Committee on the Peaceful Uses of Outer Space

Provisional Verbatim Record of the Fifty-First Meeting

Held at Headquarters, New York,
on Friday, 15 September 1967, at 10.30 a.m.

Chairman:  
Mr. WALDHHEIM (Austria)

Report of the Committee to the General Assembly (continued)

(a) Report of the Scientific and Technical Sub-Committee (A/AC.105/39)
(b) Report of the Legal Sub-Committee (A/AC.105/37)

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corrections will be 21 September 1967.
REPORT OF THE COMMITTEE TO THE GENERAL ASSEMBLY (continued)

(a) REPORT OF THE SCIENTIFIC AND TECHNICAL SUB-COMMITTEE (A/AC.105/39)
(b) REPORT OF THE LEGAL SUB-COMMITTEE (A/AC.105/37)
(c) REPORT OF THE WORKING GROUP ON NAVIGATION SERVICES SATELLITE SYSTEMS (A/AC.105/38)

Mr. PARTHASARATHY (India): We are thankful to you, Mr. Chairman, and to the Chairmen of the two Sub-Committees for the excellent statements made before the Committee which have given us a clear picture of the work done by the two Sub-Committees and the Working Group on a navigation services satellite system, as well as an idea of the areas of work which have yet to be covered.

We have before us the report of the Scientific and Technical Sub-Committee in document A/AC.105/39. Under the able chairmanship of Dr. D.F. Martin, the Sub-Committee has made considerable progress in attempting to provide answers to new and complicated problems in the field of outer space. The Sub-Committee requires his wise guidance, and we hope that his leadership will be available to it in the period ahead of us.

By delegation attaches great importance to the work of this Sub-Committee. We are, therefore, gratified to note that the report presented by the Government of India, entitled "Satellite communications: An Indian Study", has been appreciated by the Sub-Committee, as recorded in paragraph 20 of its report. The Sub-Committee also agreed that the results of the Government of India's experiment, as well as the planned UNESCO pilot programme which may follow, could have great importance for many Member States. The Sub-Committee invited the Government of India to continue to inform the Sub-Committee on this matter as it progresses, and this Government will be happy to do so.

The Indian delegation is also gratified that the Sub-Committee has noted with satisfaction and appreciation that the experimental satellite communications earth station at Ahmedabad was operational and would be utilized for training and research by both Indian and other nationals. I should state here that the Ahmedabad station, which became operational in August, 1967, is already participating in an international program and has succeeded in tracking the ATS-2 satellite, and further that on 30 August loop tests were performed successfully and qualitative experiments were done for the reception of television and multiplex signals.

We are happy to note that in response to our invitation a number of trainees from Afghanistan, Ceylon, Indonesia, Kenya and Syria are expected to join four-month courses commencing November 1967 and June 1968 for training in satellite communication, including experimental participation in laboratory tests and tests involving ATS satellites.

May I again refer to the Sub-Committee's report, this time to paragraph 26, in which the Sub-Committee has noted with appreciation the report of the Advisory Panel on the Thumba Equatorial Rocket Launching Station (TERLS), contained in document A/AC.105/L.30, and has recommended that the United Nations continue to grant sponsorship to TERLS. In this connexion, we should like to mention that we shall, at an early date, circulate a paper entitled "Rocket and Balloon Studies" in which scientific results of the investigations undertaken at the Thumba Equatorial Rocket Launching Station and at the balloon rocket launching site near Hyderabad are recorded.

The Indian delegation has distributed separately through the Secretariat copies of a handbook on TERLS prepared by the Indian National Committee for Space Research. This handbook is intended to invite the attention of the international scientific community to the availability of TERLS for space research with sounding rockets at the Magnetic Equator.

India is setting up a space science and technology centre at WelI Hill, near the site of the Thumba Equatorial Rocket Launching Station. The space science and technology centre, which will be primarily dedicated to problems of space technology is intended to provide facilities to scientists in support of this programme. The centre will also provide training in various aspects of space experimentation with sounding rockets.

My delegation would like to congratulate the Secretariat for the very useful work it has done, particularly in regard to the preparation of an International Directory of Facilities for education and of training in basic subjects related to the peaceful uses of outer space. In this connexion, we should like to refer to the statement of the representative of the United Arab Republic, in which he recalled resolution 2225 (XXI) concerning the preparation and consideration of suggestions for programmes of education and training of
specialists in the peaceful uses of outer space to assist the developing countries. We support the view expressed by the representative of the United Arab Republic and hope that steps will be taken to implement the recommendation of the General Assembly.

India is looking forward to participating in the Conference on the Peaceful Uses of Outer Space to be held in Vienna next year. It will be India's endeavour to send, within its limited means, as many participants as possible to that Conference. We hope that other developing countries too will participate fully in the Conference and will derive the maximum benefit from it. We are confident that the panel of experts under the Chairmanship of Dr. V. A. Sarabhai will finalize in good time its work in connexion with that Conference.

We also have before us the report of the Working Group on a Navigation Services Satellite System, contained in document A/AC.105/38, prepared under the Chairmanship of Professor E.Y. Chitnis. Our delegation would welcome annual reports, if possible, on this subject to the Committee from the International Civil Aviation Organization and from the Inter-Governmental Maritime Consultative Organization, as well as from other specialized agencies and interested international governmental and non-governmental organizations. It is the hope of my delegation that the Working Group will meet again to consider the reports submitted to the Committee and will make further progress in achieving its objectives.

May I now refer to the report of the Legal Sub-Committee, which is also before us (A/AC.105/37). My delegation notes with satisfaction that the Legal Sub-Committee has continued its efforts to formulate a draft agreement on liability for damages caused by the launching of objects into outer space and a draft agreement on assistance to and return of astronauts and space vehicles. We have always considered that agreements on these two subjects were vitally important and, in fact, we should have liked them to open for signature simultaneously with the Treaty on Principles Concerning the Activities of States in the Exploration and Use of Outer Space, which was opened for signature in January of this year. That has not been possible. Nevertheless, we welcome the progress made in the Legal Sub-Committee now under the able Chairmanship of Mr. Wyner in arriving at some agreed points on the question of liability for damage caused by the launching of objects into outer space and some agreed articles on the question of assistance to and return of astronauts and space vehicles.

We note with satisfaction that the principle that a launching State should be absolutely liable to pay compensation for damage caused on the surface of the Earth and to aircraft in flight has found general agreement in the Legal Sub-Committee. We feel that under the proposed agreement on liability for damage caused by the launching of objects into outer space, there should be no financial limit to claims which can be made against the launching State, as such claims would naturally depend on the facts and extent of the damage caused.

There are still many questions or points relating to the two subjects of liability for damage caused by space vehicles and assistance to astronauts which remain to be considered further in the Legal Sub-Committee. We hope that general agreement will be found on all those points, and that the Legal Sub-Committee will be able to recommend suitable agreements on both these subjects at an early date. The recent tragic death of American and Soviet astronauts, to which the Chairman of the Legal Sub-Committee referred while introducing the report of his Sub-Committee, have amply demonstrated the necessity of treating the question of assistance to and rescue of astronauts as a humanitarian question which should not be subjected to any controversy.
MR. BAL (Belgium) (interpretation from French): It has become for the Committee on the Peaceful Uses of Outer Space a tradition on the eve of the General Assembly to assess the results of its activities in fulfilling the terms of reference assigned to it during the preceding year. Within this frame work, I should like to reiterate a general comment which has been made by several other participants in the present session. Those representatives expressed the wish that the Committee on Outer Space should maintain all of the dynamism which marked it at the time of the elaboration and conclusion of the Treaty on space. Some of them indeed asked if, during the past year, the progress achieved in the space field by the competent organs of the United Nations had in all respects been as considerable as they had hoped it would be. The observations to which I have just referred especially pertain to the legal field. May I recall in that respect that, at the time resolution 2222 (XXII) was voted upon by the Assembly, many States declared that if it was desired that the Treaty on space should be assured practical application that would be really satisfactory its scope should be made more explicit and it should be supplemented by other instruments of international law. In these conditions it was incumbent on the Legal Sub-Committee to turn its attention without delay to the new routine subjects of space law, responsibility and assistance and return. Furthermore, that Sub-Committee had to begin the study of some new problems whose practical importance seemed obvious.

For its part, the Belgian delegation feels that it has shown itself to be fully aware of the need actively to seek generally acceptable solutions for the problems that arise in the framework of the task of setting up a comprehensive system of space law. Having in mind the previous work done on the question of responsibility, the Belgian delegation submitted a revised draft treaty in Geneva on those problems. Thereafter the Belgian delegation participated in consultations both with the sponsors of the two other draft conventions on the problem of liability and in the Working Group dealing with the problems relating to that subject. Anxious to arrive at concrete results rapidly, and in a spirit of compromise which no one can deny, Belgium finally decided to endorse a certain number of points of agreement which are recorded in the report of the Legal Sub-Committee and which, as a whole, show beyond all doubt, progress on the road to the preparation of a multilateral treaty regarding liability for damages resulting from the launching of objects into space.

The Chairman of the Legal Sub-Committee, while introducing the report of his Sub-Committee, rightly pointed out the need for improving the organization of the Legal Sub-Committee's work in the future. My delegation fully endorses his suggestion that we should try in this Committee to improve the organization of their work at the next session in 1968 by endeavouring to fix the date of their session sufficiently in advance so that the members of that Sub-Committee will have sufficient time to prepare their work, and it would also enable the Secretariat to provide adequate facilities for servicing their meetings. At their last session in Geneva from 19 June to 15 July 1967, the Legal Sub-Committee met for a period of three weeks but had only one meeting every day which proved inadequate for them to complete even a single item of their work satisfactorily. I am sure that the Secretariat will also see its way to arranging a larger number of meetings for the Legal Sub-Committee at its next session so that it may at least be able to complete its work on the two draft agreements on liability and assistance as speedily as possible.
We do not conceal from ourselves, nevertheless, that important work remains to be done in this field. During this session we have heard a brief description of the principle points of agreement arrived at in Geneva. It can be stated that the preparation of a treaty on liability implies that all the points of agreement should be included in conventional texts and that they should be supplemented by provisions which, in part, will have to deal with the very same subjects dealt with by the texts accepted in Geneva. This last remark applies especially to the question of the status of international organizations, to which the representative of the United Kingdom referred in the statement he made yesterday morning. Indeed, it would be inconceivable, since it is contrary to the idea of a satisfactory legal order, that a subject of law should not have obligations attached to it, not to mention rights which, logically enough, should correspond to them. For that reason, moreover, the report of the Legal Sub-Committee states, among other things, that it would be appropriate to continue the study of the question of the rights of international organizations within the framework of the planned convention.

It is hardly necessary for me to recall that an agreement still remains to be achieved on certain essential points of a treaty regarding liability, such as the criteria to follow in determining the amount of indemnification to pay in case of damages. It is to be hoped, that in 1968 the Legal Sub-Committee will, in a spirit of comprehension among all its members, rapidly attain new points of agreement in the field of liability. The task in the present case consists of preparing an instrument of positive law capable of contributing in a practical manner to the solution of cases of international litigation. Substantial progress will also be required in the matter of liability if we hope to obtain wide support for the rapid preparation of a treaty on assistance and return, a treaty which manifestly, and in conformity with resolution 2222 (XXI), should deal both with assistance to astronauts and to the return of astronauts and of space vehicles.

I will be very brief with respect to the problem of the definition and utilization of outer space. In Geneva, the Belgian delegation was amongst those which expressed doubts on the need and timeliness of establishing without delay a single definition of outer space, based on scientific criteria or on other elements.
The work that we are considering at this session has been fruitful, thanks to the intelligence and dedication which you, Mr. Chairman, have shown in directing our work; and also thanks to the capacity and effectiveness of those who were in charge of the Legal and Scientific and Technical Sub-Committees.

My delegation was glad to see the progress made this year, which is reflected in the reports that are before us. Our position on the work of the Legal Sub-Committee has been stated, and we feel that there is no need to repeat it. In order to save time I shall now refer only briefly to the recent work of the Scientific and Technical Sub-Committee, which is recorded in document A/AC.105/59, the report so eloquently introduced by Dr. Martyn.

My delegation would like once again to express its appreciation for the warm reception given by members of this Committee to the request for a launching station in Már Chiquita, in the Atlantic.

I was pleased to learn that precisely two days ago we effected a launching of a meteorological sounding rocket from this station in the Atlantic, together with another launching effected from our station in Chemical. Our Government will be pleased to receive the Group of Experts which will visit the installations and report on their functioning.

We believe that the criteria laid down by the Committee for dealing with the request by Argentina will mean that the Argentine installations will be a step forward in outer space research and will be a way of strengthening international co-operation in this field.

In this connexion, finally, I should like to clarify the interpretation of paragraph 32 of the report already referred to (A/AC.105/59). My delegation understands that in order for the United Nations to grant sponsorship to the Argentine stations the same criteria will be used as for the Thumba range area in India, and that the new guidelines which will be laid down in the future by the Sub-Committee for this kind of sponsorship will be applied to our Már Chiquita range later.

Mr. ABE (Japan): We now have before us three reports, namely, the report of the Scientific and Technical Sub-Committee, the report of the Working Group on a Navigation Services Satellite System, and the report of the Legal Sub-Committee. Having heard statements of the Chairmen of both Sub-Committees, Mr. Martyn of Australia and Mr. Wyzner of Poland, I should like to express, first of all, on behalf of my delegation, our deep appreciation of their outstanding guidance, under which both Sub-Committees have successfully completed their work.

Given these comprehensive reports of the Sub-Committees and the excellent statements of their Chairmen, my delegation does not find it necessary to dwell upon every item dealt with by those organs. Accordingly, I should like to touch upon some points to which my delegation attaches particular importance.

Firstly, with regard to the report of the Scientific and Technical Sub-Committee, it may be recalled that there was no consensus on the proposal on the desirability of enlarging the personnel, budget and competence of the Outer Space Affairs Group of the Secretariat; neither was there a consensus on the proposal on the desirability of establishing a specialized agency to deal with outer space activities. In this regard, we should like to emphasize again that Member States should make full use of the existing sources of information, such as the Outer Space Affairs Group, the Committee for Space Research (COSPAR) and the European Space Research Organization (ESRO).

With reference to the problem of United Nations sponsorship of international sounding rocket launching ranges, the Scientific and Technical Sub-Committee decided to examine at its next session the question of criteria for recommending United Nations sponsorship. We hope that such an examination of at its future session of requirements which would justify United Nations sponsorship will bring about fruitful results in this field.

The same Sub-Committee reached the consensus that it is not possible at the present time to identify scientific or technical criteria for a precise and lasting definition of outer space. Furthermore, it decided to continue consideration of this matter at future sessions and invited Member States to submit further relevant material for such consideration by the Sub-Committee.

My delegation hopes that Member States will respond positively to this invitation, taking into account important implications which any definition of outer space would have for operational aspects of space research and exploration.
Regarding the Report of the Working Group on a Navigation Services Satellite System, I should like to make reference to the hope expressed in that Report that those States active in research and development work in navigation services satellites will continue their work, in order to establish a sound technical and economic basis to meet requirements for such a system. For the purpose of contributing constructively to the Navigation Services Satellite System, we in Japan will make every possible effort to do so, although we still need to accelerate our efforts to solve the relevant problems in the field of space technology, including rockets and artificial satellites.

I should like briefly to touch upon the Report of the Legal Sub-Committee. We are pleased to note that there was some substantial progress in the drafting of an agreement on liability for damages caused by the launching of objects into outer space. On the other hand, however, it is a matter of regret that there was no comparable progress on an agreement for assistance to, and return of, astronauts and space vehicles. In this regard my delegation appreciates that in this Committee, on 13 September, the representative of the Soviet Union confirmed that it had no objection to completing its draft of 19 June 1967, concerning the rescue of astronauts, by adding provisions concerning the return of astronauts and space vehicles. We consider it an encouraging sign, and hope that the Legal Sub-Committee will make substantial progress in drafting an agreement in the future.

Mr. Sheh (Australia): The convening of the present session of the General Assembly marks the completion of one year of activity since the General Assembly adopted resolution 2222 (XXI) concerning the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and other Celestial Bodies. As has been remarked by other speakers, this is perhaps an appropriate time at which we might consider whether the hopes engendered by the signature of that Treaty have been fulfilled in the work of this Committee, and how we are proceeding in our attempt to keep pace in this political forum with the rapid developments taking place in many aspects of space technology and science.

This past year has seen meetings of both the Scientific and Technical and the Legal Sub-Committees. There has been a meeting of the Working Group on a Navigation Services Satellite System, while preparations are proceeding for the United Nations Conference on the Exploration and Peaceful Uses of Outer Space, to be held in Vienna next year.

First of all, turning to the Scientific and Technical Sub-Committee, that Sub-Committee has, just last week, completed a useful and constructive meeting, which furthered the work of that body on the main agenda items which it had been considering. The work of the Sub-Committee proceeded in an atmosphere of goodwill and co-operation, which went a great way to ensuring the speedy completion of its work. The Australian delegation welcomed the discussion which took place in that Sub-Committee on Exchange of Information. That discussion clarified some of the issues involved by bringing to our attention the large number of sources and digests already available concerning developments in all phases of space science. We agree with the view expressed by a number of delegations in that Sub-Committee, that the primary role of the Sub-Committee, and of the Outer Space Affairs Group in the Secretariat, is not itself to attempt the publication of digest material, which in the existing state of affairs would probably only duplicate what is already available, but rather to act as a means through which countries interested in particular fields could obtain information concerning the existing sources of information available to them.

With regard to the item of Encouragement of International Programmes, my delegation was pleased to note the special interest shown in the Sub-Committee in some of the potential and existing applications of space technology. Of particular interest were the reports from NO] concerning the importance of satellites in meteorology, particularly in those areas where there is at the present time a scarcity of available data. In the Southern Hemisphere, and more especially in South and South-East Asia, the introduction of methods of weather observation from satellites is of considerable importance to the countries of the region, surrounded as they are by vast areas of ocean which limit the possibilities of weather observation by conventional means. The
plans for the World Weather Watch, in which Australia is co-operating by the
establishment of a World Weather Watch Centre in Melbourne, offers a good
example of the possibilities of international co-operation in applying the
benefits of space technology on a global basis.

The Scientific Sub-Committee also commended the report of the International
Telecommunications Union. The growth of communications by means of satellites
has been one of the major applications of space technology, which is also of
particular importance to countries geographically remote from the main
communication centres, as well as to countries whose size might suggest the
feasibility of some day using satellites for internal communications. In
this connexion, considerable interest was shown in the Sub-Committee in an
Indian report on an experiment in mass communications which is in progress in
over 100 villages around Delhi. The planned UNESCO pilot programme, involving
the use of satellites for disseminating information concerning agricultural
methods and population control, is an experiment which will be watched with
interest and on which the Sub-Committee has invited the Government of India
to continue to report as the programme progresses.

Under the agenda item of International Sounding Rocket Launching Facilities,
the Sub-Committee heard a request from the representative of Argentina for
United Nations sponsorship of a sounding rocket facility at Mar del Plata.
The establishment of a launching facility in an area of considerable scientific
interest in the Southern Hemisphere was noted, and this Committee has been asked
to approve that in due course a small group of scientists should visit the
station with a view to making a recommendation concerning the granting of United
Nations sponsorship. We agree that it is appropriate that, at its next meeting,
the Sub-Committee might consider the question of criteria which should be
satisfied with a view to recommending sponsorship of International Sounding
rocket launching ranges.

In relation to Education and Training, the Secretariat had prepared for
the Sub-Committee's attention an extensive and comprehensive directory on the
opportunities which existed in many countries for education and training in
fields related to space science. My delegation would like to associate itself
with those other delegations which have expressed particular appreciation for
the efforts of the Secretariat in the preparation of this material, as well as
the documentation on the other items which it had prepared for the
Sub-Committee's session.
In this connexion the Australian delegation welcomes the statement by the representative of the USSR at the 49th meeting of the Committee, that:

"We declare again here that we have no objection to completing the draft presented by the Soviet Union on 19 June 1967 concerning the rescue of astronauts in the event of accident or emergency landing, with provisions concerning the return of astronauts and space vehicles, in conformity with the provisions of the treaty on the principles governing the activities of States in the exploration and uses of outer space, including the moon and other celestial bodies." (49th meeting, p. 61)

In view of this statement it is perhaps sufficient for me simply to express the hope that it will now be possible for the Legal Sub-Committee at its next session to make rapid progress with the task of drawing up an agreement which would cover not only the question of assistance to astronauts, but also the question of their return, as well as the return of space vehicles. Let us hope that it will be possible for the Sub-Committee to make progress on both these draft agreements which have now been before it for a number of years.

The Legal Sub-Committee also considered the proposal concerning the definition of outer space and the utilization of outer space and celestial bodies, including the various implications of space communications. While the Legal Sub-Committee was able to reach agreement on the text of a questionnaire to be addressed to the Scientific and Technical Sub-Committee, to whose discussion I have already referred, it was unable to reach agreement on any recommendations relating to the utilization of outer space and celestial bodies. By delegation believes that there will be scope for the further pursuit of these questions at future sessions of the Legal Sub-Committee.

The Working Group on a Navigation Services Satellite System, in which my delegation was privileged to participate, had a useful session at which it conducted a preliminary survey of the need for and the technical feasibility of such a system. We also discussed the proposals of this working group that there was at the present time a demonstrated need for the establishment of such a system, but that this matter should be kept under review by the specialised agencies, including IADC and ICOC, in the light of further developments in this field.
Finally, my delegation would like to add a few words about the United Nations conference on the exploration and peaceful use of outer space which is to be held in Vienna during 1968. We hope that, with the additional time now available for the preparation of the conference, it will be possible for many countries to attend, particularly those which might most expect to benefit from a conference designed to examine the opportunities available for non-space Powers to benefit from the technical and scientific achievements of the space age. In its first report the Working Group of the Whole recommended that the conference should be prepared in such a manner as to be meaningful to both scientists and non-scientists, and we think that it would be useful to include participation by representatives not only in strictly scientific fields, but also those concerned with questions of policy. We trust that preparations for the conference are proceeding and that, under your guidance, Mr. Chairman, the resources and facilities of the Secretariat will be utilized in ensuring the success of the conference.

These are the thoughts which my delegation wished to express concerning the work of the Committee on Outer Space. While in some respects the achievements of the past year have been modest ones, we feel that they have marked further progress in fulfilling the mandate that has been given to this Committee.

We feel confident that, under your wise guidance, Mr. Chairman, the Committee will go on to do even more fruitful work in the years ahead.

Mr. MARSHIK (Austria): As the Committee is once again ready to prepare its report to the General Assembly on the work accomplished over the past year, and once again, as you pointed out in your opening statement, Mr. Chairman, against a background of continuing scientific and technical achievements in the exploration and use of outer space, my delegation would like to make the following few observations on the reports submitted to our Committee and on the problems before it.

The Legal Sub-Committee, as shown in its report, has continued this year its efforts to draft an international agreement on assistance to astronauts and space vehicles and an international agreement on liability for damages caused by the launching of objects into outer space. The Sub-Committee's report reflects the progress which the Sub-Committee has been able to make in this respect.

After the spectacular achievement in preparing the Treaty on Principles Governing the Activities of States in Outer Space last year, and considering also that the two draft agreements have been on the agenda of the Legal Sub-Committee for several years, the progress achieved this year will perhaps seem modest and somewhat disappointing. Yet, the report does note that it was possible to reach agreement on several points, and speakers in this debate have called our attention to them. Also some rapprochement has been achieved on other points during the Sub-Committee's discussions. My delegation hopes, therefore, that the Legal Sub-Committee will be able to continue its work next year under favourable auspices and to report substantive progress at our next session.

Several representatives in this debate have recalled that the tragic loss of pioneers of space exploration by both the Soviet Union and the United States earlier this year has clearly demonstrated, and with painful impact, that astronauts might indeed be in need of assistance and in distress. Likewise, the steadily increasing number of launching experiments naturally increases in proportion the possibility of damage which might be caused by these objects launched into outer space. Members of the Committee will recall that years ago we were shown in this Committee by one of the delegations present remnants of vehicles sent into outer space that had fallen on the territory of a Member State. It is therefore perhaps only a question of time until actual damage does occur due to the launching of objects into outer space.
All these seem to be powerful arguments indeed to support the call for a speedy elaboration of the two proposed agreements on assistance to astronauts and on liability for damage caused by objects launched into space.

From the documents before us we note that both the Legal and the Scientific Sub-Committees have encountered considerable difficulties in their studies relating to a definition of outer space. In the discussions of the Scientific Sub-Committee last week we were told in fact that it appears very difficult if not impossible to identify scientific or technical criteria which would permit a precise and lasting definition of outer space. It is our hope that in spite of these obvious difficulties the Legal Sub-Committee will proceed with its work in this respect.

We have been reminded during this debate of the treaty on principles governing the activities of States in outer space, which has been rightly hailed as a major achievement in bringing the rule of law to outer space and which has in the meantime been signed by a very great number of States. To my delegation it appears in order that we should now also agree on a definition of what we mean by outer space and on the area to which that treaty will apply. The fact that it might not be feasible to establish a definition of outer space on compelling scientific and technical grounds in our opinion need not impede a solution. It will perhaps be possible, in the absence of scientific and technical criteria, to arrive at a definition or delimitation of outer space by agreement. The same arbitrary decision was, after all, taken in establishing the limits of territorial waters and of the high seas.

The question of the definition of outer space was discussed in the past year by both our Scientific and our Legal Sub-Committees, and it might serve, therefore, as a useful point to turn now to the report of the Scientific Sub-Committee. That report, as in the past, contains a number of recommendations on a wide range of subjects, in particular, the exchange of information, the encouragement of international programmes and, this year in particular, the very interesting Mr. Weather Watch Programme adopted by NGO earlier this year. Another on international sounding rocket launching facilities and, here, in particular, on the continuing United Nations sponsorship of the Thumba Sounding Rocket Station in India and on the proposed sponsorship for launching facilities in Argentina, as well as recommendations on education and training in space research. We believe that our Committee will have no difficulty in endorsing the Sub-Committee's recommendations on those points.

There was one further point of interest in the discussions of the Scientific Sub-Committee last week which is referred to briefly in paragraphs 23 to 25 of the Sub-Committee's report. In fact, a number of delegations in the Scientific Sub-Committee expressed their regret that at present the role of the Scientific Sub-Committee, and indeed, the United Nations, in matters of outer space was rather limited. Those delegations have, therefore, made a number of suggestions on how possibly to strengthen the role of the United Nations in encouraging international co-operation in this field. The proposal was made, inter alia, to organize United Nations sponsored conferences or seminars, symposia and training courses, and to become to a much larger extent the source for disseminating information on the practical applications of outer space -- in other words, to do on a permanent basis what the United Nations Conference on Outer Space will do in a dramatic and concentrated form on an ad hoc basis in the summer of next year in Vienna.

The same delegations pointed to the work accomplished by the International Atomic Energy Agency in that respect in the field of atomic energy. We realize, of course, that we are dealing here with a delicate problem, particularly if we contemplate the organisational and financial implications. We fully realize that opinion is by no means unanimous about the best approach to be taken on that matter. Obviously, therefore, that question will require further studies and should not be the subject of hasty conclusions. We do feel, however, that it is a matter which deserves our attention and we therefore note with satisfaction from the Sub-Committee's report that the Sub-Committee intends to keep the question under further review.
I should now like to turn to the report submitted to us by the Working Group on Navigation Services Satellite Systems. From the report it appears that the meeting of the Working Group provided a valuable opportunity for experts in that field to meet and exchange their views on the need and on the feasibility of a navigation services satellite system, in particular with representatives of the International Civil Aviation Organization and the International Maritime Consultative Organization which, after all, would be the representatives of the potential users of such a system.

On the basis of their discussions, the Working Group arrived at two basic conclusions: first, that it will be technically feasible to develop a navigation services satellite system, both to meet particular needs of civil aviation and sea-borne traffic and generally to help resolve many navigational requirements; and, secondly, that at present an agreed requirement for such a system does not exist, but that a requirement is likely to arise in the relatively near future for certain functions which could be performed by a satellite system. The Working Group, therefore, suggests -- rightly -- that the problem will require further studies and recommends that these studies be undertaken by interested organizations, in particular the two which I have just mentioned, ICAO and IMO. The Working Group further recommends that those organizations be requested to submit annually, if possible, pertinent reports to our Committee. We believe that those recommendations should be endorsed by our Committee.

As to possible reports which we will receive from interested organizations on the above-mentioned subject, we would hope that those reports, which will necessarily be highly technical, could be dealt with first by the Scientific and Technical Sub-Committee before being submitted to the main Committee here.

Finally, I wish to turn to the question of the United Nations Conference on the Exploration and Peaceful Uses of Outer Space. We have noted with great satisfaction the statements made by almost every speaker in this present debate stressing the importance of the Vienna Conference, and we wish to assure the Committee that the Austrian Government, as the host Government to the Conference, will do everything in its power to contribute to the full success of the Conference. It is in this wish to see the Conference become a true and lasting success that my delegation would like to avail itself of this opportunity to remind the members of the Committee that while the preparation for the Conference as begun, a great deal indeed remains still to be done.

Above all, as several speakers in the debate have already pointed out, the Conference will be a true success only if it is attended not only by representatives of the space Powers, but also by a significant number of participants from non-space nations and, in particular, the developing countries, for whose benefit, after all, the Conference is in the first place intended. No time, therefore, should be lost in making the necessary arrangements to publicize the Conference and its objectives on as wide a basis as possible. This will require the co-operation of Member States, as well as the collaboration of the Secretary-General, whose assistance will be available not only in the early preparation of information material, and we could think, for instance, of the preparation of an information pamphlet setting forth the idea and the objectives of the Conference, but also in the efforts to give this information material as wide a publicity as possible.

At the same time, practical preparations for the Conference will have to move speedily ahead. We know that the work of the Panel of Experts has begun and is proceeding, and we hope that the Panel will be able to meet soon to continue its efforts in this respect.

We also trust that the Secretary-General will take in good time all necessary steps in preparation for the technical and administrative arrangements needed for the Conference. In this connexion, my Government would welcome it if, in the near future, the representative of the Secretariat entrusted with the administrative preparation for the Conference could come to Vienna in order to discuss with the Austrian authorities the questions arising in connexion with the practical administrative arrangements for the Conference.
In conclusion, we should like sincerely to associate ourselves with the wish expressed by so many of the speakers in this debate to see the Conference, the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space, become a true success and a milestone in the development of international co-operation in outer space.

Mr. VINO (Italy) (Interpretation from French): Before stating the position of the Italian delegation on the items on the agenda of this Committee, I should like, as several of my colleagues have done, to welcome the representative of France, who has returned to the great United Nations family. My delegation and I personally are very gratified to see Ambassador Bérard here again after five years in Rome, where he represented, very brilliantly, I might say, his country. I believe that he was able to acquire in Rome new energy to face the trials here at the United Nations. I was amongst the first to receive him on his arrival in Rome at the outset of his mission there, and for this reason I am very happy to have the opportunity of strengthening the ties of friendship that bind him to Italy.

(continued in English)

Turning now to the matters under discussion, I wish, first of all, to congratulate you, Mr. Chairman, for your concise and at the same time comprehensive opening statement, which has given us a clear picture of the status of international co-operation for the peaceful uses of outer space.

I am also glad to express the appreciation of my delegation to the Chairman and members of the Legal Sub-Committee, of the Scientific and Technical Sub-Committee and of the Working Group on navigation satellites. They have all made valuable efforts in trying to find acceptable and suitable solutions to the difficult topics included in their terms of reference.

Furthermore, I should like to commend the efficient co-operation and support given to us and to our Sub-Committees and Working Groups by the dedicated members of the Office of Outer Space Affairs of the Secretariat, as well as by the specialised agencies concerned, such as WHO, ITU, UNESCO, ICAO and ECO.

Finally, I wish to express my appreciation to you, Mr. Chairman, and to the representative of France and the Soviet Union for the compliments addressed to my country for its space activities, which were recently highlighted by the equatorial launching of our San Marco B Satellite. May I reciprocate by expressing my sincere congratulations to the representatives of the Soviet Union and France for the significant and important achievements they have made lately in outer space.

It goes without saying that my delegation, having participated actively in the sessions of the Legal Sub-Committee, of the Technical and Scientific Sub-Committee and of the Working Group on navigation satellites, and having joined the other delegations in the unanimous approval of their reports, is ready to accept them and include them in our report to the General Assembly, without modifications or reservations.

I should add, as previous speakers have done, that, although these reports show some progress, the results have not been spectacular. The general impression of my delegation is that our efforts towards our initial goals of global space co-operation are somehow slowing down. Our pace, which is not consistent with that of the space achievements, seems to have lost momentum also in respect to the Space Treaty. The negotiation and conclusion of this Treaty, to which my delegation was glad to take an active part with other delegations, has raised great expectations among many countries, especially of practical benefits to be derived from successes in space. My delegation believes that the highly inspiring principles and objectives contained in the space Treaty, especially for their innovating spirit, should not be lost but kept alive as they could and can certainly exercise the most favourable influence on earth.

This is why we cannot help noting, as many previous speakers have already stated, that, although positive, the progress achieved by the Legal Sub-Committee under the efficient guidance of Dr. Nymeyer-- and I should like to say here that he has practically shown in the Chair that Poland can produce more than one Dr. Lomka -- has lagged behind our hopes. The progress has been rather limited and has altogether uncovered, probably, more problems than it has solved. This was perhaps a necessary and not useless exercise.
It will indeed certainly require hard work and dedication on the part of its Chairman and members to reach a unanimously agreed text on both conventions on liabilities and on assistance and return of the astronauts. But I am sure that this can be done, and my delegation is encouraged by the positive statement made here by the Soviet representative on the subject of the return of astronauts and spacecraft. It is our hope that the Sub-Committee will resume its work as soon as possible on those important matters.

The report of the Scientific and Technical Sub-Committee was not less effectively presented by its able Chairman, Dr. Martyn. I was impressed, as were other colleagues, by his instructive explanations, and I was glad to be able for once to have some glimpse of light on matters which are completely out of my range of comprehension. The report of the Scientific and Technical Sub-Committee also shows, in the opinion of my delegation, a slight trend towards routine work, which has prompted the Italian representative in that body to sound a clarion call, as defined by Dr. Martyn himself, for more imagination and for some original ideas.

Of course new ideas and proposals should be presented in well written documents, and not brought forward, at least in our judgement, suddenly in the course of discussions of other subjects. On the other hand, the demonstration of a "proven need", as requested by some quarters, in order to discuss the subject might not always be possible, and it might be the case of which comes first, the egg or the chicken.

On the bright side of the picture, we note that the report of the Scientific and Technical Sub-Committee has some interesting features, thanks to the contributions by the Government of India, with the presentation of the activities of its United Nations-sponsored Thumba Range, of the Ahmedabad satellite Earth station experiment and of the educational television satellite programme; by the World Meteorological Organisation, with the presentation of its far-sighted World Weather Watch project; and by the production of valuable documents by the Office of Outer Space Affairs of the Secretariat. It also contains the refreshing novelty of the presentation of the new Argentine sounding rocket range, to which the Italian delegation is giving full support towards obtaining United Nations sponsorship.

With respect to the question of the definition of outer space, my delegation fully concurs with the findings of the Scientific and Technical Sub-Committee and agrees that such a matter should be a permanent item on the agenda of future sessions of that body. Finally, the report of the Working Group on navigation satellites has stated in careful terms and in the most diplomatic, if not technical, tradition that, yes, navigational satellites are feasible, but alas, they will not be available for a long time to come. I wonder whether such a conclusion should not be considered a little too conservative, especially since an existing navigation satellite system has already become available for civilian use. In any case, it is the considered opinion of my delegation that the Working Group on navigation satellites should meet periodically in order to keep the matter under constant review.

The aforementioned considerations lead me to make some rather frank remarks about international co-operation in peaceful space activities. It is only fair to acknowledge that if eighty or more nations of the world, including my own, have had the opportunity to perform in outer space or to collect some direct knowledge of space research and exploration, they owe it to a great extent to the foresight and friendly spirit of co-operation of the United States of America.

I wish to take this opportunity to state how much we feel indebted to the United States for the continuous support of the San Marco and other scientific programmes achieved or planned by my country. In this connexion, the Italian delegation wishes to convey, through the representative of the United States of America, its warmest congratulations to NASA for its successful role in promoting international co-operation.

I was also gratified to note the initiatives taken by the Soviet Union in the same direction of international co-operation. The report presented by the representative of the Soviet Union indicates in fact that under the leadership of the Soviet Union, fruitful activity of international co-operation with simultaneous satellite and rocket launchings is emerging among Eastern European nations.
This brings me to one simple factual consideration. International co-operation in space is carried out at present mostly by two groups of States, one led by the United States and the other by the Soviet Union. Both are dedicated to peaceful purposes, but still with little interchange between them and with a substantial amount of competition. Now it is common knowledge that leadership carries with it great responsibilities. Now heavy that responsibility is in the case of the two great space Powers. It is too well known for me to elaborate on it. It therefore seems somehow understandable that their approach and response to new ideas, new proposals and new challenges may be different from that of other members of the Committee. In other words, it may be a more careful approach and response. The reason is obvious.

The two great powers, being confronted with big problems on Earth, in spite of their daily plunges in outer space, are forced to keep their feet firmly on the ground. Other members, less concerned with such problems and free from special responsibilities, may usefully expound ideas and proposals towards the ideal "great plan" of a unified and peaceful planet Earth operating in space as a whole. These are facts of life -- a moment in the history of mankind -- and we cannot brush them aside. I believe, however, that our Committee and its Sub-Committees have a task of the greatest importance: to try to strike a happy balance between practicality and idealism. It is one way, perhaps the only one, to maintain the drive towards the goal of ultimate global co-operation in space for the benefit of mankind, a goal that had been set for the first time nine years ago by the twelfth session of the General Assembly in resolution 1968 (XII) and embodied in the Space Treaty, an international instrument which should mark the turning point, a definitive turning point, for the better with respect to the lives of all peoples.

In this respect, I submit that the discussions of new ideas and proposals, provided, as I have said, that they are presented in written form and in the proper comprehensive form, will never constitute a waste of time for our Committee and Sub-Committees; that is all the more so when dealing with the potential practical applications of space experiences which can speed up human progress, especially in the developing countries.
Mr. TURNER (Canada): I shall be very brief because my delegation has already delivered a statement of a general nature at our meeting of 15 September. At this time I simply wish to record the satisfaction of our delegation that so many other members of this Committee have reminded us of the importance of the international conference on outer space scheduled to take place in Vienna in 1968. I think it is particularly encouraging that mention has been made of the importance of participation in this Conference by non-space Powers and especially the developing countries.

References have also been made to the desirability of adequate publicity and preparation. I think I can do no better in voicing our support for the importance which has been attached to those points than to say how well they have been expressed and outlined to us by the representative of Austria.

Mr. el ARAFY (United Arab Republic): We have just heard a most interesting and helpful statement by the representative of Austria concerning the outer space conference. The United Arab Republic delegation attaches great importance to that conference and hopes that all non-space Powers, especially the developing countries, will derive the maximum benefit from it. Therefore, my delegation should like to suggest that the part of the Austrian representative statement which dealt with the outer space conference be attached to the Committee's report as a separate annex.

The CHAIRMAN: The Committee has heard the suggestion made by the representative of the United Arab Republic to add as an annex to the report the part of the statement of the Austrian representative which dealt with the Vienna Conference. If I hear no objection I shall take it that the Committee so decides.

It was so decided.

The CHAIRMAN: The representative of India has expressed the hope that Dr. Martyn would find it possible to continue as Chairman of the Scientific and Technical Sub-Committee. Dr. Martyn was unable to attend our meeting this morning since he had to leave earlier this morning for Australia. But I shall be happy to convey to him the appeal made by the representative of India this morning in his intervention.

In this regard, I wish, as Chairman of the parent Committee, to voice my hope that Dr. Martyn will be able to continue his valuable services as Chairman of the Scientific and Technical Sub-Committee. Under Dr. Martyn's able guidance, the Sub-Committee has been able to present this Committee with many constructive and positive recommendations. I am confident that Dr. Martyn, in spite of his many obligations at home and to certain international organizations, will consider the matter in the light of the desirability of continuing his chairmanship of the Scientific and Technical Sub-Committee.

The suggestion made this morning, also by the representative of India, to enable the Legal Sub-Committee to hold more meetings will of course be put on record and the Chair will certainly do its best to be helpful in this regard.

In this connexion, I wish to repeat what I said earlier, namely, that the Chair will make every effort to set the date for the meetings of the Sub-Committees early enough to enable delegations to prepare their work for the Sub-Committees in time. However, in this connexion may I appeal to all Member States to assist the Chair in the effort since a positive outcome to this undertaking depends largely on their co-operation.

Mr. TRAFFECT (United States of America): I have a comment to make on your last remark, Mr. Chairman. I think that other delegations would find it helpful if the Secretariat were able to draw up a list of existing conferences and meetings scheduled for the next two years which might in any way interfere with the scheduling of the Legal Sub-Committee and the Scientific and Technical Sub-Committee.

The CHAIRMAN: I will ask the Secretary of our Committee to take up this suggestion and to circulate such a paper.

I now call on the Rapporteur to introduce the report.

Mr. de CARVALHO-STICS (Brazil) (Rapporteur of the Committee on the Peaceful Uses of Outer Space): The text of the draft report on the work performed by our Committee at the present session has been circulated to all delegations. As usual, the draft report is a factual and objective document which reflects the views expressed, the recommendations agreed upon and the decisions arrived at at this present session. I hope that all delegations will approve it.
The CHAIRMAN: Does any delegation wish to comment on the draft report? As no delegation wishes to make comments, I assume that the Committee agrees to adopt the draft report.

The draft report was adopted.

Mr. TRACER (United States of America): Are we talking now of the Recommendations and Decisions portion of the draft report?

Mr. de CARVALHO-SILVA (Brazil): I am dealing with both documents which have been circulated, the one in printed form and the provisional document. As regards the second document, I should like to call the attention of the members of this Committee to paragraph 5 on page 2. The brackets should be deleted. I am referring here to the beginning and end of paragraph 5.

The CHAIRMAN: Does this satisfy the United States delegation?

Mr. TRACER (United States of America): Yes. I should like to make two comments. First, I notice that the report of the Scientific and Technical Subcommittee will be annexed to the report of the full Committee to the General Assembly. I believe that there are one or two minor changes that still need to be made in the report of the Scientific and Technical Sub-Committee. For example, I have in mind paragraph 28 of document A/AC.105/59 in which reference is made to the sounding rocket range in Argentina under the name "Chemical", whereas I believe the proper name is Chemical. I believe there is a different spelling.

There may be some other changes that should be made in that report before it is annexed.

The second comment relates to paragraph 7 of the working paper containing draft recommendations and decisions, which in turn relates to the work of the Working Group on Navigation services Satellite Systems. I would suggest that it might be appropriate to retain the language used by this Committee last year, when setting forth the terms of reference for this Working Group, it directed it to consider "in sequence" and make recommendations to the Committee regarding the need, feasibility and implementation, etc.

The language we have before us I think perhaps has inadvertently left out the words "in sequence".

The CHAIRMAN: The Committee has heard the suggestions made by the representative of the United States. If there is no objection, I will take it that the Committee decides to these two minor changes.

It was so decided.

Mr. Turner (Canada): I have a further very minor editorial point. I am now referring to page 3 of the working paper. In view of the decision the Committee took a few minutes ago to attach an extract from the statement of the representative of Austria, I wonder if it would be possible to have another heading that would simply say "United Nations Conference on the Exploration and Peaceful Uses of Outer Space", and then perhaps, under the heading, a simple sentence to the effect that the Committee decided to forward for information -- or attach, or something along those lines -- an extract from the representative of Austria's statement regarding the conference.

The CHAIRMAN: The Committee has just heard the suggestion made by the representative of Canada. May I perhaps suggest that the exact wording be left to the Rapporteur and the Committee Secretary.

If there is no objection to such a procedure, it will be so decided.

It was so decided.
The CHAIRMAN: Since there are no further observations on the report, the Committee has thus concluded its deliberations for the present session. I should like to thank all members of the Committee for their co-operation, which made it possible for the Committee to accomplish its tasks speedily and in full agreement.

The Committee is once again in a position to submit to the General Assembly a comprehensive report on the work accomplished by our Committee and its Sub-Committees in the past year. Much of the credit for this achievement must, of course, go to our two Sub-Committees and to their Chairmen, Professor Martyn and Mr. Wyzner. It was a particular pleasure at this session to be able to welcome both Professor Martyn and Mr. Wyzner to this Committee. On behalf of all members of our Committee I should like to express our sincere appreciation to them for their kind co-operation. Their introduction and explanation of the reports of their respective Sub-Committees have, I am sure, been of great help to the members of this Committee.

I should also like to take this opportunity to thank the members of the Secretariat, in particular Mr. Vellodi, as the representative of the Secretary-General, and Mr. Abdel-Ghani and his devoted collaborators in our Outer Space Affairs Group, as well as all the visible and invisible helpers of our Committee who have contributed to the successful conclusion of this session.

The next year will be of particular importance to the work of our Committee. It will see the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space, scheduled to take place from 14 August until 27 August, in Vienna. Many delegations have already in these past days drawn our attention to the importance of that Conference. With the co-operation of all concerned, I am convinced that the Conference will indeed become the event of great and lasting importance which we all want it to be, and a symbol of the ever-increasing international co-operation in the peaceful uses and exploration of outer space.

The tenth session of the Committee on the Peaceful Uses of Outer Space is adjourned.

The meeting rose at 12.30 p.m.