea-bed was a recent and complicated phenomenon just as dangerous as pollution from ships. Pollution due to the exploitation of under-sea deposits of hydrocarbons or the extraction of minerals from the marine subsoil could take the form of radio-active contamination, mass release of solid or liquid wastes and disturbance of the living resources of the ocean floor by the establishment of under-sea industries. For precise definition of the factors involved, accurate scientific data would be needed.

In view of the risk of destruction of the marine and submarine wealth in the seas surrounding Madagascar and the dangers of pollution of its coasts, his delegation urgently called for: first, the establishment of universally accepted regulations on the definition of pollution, the degree of pollution and the minimum permissible disturbance, on the basis of the threshold of disturbance or sensitivity which varied with ecology of the regions or the nature of the pollutants; secondly, the establishment of international safety standards for exploration and exploitation operations on the sea-bed; thirdly, the necessary co-ordination of efforts and studies in order to avoid duplication of the work among the different specialized bodies.

His delegation supported the delegations that had stressed the urgency of preparing a universally accepted, precise international convention on the protection of the marine environment, the prevention and control of marine pollution of all types and the adoption of effective sanctions for pollution offences.

The second subject to be considered by the Sub-Committee was the peaceful uses of the sea-bed and scientific research. The question of peaceful uses was of particular importance in view of progress in the nuclear field and in oceanography and oceanology, which had drawn attention to the considerable possibilities of using the ocean floor for military purposes, which could fundamentally change present strategy. The ocean covered about 71 per cent of the earth's surface and contained the last reserves of natural resources. It was to be feared that the increasing interest shown by Governments in the ocean floor and its subsoil was not only economic and scientific but also military. The use of the ocean floor for military purposes would inevitably lead to an arms race and the stocking and deployment of nuclear weapons on the sea-bed would be an additional danger for the whole marine environment.

Because of its vulnerable position as an island and in order to preserve its position as a peace-loving country and to guarantee its security, Madagascar had always adopted a very clear policy. It supported the complete prohibition of any military activity in the whole sea-bed area outside national jurisdiction and the unequivocal statement in the provisions for the establishment of the international régime for the sea-bed of the principle of total demilitarization of that zone, on the understanding that demilitarization of the territorial sea could only be adopted within the framework of universal, controlled disarmament.

With regard to scientific research, Madagascar supported the principle of freedom of basic scientific research on the high seas and on the ocean floor beyond the limits of national jurisdiction.

Like several other States, it emphasized the need to publish the research programmes and evaluate their results and to enable the developing countries to participate in such research through the training of nationals of those countries and their effective participation in it. It must be understood that such scientific research would give no rights of priority in subsequent exploration and exploitation.

In reply to the questions put by the Chairman, his delegation considered it desirable; first, that a separate convention should be devoted to the marine environment and scientific research, because it would be more practical for States

to accede to a single convention; secondly, that texts should be prepared which were applicable to the whole surface of the seas, including territorial seas, because pollution knew no boundaries; thirdly, that the Sub-Committee should study pollution in general in collaboration with other bodies, and prepare general guidelines, leaving specialized bodies to study technical measures in detail; fourthly, that it should consider scientific research in relation both to the sea-bed and to the superjacent waters, in view of their interdependence.

Mr. PINTO (Ceylon) said that, in his delegation's opinion, the subject of scientific research that had been assigned to the Sub-Committee was of major importance. It was a subject of prime relevance for every topic that would be discussed in the other two Sub-Committees and by the Conference of the Law of the Sea. It was a recurring theme which the developing countries would do well to study and explore, for it was an essential aspect of the long-term solution to some of the major problems that had thus far prevented full exploitation by the developing countries of the resources of the marine environment. As long as they continued to have to purchase knowledge and services in order to exploit the marine environment, the developing countries would have to grant the technologically advanced countries undisputed mastery over marine resources, regardless of any legal or regulatory devices adopted for the purpose of affording the developing countries the opportunity to expand ocean-oriented industries.

For his delegation, the subject of scientific research was of considerably wider scope than its title might at first sight imply. A more suitable title might have been "scientific research and transfer of technology". It was not only the acquisition of new knowledge and the development of new techniques that were important, but also the widest dissemination of that knowledge and technology, and full international co-operation in making a reality of the transfer and application of new technology in essential fields.

His delegation was of the opinion that satisfactory machinery should be devised to ensure the dissemination of marine scientific knowledge and the transfer of marine technology to the developing countries in an appropriate manner. It should not be forgotten that the results of the most modern marine research or skill in handling the most recently developed and sophisticated fishing equipment were not always suitable to the needs of the developing countries. An intermediate level of technology, correspondingly less expensive and perhaps more readily assimilable, might well be what was required. Transfer of technology should not merely mean new markets for the most recent gadget developed by some large industrial firm.

In that connexion, he noted that in a recent ECOSOC document entitled "Science and Technology in Relation to Industrial Development" (E/4967) it was stated that "The research programmes of developing countries are to be oriented towards the development of technologies that are in line with the circumstances and requirements of individual countries and regions, and developed countries are urged, in relation to their aid and investment policies, to assist developing countries in identifying technologies which are appropriate for their circumstances, and in avoiding the utilization of scarce resources for inappropriate technologies."

In addition, a recent report of ECOSOC's Advisory Committee on the Application of Science and Technology to Development (E/4970) had drawn attention to the widening of what might be called the "technological gap" between the developed and the developing countries, which paralleled the gap between their living standards. With a view to reducing that technological gap, it had been agreed, in another report, to mount a world-wide concerted attack on certain especially important problems. The transfer of technology had also figured prominently in the International Development Strategy for the Second Development Decade, General Assembly resolution 2626 (XXV). However, the developing countries had yet to feel much impact in that area. The main result had been a proliferation of bodies dealing with the subject within the United Nations.

Something better was to be hoped for with regard to the promotion of oceanographic research, the dissemination of its results and the transfer of all kinds of technology relating to the oceans, from coastal fishing to deep sea-bed drilling. There was, however, good reason to hesitate in selecting machinery for the achievement of those aims. Should the Conference on the Law of the Sea set up a special institution to deal with ocean research and technology? Should the proposed international sea-bed authority be given responsibilities in that field beyond those connected with its primary objective, namely, the sea-bed beyond national jurisdiction? Should research and technology be assigned to a new integrated group of institutions, as suggested by the representative of Malta? Or should appropriate branches of technology be entrusted to specialized agencies already in existence, such as FAO, IMCO, UNESCO's IOC, and WMO, or, at a different level, to ECOSOC and its Advisory Committee on the Application of Science and Technology to Development and to UNCTAD and its Intergovernmental Group on Transfer of Technology? In considering those questions, it was necessary to bear in mind the extremely

valuable contributions made in that field by organs of the specialized agencies such as the FAO Committee on Fisheries and UNESCO's IOC.

Whether the existing specialized agencies were utilized or new institutional arrangements were created to work in collaboration with them in areas related to ocean science and technology, he believed the Conference on the Law of the Sea should elaborate measures for international co-operation on a bilateral, regional or multilateral basis in all branches of ocean scientific research by promoting collaboration in scientific research by personnel of different countries, and timely and effective publication of research programmes and their results through international channels; co-operation in measures to strengthen the research capabilities of developing countries through training of personnel and participation of such personnel in the research programmes of the industrialized developed countries; and the transfer of marine technology of all kinds from the developed to the developing countries.

With regard to the idea of freedom of scientific research, he said that, if the phrase was intended to mean that a State or its agencies or nationals could go anywhere in the marine environment and begin scientific research operations there, free from any control or regulation, he did not think that such an idea would be easily accepted by the Sub-Committee. If such research was carried out within the national jurisdiction of a coastal State, it should be subject to such reasonable conditions as the coastal State saw fit to impose, regarding, for example, its prior consent, the right of participation, or the right to be informed of the results of the research, the right to terminate or interrupt the research for good cause, and the right to secure compliance with its own laws and regulations. Any new institution established in that field by the Conference on the Law of the Sea might be given the role of an intermediary in making arrangements of that kind between coastal States and States proposing to carry out research activities. Coastal States would be under the corresponding obligation not to subject the research activities to needless interference or disruption.

Scientific research on the high seas would be free in the sense that the scope of the research programme would remain within the discretion of the State concerned, provided that it had no warlike, destructive or dangerous purpose, and that such activities would not be subject to unjustified interference by any State, whether coastal or not. On the other hand, the interests of the international community

would have to be protected through the application of certain basic rules, such as notification, and it would be necessary to consider recognition by a coastal State of certain rights that would enable it to protect its health, safety or security in an area of the high seas adjacent to its territorial sea.

Some delegations had made a distinction between scientific research and industrial research. It had been argued that, while the former should be free, the latter might be placed under some kind of control. However, it would be difficult to distinguish between scientific research in the sense of pure scientific investigation, and research directed towards some immediate industrial or commercial objective. His delegation had not been able to think of any satisfactory method of assessing whether a particular research activity should be placed in one category or the other. It had therefore concluded that, although such a distinction might exist, the absence of objective criteria on the basis of which to make that distinction made it necessary to apply some form of control uniformly, at least to the extent that research of all types taking place outside the national jurisdiction of any State should, in the first instance, be notified to an international authority in such detail as that authority might require. On the basis of such information, the authority might either agree or disagree with the notifying State about the category to which the research belonged.

At the sixth meeting of the Sub-Committee, the representative of the United Kingdom had referred to the views of the delegation of Ceylon regarding the difficulties involved in distinguishing scientific research from what the representative of the United Kingdom suggested might be called prospecting. The delegation of Ceylon agreed with the need to burden the scientist as little as possible with matters of administrative detail, but it thought it would be reasonable to apply some control in respect of scientific research on the high seas, if only so that the international community could be satisfied that the operations of a particular ship were in fact what they seemed to be, and that they did not present a threat to any particular interest of the international community. The representative of the United Kingdom had suggested that there was a clear distinction in motive between scientific research and "prospecting", and the delegation of Ceylon was in complete agreement with that statement. However, the difficulty was precisely to ascertain the motive. Perhaps it should be considered that a notification of scientific research in a particular area, when accompanied by an outline of the research programme and a commitment to publish the results within a reasonable time, could be accepted as proof of motive.

Technological progress, industrialization, rapid economic growth, and the achievement of high standards of living that virtually demanded the manufacture and ultimate destruction of a vast range of products had brought some parts of the world to the threshold of a problem of the first magnitude, namely, the pollution of the marine environment and the breakdown of its ecological systems.

As the countries most likely to be affected were those which also wielded substantial political and economic power, the world had been ushered into an era of environmental awareness, and every means of communication was now being used to warn of the imminent catastrophe of environmental pollution. It was not the intention of his delegation to imply that environmental pollution, and pollution of the world's oceans in particular, was anything but a very serious problem, even though it probably affected developing countries in Asia somewhat less than countries in other areas. However, his delegation wished to stress that the deterioration of the marine environment, through the discharge of noxious substances, was a "social cost". The aim of the Sub-Committee should be to make that cost more explicit, and to ensure that it would be equitably apportioned among those who had been principally responsible for the deterioration and who had benefited correspondingly from the use of the ocean as the dumping ground for every type of effluent.

The Sub-Committee's first task would be to define marine pollution. Then it would need to identify the sources of pollution. A third step would be to classify pollutants according to their physical and chemical characteristics. In his comprehensive report on the prevention and control of marine pollution (E/5003), the Secretary-General had explored those problems in detail, discussed what constituted pollution and dealt in turn with five main sources of pollution and some eight main classes of pollutants. However, much work remained to be done, particularly with regard to the determination of the point at which the discharge of a particular effluent amounted to pollution. A fourth step in the work of the Sub-Committee might be the consideration of methods of monitoring levels of pollution on a national and world-wide basis. Perhaps at a later stage, consideration could be given to a more comprehensive system of surveillance as a complement to some form of concerted international or regional emergency action. It would naturally be necessary to consider the institutional arrangements required to co-ordinate the collection and dissemination of information on pollution and, when appropriate, emergency action. The Sub-Committee might well wish to consider investing the proposed international sea-bed authority with certain functions in that field.

The task of the Sub-Committee would be considerably facilitated by the work that would be done at the 1972 Conference on the Environment. If that Conference succeeded in adopting a set of principles relating to marine pollution comparable to those set out in General Assembly resolution 2749 (XXV), they would provide a solid basis for the work of the Sub-Committee in 1973.

Perhaps as a fifth step, it would be necessary to consider the type of framework that would be politically feasible at the present time. A decision had to be made as to whether there should be a system of uniform or near-uniform pollution rules based on internationally adopted standards, whether there should be one or more international instruments which would provide for regulation on a regional basis, or whether the aim should be the international adoption of certain recommended rules and practices which might lead to uniform national legislation.

In that connexion, it seemed to his delegation that the type of action required for effective pollution control would differ from region to region and from country to country, as would the degree to which there would be a need and a will to apply prescribed measures. That was inevitable, since some areas, and in particular the highly industrialized ones, were more polluted than others. Any global measures would need to be sufficiently flexible in order to take account of those differences. In addition, any approach that was taken would have to consider the mode of enforcement of the measures that had been adopted.

The matter of enforcement raised the question of the rights and duties of coastal States in relation to damage or threat of damage arising from pollution. Ceylon would support the position that the coastal State in the region of an activity causing or likely to cause damage through pollution had the right to be consulted and, in certain circumstances, to take preventive measures. In that connexion, the provisions on consultation with coastal States contained in paragraphs 12 and 13 (b) of the Declaration of Principles (A/RES/2749 (XXV)) reaffirmed the right of coastal States with respect to measures to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat thereof or from other hazardous occurrences caused by any activities in the international area of the sea-bed. Although his delegation would expect that those rights of coastal States would be accommodated in the international régime being worked out by Sub-Committee I, it was of the opinion that the coastal State had identical rights with respect to measures to prevent, mitigate or eliminate grave and imminent danger from activities in marine areas other than the sea-bed.

and from pollution resulting from those activities. In some cases, particularly the case of oil pollution, those rights might be regulated through international agreements, but that those rights existed did not seem open to question.

It would also be necessary to consider the principles applicable to the determination of liability in the case of pollution damage. It was necessary to determine whether an offender State should be responsible directly for damage, whether such responsibility should be "absolute" or "strict" or whether it should be dependent on some notion of fault, and whether there should be obligatory multilateral insurance or compensation arrangements in view of the potentially extensive and perhaps irreparable nature of the damage that might result.

It would also be necessary to consider the matter of settlement of disputes relating to pollution of the marine environment, and to damage sustained by States as a result of such pollution. Although it was difficult to distinguish between the two types of situation and to foresee whether someone might bring a suit for damage to the marine environment from which no State had suffered immediately, it might be useful to keep the two concepts separate from the very beginning. It was also necessary to decide whether there should be a specialized tribunal for the settlement of such disputes and whether it should have compulsory jurisdiction.

Developing countries such as Ceylon would be reluctant to become overinvolved in pollution prevention and control measures that would mean still further demands on their infant industries. Their position had been clearly stated in a GATT study entitled "Industrial Pollution Control and International Trade",^{5/} published in July 1971. It was to be expected that the developed countries whose industries had for decades added steadily, and with what, in retrospect, might appear to be less than adequate forethought, to the level of pollution in the marine environment, would take a greater initiative and bear a far greater share of future measures to control marine and other types of pollution. On page 83 of his comprehensive report on the prevention and control of marine pollution (E/5003), the Secretary-General rightly emphasized that "The challenge to industrial countries - which in building up their industrial wealth have added most to the problem - is to ensure that the desire to stem the tide of pollution does not become an unwitting instrument to slow down the growth of nations still struggling to attain a similar level of development".

^{5/} Sales No.: GATT/1971-1.

Ceylon would be glad to participate in future measures, whether world-wide or regional, to reduce and eliminate the menace of pollution of the seas and the marine environment as a whole. In so doing, Ceylon would look to the co-operation of those who should bear the greater share of the "social cost" involved, and seek a distribution of the burdens of that endeavour in such a manner as not to impair needlessly the efforts of the developing countries to achieve a better standard of living for their peoples.

Mr. de SOTO (Peru) said that his delegation had listened with great interest to the observations of the representative of Malta concerning nuclear weapon testing on the Mururoa Atoll in the Pacific Ocean. The Peruvian Government had previously protested against those explosions and the Peruvian delegation fully supported the proposal by the representative of Malta that the Sub-Committee should discuss the subject.

Mr. MOTT (Australia) said that the Australian Government had repeatedly protested against the testing of nuclear devices in the atmosphere in disregard of world public opinion. The Australian delegation therefore regretted the current series of tests being made in the Pacific region. It appreciated the initiative of the representative of Malta in that regard, which deserved further discussion by the Sub-Committee.

Mr. BEEBY (New Zealand) said that his Government had consistently opposed the testing of nuclear weapons in the atmosphere. It therefore welcomed the suggestion made by the representative of Malta that the Sub-Committee should express its concern about the recent tests in the Pacific area.

Mr. OKAWA (Japan) said that his delegation shared the concern expressed by the representative of Malta with regard to the testing of nuclear weapons in the Pacific Ocean and considered that the Sub-Committee should draft a balanced expression of concern at the consequences of such testing on the marine environment. He wondered whether the representative of Malta might be willing to suggest a draft text.

Mr. DEJAMMET (France), speaking in exercise of his right of reply, said that he was surprised at the concern expressed by delegations about tests that had taken place on French territory. On the previous occasions when such concern had been expressed, in 1956 and 1960, there had been a direct relationship between nuclear explosions and the sea, for the nuclear tests had taken place under water or on the ocean surface. On the present occasion, however, the French experiments were

being carried out under different circumstances. The nuclear tests did not take place under water or on the ocean surface. They were being made in the atmosphere, at such high altitudes that the fire ball caused by the explosions did not come into contact with the water, and radioactive particles were carried away by the wind. Those tests were therefore not dangerous to health or safety in the Pacific area.

If delegations were going to make any proposals in that connexion, it would be necessary to study the whole field of radiation, and in particular the reports of the Scientific Committee on the Effects of Atomic Radiation. Those reports showed that, since 1956, the effects of nuclear tests had not been dangerous and that the amount of radiation in the atmosphere had decreased.

Mr. YANGO (Philippines) said that his Government had consistently protested against the nuclear testing being conducted by France in the Pacific Ocean. His delegation therefore strongly supported the suggestion by the representative of Malta.

Mr. PARDO (Malta) said that his delegation would circulate a rough draft of a text for an expression of concern with regard to the recent nuclear weapon tests in the Pacific Ocean.

Referring to the observations of the representative of France, he pointed out that it was well known that marine pollution could be caused by the activities of man on land, on the sea or in the air, and it was undeniable that the atmospheric nuclear weapon testing at Mururoa had had very serious localized effects on the flora and fauna of the atoll. His delegation was not alone in believing that repeated nuclear weapon testing was of a nature to threaten a very large area of the Pacific Ocean. For example, Professor Rostand, the well-known French scientist, had pointed out the possible dangerous consequences of such testing over very wide areas.

Mr. DEJAMMET (France) wished to stress that since the fire ball caused by the explosion did not come into contact with the water, and since radioactive particles were carried off by the wind, the local flora and fauna were not affected in any way by such tests, as had been confirmed by the oceanographic research ships patrolling the area. In addition, he did not think that Professor Rostand possessed any information that was not already known by the Scientific Committee on the Effects of Atomic Radiation.

The meeting rose at 6.10 p.m.

SUMMARY RECORD OF THE EIGHTH MEETING

held on Wednesday, 18 August 1971, at 3.30 p.m.

Chairman: Mr. VAN DER ESSEN Belgium

GENERAL DEBATE - MARINE POLLUTION (continued), SCIENTIFIC RESEARCH

Mr. MOTT (Australia) said that, as his delegation had spoken on the subject of marine pollution at the fourth meeting, he would confine his present statement to scientific research.

In his view, it would be premature to limit the scope of consideration of the subject. A difficult threshold question concerned the possibility of distinguishing between pure research and research with a commercial object.

Paragraph 10 of the Declaration of Principles Governing the Sea-Bed and the Ocean Floor contained in General Assembly resolution 2749 (XXV) laid down certain guidelines for the Sub-Committee's work. It provided that States should promote international co-operation in scientific research exclusively for peaceful purposes: (a) by participation in international programmes and by encouraging co-operation in scientific research by personnel of different countries; (b) through effective publication of research programmes and dissemination of the results of research through international channels; (c) by co-operation in measures to strengthen research capabilities of developing countries, including the participation of their nationals in research programmes. His delegation attached importance to that principle, because the Sub-Committee's main objective should be to facilitate scientific research both in the sea and on the sea-bed, which had a bearing on the preservation of the marine environment.

It was also important to keep in mind the principles set out in resolution VI-13 of the Intergovernmental Oceanographic Commission (IOC), which laid down procedures for informing coastal States of research programmes of concern to them, enabling those States to take part in such programmes and ensuring the publication of their results. Under the general provisions of the IOC resolution, the coastal State retained the right to give or withhold its consent in conformity, as regards the continental shelf beyond the territorial sea, with the provisions of article 5, paragraph 8, of the 1958 Convention on the Continental Shelf.^{1/} The rules set forth in that article were satisfactory.

^{1/} See United Nations, Treaty Series, vol. 499, p.311

Attention should be drawn to the responsibility of those engaging in deep-sea drilling and to the possible consequences of such operations. Principle number 10 of the Declaration of Principles should perhaps be strengthened on that point in considering its rendition in treaty language.

Deep drilling should be made subject to the provisions of paragraph 12 of the Declaration of Principles Governing the Sea-Bed and Ocean Floor, which provided that, in their activities in the area, States should pay due regard to the rights and legitimate interests of coastal States in the region of such activities, and that consultations should be maintained with the coastal States concerned with respect to activities relating to the exploration of the area and the exploitation of its resources with a view to avoiding infringement of such rights and interests.

Furthermore, article 6, paragraph 2, of the Convention on Fishing and Conservation of the Living Resources of the High Seas^{2/} provided that any coastal State was entitled to take part on an equal footing in any system of research and regulation for purposes of conservation of the living resources of the high seas adjacent to its territorial sea. In that connexion, his delegation submitted that the coastal State's special interest in scientific research was not confined to maintaining the productivity of the living resources of the high seas; it was desirable that coastal States should be able to participate in scientific research in high seas adjacent to their coasts. One possibility was that the coastal States' responsibilities might entail some form of control or supervision over research; another would be to provide that the coastal State had the right to be consulted about and to participate in research in the adjacent high seas areas.

Many delegations, including those of Ceylon and Indonesia had stressed the need for training specialized personnel in the developing countries. That was a matter which would merit detailed attention by the Sub-Committee. His own country would be glad to provide assistance under its existing training programmes.

Lastly, great care should be taken to ensure that any rules established in connexion with scientific research should be clear and precise and should not provide a basis or excuse for hindering the exercise of the basic right of freedom of navigation on the high seas.

His delegation might wish to make a further statement on any other matter which might be submitted to the Sub-Committee for attention.

^{2/} See United Nations, Treaty Series, vol. 559, p.285

Mr. GARCES (Colombia), after referring to the statement made by the Chairman at the Sub-Committee's second meeting, stressed the vital importance of the questions under consideration and the need for a united effort by all countries to combat the grave dangers they were all facing.

The Secretary-General's report to the Economic and Social Council (E/5003) should serve as a basis for the Sub-Committee's discussions, particularly chapter VII entitled "Conclusions and recommendations". The Sub-Committee should also give greater attention to the report of the Inter-Governmental Working Group on Marine Pollution (A/Conf.48/IWGMP.I/5) to which were annexed important observations by Latin American countries concerning the setting up of an international body; the same applied to the decisions that would certainly be taken by the 1972 Stockholm Conference on the Environment. His delegation welcomed the fact that, to judge by the statements of a number of countries, including Canada, Norway, Spain, Australia and Japan, a consensus seemed to be emerging on the need for an overall approach to the problem.

The representative of Trinidad and Tobago had already introduced at the eighteenth meeting of Sub-Committee I the working paper on the régime for the sea-bed and the ocean floor and the subsoil thereof beyond the limits of national jurisdiction, submitted by a number of Latin American countries (A/AC.138/49). After stating in article 1 that the sea-bed and ocean floor and the subsoil thereof beyond the limits of national jurisdiction, as well as its resources, were the common heritage of mankind, the sponsors specified in article 8 that coastal States should be entitled to adopt the necessary measures to prevent, mitigate or eliminate grave danger to their coasts or related interests that might result from pollution, the threat of pollution or from any other hazardous occurrences resulting from or caused by such activities. Chapter II was concerned with the establishment of an international authority, whose powers and duties were listed in article 14: inter alia, the authority was entrusted (f) with taking measures to prevent, mitigate or eliminate pollution or the threat of pollution as well as any other hazardous occurrences resulting from or caused by any activities in the area. Article 16(a) provided for the establishment of regional oceanographic institutions for training nationals of developing countries in all aspects of marine science and technology. Article 17 provided that authorization for scientific research should be granted to any entity offering, in the judgment of the Council, the necessary guarantees as to its technical competence and undertaking to assume responsibility for any damage that might be caused to the marine environment and to

comply with the regulations adopted in that regard by the authority; under article 18, the latter would at all times have access to all research data as well as to interim and final results of research.

Admittedly, some speakers, including the representative of the Soviet Union, had expressed the fear that the setting up of such an authority might act as a brake on research. That was indeed a risk which should be foreseen and avoided, a task which should not present major difficulties. His own delegation, however, still believed that such an authority would sooner or later be found to be essential.

Mr. KAZEMI (Iran) said he wished to begin by explaining his delegation's position on the questions raised by the Chairman concerning the Sub-Committee's terms of reference.

Firstly, his delegation considered that it would be better to think in terms of a separate convention on the protection of the marine environment and scientific research, since the four existing conventions^{3/} were of a strictly legal nature whereas the problem now calling for action - and urgent action - was of a technical character. Apart from the fact that ratification of the existing amended conventions would take a considerable time, it seemed highly desirable to have a separate instrument dealing exclusively with technical problems and amalgamating the provisions contained in several documents. In view of the universal nature of pollution, the relevant regulations should encompass all marine species and causes of pollution; that answered the second and third questions. Lastly, for the same reason, the study of scientific research should include both research on the sea-bed and research in the superjacent waters.

The question of the environment, and more particularly of its increasing pollution, had been the subject of extensive consideration both inside and outside the United Nations system for a number of years. It was to be hoped that the 1972 Stockholm Conference would justify the hopes placed in it and that the conference planned by IMCO for 1973 would result in rigorous measures to control contamination of the marine environment by sea-going vessels.

^{3/} Convention on the Territorial Sea and the Contiguous Zone; Convention on the High Seas; Convention on Fishing and Conservation of the Living Resources of the High Seas; and Convention on the Continental Shelf.

The Secretary-General's excellent report (E/5003) showed that the activities and experiments undertaken by the various bodies and organs concerned should meet three fundamental requirements: practical efficiency (implying strict co-ordination), complementarity of activities at the national, regional and international levels, and the need for an information campaign and the mobilization of international public opinion against the dangers of pollution of the seas.

The closest co-operation should be ensured between the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction, and the Stockholm Conference.

The international community's recognition of the threat which the contamination of the marine environment and the deterioration of the ecological and biological balance of the seas and oceans presented to the survival of the human race had both an encouraging and a disturbing aspect. The encouraging aspect was self-evident but the development was also disturbing in that it involved the realization that, because of his negligence and indifference, man had transformed the seas into reservoirs of impure water, if not of poisons. In the view of some experts, marine pollution had reached a critical stage and decisions had to be taken without delay to arrest the spread of such an unbelievable danger. As was aptly stated on the last page of annex 2 to the Secretary-General's report, a continued indiscriminate use of the world ocean as an international dumping ground for imperishable human refuse might have irreparable effects on the survival of species.

Mr. JOUDRO (Union of Soviet Socialist Republics) said that the Soviet Union considered that the prevention of environmental pollution was a crucial problem for all mankind. It was for that reason that, at both the national and the international level, decisions involving the application of investment norms and organizational measures were being taken with a view to preventing such pollution. Those measures were intended to bring about a great reduction in discharges into the sea, inland waters and the atmosphere of wastes capable of polluting or poisoning natural resources.

He reminded the Sub-Committee of the failure of the 1927 Washington Conference, which had prepared a draft convention on prevention of pollution of the sea by oil but which had laboured in vain, since no State had acceded to that convention. The committee of experts convened by the League of Nations in 1934 and 1935 had been similarly unsuccessful.

After the Second World War, the international community had been primarily concerned with a very widespread form of pollution, that caused by the discharge of fuel oil and other hydrocarbons into the sea. It had accordingly drawn up the 1954 London Convention^{4/} and the conventions for its application adopted at Brussels in 1969^{5/}, while IMCO had undertaken a wide range of activities for the protection of the marine environment against pollution by oil.

In spite of all those efforts, the discharge of diesel oil and other hydrocarbons into the sea was still a major threat to the living resources of the sea and even to the capacity of the world ocean to absorb and neutralize the noxious substances being dumped in the marine environment.

In addition to the discharge of oil and oil products into the marine environment, there was the threat of pollution caused by the exploration and exploitation of oil resources in the sub-soil of the sea. That danger was illustrated by the Santa Barbara disaster in February 1969, following an accident which had led to the formation of thick oil slicks on the sea surface and had threatened the very existence of many inhabitants of that area. There was no guarantee against a repetition of such disasters.

In his delegation's view, there was a regrettable discrepancy between measures to prevent pollution of the marine environment by ships and measures to prevent such pollution as a result of extraction of mineral resources from the sub-soil of the sea. International action was very deficient in the latter field.

A third danger arose from the fact that the sea had become a receptacle for sewage and industrial waste. Radioactivity constituted a fourth source of contamination of the marine environment. Attention should be drawn to the fact that article 25 of the 1958 Convention on the High Seas^{6/} imposed important obligations on States in that respect.

^{4/} United Nations, Treaty Series, vol. 327, p.4.

^{5/} IMCO Publication, Sales No. IMCO, 1970.3.

^{6/} United Nations, Treaty Series, vol. 450, p.82.

The United Nations had officially recognized that the international community had a duty to take effective and co-ordinated measures to control pollution of the environment in general and of the marine environment in particular. The General Assembly had adopted a whole series of important resolutions on pollution control, thus giving expression to the growing concern of Governments regarding that question.

The problem of marine pollution was already under examination by the special Inter-Governmental Working Group established by the Preparatory Committee of the United Nations Conference on the Environment which was to meet at Stockholm in 1972.

Marine pollution, viewed globally, was an extremely complex phenomenon resulting from a great variety of natural or social factors whose interaction could not be appreciated without extensive scientific study. In that connexion, the report of the Secretary-General on the prevention and control of marine pollution recognized "that the current lack of knowledge makes it impossible to formulate a comprehensive plan to combat marine pollution on a global scale or to recommend a comprehensive international legislative programme" (E/5003, para. 229). That situation pointed to the great importance of the special studies on pollution of the marine environment at present being carried out by a number of national scientific bodies and international institutions, in particular the Inter-Governmental Oceanographic Commission of UNESOC and the Joint Group of Experts on the Scientific Aspects of Marine Pollution.

In any case, all the studies which had been carried out by international organizations and specialized agencies showed the widespread character of the problem of marine pollution and the great difficulties encountered in the search for practical solutions. The Secretary-General himself had stressed in his report that pollution "is not a problem that can be solved either quickly or easily by some all-embracing action" (E/5003, para. 220). Thus, in studying the problems raised by marine pollution control, three important points must always be borne in mind: first, that the problem of pollution of the marine environment was a universal problem which called for the adoption of global measures because the masses of water which carried pollutants moved over huge distances and took no account of national frontiers. The second point was that the solution of the pollution problem called for action spread over several stages, which must be carefully co-ordinated and carried out at different levels of decision-making and implementation. The various decisions and activities should constitute a single

system of international and regional measures; that system should rest on a scientific basis and make use of the most effective methods of pollution control. It should also take into account the economic capacity both of States and the international community. The third point was that both the competent international organizations and the specialists concerned recognized that there was no immediate possibility of finding a universal and effective solution to the problem of controlling pollution of the world ocean.

For those reasons, he questioned the soundness of the proposals made by certain delegations that the Sub-Committee should formulate general principles and norms which would be applicable to all aspects of pollution of the marine environment and would serve as a basis for future "technical" work by the specialized agencies.

The Soviet delegation, for its part, was not convinced that such a method was realistic or effective and proposed another approach, which seemed to it to be more in keeping with the Committee's terms of reference, as contained not only in resolution 2780 (XXV) but in other resolutions of the General Assembly, in particular resolutions 2749 (XXV) and 2467 B (XXIII), an approach which related to the formulation of a régime for the exploitation of the sea-bed and the ocean floor and the subsoil thereof. The Sub-Committee should therefore concentrate its efforts on that specific and capital problem by endeavouring to devise legal norms and rules applicable to the prevention of pollution resulting from industrial exploration and exploitation of the sea-bed and ocean floor and the subsoil thereof. The problem of preventing pollution of the marine environment as a whole was a complex one which called for the study of many difficult technical issues.

He drew the attention of the members of the Sub-Committee to the provisional draft articles of a treaty on the use of the sea-bed for peaceful purposes (A/AC.138/43) submitted by the USSR and pointed out that the Soviet Union had included in that document a number of general provisions regarding prevention of pollution of the marine environment as a result of industrial exploration and exploitation of the sea-bed and ocean floor and the subsoil thereof, and regarding the adoption of rules and recommendations on those matters by the governing bodies of the future international machinery. That approach appeared to be shared by a number of delegations which had also included in their proposals provisions on the control of pollution resulting from industrial activities carried out on the sea-bed and the ocean floor. Such provisions were to be found in the proposals submitted, inter alia, by Poland (A/AC.138/44), a group of Latin American countries (A/AC.138/49), Tanzania (A/AC.138/33), and the United States of America (A/AC.138/SC.II/L.).

At all events, it was necessary to remember that, even if attention was confined to that particular aspect of pollution, i.e. pollution of the marine environment resulting from industrial activities carried out on the sea-bed and ocean floor and the subsoil thereof, the Sub-Committee would have to deal with many complex problems if it wished not merely to draw up a document of a purely declaratory character on the inadmissibility of pollution but to establish a practical system of sound principles and rules resting on scientific bases and capable of ensuring effective protection of the marine environment against pollution due to industrial activities on the sea-bed. Thus, although IMCO had a large number of specialists, technicians and jurists at its service, it had experienced serious difficulties on its attempt to prepare a draft convention on the legal aspects of pollution of the sea by oil in 1969.

What would be the various aspects of the Sub-Committee's work if it should decide to concentrate on drawing up legal principles relating to the control of pollution caused by industrial activities on the sea-bed and ocean floor and the subsoil thereof? In the first place, it would have to define the actual concept of pollution. That definition, which would have to be based on scientific criteria, would at the same time constitute a legal definition. Special preliminary studies would be needed for that purpose. Another important aspect of the problem concerned the legal definition of the causes of pollution. Pollution could result from force majeure, from deliberate acts, from acts of major or minor negligence or from a combination of subjective and objective factors. All those elements would have to be taken into consideration in the proposed principles and norms. It would also be necessary to devise rules governing the elimination of the consequences of pollution, once it had occurred. In the event of injury resulting from pollution, the injured parties would claim compensation. That raised the problem of financial liability which always gave rise to great difficulties. In particular, a decision would have to be taken on whether liability would be objective (or absolute) or whether it could arise only in the event of the respondent being totally or partly at fault. A decision would also have to be taken on whether liability was to be imputed to the State which had obtained a concession from the international machinery (a proposition which seemed doubtful) or to the holder (individual or body corporate) of the right to explore or exploit the resources of the sea.

The solution was no simpler with regard to the coverage of risks by means of insurance or of a cash deposit or guarantee or even by the delivery of a certificate of solvency issued by the State concerned or by its authorized organs. Apart from problems of civil law, difficult questions of administrative and criminal liability arose. Lastly, there were problems of jurisdiction and procedure as well as that of the choice of the applicable national law in the matter of property rights.

The list he had given was only a very general list of the legal questions which would have to be studied in order to solve one particular aspect of the pollution problem, namely the prevention of pollution caused by exploration and exploitation of the resources of the sea-bed and subsoil thereof. It was not an arbitrary list, but was based on the experience gained in the drafting of the 1969 Brussels Conventions on the problems of public and private law connected with pollution by hydrocarbons transported by sea and in the preparation of the draft convention on the establishment of an international compensation fund. Far from being confined to the questions he had just enumerated, those instruments contained a number of important provisions on other problems.

The Soviet Union delegation was in favour of a careful delimitation of the Sub-Committee's tasks with respect to pollution prevention, not because it was opposed to the wider approach advocated by other delegations but rather because it was convinced that the Sub-Committee should set itself realistic goals. The first step was to draw up a systematic and general plan of international measures that would be applied by a whole set of specialized bodies and international institutions in their respective fields of competence. The Soviet Union would co-operate actively with those organizations but would not refuse to co-operate effectively with other delegations within the framework of the Sub-Committee, if the latter should adopt a method of dealing with the problems of pollution control in the world ocean other than the one which he had just described and which his delegation considered to be the most effective.

Mr. FRANGOULIS (Greece) noted that the question of the preservation of the marine environment, which was one of the most important aspects of the Sub-Committee's work, was already being studied by a number of international organizations, including UNESCO, FAO and IMCO, which were doing admirable work within their respective spheres of competence. Those organizations had not, however, dealt with all aspects of marine pollution nor was sufficient information

yet available on how the marine environment reacted to pollution. The Sub-Committee, in view of its large membership and the nature of its mandate, was the body best suited to fill the existing gaps and, at the same time, to co-ordinate the activities of the above-mentioned organizations in order to avoid overlapping.

In that context, the Sub-Committee should draft articles of international public law relating to the preservation of the marine environment, with due regard for the international arrangements already worked out by the specialized agencies and for the work of the forthcoming Stockholm Conference on the Environment. The provisions of the convention which the Sub-Committee was responsible for preparing should be flexible enough to accommodate existing or future treaties dealing with specific issues. The question whether the Sub-Committee should add articles to the relevant 1958 Conventions or prepare a separate draft treaty was closely connected with the division of work between the Stockholm Conference and the Sub-Committee. If consideration of the overall problem of marine pollution was entrusted to the Sub-Committee, it should prepare a separate draft convention; if, on the contrary, that task was left to the Stockholm Conference, the Sub-Committee should merely propose articles to be inserted in the 1958 Conventions.

In view of the fact that pollution was not restricted to any particular area, the Sub-Committee should concern itself with the high seas as well as with the areas coming under national jurisdiction.

Similarly, it was not possible to make any clear distinction between scientific research conducted on the sea-bed, on the one hand, and in its superjacent waters, on the other. It would therefore be preferable for the Sub-Committee, given the general nature of its mandate, to consider scientific research in the high seas as a whole.

Furthermore, since the Sub-Committee was responsible for co-ordinating the activities of all international organizations dealing with marine pollution, due regard should be given to the conclusions reached in those bodies, particularly IMCO; otherwise, there was a danger of taking over-hasty decisions.

Mr. SELLI (Italy) laid stress on the progress made as a result of the scientific studies which served as a basis for the Sub-Committee's discussions. There had been an enormous increase in knowledge about the sea-bed and the ocean floor and the subsoil thereof; however, that knowledge was still not sufficiently

precise and present ideas about the mineral resources of the sea were still largely a matter of speculation. Much was known about the continental shelf in the North Sea, the Mediterranean, North and Central America and the Persian Gulf; much less was known about the continental shelf in Africa, South America and Asia. Knowledge of the resources of the sea-bed was also very fragmentary. The chief goal in the years to come was, therefore, to obtain a fuller knowledge of the sea-bed and the geology of its subsoil.

Freedom of scientific research was essential if progress was to be made in that field. The scope of scientific research should be considerable and large sums would be required to finance it. In addition, international co-operation, whether between intergovernmental or non-governmental bodies, would be essential. Such co-operation should take place at the four following levels: preparation of programmes, undertaking of expeditions, study of collected data and samples, and dissemination of data and results. Co-operation in the preparation of programmes and the dissemination of results could be assured by existing intergovernmental bodies, chiefly those within the United Nations system (UNESCO, FAO, IOC, etc.), but at the two other levels strong, free and friendly mutual assistance would be needed among all interested developed and developing countries.

In that connexion, it was a matter for regret that the 1958 Convention on the Continental Shelf^{7/} restricted the freedom of scientific research on the continental shelf; in fact, it was known that in many cases coastal States had refused foreign scientific institutions permission to carry out research on the continental shelf. If the limit of national jurisdiction or of the trusteeship area was increased to 200 miles, there was a danger that scientific research would be even more impeded. That could seriously endanger the hoped-for co-operation in the future.

To overcome those difficulties and to encourage co-operation, his delegation wished to make the following recommendations: firstly, scientific research must be free on the sea-bed and the ocean floor and in the superjacent waters; secondly, freedom of navigation and research must be assured to all oceanographic vessels outside territorial waters; thirdly, any scientific institution that intended to carry out scientific research must give prior notification of its intention and operative programme (period of time, objectives, location of stations, methods and instrumentation to be used, etc.); fourthly, if scientific research was carried out in the national or trusteeship area, the scientific institution would furnish the above-mentioned information directly to the coastal State; fifthly, in such a

^{7/} United Nations, Treaty Series, vol. 499, p.311.

case, representatives and scientists of the coastal State would be able to participate in the research and assure themselves of the scientific character of the aims of the cruise, and all the data obtained would be sent to the coastal State; sixthly, in the international sea-bed area, the scientific institution would transmit the above-mentioned information to the international authority that was to be set up; seventhly, part of the proceeds derived from the exploitation of the resources of the area beyond the limits of national jurisdiction must be allocated to scientific co-operation programmes.

Another solution would be to make some international authority responsible for obtaining the consent of its member States for research to be conducted off their coasts beyond their territorial waters. Initially, it could be an existing United Nations body, which would then be replaced by the international authority that was to be set up. Whichever formula was adopted - simple notification or allocation of responsibility to an international authority - a new international agreement would have to be concluded, since the 1958 Convention was no longer adequate in that regard.

Mr. NAJERA (Ecuador) said that the statements made by certain delegations and by the Secretary-General of the United Nations Conference on the Environment, the Secretary of the Inter-Governmental Oceanographic Commission and the representative of the Inter-Governmental Maritime Consultative Organization had revealed the importance of the tasks entrusted to the Sub-Committee III with regard to the prevention and control of marine pollution. The Sub-Committee was required, on the basis of technical studies by other United Nations bodies, to formulate new provisions of international law enabling all countries to prevent and control the dangers of pollution and to promote international co-operation in scientific research exclusively for peaceful purposes, in accordance with General Assembly resolution 2749 (XXV). It should take particular account of the preparatory work for the Conference on the Environment and its Working Group on Marine Pollution, which had met in London in June 1971, and of the Conference to be convened by IMCO in 1973. Account should also be taken of the results of the FAO Technical Conference on Marine Pollution and its Effects on Living Resources and Fishing, held in December 1970. Lastly, it should base itself on the reports by the Secretary-General in documents E/5003 and E/5017.

In the immediate future, the Sub-Committee's role should be to co-ordinate and centralize all the work on pollution; in the light of the results, decisions and suggestions of the Conference on the Environment and of the IMCO Conference, it could then draft the treaty articles requested in General Assembly resolution 2750 (XXV).

In its work, the Sub-Committee should also take into consideration the Declaration of Lima adopted by the Latin American States in August 1970 (document A/AC.138/28), and of the resolutions contained in that document on the sea-bed and the ocean floor beyond the limits of national jurisdiction, pollution, the prohibition of nuclear and other weapons on the sea-bed and the ocean floor and in the subsoil thereof, and on legal aspects of scientific oceanographic research.

Scientific research activities carried out in areas coming under national jurisdiction should be subject to the law of the State concerned and, in the interests of the developing countries, the results of such research should be published periodically. Activities undertaken beyond the limits of national jurisdiction should be subject to the provisions of the international régime.

Commenting on the questions raised by the Chairman regarding the true scope of the Sub-Committee's terms of reference, he said that in due course the Sub-Committee should draft one or more conventions on the marine environment and scientific research, in order to establish minimum norms that would make it possible to apply a global solution to the problem of pollution. Those norms should clearly establish principles of security and respect for the rights of coastal States, and it was desirable that they should apply to all pollutants.

DRAFT STATEMENT OF THE MALTESE DELEGATION ON ATMOSPHERIC NUCLEAR WEAPON TESTS
IN THE OCEAN ENVIRONMENT

Mr. PARDO (Malta) said that on 17 August 1971 he had proposed that the Sub-Committee should adopt a balanced statement of concern with regard to the environmental consequences of the current series of nuclear weapon tests in the Pacific region. His delegation, in consultation with others, had drafted such a text which he wished to submit to the Sub-Committee (A/AC.138/SC.III/L.4).

The French representative had firmly opposed the suggestion of the Maltese delegation, while giving an assurance that his Government had taken effective measures to prevent harmful consequences arising from the activities in question. Several delegations had nevertheless considered that it would be useful for the Sub-Committee to adopt a balanced statement on the subject and had asked his delegation to draft the text. It had done so not in order to censure or condemn but in order that the Sub-Committee could alert Governments and public opinion to the danger to the marine environment involved in the application of contemporary nuclear technology within or outside the limits of national jurisdiction. The adoption of such a statement would enhance the value of the Sub-Committee's work.

Mr. ZEGERS (Chile) supported the initiative taken by the Maltese delegation. His country had already made protests with regard to atmospheric nuclear weapon tests carried out by France. As a country of the Pacific, Chile was particularly concerned by explosions of that type. He nevertheless wished to emphasize the close links that existed between Chile and France.

Mr. BEEBY (New Zealand) said that his delegation was one of those that the Maltese delegation had consulted before submitting its draft statement. He hoped that the Sub-Committee would be able to adopt the draft, with possible improvements.

The French delegation had declared that the tests had no effect on the environment and did not therefore come within the Sub-Committee's terms of reference. He wished to point out, however, that according to published scientific results concerning the French tests, nuclear weapon tests resulted in an increase in radioactive material in fish. Moreover, whatever precautions were taken, the French representative could not deny that such tests entailed certain risks; otherwise it might well be asked why France was carrying them out in the Pacific. They also represented an unwelcome extension of the nuclear arms race. New Zealand, like other countries, hoped that those tests would come to an end.

During a meeting held that month at Wellington, the Governments of the Pacific islands in the vicinity of the test area (Western Samoa, Nanru, the Cook Island, Fiji, Australia and New Zealand) had adopted a final communiqué, the text of which had been drawn to the attention of France, deeply deploring the atmospheric tests being carried out in French Polynesia, despite the Treaty banning nuclear weapon tests and the protests to which such tests had given rise, and appealing to France to put an end to such tests.

Since the Sub-Committee had to consider the questions relating to protection of the marine environment and since that environment might be adversely affected by atmospheric nuclear weapon tests, the situation created by the French nuclear tests undoubtedly came within the Sub-Committee's terms of reference.

Mr. HARRY (Australia) said he also supported the action taken by the Maltese delegation. In his opinion, the Sub-Committee was entitled to express its concern regarding the French atmospheric tests, since the preservation of the marine environment was included in its terms of reference. It had been established that nuclear tests entailed certain risks, and despite the assurances offered by the French representative, there was no evidence that those risks had disappeared. In that connexion, an article had appeared on 17 August 1971 in the newspaper

"Le Monde", stating that, at the time of the Encelade explosion in the Mururoa zone on 12 June 1971, there had been a slight fall-out over the Tureia atoll during the night of 12/13 June as a result of the unforeseen conjunction of a contaminated air layer and rain. It should also be noted that, according to the Maltese delegation's suggested statement, the Sub-Committee's expression of concern would be addressed to all States which carried out atmospheric nuclear weapon tests.

He hoped that the French delegation would be able to accept the text. He wished to confirm the remarks made by the representative of New Zealand regarding the meeting of the Governments of the Pacific islands.

Mr. MENDOZA (Philippines) said that he, too, was in favour of the text proposed by the Maltese delegation. Despite the assurances given by France, no absolute guarantee could be given with regard to the protection of the environment and human beings. The tests had probably been held beyond the limits of national jurisdiction, an area which, analogously, under the terms of General Assembly resolution 2749 (XXV), had to be used exclusively for peaceful purposes in the interest of mankind. It was not certain that the French tests complied with those terms.

Mr. MYRSTEN (Sweden) supported the proposal of the Maltese representative, since, although his country was remote from the test area, it was concerned with the protection of the marine environment as a whole.

Mr. OKAWA (Japan) said he also supported the Maltese proposal. The last French test had been held on the date of the twenty-sixth anniversary of the nuclear bombardment of Nagasaki which had caused the instantaneous death of thousands of Japanese in 1945 and the death of many others after years of suffering. That was a psychological aspect that deserved mention.

Mr. BEESLEY (Canada) said that his country maintained good relations with the countries carrying out nuclear tests, but he was nevertheless in favour of a ban on such tests whether they were atmospheric or underground. Underground tests were in fact the most dangerous for Canada, but it was also concerned at the possible harmful effects of atmospheric tests on the environment.

Mr. DEJAMMET (France), after describing the safety arrangements for the atmospheric nuclear weapon tests undertaken in the Pacific region on the initiative of the French Government, said that those experiments were now being carried out in very different conditions from those that had existed at the time of the 1958 United Nations Conference on the Law of the Sea. The current tests, instead of

being conducted in contact with the water, were being held at a very high altitude specifically in order to avoid any dangerous contamination of ocean space. All the members of the Committee were aware that the sea already contained radioactive substances which accounted for only a fraction of the many potential sources of pollution of the marine environment. If the Sub-Committee were to undertake a study of effective measures to prevent contamination by radioactive substances, it should consider all the sources of radioactivity, i.e. nuclear power stations, nuclear-powered vessels, radioactive devices, etc. By so doing, it would of necessity encroach on the sphere of activities of other competent bodies. In 1958, the Conference had referred the study of the consequences of nuclear tests to the General Assembly; the latter had set up the United Nations Scientific Committee on the Effects of Atomic Radiation, which made regular studies of the effects of radioactive fall-out and reported to the General Assembly on the results of its research. That Committee was made up of experts who were well informed of the results of the French experiments. Its reports had never expressed the slightest alarm at the French tests which, he repeated, were carried out in unparalleled conditions of safety in a site specially chosen for the exceptional safeguards it offered with respect to such factors as prevailing winds and remoteness from populated areas. The report of the Scientific Committee on the Effects of Atomic Radiation had been unanimously approved by the General Assembly.

All Governments were free to express their opinion and it was for the Rapporteur to include them in his report on the Sub-Committee's session.

Mr. PARDO (Malta) said that document A/AC.138/SC.III/L.4 should be amended by replacing the words "in the ocean environment" in the fourth and fifth lines, by the words "above the ocean environment".

He proposed that the debate should be adjourned to allow of further consultations between delegations.

Mr. DEJAMMET (France) said he doubted whether consultations could serve any useful purpose, since his Government could not endorse a statement of the type proposed by the Maltese delegation.

The CHAIRMAN also thought that it would not be possible to reach a consensus on the matter and requested the Rapporteur to prepare an objective account of the various views put forward during the debate.

Mr. BEEBY (New Zealand) said he would like document A/AC.138/SC.III/L.4 to be annexed to the report and requested that his country should be regarded as one of the sponsors of the suggested statement.

Mr. DEJAMMET (France) said he was afraid that, if the suggested statement was reproduced as an annex, it might be regarded as an official document of Sub-Committee III. His delegation would must prefer the substance of the text to be included in the body of the report, followed by a summary of the arguments put forward by those supporting the Maltese proposal and a statement of his own delegation's reaction.

Mr. IGUCHI (Japan), Rapporteur, said he could not give any undertaking on the form of his report since it was not the practice to name the countries which had taken particular positions during debates. He did not think that the report should dwell on that point. In any case the draft report would be submitted to the Sub-Committee for examination.

Mr. HARRY (Australia) requested that the debate should be accurately summarized in the report, with a statement of the views of the delegations that had taken part and those of the French delegation.

Mr. de SOTO (Peru) supported the Australian representative's observations.

Mr. SERAZZI (Chile) said he also supported the request of the Australian representative.

Mr. IGUCHI (Japan), Rapporteur, assured the Sub-Committee that, although he was a member of the Japanese delegation which had adopted a definite position on the question, his report would be completely objective.

The meeting rose at 6.50 p.m.

SUMMARY RECORD OF THE NINTH MEETING

held on Thursday, 19 August 1971, at 11 a.m.

Chairman:

Mr. VAN DER ESSEN

Belgium

GENERAL DEBATE (continued)

Mr. ZEGERS (Chile) said that he proposed to submit some general remarks of a legal and political nature on the subjects Sub-Committee III had been asked to consider.

With regard to pollution, since the problems of the sea and the oceans constituted a physical and legal whole, as recognized by the General Assembly in resolution 2750 C (XXV), the Sub-Committee should embark on those subjects in their entirety and study the question of pollution not only on the sea-bed and the ocean floor but also in the superjacent waters, for the whole of the area beyond the limits of national jurisdiction. In that connexion, it should take account of the preparatory work for the Conference on the Environment and the work of other organizations. With regard to scientific research, it should also take into consideration research carried out in the whole of the sea and ocean space beyond the limits of national jurisdiction. The question of the protection of the marine environment raised a much larger problem than pollution; it involved the regulation of activities on the high seas and the possible establishment of an international body. The Sub-Committee should also take up the question of peaceful uses of the ocean, a matter which was closely related to pollution and scientific research.

In reply to the questions raised by the Chairman in document A/AC.138/SC.III/L.3, he said that the first was whether draft articles should be prepared for insertion in the four 1958 Conventions,^{1/} or a separate convention should be drawn up. The General Assembly had instructed the Committee to draft articles but had not mentioned those Conventions, to which only one-third of the States Members of the United Nations were party. In his delegation's opinion, the Sub-Committee should draft articles on all the subjects on its agenda, taking into consideration

^{1/}, Convention on the Territorial Sea and the Contiguous Zone; Convention on Fishing and Conservation of the Living Resources of the High Seas; Convention on the High Seas; and Convention on the Continental Shelf.

current international practices, in particular those which were codified in the four Conventions, but without specifying the final legal form to be given to the text.

With regard to the second and third questions, it seemed obvious that, in accordance with its mandate, the Sub-Committee should draw up texts applicable to the whole marine environment beyond national jurisdiction and should consider the question of pollution not only of the sea-bed and the ocean floor but also of the superjacent waters. In the case of territorial waters, it could only formulate recommendations, since questions of State sovereignty were involved.

In reply to the Chairman's fourth question, he said that the Sub-Committee should study the question of scientific research carried out anywhere in the marine environment. Standards should be applied to the area beyond the limits of national jurisdiction, but recommendations should also be made with regard to territorial waters.

His delegation thought the Sub-Committee should, in addition, consider the question of the conservation of the marine environment and its peaceful uses. That question would be considered by several sub-committees, in accordance with their mandate, but it also fell within the competence of Sub-Committee III, since it was closely bound up with the question of safety and peaceful use of the sea-bed and the ocean floor.

Reverting to the question of pollution, he pointed out that the Conference on the Environment was to take place in a few months' time. The work done by the specialized agencies in that connexion should not induce the Sub-Committee to relinquish its task, which was to draw up legal principles relating to pollution. The problem of pollution was extremely urgent. Major disasters had occurred recently. The Preparatory Committee for the Conference on the Environment, the Secretary-General's report to the Economic and Social Council (E/5003) and various other statements had brought out the importance and urgency of the matter. It should be studied as a whole. An attempt should be made to formulate principles regarding pollution of the seas in general, with a view to the Conference which the Committee had been instructed to prepare. As far as pollution was concerned, it was impossible to apply the same rules to developed and developing countries alike: standards would have to be more strict for the former and more flexible for the latter. All the developed countries should further undertake to adopt the necessary measures to avoid pollution.

The rights of coastal countries should be respected, since pollution could cause serious damage to a coastal State, by affecting its resources, beaches, health, population or tourist industries. The 1969 Brussels Convention^{2/} acknowledged that situation. There should therefore be consultations with coastal States to regulate the activities undertaken in the international area in proximity to their coasts.

Various delegations had asked the Secretariat to prepare certain documents which would be of great use to the Sub-Committee. The representative of Peru had stressed that it would be good to have maps showing the degree of pollution of the seas and oceans. Other delegations had suggested a compilation of regional conventions and agreements in force concerning pollution. The Secretariat might also invite Governments to submit a summary of their national laws and regulations on pollution of the seas and oceans. His delegation was convinced that an appeal should be made urging countries to take action at the national level, and that the importance of regional agreements, some of which were satisfactory, should be stressed. The Sub-Committee should draw up a detailed and comprehensive convention, setting forth all the general principles applicable to marine pollution.

The protection of the marine environment was a matter for Sub-Committee III but it was closely linked with other subjects falling within the competence of other sub-committees. The General Assembly had decided that beyond the limits of national jurisdiction an international régime should be provided for and an international organization established for that purpose. The Group of 77 would like that organization to have substantial powers. If that were not possible, at least a less ambitious régime and a relatively modest but world-wide institution responsible for co-ordinating activities to protect the marine environment and to combat pollution should be set up. The establishment of a régime for the protection of the marine environment necessarily pre-supposed regulation of the freedom of the seas. The old régime appeared to be out of date, for, when it was elaborated, the resources of the sea were thought to be inexhaustible. The

^{2/} IMCO Publication, Sales No.: IMCO, 1970, 3.

system of unrestricted freedom had ceased to exist. The regulation of such freedoms, except for freedom of navigation, was becoming essential. He repeated the request already submitted to FAO, urging it to carry out a study on the conservation of the resources of the high seas, the extinction of species and fishery methods, and to submit its report to the Preparatory Committee.

Scientific research should be viewed as a "common heritage of mankind". Its findings should be widely disseminated. All States should demonstrate their solidarity in that respect. All States should have equal opportunities. The régime of absolute freedom in scientific research derived from the former doctrine of liberalism. It was an instrument of service to the strongest. The approach to scientific research needed to be revised, for three reasons: first there was insufficient joint scientific research within the international community; secondly, scientific research and economic investigation were often confused; lastly, scientific research was often tied up with the activities of military secret services. The Intergovernmental Oceanographic Commission was making a magnificent effort in the field of scientific research but lacked financial resources. It should be provided with the means required to enable it to carry out its programme. Provision should also be made for it to participate in the Committee's work and for every developing country to take part in it. It would be interesting for the Committee to hear what a representative of that Commission might have to say. If that were not possible, the Commission should be asked to submit working papers outlining the activities undertaken within the framework of its research programme. A concerted effort by the international community was called for in the field of scientific research and steps should be taken to disseminate the findings. When research was being undertaken, all the interested parties should be notified. In scientific research, as with pollution, the national jurisdiction of States should be strictly respected. Coastal States should participate in research carried out within the limits of their national jurisdiction and even beyond that limit.

The peaceful uses of the seas and oceans was of crucial importance for mankind, with regard to both their resources and the opportunities for communication and safety measures. The subject was bound up with the question of pollution. During the last world war, a large number of ships had been sunk, thus contaminating the seas; but even in peace time, nuclear ships, poison gases and

nuclear explosions constituted a serious risk. In that sphere States sometimes took unilateral decisions - nuclear tests are a case in point -, which were hardly compatible with the interests of the international community. At the present time, there was in some areas an armaments race, and poison gases were being dumped on the ocean floor. Technical progress in armaments increased the risks of pollution.

The Sub-Committee should not view the question of peaceful uses of the sea-bed and ocean floor from the same angle as the Disarmament Commission, which was concerned with negotiations of a political nature. It should set forth principles, lay down rules and prepare draft articles on the subject. Some delegations had expressed anxiety about the nuclear tests carried out by France in particular, and had protested vigorously. It had been suggested that those tests might be the source of the numerous earthquakes which had occurred in South America in recent years. His delegation found it hard to understand why the Sub-Committee had not yet been able to decide that the anxiety expressed on that subject should be mentioned in its report. The report should, of course, take account of all the viewpoints expressed in the course of the discussions. The question of the peaceful use of the sea-bed and the ocean floor should be treated realistically without demagoguery and be studied in depth. The interests of the international community required such an approach.

In his delegation's opinion, the questions the Sub-Committee was called upon to consider were among the most exciting with which the United Nations was concerned, as was evident from the interest shown by delegations and the high standard of the discussions.

Mr. GEBRE KIDAN (Ethiopia) said that prevention and control of marine pollution was the first step towards the preservation of the marine environment. Governmental and intergovernmental organizations and the United Nations itself were studying ways of preventing and controlling pollution, or at least of mitigating the harmful effects it might have on the living resources of the sea and related human activities. In that connexion, he wished to thank the Secretary-General for his excellent report (E/5003), analysing possible solutions to the problem of marine pollution. The pollution which was beginning to threaten the entire marine environment could be traced to man's activities in an increasingly industrialized and urbanized world. No member of the world community could remain indifferent to that danger, which threatened all countries alike, whether highly developed or not.

Pollution problems in different parts of the world were related, for ocean currents could spread pollution over hundreds of miles, and winds could carry some forms of pollutants from one part of the globe to the other. The problems would therefore have to be tackled on a world-wide scale.

So far, sea pollution had not been a serious problem in Ethiopia. The country was protected by legislative provisions and port regulations prohibiting the discharge into the sea of waste matter likely to be detrimental to navigation or to pollute the water. Discharge of oil or oil mixed with water was also prohibited. A campaign against pollution had been launched at the beginning of the year, in order to draw public attention to the serious threat which sea pollution represented for the future of mankind.

The specialized agencies of the United Nations had given a striking definition of pollution. The most effective way of preventing and controlling pollution was to eliminate the pollutants before they were released into the rivers and estuaries or the sea. Various categories of pollution could be identified, but according to the report of the Secretary-General, it seemed that the disposal of sewage and industrial waste would be the most serious source of marine pollution for some time to come. While it would be desirable to prevent that type of pollution as soon as possible, using the various existing methods, the cost and difficulty of such an operation were a serious obstacle for all countries, whatever their level of development. Chemicals such as DDT which were used for vital public health programmes such as the eradication and control of malaria, but which were a source of pollution, would probably continue to be used until equally cheap and effective substitutes were put on the market. On a more general basis, anti-pollution measures should not have any adverse effects on the economy of the developing countries.

Ship-borne pollutants and cargoes released either accidentally or deliberately into the sea presented serious problems. Statistical data showed that 7 per cent of the world's fleet was annually involved in collisions at sea. His country, which bordered on a semi-enclosed sea used as an important shipping lane, was concerned about marine pollution by oil. The Inter-governmental Maritime Consultative Organization, by conducting research programmes, drafting conventions and organizing international consultations, was promoting a better understanding of the problem. It should also be noted that the provisions of the

International Convention for the Prevention of Pollution of the Sea by Oil (London, 1954)^{3/} and the Convention on the 1958 High Seas^{4/} did not cover all sources of pollution, and effective means of controlling new sources were therefore lacking.

Little was known as yet about the danger of pollution arising from the exploration and exploitation of the sea-bed. As the sea-bed should be exploited for the benefit of mankind as a whole, however, such activities should be controlled so as to give maximum protection to the living resources of the sea. Although not much was known about the effects of the disposal of radioactive waste and the military use of the ocean, all sources of pollution could be said to be dangerous and the developing countries were particularly vulnerable. Concerted action to combat them would have to be taken on a world-wide scale and a global environmental monitoring system might be envisaged. The developing countries would be called upon to participate in such activities, and training programmes should be provided for nationals from the developing countries to cover the different forms of pollution control.

With regard to scientific research, he referred to paragraph 10 of the Declaration of Principles Governing the Sea-bed and the Ocean Floor, and the Subsoil thereof, beyond the Limits of National Jurisdiction (General Assembly resolution 2749 (XXV)). That text was unsatisfactory, because it did not refer specifically to the training of personnel from developing countries. That was a question of vital importance, for unless the developing countries had at their disposal personnel trained in the various disciplines of sea-bed technology, they would not be in a position to participate actively in the scientific research programmes. If the developing countries could not take part in sea-bed research activities, the concept of a common heritage would lose some of its meaning.

The financial benefits accruing from exploration and exploitation of the sea-bed were not the only ones: an increase in scientific and technical knowledge would no doubt ensue. Unfortunately, developing countries which did

^{3/} United Nations, Treaty Series, Vol.327, p.4.

^{4/} Ibid., Vol.450, p.82.

not have the necessary technical know-how for participation in such activities would not benefit. It was therefore essential to establish training institutions. The programmes for such institutions should be so prepared that countries, developed or developing, coastal or land-locked, could join in the common endeavour to increase knowledge of the ocean and its resources, in which technicians as well as professional personnel should participate.

Training should be aimed at narrowing down the existing inequalities between developed and developing countries in the sphere of scientific and technical knowledge of the marine environment and sea-bed resources.

An expanded, long-term programme of oceanic exploration and research had been prepared in order to increase scientific knowledge of the marine environment. The Inter-governmental Oceanographic Commission had established a Group of Experts on Long-Term Scientific Policies and Planning to keep the programme under constant review and advise on the subject. Scientific research for peaceful purposes should be conducted with a view to increasing scientific knowledge for the benefit of all countries and freedom of scientific research should be granted, provided the rights and interests of all States were secured. Scientific research conducted in areas beyond national jurisdiction should take account of the regulations drawn up by the international machinery to be established to safeguard the interests of the international community. Scientific research within any area under national jurisdiction was, of course, subject to any reasonable conditions imposed by the coastal State.

He said that he wished to reply to the four questions put by the Chairman at the third meeting of the Sub-Committee. The first was whether the Sub-Committee should consider drafting articles for insertion in the four 1958 Conventions, or whether it was preferable to draft a separate convention on the marine environment and scientific research. It was difficult to foresee the outcome of the discussions, since the Sub-Committee was still at the stage of general debate and exchange of views. The second and third questions related to pollution. The Chairman had asked the Sub-Committee to consider whether texts should be drafted which would apply only to the high seas or which would also include territorial waters. Were they to deal with pollution due to the exploitation of the sea-bed or with marine pollution in general? If the whole marine environment and all marine resources were to be preserved, the Sub-Committee should not confine itself

to any specific kind of pollution, or pollution as applied to any specific area of the sea. The fourth question related to scientific research. Should the Sub-Committee confine itself to research on the sea-bed or should it include research in the superjacent waters of the high seas? There again, he thought that research activities should cover both fields, since they might sometimes be inter-related.

Mr. HJERTONSSON (Sweden) said he would like to make a few remarks about the preservation of the marine environment and the prevention of pollution and first of all to thank the Secretary-General for the excellent report (E/5003) he had prepared on that subject, which would be the focus of the discussions at the 1972 Conference on the Environment. The Committee would, of course, have to bear in mind the results of that Conference when drafting the articles concerning the preservation of the marine environment. He hoped the Conference would draw up a convention forbidding ocean dumping, except where it could be done without endangering the marine environment. It was quite unacceptable that the dumping of such wastes should continue to be permitted when people were perfectly aware of the risks involved. The oceans were the common heritage of all peoples and neither private companies nor single States had the right to destroy that heritage.

His delegation's position of principle was a logical reflection of his country's policy on environmental protection. In order to achieve that objective, effective legislative measures had been taken as a basis for action by the authorities, industry and other organizations that played an important part in environmental protection. It had also been necessary to set up administrative apparatus for the application of the relevant legislation, which in some cases, had been supplemented by economic assistance measures.

The Stockholm Conference should also draw up a Declaration of Principles regarding the Environment, which would, of course, deal with all the problems relating to the preservation of the marine environment. Such a declaration should be of a general nature, but should avoid the repetition of platitudes. Like the Canadian representative, he thought that such a declaration would be useful to the Committee when drafting the articles of a convention on the preservation of the marine environment.

He hoped the Conference on the Environment would also adopt an action plan covering a wide spectrum of activities. Such a plan would, if adopted, prepare the way for work to be undertaken on the environment by the United Nations bodies. It would specify the measures to be taken and the resources required and would contribute to a rational division of labour between the international organizations concerned. Since marine pollution was a world-wide problem, the Conference on the Environment should provide for a global monitoring system to determine the major sources of pollution and to evaluate their long-term and short-term effects.

Several delegations had emphasized the need to give coastal States the right to exercise effective pollution control over vast areas adjacent to their territorial waters, so as to prevent the pollution of their coastlines. As coastal States would always be the main victims of marine pollution, it was logical to grant them policing rights. It had to be remembered, however, that pollution of the marine environment called for measures on a world scale and a global monitoring system was essential. Not only was it necessary to protect shores and coastal waters - the marine environment as a whole had to be defended. That was why it was not enough merely to extend the jurisdiction of coastal States in order to combat the pollution of the marine environment. What was needed was world agreements for the protection of the marine environment. However, since world agreements usually gave meagre results, it would be unwise to rely solely on them, and at the same time regional or bilateral agreements should be concluded to serve as an incentive or as a pilot for agreements on a global scale.

His delegation was convinced that in its future development, international law should stipulate that coastal States had specific rights and responsibilities in respect of the prevention and control of marine pollution. It was not a matter of the sovereign rights of a coastal State but, as the Canadian representative had said at the third meeting, the coastal State should exercise such rights as a custodian of part of the marine environment on behalf of the international community. Those fundamental rights and duties of coastal States should therefore be laid down in international conventions. Even though, in the opinion of some coastal States, the two 1969 IMCO Conventions concerning oil pollution were too liability-oriented, they nevertheless acknowledged the particular

interests of coastal States in preventing pollution of their marine environment, and they could therefore serve as a guideline when the Committee came to define the rights and duties of a coastal State.

Turning to the problems and dangers arising from the use of the sea-bed and the ocean floor for storage, he said that storage of various substances for different purposes was, clearly, bound to increase in years to come. The strictest regulations and safety standards had to be drawn up to counteract the tremendous risks for the marine environment of having large quantities of oil stored in containers on the sea-bed. His delegation could not accept a situation whereby a ban on ocean dumping would lead to an increase in the disposal of toxic and dangerous wastes in containers on the sea-bed, which would undermine the effectiveness of future anti-dumping regulations.

The nuclear tests carried out by France in the Pacific were connected with military activities on the high seas. The more general question of the use of the high seas for military purposes to the detriment of other legitimate uses were more fitted to be dealt with by Sub-Committee II and his delegation would take up the question later in that Sub-Committee.

Mr. APPLETON (Trinidad and Tobago) said that his delegation was particularly concerned with the problem of pollution, especially pollution of the marine environment caused by oil. The economy of his country, like that of other Caribbean countries, depended to a large extent on tourism and its beaches were an essential natural resource. His country had therefore to take joint and separate action to combat effectively the hazards of marine pollution.

With regard to the questions raised by the Chairman at the third meeting of the Sub-Committee, his delegation subscribed to the view that pollution recognized no political, geographical, or environmental frontiers, and that the problem required an all-embracing approach.

The over-all pollution problem was an extremely complex one, since land, sea and air pollution all formed part of one ecosystem and could not be separated from one another. While the earth had its own self-regulating waste disposal system, there were nevertheless tolerance limits. The winds which constantly ventilated the earth were only effective up to six miles; toxic waste was killing the micro-organisms which were responsible for the self-adjusting processes of water purification; modern technology was constantly contaminating our natural

surroundings with tens of thousands of synthetic substances, many of which were almost totally non-degradable (aluminium cans, plastics, oil, fall-out from nuclear tests, radio-active wastes, non-biodegradable detergents, etc.).

Almost all pollutants ended up in the sea, which possessed vast, but by no means infinite powers of self-purification. Scientists were therefore very much concerned with the effects of pollutants on plant and marine organisms, such as the phytoplankton, which produced about one fifth of the earth's total supply of oxygen. Man, especially twentieth century man, had broken nature's balanced cycle maintained for millions of years by flora, fauna and both aerobic and anaerobic bacteria, and in doing so, had poisoned and continued to poison himself as well as his natural environment. The problem of pollution, therefore, concerned not only the environment but also man's very survival on earth.

In that respect, it was gratifying to note that the wording of paragraph 11 of General Assembly resolution 2749 (XXV) allowed for the widest possible interpretation of the Committee's terms of reference and did not in any way limit the Sub-Committee's functions to a mere drafting of articles for the control of marine pollution arising from exploration and exploitation in the international sea-bed area beyond the limits of national jurisdiction.

A major factor contributing to the problem of pollution was the population explosion: the world's present population was over 3,500,000,000 and was conservatively estimated to reach almost 7,000,000,000 in 30 years' time.

Another major contributing factor was that technical man was often entirely oblivious of his impact or potential impact on the environment, as for instance in the case of the atomic bomb and of the motor car. Technology had, in fact, brought about the environmental crisis, and technology should therefore be applied to deal with it. Many ideas had been put forward in the matter and it was encouraging to note that public opinion was becoming more and more aware of the problem. Beyond a doubt, lasting solutions would be difficult and expensive.

Pollution by oil was at present the most serious form of pollution, affecting the entire environment: land, sea and air.

Land pollution by oil was generally due to the escape or seepage of crude oil caused by faulty equipment or deliberate tampering. It was also caused by the improper use of petroleum-based agricultural chemicals, which sometimes had adverse effects on agriculture. Air (or atmospheric) pollution by sulphur arose

in particular from the burning of coal and fuel oil in power stations, industrial plants and heating installations, as well as from the use of petrol and oils containing sulphur in road-motor vehicles.

The pollution of the seas and coastal waters by oil could be attributed to three main causes: firstly, accidental escape or deliberate dumping of oil in the sea during the cleaning of oil tankers and other vessels. However, most oil companies and tanker owners had now adopted the "Load-on-Top" system, whereby only slightly contaminated water was expelled from the waste, leaving behind the concentrated oil residues, on which the fresh crude oil cargo was loaded. Consequently, more than ninety per cent of the oil formerly discharged into the sea was now retained in the vessels. Research was continuing to improve the separation of oil and water, and it was estimated that two million tons of oil per year, which once found its way into the sea, were now recovered by that method.

Secondly, pollution of the seas by oil was also due to tanker accidents, caused by oversight or error. Such accidents could be very expensive and their cost would increase, as tanker sizes grew and super-tankers became more numerous. The recent Torrey Canyon disaster had alerted world opinion to the possibility of giant tankers breaking up and discharging vast quantities of oil into the sea. Less serious accidents occurred from time to time: for example, a small tanker of about 20,000 tons recently ran aground off Nova Scotia causing damage to 400 miles of tourist beach resorts.

Thirdly, pollution of the seas by oil was also caused by blow-outs in off-shore wells, as happened off Santa Barbara, California, on 28 January 1969 and on the Louisiana drilling rig which caught fire in March 1970. Fortunately, accidents of the proportions experienced off Santa Barbara were relatively rare and the odds against their happening again had been estimated at 8,000 to one.

Since the cost of marine pollution was so high, a major concerted effort was needed in the fields of science and technology, law and economics, with the fullest co-operation from governmental and non-governmental agencies, private entities and international organizations.

His delegation recognized the invaluable contribution made by IMCO for a solution of the problem, in its attempt to eliminate completely by 1975, if possible, the deliberate pollution of the seas by oil and the minimising of "accidental spillages" leading to pollution. Those objectives were very

important: world opinion was quickly alerted when spectacular accidents, such as the Torrey Canyon and Santa Barbara disasters, occurred once in a while, but little or nothing was heard about the day-to-day incidents of tanker discharges of oil in normal operations, which had just as harmful effects on the marine environment over a period of time. The situation was expected to grow worse because of the expanding volumes of tanker-borne crude oil and the increase in off-shore drilling.

With regard to accidental spillages of oil, his delegation would welcome the inclusion in the proposed revision of the 1954 IMCO International Convention for the Prevention of the Pollution of the Sea by Oil of mandatory measures calling on Members States to adopt the most advanced oil/water disposal systems for tankers operating in the marine environment. In that respect, his delegation fully endorsed the recommendations of the report of IMCO's Maritime Safety Committee for the installation of standardized facilities for such disposal in port.

His delegation also hoped that the proposed revision of Convention would require all vessels to be fitted with adequate and serviceable navigational equipment and to be manned by qualified captains and crew. In that connexion, he pointed out that the inquiry into the disaster involving the "Arrow" off Nova Scotia, had revealed that no member of the crew, not even the captain, was a qualified seaman.

To provide for any contingencies involving small or large spillages, it was essential that a commission of the international regime should be established for the effective deployment of manpower and equipment and to furnish scientific and technical advice for the prevention and control of pollution. Such a commission could also have related functions, such as administering a central laboratory whose main task would be to receive, analyze and identify all crude oil and noxious substances dumped into the sea. In that connexion, his delegation supported the Maltese representative's recommendation that a regional or world ecological emergency organization should be established; it also agreed with the Japanese representative that Sub-Committee III should formulate a broad principle for the overall control of possible pollution sources and routes.

In conclusion, his delegation congratulated the Secretary-General on his excellent report on the prevention and control of marine pollution (E/5003).

Mr. de SOTO (Peru) and Mr. BEEBY (New Zealand) said that their delegations had become co-sponsors of the Maltese delegation's suggested statement of views (A/AC.138/SC.III/L.4), expressing anxious concern at the explosion by the Government of France of a prototype thermonuclear device in the Pacific region.

The meeting rose at 1 p.m.

SUMMARY RECORD OF THE TENTH MEETING

held on Thursday, 19 August 1971, at 3 p.m.

Chairman: Mr. VAN DER ESSEN Belgium

GENERAL DEBATE - MARINE POLLUTION (continued)

Mr. OKAWA (Japan) and Mr. MENDOZA (Philippines) asked that their countries should be included among the co-sponsors of the statement of views suggested at the eighth meeting by the delegation of Malta. (A/AC.138/SC.III/L.4)

It was so decided.

Mr. KOLESNIKOV (Ukrainian Soviet Socialist Republic) said that on the basis of thirty years of experience in oceanographic research, he could assert that to resolve effectively some of the problems raised in the exploitation of the world's oceans, whether in regard to navigation, fishing, laying of submarine cables, exploitation of wave and tidal energy, desalination of sea water or exploration for industrial purposes with a view to subsequent extraction of mineral resources from the sea-bed or its subsoil, it was first necessary to have at one's disposal a profound knowledge of all the processes which went on in the ocean and in the marine environment. The ocean was a complex system which influenced and was influenced by the atmosphere, with an upper boundary, the atmosphere itself, and a lower boundary, the terrestrial crust which constituted the subsoil of the sea-bed and ocean floor. The necessary knowledge of the ocean could be obtained through fundamental scientific research in various fields of oceanographic science, physical oceanography, geology, geophysics, geochemistry, hydrochemistry and yet other disciplines. Only on the basis of the results of fundamental scientific research, carried out on a large scale, would it be possible to create favourable conditions for the practical exploitation of the oceans of the world. Scientific knowledge was the basis, in particular, of exploration for industrial purposes which would subsequently permit the extraction of mineral resources from the sea-bed and its subsoil. There was no doubt that the knowledge obtained so far through the oceanographic and related sciences was very modest and did not measure up to the gravity that the problem of the exploitation of the seas and the oceans had acquired at the present time.

Although man had sailed and fished the seas for thousands of years, he knew less of the relief of the ocean bottom than he knew of the surface of the moon

through the photographs recently obtained from the satellites launched by the Soviet Union and the United States of America.

If at the present time man should set himself the objective of "photographing", even in somewhat less detail, the surface of the ocean bottoms of the world, by the only method he had at his disposal, ultra-sonic sounding, a ship specially fitted out for oceanic and hydrographic scientific research, even if it had an operating radius of five miles, would need 250 years to carry out its task; or alternatively, it would be necessary to have 500 ships on the job for six months. Of course that was impossible, and man had no other means at his disposal. Scientific research with specialist ships called for a great deal of work and was very costly, in view of the cost of the equipment of such ships, which had to have electrical measuring apparatus, technical facilities for handling the findings, computers, to say nothing of the cost of the scientific expeditions themselves.

Despite the slowness of progress in accumulating scientific knowledge of the world's oceans, it had, however, to be acknowledged that in the last ten years especially, scientists of many countries had achieved some significant results which had made a notable contribution to the enrichment of oceanographic science. That was particularly true in regard to the geology and geophysics of the ocean floor, to the study of the relief of the sea-bed and geomorphology, the preparation of bathymetric maps, the study of the structure of the terrestrial crust using seismic, magnetic and gravimetric data, the study of the phenomena taking place on the surface of the water and the tectonics of the sea-bed. Those results had been obtained with the aid of electronic measuring devices, fully-automated systems for recording and processing observations, and the use of new technical facilities such as manned and unmanned submarine buoys, telemetering buoys communicating data by radio, floating platforms or platforms anchored to the sea-bed, and other structures such as listening-posts or stations set up on the sea-bed to measure the speed of currents and to observe ocean turbulence or thermal flows at the sea bottom. Progress in the fields of geochemistry, hydrochemistry and biology had contributed greatly to the accumulation of oceanographic knowledge.

The Ukrainian SSR had contributed to successes in the field of fundamental oceanographic science through the participation of its scientists in freely-undertaken scientific research, devotedly pursued and demanding a heavy outlay in energy and money. He pointed out that when exploratory testing and prospecting

of the resources of the sea-bed and ocean floor in petroleum and natural gas were carried out in deep ocean waters, specially-designed and equipped ships were used instead of fixed or floating drilling platforms. The use of other technical methods, which were, however, still at the trial stage, was also contemplated.

Obviously, research concerning the ocean surface, the over-lying atmosphere, the water mass, the bottom and subsoil of the oceans was very costly and largely exceeded the resources of any single country, however developed it might be. For that reason, international co-operation in oceanographic research was of the highest importance.

It was fitting to pay a tribute to the work in that field of the Intergovernmental Oceanographic Commission, in which the Ukrainian Government had co-operated through work carried out on its oceanographic scientific research ships, which had taken part in expeditions to the Atlantic tropical areas, the Mediterranean, the West Indies and various other regions. The results of the observations recorded during those expeditions and the conclusions drawn from this research had been communicated to the "B" International Data Bank located at Moscow. The results had been systematically used in preparing maps and publishing international atlases under the auspices of the Intergovernmental Oceanographic Commission. Ukrainian exploration ships had taken on board UNESCO fellowship-holders from developing countries to enable them to acquire or complete their training. The Ukrainian SSR intended to continue and to expand all those types of activity in the future.

What was called for was not merely an increase in knowledge of the oceans of the world and their resources, for the purpose of their exploitation in the most favourable conditions and for peaceful uses, but also rational planning of the exploitation of the resources of the seas and oceans through international co-operation.

The success of the efforts undertaken by the international community in that field required that the principle of freedom of scientific research on the high seas should be strictly observed. That principle, recognized in international law, should cover not only the surface of the water but also the sea bottom and its subsoil. It was fundamental to the orderly development of international co-operation in oceanographic research and in the exploitation of the resources of the sea-bed and ocean floor in the interests of all mankind.

There was talk of the establishment of an international body with jurisdiction covering scientific research on the oceans, the sea-bed and ocean floor and subsoil, and the industrial exploitation of the resources of the sea, the sea-bed and ocean floor and subsoil, beyond the limits of the continental shelf, which would act either through its own machinery or through recourse to the services of governments or corporate bodies or individuals. His delegation was concerned to emphasize in that connexion that a distinction should be made between scientific research and prospecting for industrial purposes, for there were differences of a legal nature between the two types of operations. If fundamental research in the oceans, on the sea-bed and ocean floor and the subsoil of the oceans was undertaken, and if that research work was effected through the facilities of the governments undertaking it, care should be taken to see that freedom of research was guaranteed. Industrial prospecting, on the other hand, which aimed at discovering deposits rich in useful minerals, had exclusively commercial objectives; whether it was undertaken by individuals or by corporate bodies, it had to justify itself by the income derived from the industrial exploitation of the minerals discovered; it must therefore be subject to a different system of international law.

For that reason, his delegation thought that in drawing up legal standards to regulate the activity of governments which embarked on the exploration of the sea-bed and ocean floor, the guarantees provided in the text of article 27 of the Soviet provisional draft Articles of a treaty (A/AC.138/43), should be drawn upon. That article contained an appropriate safeguard for the principle of freedom of scientific research on the sea-bed and the subsoil. For the preparation of those standards and of a long-term programme of international co-operation, his delegation would recognize the UNESCO Intergovernmental Oceanographic Commission as competent. It considered that the establishment of another international body with the same terms of reference would amount to duplication.

With regard to pollution of the marine environment by the discharge of oil and oil derivatives in the oceans, his delegation observed that IMCO had long and successfully campaigned against pollution of the marine environment caused by navigation. It regretted that nothing had been done to prevent the contamination of the marine environment by industrial effluents resulting from

the exploration and exploitation of the hydrocarbon resources of the subsoil of the sea-bed and ocean floor. It fell to the Committee to fill that gap by drawing up standards for protection against the consequences of exploration and exploitation of the mineral resources of the sea-bed and ocean floor, and the subsoil, when they resulted in pollution of the marine environment.

Mr. BEESLEY (Canada) said that by establishing legal principles applicable to the marine environment, the Sub-Committee would not only be discharging its mandate to prepare for the 1973 Conference on the Law of the Sea, but would also be contributing to the preparation of the Stockholm Conference on the Environment. In that connexion, it was clear that the Sub-Committee had a comprehensive mandate in respect of the problem of marine pollution.

He drew attention to the draft declaration of principles on the environment submitted by Canada in connexion with the preparation of the Stockholm Conference (A/CONF.48/IWGM.P.I/5, annex VI). With regard to the sea, the essence of that declaration was that no State had a right to pollute its marine environment. Perhaps States had a right to discharge waste into the sea, but that right should not be so exercised as to give rise to pollution, either of the environment of another State or of the high seas. In that connexion he mentioned the concept to which his delegation had already referred - that the right to use the sea necessarily entailed duties and responsibilities with regard to the protection of the interests of the international community; his delegation had referred to it as "the concept of custodianship." It already applied to the territorial sea, since the right of innocent passage was recognized. According to that concept, and in harmony with the views expressed by the United States delegation at the sixty-fifth meeting of the Committee the coastal States, acting as custodians, should be subject to international standards and to the jurisdiction of international tribunals.

He added that Canada's recent reservation concerning the compulsory jurisdiction of the International Court of Justice in respect of the prevention and control of pollution was of a purely interim character: it would be withdrawn later, once rules of law had been adopted in that sphere.

The elaboration of a comprehensive treaty on the protection of the marine environment should be based on the concept of custodianship, and would require as a first step an agreed definition of marine pollution. The Joint Group of

Experts on the Scientific Aspects of Marine Pollution (GESAMP) had defined marine pollution as the introduction by man, directly or indirectly, of substances or energy into the marine environment (including estuaries) resulting in such deleterious effects as harm to living resources, hazard to human health, hindrance to marine activities including fishing, and impairment of the quality of sea water for usage. The GESAMP definition was close to that given by Canada in the Arctic Waters Pollution Prevention Act of June 1970. But that definition required still further amendment to take into account factors to which he would refer later in his statement. Above all it was necessary to guard against the assumption that the ocean had an infinite assimilative capacity.

He then reviewed the main principles contained in the Canadian draft declaration. The first principle to which he would refer read as follows:

"No State may use or permit use of its territory in such a manner as to cause damage to the environment of other States or to the environment of areas beyond the limits of national jurisdiction".

That principle involved a limitation of the sovereignty of States within their own territory. It was in fact a natural extension of the rule of international law enunciated in the "Trail Smelter" and Corfu Channel cases. It also included the concept of custodianship which he had already mentioned. Such a limitation would relate not only to the territorial sea but also to the continental shelf, where States enjoyed sovereign rights over sea-bed resources. At the same time, the environment of other States would not be limited only to their territory; it would also include their extra-territorial interests, for instance their exclusive fishing zones. That principle would apply to types of pollution which were directly caused by use of the sea; this could perhaps lead to the exclusion of pollution due to substances from land-based activities entering the sea through the atmosphere. It would be preferable if those forms of pollution were dealt with elsewhere than in a conference on the law of the sea. That would leave two major sources of pollution which should be discussed: the discharge of industrial or domestic waste into the territorial sea, and the exploration and exploitation of sea-bed mineral resources within the limits of national jurisdiction. Limitations on the coastal States' rights with respect to those activities were already implicit in the rule relating to the "Trail Smelter" and Corfu Channel cases. Other provisions along those lines could be found in

Articles 24 and 25 of the 1958 Convention on the High Seas^{1/} and Article 5 (7) of the 1958 Convention on the Continental Shelf.^{2/} The best protection for the other States would perhaps be the self-interest of the coastal State, which was likely to be the first to suffer from the effects of pollution. Nevertheless that guarantee was not enough, since in some cases an unpolluted environment might be regarded as a luxury beyond the means of the State concerned. Legal obligations should therefore be established in that field. The first step would be to establish international standards with respect to the types of waste matter which coastal States could discharge into their territorial seas, taking account of the above-mentioned principle, and to define the anti-pollution measures which coastal States would be obliged to undertake in exploiting sea-bed resources within the limits of their national jurisdiction. Provision should also be made for the application of special and possibly stricter standards within the framework of bilateral or regional treaties. In the preparation of such anti-pollution standards, it must be ensured that they did not go further than was required for the protection of the environment of other States and of the high seas. But the disposal of substances which were highly toxic and had a long survival time should be absolutely excluded. Nuclear explosions had already been prohibited in the Nuclear Test Ban Treaty signed in Moscow on 5 August 1963.^{3/}

The enforcement of those anti-pollution standards would obviously be left to the coastal States. However, to ensure that the coastal States met their obligations, an effective mechanism would have to be established for the settlement of disputes arising both before and after damage had been suffered. More satisfactory provisions than were found in existing law should also be made for the payment of compensation. The existing law was even more deficient with regard to the protection of the high seas; the States parties to the proposed treaty, or an appropriate international agency, would have to be given powers to ensure that the coastal States did not pollute the high seas.

1/ United Nations Treaty Series, Vol. 450, p.82.

2/ Ibid., Vol. 499, p.311.

3/ United Nations Treaty Series, Vol. 480, p.43.

The representative of Canada then quoted a second principle from the Canadian draft declaration:

"No State may use areas beyond the limits of national jurisdiction in such a manner as to cause damage to the environment of such areas or to the environment of other States".

That principle too represented the logical extension of the rule enunciated in the "Trail Smelter" and Corfu Channel cases. Like the first principle he had quoted, it was concerned with damage caused to other States, not only within their territory but also on their continental shelf and in their exclusive fishing zones. The 1973 Conference on the Law of the Sea would be the best forum in which to enshrine that second principle in treaty obligations, which could then be translated into technical regulations by IMCO and other specialized agencies. Most of the activities causing pollution of the seas beyond the limits of national jurisdiction could be classified as flag-State activities. So far the only provisions in international law covering those activities were articles 24 and 25 of the 1958 Convention on the High Seas, the International Convention for the Prevention of Pollution of the Sea by Oil (1954, amended in 1962 and 1969),^{4/} and the two IMCO Conventions adopted at Brussels in 1969.^{5/} His delegation thought that the problem of pollution due to the activities of the coastal State or the flag-State in the territorial sea, on the continental shelf and the high seas should be dealt with in a single treaty of general application - a kind of "umbrella agreement" - accompanied by regional treaties. Such a treaty could be negotiated at the 1973 Conference on the Law of the Sea. It could provide for further rules and standards to be established in treaties of general application to be negotiated by IMCO or other specialized agencies. It could also provide for the adoption of regional treaties laying down special and possibly stricter rules and standards.

Pollution from nuclear tests was as much a disarmament problem as an environmental one. The comprehensive treaty on marine pollution might also

^{4/} United Nations Treaty Series, Vol. 327, p.4.

^{5/} IMCO Publication, Sales No.: IMCO/1970.3.

include the prohibition of testing on the high seas, which had already been requested in the 1963 Nuclear Test Ban Treaty.

With regard to pollution arising from the exploration and exploitation of sea-bed mineral resources, the above-mentioned comprehensive "umbrella agreement" and the subsidiary rules could be incorporated in the treaty establishing the international sea-bed regime and mechanism. In any event, the representative of Canada hoped that the standards adopted for those activities would be based on the principles contained in the Canadian delegation's statement at the tenth meeting of Sub-Committee I and the Australian delegation's statement at the fourth meeting of Sub-Committee III. The same provisions should apply to scientific research where such research involved drilling, which presented the same dangers for the environment.

The enforcement of the obligations to be established with regard to pollution from flag-State activities would be the responsibility of the coastal States. The exercise of powers delegated to the coastal States would be carefully limited, and appropriate procedures would be established for the settlement of disputes. In the Canadian delegation's view, the coastal States would have the right to establish "anti-pollution zones", i.e. zones of specialized jurisdiction in areas adjacent to their territorial sea, for the prevention of pollution. Traditional jurisdictional limits were in fact no longer sufficient in that sphere. The coastal States must exert the necessary jurisdiction over the sea beyond their territorial limits, taking into account the seriousness of the danger and the specific circumstances.

It would also be necessary to expand the old concept of the right of innocent passage. The coastal States must have the clear right and responsibility to prohibit any ships that did not conform to required safety standards from crossing their territorial sea. In addition, the modernized concept of innocent passage should replace absolute freedom of navigation in the coastal State's anti-pollution zones. The representative of Canada was gratified to know that the representatives of Australia (A/AC.138/SC.I/SR.10) and New Zealand (A/AC.138/SR.62) had already supported the idea of anti-pollution zones in which the coastal States would exercise broad powers.

Although not rejecting other possible ways of enforcing anti-pollution measures, his delegation was not in favour of establishing a kind of super-agency

with powers surpassing the combined powers of the Security Council, IMCO, ICAO, WHO, WMO, ITU, GATT, and IAEA. In any case, no country would be prepared to wait for the slow process of bringing international machinery into action before responding to a threat of pollution off its coasts. The proposed international sea-bed mechanism would be responsible for seeing that anti-pollution measures were enforced, but its role must be compatible with the special rights of coastal States to intervene where there was a threat of pollution. The right of intervention by coastal States beyond the limits of their national jurisdiction (on the continental shelf or in their anti-pollution zones) must be incorporated in a comprehensive treaty dealing with pollution from flag-State activities.

That right was already recognized in the 1969 IMCO Convention on Oil Pollution and had become a customary rule of law in the United Kingdom since the "Torrey Canyon" incident. The representative of Canada hoped that the proposed convention would provide that any State facing grave and imminent danger to its coast-line or its related interests from pollution or threat of pollution from the sea, following an accident on the high seas or acts related to such an accident which might have serious consequences, could take the necessary steps to prevent, mitigate or eliminate such a danger. That was the rule which had been adopted by the Institute of International Law at its meeting in Edinburgh in September 1969. In that connexion, he drew attention to the resolutions concerning marine pollution problems adopted at that meeting.^{6/}

To ensure the enforcement of rules relating to flag-State activities, the concept of universal jurisdiction as applied to piracy and the slave trade could also be applied.

The proposed comprehensive treaty on marine pollution should also incorporate a third principle from the Canadian statement, which read as follows:

"Every State has the responsibility to compensate for damage caused by such activities (that is, by activities within its territory or under its flag)."

That principle should also apply to damage caused in the exclusive fishing zones and on the continental shelf. The proposed treaty should make satisfactory

^{6/} Yearbook of the Institute of International Law, 1969 Vol. 53 II, p.358.

provision for obtaining such compensation, since under existing laws, recourse to an international tribunal would require the consent of the offending State, except where both parties were bound by a declaration of acceptance of the compulsory jurisdiction of the International Court of Justice, or by some similar agreement. With regard to damage caused in areas beyond the limits of national jurisdiction, it might be recognized that the international community and the injured States had a right to compensation. Whatever the case, an effective system aimed at prevention must be established in that field.

His delegation hoped that the proposed comprehensive treaty and regional treaties on marine pollution would include the following principle taken from the Canadian Draft Declaration:

"Every State has the duty to consult with other States before undertaking activities which may damage the environment of such States, and a similar duty to consult with the appropriate international organization, if any, before undertaking activities which may damage the environment in areas beyond the limits of national jurisdiction".

The principle of prior consultation had already been incorporated in the Declaration of Principles Governing the Sea-Bed and the Ocean Floor and the Subsoil thereof, adopted by the General Assembly in resolution 2749 (XXV). According to that principle, all activities likely to result in pollution which could cause extra-territorial damage must be reported to the State or international organization concerned.

In conclusion, the representative of Canada emphasized the importance which his country attached to the question of marine pollution. Canada had already taken steps to protect its Arctic environment and he recalled that the Canadian Prime Minister had recently stated that his country would not permit that environment to become polluted in the name of freedom of the seas or in the interests of economic development.

Mr. LUPINACCI (Uruguay), recalling that the Sub-Committee had a dual mandate, stressed the importance of the draft articles which it had the responsibility of preparing for the 1973 Conference. He congratulated the Secretariat on having placed at the Sub-Committee's disposal some excellent documents which would greatly help it in its work. In common with the Argentine and several other delegations, his delegation considered it advisable to transmit the Secretary-General's report (E/5003) to the General Assembly.

The problem of the pollution and disturbance of the marine environment was serious and very complex, involving as it did legal, political, economic and technical considerations. A great many organizations and bodies had already studied it, and the time had come to co-ordinate those various activities. It was important in particular for the Sub-Committee to keep in very close contact with the preparatory commissions of the 1972 Stockholm Conference and of the conference which IMCO was planning to convene in 1973. The Sub-Committee could even, as had been suggested, take on the task of co-ordinating all the activities undertaken in that field.

Pollution of the marine environment did not have any political or geographical frontiers: it therefore followed that the problem should be tackled on a world-wide scale, since it concerned all mankind. The urgently-needed supervisory regime should to a large extent be international. — — —

Action at the regional and national levels should not for that reason be neglected; on the contrary, the minimum standards to be established must be sufficiently flexible to be adapted to the special features of any particular ocean or sea and to the defence of any coastal State whose interests were specially threatened. As coastal States were in the final analysis the most directly concerned, it was important to recognize that they had a special right of control over the zone within their jurisdiction; in that respect there was no opposition, but agreement, between the interests of the coastal State and of the community.

It had repeatedly been claimed in the Sub-Committee that the exercise by a coastal State of the right to determine unilaterally the breadth of its territorial sea served no useful purpose, since the sources of pollution lay in any event outside that zone and only action at the regional or international levels could be effective. That line of reasoning would appear to be false, since control by a coastal State could in fact only increase the effectiveness of regional or international control. It could not be denied that national legislation was the essential basis of any international system of control and prevention. The Secretary-General's report (E/5003) showed clearly that the measures adopted so far at that level were very far from sufficient to stem the evil threatening mankind.

With regard to the first question put by the Chairman at the third meeting, the Uruguayan delegation's answer would be that, subject to the results of the

Stockholm Conference, it would be preferable to consider the conclusion of a separate convention on the marine environment and on scientific research rather than to revise the 1958 Conventions. The ratification of such a convention could be followed by the conclusion of regional or bilateral agreements, which would set out the methods of implementation, or even of special agreements on particular points. As for the principles which should guide the drafting of that convention, he could not do better than to refer to the masterly statements made by the Spanish and Canadian representatives.

With regard to the Chairman's second question, his delegation considered that the agreements to be drafted should deal with the whole surface of the sea. Like many other delegations, it believed that the mandate given to the Committee by the General Assembly was sufficiently broad for the purpose, and furthermore that it would be logical to do so, since pollution affected the entire world. Similarly, all possible sources of pollution should be considered, especially nuclear pollution.

Lastly, he failed to see why the Sub-Committee should consider the question of scientific research on the sea-bed only, and not also research in the waters above it.

In that connexion, his delegation considered that the principle of freedom of scientific research, which was so important to the development of civilization, should be safeguarded, although it could not be applied without some control. They were here concerned with an activity which was essentially disinterested, while its results were capable of transmission and popularization; it should therefore be placed at the service of mankind. Too often, however, it was deflected from its proper purpose to serve political and economic interests. It went without saying that, as laid down in the Lima Declaration (A/AC.138/28), no research should be undertaken within the jurisdiction of a coastal State without its consent. On the other hand, the Representative of Argentina had dealt exhaustively with the régime to be established in international waters.

His delegation reserved the right to speak again on any specific point which might be raised in the Sub-Committee.

Mr. SARMA (India) said that he would only deal with the first three questions put by the Chairman at the third meeting and that, in the present phase of the Sub-Committee's work, his delegation did not intend to express any definitive views in the matter.

With regard to the first question, he noted that paragraph 2 of General Assembly resolution 2750 C (XXV) provided that the forthcoming conference on the Law of the Sea would deal among other things with the preservation of the marine environment, including the prevention of pollution. In paragraph 6 of that resolution, the Sub-Committee was instructed to prepare a comprehensive list of subjects and issues relating to the law of the sea referred to in paragraph 2, and to draft articles on such subjects and issues. It seemed, therefore, that what the General Assembly had envisaged was not so much a revision of existing conventions as the drafting of new articles. Moreover, the 1958 Conventions contained provisions relating to their revision; that would considerably complicate the Sub-Committee's task and there was no assurance that all the States signatory to those Conventions would agree to such revision. Besides, States not parties to the Conventions might perhaps not be able to take part in the revision process. It would therefore seem preferable to draft one or more new conventions.

With regard to the substance of the second question, his delegation considered that it would be difficult to prepare legislation for only part of the surface of the sea, since pollution could very well originate on the high seas and its effects be felt in territorial waters, or vice versa. Undoubtedly, it was for every coastal State to take the necessary measures to prevent pollution in its own territorial waters, but it also had the right to see that pollution originating on the high seas adjacent to its territorial waters, did not affect those waters, its living resources and its shores. To be effective, international legislation should cover the whole surface of the sea.

With regard to the Chairman's third question, the source of pollution was of considerable importance, but the Sub-Committee's terms of reference did not make any distinction between the sea-bed, the land and the air. Each of the five main categories into which the Secretary-General in his report (E/5003) had divided the sources of pollution, posed a serious problem; that was made clear by the detailed attention given to the matter by the United Nations specialized agencies and the International Atomic Energy Agency. One aspect of the problem, however, had not yet received adequate attention from the organizations of the United Nations system, namely, pollution resulting from the exploration and exploitation of the sea-bed and subsoil. Perhaps it was premature to attempt to predict the scope of activities in that area, but there was no doubt that scientific progress would

constantly increase the risks. Therefore, a special legal regime should be envisaged to combat that danger, after all the relevant technical data had been collected by the competent international authority or by the appropriate regional bodies. The question of the functions and powers of the international authority should also be very closely examined, as well as its relationships with existing regional bodies. When all available data had been gathered, the Sub-Committee might prepare, first, draft articles limited to sea-bed activities, then a comprehensive draft based on the work of other organizations and of the 1972 Conference on the Environment. There was no doubt that the proposals submitted by the Canadian and United States representatives (A/AC.138/SC.III/SR.7), as well as the proposed framework for regional agreements on the control of marine pollution in the Mediterranean and the North Sea, would help considerably in achieving the objectives set up.

Mr. EVENSEN (Norway) said that his delegation believed it was speaking on behalf of a large proportion of the members of the Sub-Committee when it recommended that the General Assembly should ask Member States to take adequate measures, in the areas within their jurisdiction, to prevent and regulate uncontrolled discharges of harmful, poisonous and dangerous substances or materials into the seas by ships, barges or other vessels and by pipes draining directly into the sea or into rivers and lakes emptying into the sea. The need for immediate action in that matter was all the greater since a third consignment of radioactive waste had just been dumped into the Atlantic. At the same time, Member States should be urged to take adequate action to prevent and eliminate the dangers of marine pollution due to the exploration and exploitation of the mineral resources of their continental shelves. Such recommendations, made by the General Assembly, would not prejudice in any way the decisions to be taken in a wider context by the 1972 Stockholm Conference or later by the IMCO Conference to be convened in 1973. Those considerations had led the Norwegian delegation to submit to the Sub-Committee, rather tardily, a draft resolution on preliminary measures to prevent and control marine pollution (A/AC.138/SC.III/L.5). His delegation hoped that it would be adopted by the Committee.

Mr. PRIETO (Chile) unreservedly supported the Norwegian delegation's initiative, but pointed out that the same rules could not be applied to both industrialized and developing countries. He would therefore appreciate it if the Norwegian representative would clarify his interpretation of paragraph 4 of the draft resolution.

Mr. EVENSEN (Norway) said that his delegation had merely suggested that the General Assembly should appeal to all Member States to take all the measures they considered necessary during the transitional period.

Mr. DE SOTO (Peru) stressed the significance of the Norwegian proposal, which the Sub-Committee should carefully consider before preparing its final report.

The CHAIRMAN, replying to a question by Mr. PARDO (Malta), indicated that since the list of speakers had been exhausted, the general debate should be regarded as closed. The present meeting was the last scheduled to be held before the adoption of the report. If, however, the Sub-Committee considered it necessary to discuss any further specific point, such as the proposal just submitted by the Norwegian representative, the Secretariat would do everything possible to meet its wishes.

The meeting rose at 6.00 p.m.

SUMMARY RECORD OF THE ELEVENTH MEETING

held on Tuesday, 24 August 1971, at 3.35 p.m.

| | | |
|------------------|-------------------|----------|
| <u>Chairman:</u> | Mr. VAN DER ESSEN | Belgium |
| later: | Mr. GEBRE KIDAN | Ethiopia |

GENERAL DEBATE (continued)

The CHAIRMAN reminded the Sub-Committee that it had to take a decision on the draft resolution submitted by the Norwegian delegation (A/AC.138/SC.III/L.5). It appeared that in submitting that draft resolution, the representative of Norway had simply requested that it should be annexed to the Sub-Committee's report.

Mr. EVENSEN (Norway) said that he would welcome a detailed discussion on his delegation's draft resolution. He had requested that the draft should be annexed to the report simply because he was afraid that the Sub-Committee would not have enough time to discuss and adopt it.

Mr. SIMPSON (United Kingdom) said that, when the representative of Norway had submitted his delegation's draft resolution, he had mentioned the dumping of radio-active waste in the Bay of Biscay by the British ship Topaz. The dumping of waste by the Topaz had been one of a series of operations carried out under the auspices of the European Nuclear Energy Agency. The material discharged during those operations was not highly radio-active. It had been discharged at depths twice as great as those recommended by the International Atomic Energy Agency, and at a distance of 350 miles from the continental shelf, far from any fishing grounds. Great precautions had been taken and the operations had been described in detail in an OECD publication entitled "Radio-active Waste Disposal Operation into the Atlantic".

Mr. LEGAULT (Canada) supported the proposal to annex the Norwegian draft resolution to the Sub-Committee's report. He would also be willing to support its adoption if the other delegations agreed to do so. He would like, however, to make one amendment, for the present text lent itself to different interpretations. He proposed the substitution, in operative paragraph 4, of the words "to take adequate steps within their jurisdiction to prevent and control..." by the phrase "to take appropriate measures to prevent and control...".

Mr. EVENSEN (Norway) accepted the amendment proposed by the representative of Canada.

Mr. MCKERNAN (United States of America) considered that the new text was more ambiguous than the original, since it would allow Member States to take steps to prevent and control the dumping of hazardous substances without taking into account the limits of national jurisdiction.

Mr. LEGAULT (Canada) thought that the new version did not prejudice the question of jurisdiction. The word "appropriate" ensured that the measures taken would be both legal and effective. Moreover, that version would enable States to take both individual and joint action.

Mr. MCKERNAN (United States of America) said he was not satisfied with those explanations. In his view, the advantage of the original text was that it indicated clearly that States should take steps within their jurisdiction, whereas the new version did not state whether those steps would be taken within or beyond the limits of national jurisdiction. That point could give rise to considerable controversy.

Mr. LEGAULT (Canada) said he would be willing to accept the original text, provided it was possible to agree on the meaning of the words "within their jurisdiction". If not, it was better to adopt a neutral text such as the one he had proposed.

Mr. de SOTO (Peru) agreed with the representative of Canada. The proposed amendment had the advantage of being neutral; it did not prejudice the legality of the steps which might be taken by States beyond the limits of their jurisdiction. The original version was too restrictive; it made it impossible for States to take steps to control or suspend dumping operations off their coasts in order to protect their territory.

Mr. ONKELINX (Belgium) considered that the Norwegian proposal raised highly complex legal issues and that the Sub-Committee would therefore be unable to take a decision at the present session. It seemed best to annex to the report both the Norwegian draft resolution and the Canadian amendment and to leave the discussion open until the next session.

Mr. OKAWA (Japan) agreed with the representative of Belgium. His delegation was not in a position to support the adoption of the Norwegian draft resolution, as it required to study the text more closely.

Mr. BEESLEY (Canada) did not think it advisable to prolong the discussion on the Norwegian draft resolution. The Norwegian delegation had requested that its proposal should be annexed to the report. His delegation, which had become a co-sponsor of the draft resolution, had proposed an amendment which had been accepted by the original sponsor of the draft. To include that text as an annex to the draft report seemed to be a satisfactory solution.

Mr. MCKERNAN (United States of America) said that he could see no objection to the draft resolution and the Canadian amendment being annexed to the report, since the Sub-Committee was not giving its views on the substance of the texts.

The CHAIRMAN pointed out that the representative of Norway had simply requested that his proposal should be annexed to the report. Moreover, it emerged from the exchange of views which had just taken place that the Sub-Committee would be unable to take a decision on that document at the present stage, since one delegation had opposed its adoption. The Sub-Committee could perhaps state in its report that two delegations had submitted a draft resolution which would be transmitted to the General Assembly, but that the Sub-Committee had not taken any decision on the substance of that document, which would simply be annexed to the report.

It was so decided.

Mr. MOTT (Australia) requested that his country should be added as a co-sponsor of the statement contained in document A/AC.138/SC.III/L.4 concerning nuclear weapon tests in the Pacific region.

Mr. de SOTO (Peru), recalled that his Government had already submitted observations directly to the Government of France on the nuclear weapon tests carried out by France in the Pacific. Many speakers had addressed the Sub-Committee in order to denounce the danger of those experiments. The representative of France had replied eloquently, giving arguments which, however, had not proved convincing, since the statement formulated in document A/AC.138/SC.III/L.4 requesting the Government of France to put an end to the atmospheric nuclear weapon tests had not been withdrawn. Those tests must be suspended immediately, for a decision must be taken before serious damage was caused. As some delegations had said, if those experiments presented no risk, why had they not been carried out on French metropolitan territory? Why had they been conducted in the Pacific region, where there was a possibility of serious damage to the marine environment and where many States were heavily dependent on the resources of the sea? The representative of

France had said that those experiments had been carried out in the Pacific because that region offered exceptional security conditions. Nevertheless, nuclear weapon tests unleashed forces which were beyond human control and which could cause incalculable damage to the marine environment and to the coastal States. The many appeals which had been made by the Government of Peru had been left unanswered.

His delegation considered that the statement in question expressed the opinion of the members of the Sub-Committee as a whole. It had in fact only been contested by one delegation, that of the country which had carried out those experiments.

CONSIDERATION OF THE DRAFT REPORT OF THE SUB-COMMITTEE

The CHAIRMAN invited the Sub-Committee to examine its draft report (A/AC.138/SC.III/L.6).

He also announced that the Rapporteur, Mr. Iguchi, had been recalled urgently by his Government and would therefore be unable to present his report. He suggested that Mr. Iguchi should be replaced by Mr. Nomura, another member of the Japanese delegation.

It was so decided.

Mr. NOMURA (Japan), Rapporteur, said that the departure of Mr. Iguchi had placed him in a difficult position. He had had very little to do with the preparation of the draft report and apologized to the members of the Sub-Committee if he should prove unable to give an adequate reply to all their queries. He would, however, do his best to assist the Sub-Committee in adopting the report. Before leaving, Mr. Iguchi had informed him that he had not attempted to summarize all the views expressed by the delegations but had merely tried to highlight certain points. To enable delegations to follow the complete discussion that had taken place in the Sub-Committee, an index of the summary records had been included at the end of the draft report; by referring to that index, delegations would be able to know exactly what the various delegations had said and where their statements could be found.

The report was divided into several parts, namely, an introduction, followed by four main sections. Section A contained statements made by the delegations in reply to the questions raised by the Chairman. Section B contained statements made at the invitation of Sub-Committee III, in particular those made by several representatives of specialized agencies. Section C contained a proposed statement expressing anxious concern about the atmospheric nuclear weapon tests recently

conducted in the Pacific. That section would, however, be replaced by a text approved by the sponsors of document A/AC.138/SC.III/L.4 and the Member State carrying out those tests in the Pacific. If the Sub-Committee decided to include the new text in the report, document A/AC.138/SC.III/L.4 would appear as an annex. Section D concerned a proposal by Norway contained in document A/AC.138/SC.III/L.5. In view of the decision which had just been taken, that document would be annexed to the report.

Mr. STEINER (Secretary of the Sub-Committee) said that a number of corrections had to be made in the report. First, some paragraphs in the introduction should be renumbered; present paragraph 8 became paragraph 4, present paragraph 7 became paragraph 5, present paragraph 4 became paragraph 6, present paragraph 5 became paragraph 7 and present paragraph 6 became paragraph 8.

The other corrections were as follows:

In new paragraph 5 (former paragraph 7) the second sentence should be deleted and replaced by the following:

"The first and second meetings were held in March and the third in July and August"; in paragraph 12, the word "idea" should read "ideas"; in the ninth line on page 6 of the French text, the word "notamment" should be inserted between "elles ont" and "avancé"; on page 5 of the English text, in sub-paragraph (i), the article "the" should be deleted in the third line; in paragraph 2, the word "pollution" should be replaced by the word "environment" in the last but one line; and in the fourth line of the French text the word "inadéquate" should read "adéquate"; in paragraph 3 the word "pollution" should be replaced by the word "environment"; in the fifth line of paragraph 2 on page 6, the article "the" before the word "pollutants" should be deleted, and in the sixth line, the article "the" replaced by "that" before the word "pollution"; in the second line of page 8 of the French text and on the twenty-seventh line of page 6 of the English text, the words "le développement de" before the words "la recherche scientifique" and "the development of" before the words "scientific research" should be added; in the sixth line of paragraph 3, "and" should be replaced by "or"; lastly the heading of the last part of the draft report should read, on page 16 of the French text, "index des comptes rendus analytiques" and on page 13 of the English text "index of summary records".

Mr. BEESLEY (Canada) had some criticisms to make of the way in which the draft report had been drawn up. The statements made by the delegations, as referred to in the report, were connected with the questions put by the Chairman; many delegations had spoken about other matters, but because of the way in which the report had been compiled, those statements were not mentioned. For instance, his delegation had spoken about the links which should exist between the work of the Sub-Committee and that of the Stockholm and IMCO Conferences, and had stressed how important it was to specify the responsibility of each of those Conferences to avoid confusion. His delegation had also referred to the concept of delegation of authority associated with that of mandate. Those were very important matters which had also been dealt with or supported by several delegations and should therefore be mentioned in the report.

The CHAIRMAN suggested that delegations should send the Rapporteur their amendments in writing.

Mr. DIGGS (Liberia) endorsed the Canadian representative's comments. In his opinion, the draft report did not mention some of the views and ideas expressed by his delegation at the fifth meeting and supported by other delegations during the debate. His delegation had, in particular, raised the question of pollution caused by discharges of dangerous substances by highly industrialized countries. It had emphasized that responsibility for marine pollution did not lie with developing countries and that such discharges should cease immediately in the area regarded as the common heritage of mankind. His delegation had also emphasized the need to make arrangements for the training of skilled personnel and the transfer of techniques for the prevention and control of pollution. The report did not lay sufficient stress on the damage caused by some developed countries in their uncontrolled research activities in the marine environment, not only within their jurisdiction but also on the high seas. He had specifically raised that issue, but it was not mentioned in the index of summary records at the end of the draft report.

Mr. PARDO (Malta) also endorsed the Canadian delegation's comments. The report did not reflect some of the position taken by his delegation and some of its important suggestions. It was true, for instance, that many delegations had expressed the view that the Sub-Committee, in drafting a comprehensive treaty on marine pollution, should await the results of the United Nations Conference on the Environment, as stated in paragraph 1 (2) of part A, but his delegation did not

share that view. Moreover, it considered that it was not for the Sub-Committee to prepare a draft treaty on marine pollution and that it should have formulated instead a series of general legal principles to replace articles 24 and 25 of the 1958 Convention on the High Seas^{1/} or to be included in the new convention on the law of the sea. There was no mention of those views in the draft report. His delegation had further suggested that the Sub-Committee should consider the possibility of preparing treaty articles empowering the international sea-bed machinery to accept from States the gift of islands of special scientific interest to the international community, but that suggestion too had not been mentioned.

His delegation had also suggested that no State should be able to apply its technical facilities in a way liable to change the marine environment perceptibly without first obtaining the consent of the international community. That standpoint was not mentioned in the draft, nor was his delegation's suggestion relating to pollution.

Mr. MYRSTEN (Sweden) endorsed the Maltese representative's comments. Although it was true that many statements had been made within the framework of the questions put by the Chairman, just as many and as important statements and suggestions had been made in connexion, for instance, with pollution and scientific research, which fell within the Sub-Committee's terms of reference. If the report did not give an account of those statements and suggestions, they would have to be repeated at the following session.

Mr. MOTT (Australia) supported the Canadian representative's suggestion. During the general debate, a number of delegations had suggested that the right of coastal States should be extended in areas beyond the territorial seas for the purposes of preventing and controlling pollution and for scientific research. Yet those suggestions had not been made sufficiently clear in the draft report.

Mr. MCKERNAN (United States of America) said that he could only agree with preceding speakers that the draft report did not take sufficiently into account important comments and suggestions made in the discussions. As it was now too late to undertake a redraft, they might perhaps be included in a new section 5 in part A, entitled "General observations on other matters".

Mr. GEBRE KIDAN (Ethiopia) took the Chair.

^{1/} United Nations, Treaty Series, vol.450, p.82.

Mr. ITURRIAGA (Spain) endorsed the United States representative's proposal; such new section would make it possible to record various suggestions made by Spain, which were not mentioned in the draft report. The meeting could be adjourned to enable delegations to consult with regard to the drafting of the new section.

Mr. LEGAULT (Canada) said that, while he understood the reasons for the very useful proposal made by the United States of America, he feared that the addition of a new section would not be enough to correct the imbalance of the report which was due to its very structure.

Mr. PARDO (Malta) endorsed the Canadian representative's comments.

Mr. BEEBY (New Zealand) considered that the proposed new section should preferably be a separate part, for instance, part D, instead of being incorporated in part A.

Mr. DE SOTO (Peru) pointed out that the nature and the presentation of the amendments that the Chairman had asked delegations to submit, would depend on the final form of the report; if it was not based on the four questions put by the Chairman, those amendments would necessarily be different.

Mr. LEGAULT (Canada) said he was in favour of a complete recasting of the report.

Mr. STEINER (Secretary of the Committee) recalled that the report should be ready in time for consideration by the Committee on the following Thursday. He thought it preferable, in the light of that time-limit, that delegations should submit written amendments.

Mr. RAKOTOMANANA (Madagascar) also thought that it was too late to break up the draft report. As the disagreements mainly related to part A, it should be possible to adopt the rest of the report, paragraph by paragraph.

It was so decided.

I. INTRODUCTION

Paragraphs 1 and 2

Paragraphs 1 and 2 were adopted.

Paragraph 3

Mr. ITURRIAGA (Spain) pointed out that paragraph 3 and new paragraph 4 (former paragraph 8) dealt with general questions which had been debated in plenary. He wondered whether it would not be better to place them in the Committee's report.

Mr. STEINER (Secretary of the Sub-Committee) said that paragraph 3 had been included because it referred to the agreement on which the organization of the work and the allocation of subjects and functions to the Sub-Committees had been based.

Mr. DEJAMMET (France) thought that the paragraph was in its proper place, since it reflected the conditions in which that body had discharged its mandate.

Mr. ITURRIAGA (Spain) accepted the Secretary's explanations. In the report of the Committee of the Whole, reference could be made to what had been decided by the Committee when agreeing on the organization of the work.

Paragraph 4 (former paragraph 8)

Mr. PARDO (Malta) thought that the last sentence should be reworded, since organizations and bodies could not attend meetings.

Mr. SIMPSON (United Kingdom) considered it preferable to delete the second sentence, as it was not completely in accordance with the facts.

Paragraph 4 was adopted, taking into account the comments made.

Paragraphs 5, 6 and 7 (former paragraphs 7, 4 and 5 respectively)

Paragraphs 5, 6 and 7 were adopted.

Paragraph 8 (former paragraph 6)

Mr. RAKOTOMANANA (Madagascar) pointed out that a translation error seemed to have slipped into sub-paragraph 3, and that it would be advisable to replace the words "de profiter" in the third line by "à profiter" (French text only).

Mr. DEJAMMET (France) supported that suggestion.

Mr. PARDO (Malta) thought that in the English text the word "should" ought to be replaced by "could" in sub-paragraph 1, and "will" by "might" in sub-paragraph 3.

Mr. ITURRIAGA (Spain) thought that the Spanish version of sub-paragraph 3 ought to be revised.

Paragraph 8 was adopted, taking into consideration the comments made.

Paragraph 9

Mr. OKAWA (Japan) wondered whether the word "next" was necessary in the third line of the paragraph.

Mr. GOWLAND (Argentina) asked what was the Note referred to in the beginning of the paragraph. He took it to mean document A/AC.138/SC.III/L.3.

The CHAIRMAN thought that it was rather the Note mentioned in paragraph 8, i.e. document A/AC.138/SC.III/L.2; the Secretariat would settle the question.

Paragraph 9 was adopted, taking into account the comments made.

Mr. Van Der Essen resumed the chair.

Paragraph 10

Mr. PARDO (Malta), supported by Mr. LEGAULT (Canada), suggested deleting that paragraph, which seemed to him superfluous.

Mr. DEJAMMET (France) was of the opinion that instead of deleting that paragraph, a formula would have to be found stating that some delegations had based their speeches on the Chairman's Note. That formula might be fully developed during informal discussions required as a result of reorganizing the structure of the report.

Mr. PARDO (Malta) asked whether that formula might be introduced into paragraph 11.

Mr. DEJAMMET (France) would have preferred to see paragraph 11 left as it stood.

Paragraphs 11 and 12

Mr. BEESLEY (Canada) suggested that paragraphs 10 and 11 and the first sentence of 12 should be set aside for examination by the Rapporteur.

It was so decided.

Mr. DEJAMMET (France) was in favour of the Maltese representative's proposal which had been supported by the Canadian delegation, with regard to paragraph 11 and the first sentence of paragraph 12. At the same time, he requested that the French text should be aligned on the English text. The expression "aspect concret" which was used at the beginning of paragraph 12 in the French text was incomprehensible, and did not correspond to the expression "specific idea" in the English text.

The CHAIRMAN said that the Secretariat would be responsible for assuring concordance between the English and French texts.

Second sentence of paragraph 12

Mr. PARDO (Malta) suggested that the words "more particularly those of the coastal States" should be added at the end.

Mr. PAVICEVIC (Yugoslavia) supported the Maltese amendment, and requested that it should be supplemented by the following phrase: "and of the right of developing countries to take part in scientific research and be associated with the results and benefits to be derived from it".

Mr. OKAWA (Japan) wondered whether paragraph 12 might not serve as an introduction to a series of paragraphs covering the concern expressed on various points by several delegations.

Mr. PARDO (Malta) supported the proposal of the Japanese representative and suggested that paragraphs 13 and 14 might be examined before returning to the second sentence of paragraph 12 at a later stage.

Paragraph 13

Paragraph 13 was adopted.

Paragraph 14

Mr. BEESLEY (Canada) pointed out that the list of countries sponsoring draft resolutions as given in paragraph 14 was incomplete.

Paragraph 14 was adopted.

Paragraph 15

Paragraph 15 was adopted.

The CHAIRMAN requested members of the Sub-Committee to examine paragraphs 10 and 11 and the second sentence of paragraph 12.

Mr. BEEBY (New Zealand) thought that the proposal of the Japanese representative reflected the general feeling of the members of the Sub-Committee.

Mr. OKAWA (Japan) said that paragraphs 10 and 11 could be set aside. On that assumption, paragraph 12 could be inserted after paragraph 15 and a new series of paragraphs could be drafted to take account of the views expressed by some delegations.

The CHAIRMAN suggested leaving it to the Rapporteur, in consultation with the delegations concerned, to draft the extra paragraphs which could be examined at the next meeting.

It was so decided.

Paragraph 16

Mr. PARDO (Malta) said that he could not accept paragraph 16 as it stood. He requested the Secretariat to submit to the meeting on the following morning, a new version of paragraph 16, of the second sentence of paragraph 12 and of the whole of Section A.

Mr. D'AINEAU (Chile) regretted to note that there was a distinct discrepancy, in the Spanish version, between the wording of paragraph 16 and that of Section A. He pointed out that the phrases "the majority of the delegations" and "many delegations" which were used in Section A represented an evaluation by the Rapporteur rather than an objective statement of fact.

The CHAIRMAN suggested that in order to satisfy the representative of Chile, the word "statements" in the title of Section A should be replaced by the word "evaluation".

Mr. PARDO (Malta) requested that the text should be completely redrafted from paragraph 16 onwards. His delegation would not be content with mere amendments to the wording of the text.

Mr. de SOTO (Peru) shared the concern of the Maltese delegation. The text of Section A did not correspond to what had been said during the discussion. He suggested, however, that rather than amend the wording of paragraph 16, Section A should be redrafted so as to give an accurate summary of the statements. It would perhaps be better to postpone the discussion of paragraph 16.

Mr. BEESLEY (Canada) supported the proposal made by the representative of Peru and requested that the Sub-Committee should pass on to the discussion of Section B.

The CHAIRMAN suggested leaving Section A aside until the delegations had submitted their proposals to the Secretariat in writing.

Section B

First paragraph in Section B, sub-section (a)

The first paragraph of sub-section (a) was adopted.

Second paragraph of sub-section (a)

The CHAIRMAN, replying to a question by the representative of Spain, said that the sentence in brackets would appear as a footnote.

The second paragraph of sub-section (a) was adopted, taking that statement into account.

Sub-section (b)

Sub-section (b) was adopted.

Sub-section (c)

First paragraph

Mr. PARDO (Malta) asked for amendment to the text of that paragraph: The Stockholm Conference to be held in 1972 was not a specialized agency and naturally had not yet undertaken any work.

The CHAIRMAN said the Secretariat would make the necessary change.

Sub-section (c) was adopted.

Sub-section (d)

Mr. PARDO (Malta) said that there was a lack of balance in the treatment of the statements in section B. Indeed, the statement made by Mr. Busha on behalf of IMCO took up a whole page, and it would be advisable to shorten it further.

MR. BEESLEY (Canada) supported the proposal by the representative of Malta.

The CHAIRMAN said that the Secretariat would make the necessary adjustments.

Section C

The CHAIRMAN stated that a new text had been drafted to replace Section C.

Mr. NOMURA (Japan), Rapporteur, read out the new text.

The CHAIRMAN stated that the text which had just been read out had been approved by the parties concerned.

Mr. D'AINEAU (Chile), referring to the proposal by the representative of Malta that explosions in the Pacific Ocean should be suspended, supplemented by the Canadian proposal that underground explosions should be included in the ban, said that his country reiterated its support of the proposal, since it was opposed in principle to nuclear explosions of all kinds, but it did not co-sponsor the proposal.

Mr. BEESLEY (Canada) read out an additional text which had also been approved by the delegations concerned and which read as follows:

"Several delegations voiced concern about nuclear weapons tests of any sort whether in the atmosphere or underground which could endanger the marine environment."

In replying to a question by the Chairman, he made it clear that the text was an amendment to the text which the Rapporteur had read out.

Mr. BEEBY (New Zealand) asked whether all the delegations concerned, including his own, had been fully consulted.

Mr. BEESLEY (Canada) said that the text in question had been examined several times by the delegations concerned, including the New Zealand delegation.

Mr. BEEBY (New Zealand) accepted the Canadian amendment.

Mr. DEJAMMET (France) acknowledged that the text which the Rapporteur had read out reflected the discussions which had taken place. The Canadian amendment did indeed correspond to views expressed by some delegations. It was not for him to decide what should appear in the report, and if some delegations insisted that

a view expressed during the general discussions should be indicated in the report, his delegation could hardly oppose that, especially as its own views were reflected in the text which the Rapporteur had read out. His delegation had stated, in fact, that it did not consider that the Sub-Committee was competent to discuss the question of nuclear explosions, whether underground or in the atmosphere. His delegation maintained its position, namely that the Sub-Committee was engaging in a practice which might prove unwise in the long run - that of wishing to incorporate in the report the texts submitted by some delegations concerning questions already dealt with by other United Nations bodies. For that reason his delegation, although not wishing to begin a general debate, had requested members of the Sub-Committee to refer to a scientific document which was more likely to give an impartial view and which had been prepared by the United Nations Scientific Committee on the Effects of Atomic Radiation. Some delegations might be tempted to use arguments of a scientific nature. It was obvious that if the discussion was to take place in that perspective, a very full documentation would have to be submitted, which the Sub-Committee would not have time to examine. His delegation had therefore confined itself to comments of a very general nature and was satisfied with the way in which the Rapporteur had reflected those comments in his report. He therefore left it to the other parties to decide whether a view which had undoubtedly been expressed during the discussions and which referred to those underground explosions should be incorporated in the report.

The CHAIRMAN proposed the adoption of the text read out by the Rapporteur, as amended by the representative of Canada.

It was so decided.

The meeting rose at 6.55 p.m.

SUMMARY RECORD OF THE TWELFTH MEETING

held on Wednesday, 25 August 1971, at 10.35 a.m.

Chairman: Mr. VAN DER ESSEN Belgium

CONSIDERATION OF THE DRAFT REPORT OF THE SUB-COMMITTEE (continued)

Mr. PINTO (Ceylon) said he wished to propose two amendments to the draft report (A/AC.138/SC.III/L.6). The first was to insert the following additional paragraph immediately after paragraph 12 of the introductory part:

"Some delegations emphasized that any general legal norms regarding pollution of the marine environment should take into account the special position of certain developing countries where pollution had not yet reached a critical level and where the imposition of rigorous and costly pollution control standards would make undue demands on their infant industries. The industrialized countries, in building up their industrial wealth had added most to the pollution problem through commercial neglect and industrial expediency. Pollution control measures must not be allowed to become an instrument to slow down the growth of nations still struggling to attain a similar level of development."

His delegation had put forward the idea contained in that proposed new paragraph at the Sub-Committee's seventh meeting and had been disappointed that it had not been reflected in the draft report.

His second amendment was to insert the following additional paragraph at the end of part A:

"One delegation emphasized that, in its view, the subject 'scientific research' as it came before Sub-Committee III included not merely the acquisition of new knowledge and the development of new techniques, but also measures to secure the widest possible dissemination of knowledge and technology, including international co-operation to make a reality of the transfer and application of marine technology to the developing countries."

The amendments he had proposed should not be taken as implying any criticism of the Rapporteur, who had had the very difficult task of recording a wide variety of views. His sole purpose was to ensure that his own delegation's views were adequately reflected in the report.

The CHAIRMAN requested delegations wishing to propose amendments to the draft report to submit them in writing to the Secretary.

Mr. PARDO (Malta) said that it would be difficult for his delegation to submit amendments to part A in its present form. In view of the criticism expressed at the previous meeting, it had been his understanding that that part of the report would be revised and probably recast.

Mr. GEBRE KIDAN (Ethiopia) proposed that the opening phrase of the second amendment proposed by Ceylon should be amended to read: "Some delegations emphasized that in their view", since his own delegation had also expressed the view set forth in that amendment.

Mr. PANIKKAR (India) said he supported the amendments proposed by Ceylon, both of which reflected views which had been expressed by a number of delegations and should find a place in the report.

Mr. LEGAULT (Canada) said that he shared the understanding of the representative of Malta. As it now stood, the text of part A was unbalanced and gave the impression that the Sub-Committee's entire debate had centered on the four questions put by the Chairman. It was essential to alter that presentation.

Mr. BOHTE (Yugoslavia) said he supported the two amendments proposed by Ceylon. The summary records of the Sub-Committee's meetings would show that the views set out in both those amendments had been expressed not by one, but by several delegations, and he therefore endorsed the proposal that the opening phrase of the second amendment should be amended to make that clear.

His delegation also considered that the section of the draft report dealing with scientific research was unbalanced, since it placed excessive emphasis on the views of those delegations that favoured absolute freedom of scientific research. A number of delegations had, however, strongly urged that scientific research should be internationally regulated and should form an integral part of the international machinery. He would submit a revised text for that passage to the Secretariat.

Mr. MBOTE (Kenya) said that his delegation, too, had understood that the whole of part A would be revised. Some passages of that part of the report were highly unbalanced. For example, the passage on scientific research gave the impression that most delegations wished to preserve the existing freedom of research. In fact, the majority of coastal States wished to subject it to some control.

He suggested that it would be preferable to postpone the further consideration of amendments until a revised version of part A had been circulated.

Mr. STEINER (Secretary of the Sub-Committee) said that a number of amendments to part A had been received by the Secretariat and would be taken into account by the Rapporteur. The criticism that part A as it now stood gave the impression that the whole discussion had revolved around the four questions put to

the Sub-Committee by the Chairman could be met by inserting a new section describing the views that had been expressed on other matters. At the present late stage of the Sub-Committee's work, there would not be time to arrange for a complete rewriting of part A and for its translation into all the official languages.

Mr. PARDO (Malta) said it was not his delegation's suggestion that part A should be completely rewritten. His objection was to the introduction and to the titles of the various sections. He therefore suggested that the titles should simply be deleted and that additional paragraphs should be inserted, as indicated by the Secretary.

Mr. LEGAULT (Canada) said he was in complete agreement with the representative of Malta.

Mr. RATSIRAKA (Madagascar) said that he, too, endorsed the statement by the representative of Malta. He also supported the two amendments proposed by the delegation of Ceylon.

He himself wished to propose that, in paragraph 16 of the introductory part of the draft report, the words "as well as those of delegations" should be replaced by "as well as the opinions or comments expressed by delegations", and that the last paragraph of section 3 of part A should be redrafted to make it less ambiguous.

The CHAIRMAN said that the Rapporteur would revise the text of part A in the light of the various suggestions that had been made.

The meeting rose at 11 a.m.

SUMMARY RECORD OF THE THIRTEENTH MEETING
held on Thursday, 26 August 1971, at 3.30 p.m.

Chairman: Mr. VAN DER ESSEN Belgium

CONSIDERATION OF THE DRAFT REPORT OF THE SUB-COMMITTEE (continued)

The CHAIRMAN drew attention to a paper without a symbol containing a new version of part II, section A, of its draft report (A/AC.138/SC.III/L.6).

Mr. NOMURA (Japan), Rapporteur, said that, in preparing the new version of part II, section A he had taken into account the comments made on the original version by various representatives and a number of written amendments he had received. The new version was intended not to cover all the views and comments put forward during the general debate, since they were already contained in the summary records, but rather to summarize the statements made on the four questions raised by the Chairman and to include recommendations and statements of a more general nature.

Mr. STEINER (Secretary) drew attention to a number of minor corrections to the text before the Sub-Committee.

Mr. LEGAULT (Canada) said he had understood that paragraph 10 of the draft report was to be deleted but that paragraphs 11 and 12 were to be rewritten. He asked whether it would be possible for the Sub-Committee to have the new versions of those paragraphs, which were not in the paper circulated.

Mr. STEINER (Secretary) said it had been agreed that the recasting of paragraphs 11 and 12 would be left to the Rapporteur and the Secretariat; the new versions would appear in the final report. The Secretariat would, however, make every effort to make the text available beforehand if possible.

The CHAIRMAN invited the Sub-Committee to consider the new version of part II, section A, paragraph by paragraph.

Paragraph 16

Mr. JOUDRO (Union of Soviet Socialist Republics) said he felt the Sub-Committee should avoid using such expressions as "the majority of the delegations". It would be preferable to adopt the practice followed in the other Sub-Committees and use more general expressions, such as "The view was expressed that".

After a brief discussion, the CHAIRMAN suggested that the phrase "The majority of the delegations" should be replaced by the words "Some delegations".

It was so decided.

Mr. FRANCIS (Jamaica) suggested that the words "co-ordinate" and "sea" in the last line of sub-paragraph (i) should be replaced by the words "co-ordinated" and "seas", and that the phrase "the victim coastal States", in sub-paragraph (ii), should be replaced by the phrase "coastal States likely to suffer damage from marine pollution".

It was so decided.

Mr. LEGAULT (Canada) proposed that, in sub-paragraph (ii), a reference to the 1954 and 1969 IMCO Conventions on oil pollution should be inserted after the words "the Geneva Conventions".

It was so decided.

After a brief discussion in which Mr. BRITTIN (United States of America) and Mr. JOUDRO (Union of Soviet Socialist Republics) took part, Mr. LEGAULT (Canada) proposed that the following new sentence should be inserted after the first sentence in paragraph 16: "Some delegations took the view that the preparation of a preservation treaty would be in keeping with the mandate set out in resolution 2750 C (XV)".

It was so decided.

Mr. LUPINACCI (Uruguay), supported by Mr. DABIRI (Iran), proposed the addition of a new sub-paragraph (iii) as follows:

"(iii) a separate convention on protection of the marine environment might facilitate its adoption and ratification by States."

It was so decided.

Paragraph 16, as amended, was adopted.

Paragraph 17

Mr. NOMURA (Japan), Rapporteur, said that in the first sentence in line with the decision just taken on paragraph 16, the word "many" should be replaced by "some".

Mr. DEJAMMET (France) proposed the addition of the following new sentence, after the first sentence of paragraph 17: "It was also stated that the preparation of a general treaty would be facilitated if preceded by the drafting of multilateral treaties of regional application."

It was so decided.

Mr. MOTT (Australia) proposed the addition of the words "and by national legislation" at the end of the first sentence.

It was so decided.

Mr. PAVIĆEVIĆ (Yugoslavia) proposed the insertion of the following sentence before the last sentence of paragraph 17: "Some delegations expressed the view that the elaboration of a treaty or treaties for the protection of the marine environment should be undertaken in conformity with the international régime and machinery for the exploration and exploitation of the sea-bed and ocean floor beyond the limits of national jurisdiction."

It was so decided.

Paragraph 17, as amended, was adopted.

Paragraph 18

Mr. LEGAULT (Canada) proposed that, in line with the change made in paragraph 16, the words "Many of the" in the first sentence should be replaced by the word "Some". He also proposed the inclusion of an additional sentence reading: "One delegation expressed the view that the relationship between the 1972 Stockholm Conference and the 1973 Law of the Sea Conference should be as follows:

- (a) The 1972 Conference on the Environment should produce a declaration of legal principles, which in turn should be reflected
- (b) in an "umbrella" treaty to be negotiated at the 1973 Law of the Sea Conference, and,
- (c) be translated into related technical rules by IMCO and other specialized agencies."

It was so decided.

Paragraph 18, as amended, was adopted.

Paragraph 19

Paragraph 19 was adopted.

Paragraph 20

Mr. PAVIĆEVIĆ (Yugoslavia) proposed that the words "and the development of scientific research" in the second sentence should be deleted, since the paragraph recorded views concerning the marine environment, while scientific research was dealt with in subsequent paragraphs.

It was so decided.

Mr. MOTT (Australia) proposed that in the second sentence the word "can" should be replaced by the word "could" and the word "are" by the word "were". In the fourth sentence the word "situated" should be replaced by the word "applicable".

It was so decided.

Mr. JOUDRO (Union of Soviet Socialist Republics) said that the third and fourth sentences were rather difficult to understand. It might be advisable to delete them.

Mr. D'AINEAU (Chile) felt that it was essential to keep those sentences, even if the thought was not expressed very clearly.

The CHAIRMAN said that he would ask the Secretariat to make the meaning clearer.

Paragraph 20, as amended, was adopted.

Paragraph 21

Mr. LEGAULT (Canada) proposed that the full stop at the end of the last sentence should be replaced by a comma and that the words "subject to the aforementioned right on the part of coastal States" should be added.

Mr. BRITTIN (United States of America) suggested that the point raised by the Canadian representative might be more suitably provided for if the words "The view was expressed in this connexion" at the beginning of the second sentence were replaced by the words "In connexion with the above some delegations expressed the view".

It was so decided.

Mr. JOUDRO (Union of Soviet Socialist Republics) proposed that the words "freedom of passage" in the second sentence should be replaced by the words "freedom of navigation", which was the more usual term.

It was so decided.

Paragraph 21, as amended, was adopted.

Paragraph 22

Mr. LEGAULT (Canada) pointed out that the delegation referred to was his own. He proposed that in the first sentence the words "and 1969" should be added after "1954"; that, in the second sentence, the word "including" should be replaced by the word "within" and that commas should be inserted after the words "concept" and "powers"; that, in the third sentence, the word "of" should be replaced by the word "in" and the word "concerning" by the words "that the", and that the words "should be strengthened and reflected in a future comprehensive treaty on marine pollution" should be added at the end; that, at the end of the fourth sentence, the words "and also stressed the principle of liability for pollution damage from such activities" should be added; and that the last sentence should be deleted.

It was so decided.

Mr. DEJAMMET (France) felt that the views of other delegations should also be reflected. He accordingly proposed the inclusion of an additional paragraph reading:

"Referring to liability for damages, other delegations pointed out that, according to international law, State responsibility was involved for non-execution or violation of the dispositions of conventions to which States were parties. The same delegations insisted on the necessity of including, in the convention to be established, dispositions concerning the nature and the modalities of the implementation of a principle of responsibility for damage."

It was so decided.

Paragraph 22, as amended, was adopted.

Paragraph 23

Mr. PAVIĆEVIĆ (Yugoslavia) felt that the substance of paragraph 23 was already covered by paragraph 20, and suggested deletion of paragraph 23.

It was so decided.

Paragraph 24

Paragraph 24 was adopted.

Paragraph 25

Mr. LUPINACCI (Uruguay) proposed the deletion of paragraph 25. The first part was covered in paragraph 20, while the second part referred to a difficult problem but offered no solution or new idea. The problem could better be dealt with in future conventions.

Mr. BEEBY (New Zealand) pointed out that paragraph 20 referred to the area to be covered by the treaty, while paragraph 25 was concerned with sources of pollution. In his view, paragraph 25 should be retained.

Mr. LUPINACCI (Uruguay) suggested that a sentence be added to paragraph 20 to meet the point raised by the representative of New Zealand.

Mr. PAVIĆEVIĆ (Yugoslavia) felt that paragraph 25 should be retained in its present form.

Mr. LUPINACCI (Uruguay) said that he would not press his amendment.

Paragraph 25 was adopted.

Paragraph 26

Mr. LEGAULT (Canada) proposed that the beginning of the paragraph should be reworded as follows: "Some delegations expressed the opinion that the most appropriate test for determining the types of marine pollution which should be dealt with by", the rest of the paragraph remaining unchanged.

It was so decided.

Mr. PAVIĆEVIĆ (Yugoslavia) was not clear as to the precise meaning of the words "the sea itself" at the end of the paragraph.

Mr. LEGAULT (Canada) suggested that they be replaced by the words "the sea-bed".

It was so decided.

Paragraph 26, as amended, was adopted.

Paragraph 27

Mr. MOTT (Australia) pointed out that parts of paragraph 27 were covered in the first sentence of paragraph 36 and in the second sentence of paragraph 18. He suggested that the three paragraphs should be combined.

Mr. JOUDRO (Union of Soviet Socialist Republics) supported the proposal.

Mr. KAPOOR (India) suggested the addition of the following sentence at the end of the new paragraph: "In this connexion a view was also expressed that the Secretariat may be requested to collect information on the nature of the activities of States in the sea-bed area and to prepare an analysis on the sources of pollution, the types of pollutants and the extent of the damage caused or likely to be caused, as well as measures for the preservation and control of the marine environment".

The CHAIRMAN said that, if there was no objection, the Secretariat would draft a revised paragraph to replace paragraphs 18, 27 and 36 in their present form and include the sentence proposed by the representative of India.

It was so decided.

Paragraph 28

Mr. VELLA (Malta) said he had a number of amendments to propose as a result of which paragraph 28 would read as follows: "A delegation expressed the view that in strict accordance with its terms of reference, the work of this Sub-Committee should focus on the wider concept of the preservation of the marine environment which includes, but is not limited to, the prevention of marine pollution. Towards this end the delegation felt that the Sub-Committee should start work on the formulation of general norms to the effect that no State may use its technological capability in a manner that may cause significant and extensive change in the natural state of the marine environment without obtaining the consent of the international community. Secondly, with regard to the prevention and control of ocean pollution, the Sub-Committee should seek to replace articles 24

and 25 of the Geneva Convention on the High Seas with the general norms more precisely defining the responsibility of States and thirdly, that the Sub-Committee examine the feasibility of drafting treaty articles enabling the international machinery to be established for the sea-bed to receive and to administer on behalf of, and in the interest of, the international community as a whole, islands, reefs, sandbanks and low-tide elevations of particular scientific interest. In this connexion, the delegation outlined preliminary and tentative texts of treaty articles."

It was so decided.

Paragraph 28, as amended, was adopted.

Paragraph 29

Mr. DIGGS (Liberia) proposed the addition of the following sentence: "Some delegations supported the concept that the training of nationals from developing countries and the transfer of technology for prevention and pollution control should be a matter of high priority for the developed countries."

It was so decided.

Mr. PINTO (Ceylon) agreed with the substance of the Liberian proposal but felt that a better place for it would be paragraph 47.

Mr. DIGGS (Liberia) said that he would prefer to have it in paragraph 29 since the paragraph would then take into consideration the views expressed by developing countries.

Mr. BRITTIN (United States of America) proposed that the second sentence should begin with the words "According to these delegates ...".

It was so decided.

Mr. GEBRE KIDAN (Ethiopia) proposed the insertion of the words "and their development in general" at the end of the first sentence.

It was so decided.

Paragraph 29, as amended, was adopted.

The meeting rose at 6.35 p.m.

SUMMARY RECORD OF THE FOURTEENTH MEETING
held on Friday, 27 August 1971, at 9.55 a.m.

Chairman: Mr. VAN IER ESSEN Belgium

ADOPTION OF THE REPORT OF THE COMMITTEE

The CHAIRMAN invited the Committee to continue its consideration of the revised version of paragraphs 16 et seq. of the draft report, (A/AC.138/SC.III/L.6) circulated in a conference room paper without a symbol, headed "Preservation of the Marine Environment, including the Prevention of Pollution".

Paragraph 30

Mr. HJERTONSSON (Sweden) suggested deletion of the opening words "as a subject to be dealt with by the Sub-Committee" and the addition of the words "by the Sub-Committee" at the end.

It was so decided.

Paragraph 30, as amended, was adopted.

Paragraph 31

Paragraph 31 was adopted.

Paragraph 32

Mr. BEEBY (New Zealand) said that paragraph 32 caused his delegation some difficulty. The second sentence was not clear and the third sentence bore no relation to the first two. He therefore proposed deletion of the paragraph.

It was so decided.

Paragraphs 33 and 34

Paragraphs 33 and 34 were adopted.

Paragraph 35

Mr. FRANCIS (Jamaica) proposed that the word "global" should be substituted for "universal" in the first sentence.

It was so agreed.

Paragraph 35, as amended, was adopted.

Paragraph 36

The CHAIRMAN recalled that the Sub-Committee had decided to combine paragraph 36 with paragraphs 18 and 27.

Paragraph 37

Mr. BEEBY (New Zealand) said he was not clear as to the meaning of the second sentence and suggested its deletion.

It was so decided.

Paragraph 37, as amended, was adopted.

Paragraph 38

Mr. JOUDRY (Union of Soviet Socialist Republics) said that the words "A delegation" or "It was proposed that" should be used instead of the words "One delegation" in the first line.

It was so decided.

Mr. MOTT (Australia) proposed that paragraph 49 should become the first sentence of paragraph 38, as the two were related.

It was so decided.

Paragraph 38, as amended, was adopted.

Paragraph 39

Paragraph 39 was adopted.

Paragraph 40

Mr. PAVICEVIC (Yugoslavia) was not clear as to the exact meaning of the words "the regime of the sea." The delegation which had expressed the view referred to in the first sentence might perhaps clarify that point.

Mr. GOWLAND (Argentina) said that his delegation had expressed the view that scientific research was a matter which inevitably involved various aspects of the law of the sea.

Paragraph 40 was adopted.

Paragraphs 41 and 42.

Mr. PINTO (Ceylon) thought that there was much to be said for combining paragraphs 41 and 42. He did not think that the reference in paragraph 41 to the study of Sub-Committee I was relevant. Paragraph 42 might be added to paragraph 41 and re-drafted as follows: "Some delegations saw difficulty in establishing objective criteria by reference to which the two types of activity might be distinguished and for that reason expressed the view that scientific research should be subject to the same controls as industrial prospecting." The meaning of the words "where such research involved deep drilling or other projects with similar potential for pollution of the marine environment" at the end of paragraph 42 was not clear.

Mr. BEEBY (New Zealand) said that the text proposed by the representative of Ceylon was an improvement over the present one. The final clause in paragraph 42 might be clearer if it became a new sentence which would start with the words: "Some delegations emphasized the need for such controls where the research ...", the remainder of the clause remaining unchanged.

The CHAIRMAN suggested that the Secretariat should be asked to redraft paragraphs 41 and 42 on the basis of the views expressed by the representatives of Ceylon and New Zealand. They would be combined into a single paragraph.

It was so decided.

Paragraphs 41 and 42 were adopted, subject to the decision just taken.

Paragraph 43

Mr. LEGAULT (Canada) said that, since the second sentence was meant to reflect a view rather than to pass judgement, he proposed that the words "This principle is" should be replaced by the words "This principle was said to be" and that the word "offers" should be replaced by the words "and was considered to offer".

It was so decided.

Mr. LUPINACCI (Uruguay) said that the words "The opinion was expressed that", at the beginning of the first sentence, might similarly be interpreted as being the general opinion of the Sub-Committee. He proposed therefore that a more usual formula, such as "Some delegations expressed the view that", should be used.

It was so decided.

Mr. PAVICEVIC (Yugoslavia), supported by Mr. WARIOBA (United Republic of Tanzania), suggested that, for the sake of balance a sentence stating that other delegations differed from that view should be added.

Mr. JOUDRO (Union of Soviet Socialist Republics), supported by Mr. KOLESNIKOV (Ukrainian Soviet Socialist Republic), said that, while some delegations were in favour of complete freedom of scientific research, others favoured control. If the second point of view was reflected independently in subsequent paragraphs without contradiction, the same should be done for the first.

Paragraph 43, as amended, was adopted.

Paragraphs 44-46

Mr. PAVICEVIC (Yugoslavia) proposed the following new text for paragraph 44:

"Some delegations stressed that scientific research should be internationally regulated and that in this framework future international machinery or coastal States should allow research to proceed unhindered. A number of delegations emphasized the rights of coastal States of control in zones adjacent to the territorial sea and the rights of coastal States to be consulted and to give their consent for research in this area as well as to participate in all projects of research carried out in their adjacent zones."

Mr. BRITTIN (United States of America) pointed out that the new text would remove the need for paragraph 46.

Mr. PINTO (Ceylon) supported the Yugoslav proposal.

Mr. TODD (United Kingdom) said he had no objection to the text proposed by the Yugoslav representative. He noted, however, that the first sentence of the original paragraph 44 seemed to have been dropped and suggested that it should be retained and made the first sentence of paragraph 43. He also suggested that paragraph 43 should then be placed before paragraph 40, in order to improve the balance of the report.

Mr. PAVICEVIC (Yugoslavia) said he had no objection to moving the first sentence of paragraph 44 to paragraph 43, but did object to the suggestion that paragraph 43 as a whole should be placed before paragraph 40. He would agree that the text he had proposed made paragraph 46 redundant.

Mr. LEGAULT (Canada) said that the removal of paragraph 46 would leave paragraph 45 in isolation. Since the ideas contained in that paragraph were essentially the same as in paragraph 43, perhaps paragraph 45 too could be deleted.

Mr. JOUDRO (Union of Soviet Socialist Republics) said he had no objection to the proposal of the United Kingdom regarding the first sentence of the original paragraph 44 or to the new text of paragraph 44 proposed by the Yugoslav representative. He also agreed that paragraph 46 should be deleted, but in his view paragraph 45 dealt with a quite different subject and should be retained.

Mr. LUPINACCI (Uruguay) supported the new text of paragraph 44 proposed by the Yugoslav representative and the deletion of paragraphs 45 and 46.

Mr. BRITTIN (United States of America) said he shared the hesitation of the USSR representative regarding the deletion of paragraph 45.

Mr. LEGAULT (Canada) suggested that, if paragraph 45 was retained, the following new sentence should be added: "Other delegations differed from this view and stressed the importance of adhering to existing rules of international law concerning scientific research on the continental shelf."

Mr. LUPINACCI (Uruguay) supported the Canadian proposal but suggested that the words "existing rules of international law" should be replaced by the words "the provisions of the 1958 Geneva Convention on the Continental Shelf".

Mr. MOTT (Australia) said he could agree to the deletion of paragraph 46, on the understanding that the Canadian and Uruguayan amendment to paragraph 45 was accepted. He had some reservations regarding the first sentence of the original paragraph 44 and the first sentence of the new version proposed by the Yugoslav representative. It was not clear what area of the sea was meant. Was it, for example, intended that a future international authority or coastal State should allow research to proceed unhindered in territorial waters? He did not believe that anyone had suggested that a future international authority should be given such sweeping powers.

Mr. PAVICEVIC (Yugoslavia) said he was willing to delete the second part of the first sentence of his proposed text, on the understanding that the United Kingdom representative would withdraw his proposal to move the first sentence of the original paragraph 44 to paragraph 43.

After a brief discussion, Mr. TODD (United Kingdom) agreed to withdraw his proposal regarding the first sentence of paragraph 44.

The new text of paragraph 44 proposed by the Yugoslav representative, as amended, was adopted.

Paragraph 45, as amended by the Canadian and Uruguayan representatives, was adopted.

Paragraph 46 was deleted.

Paragraph 47

Mr. BEEBY (New Zealand), supported by Mr. DIGGS (Liberia) and Mr. PINTO (Ceylon), said that, in view of the first sentence of the new text of paragraph 44, the last sentence of paragraph 47 was redundant. He proposed, therefore, that it should be deleted.

It was so decided.

Mr. GEBRE KIDAN (Ethiopia) proposed the addition of the following new sentence:

"Some delegations expressed the view that for developing countries to participate effectively in scientific research and to utilize the information acquired through research, a sufficient number of their nationals would have to be trained in all branches of marine science and technology at all levels".

It was so decided.

Paragraph 47, as amended, was adopted.

Paragraph 48

Mr. LUPINACCI (Uruguay), supported by Mr. GOWLAND (Argentina), said that it would be preferable to begin the paragraph with the fundamental principle that the consent of coastal States was required. He proposed, therefore, that the order of the two sentences should be reversed. The new first sentence should then begin with the words "Some delegations expressed the view that".

It was so decided.

Mr. LEGAULT (Canada) said that no one had argued that the international community would have the right to verify the scientific character of research on the continental shelf. He proposed, therefore, that the words "international community" should be replaced by "coastal State".

It was so decided.

Paragraph 48, as amended, was adopted.

Mr. PINTO (Ceylon) proposed that the order of paragraphs 47 and 48 should be reversed.

It was so decided.

Paragraph 49

The CHAIRMAN noted that by an earlier decision paragraph 49 had been added to paragraph 38.

Paragraph 50

Mr. LUPINACCI (Uruguay) proposed the addition of the words "with special consideration for the needs of developing countries" at the end of the first sentence.

It was so decided.

After a brief discussion in which Mr. MOTT (Australia), Mr. BRITTIN (United States of America) and Mr. WARIOBA (United Republic of Tanzania) took part, the CHAIRMAN suggested that the first part of the first sentence should be deleted and that it should begin with the words "A delegation observed".

It was so decided.

Paragraph 50, as amended, was adopted.

The CHAIRMAN said that part II, section D, would need recasting and suggested that the task should be left to the Rapporteur.

It was so agreed.

III. ADOPTION OF THE REPORT

The draft report of the Sub-Committee, as amended, was adopted.

The meeting rose at 11.45 a.m.