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COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE
PROVISIONAL VERBATIM RECORD OF THE FORTY-SEVENTH MEETING

Held at Headquarters, New York,
on Monday, 17 April 1967, at 3.00 p.m.

Chairman:

Mr. WALDHEIM

(Austria)

1. Adoption of the agenda
2. Statement by the Chairman

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ADOPTION OF THE AGENDA

The CHAIRMAN: The provisional agenda for our meeting has been circulated as document A/AC.105/L.35. The first item on the provisional agenda is the adoption of the agenda. If there is no objection I shall consider the agenda adopted.

The agenda was adopted.

The CHAIRMAN: In accordance with our usual practice, I invite the representatives of the specialized agencies and COSPAR to take their places as observers.

STATEMENT BY THE CHAIRMAN

The CHAIRMAN: I should like, first of all, to welcome members to this meeting of the ninth session and to express the hope that we shall be able as in the past, to conduct our business in the spirit of co-operation which has always characterized the work of this Committee.

Since our last meeting we have witnessed further developments in the peaceful exploration of outer space. Without going into too much detail, I should like to refer to the satellites launched by the United States and the Soviet Union for the purpose of photographing the lunar surface and for weather observation. I should like further to refer to the experiment carried out by French scientists in order to determine how an animal behaves in a state of weightlessness, and satellites launched for geodetic surveys. Accordingly, I should like to congratulate the scientists and technicians involved in the exploration of outer space, particularly those of the space Powers, for their great achievements.

(The Chairman)

While we take great pride in the technical progress made by our scientists, it is incumbent upon us to seek solutions to the inherent political and legal problems through constructive and patient negotiations. In this respect I should like to express my satisfaction that the Treaty governing the activities of States in the exploration and peaceful uses of outer space, including the moon and other celestial bodies, has to date been signed by seventy-nine countries. No less gratifying is the unanimous decision of the General Assembly, in resolution 2221 (XXI), to accept the recommendation of the Committee to convene a United Nations conference on the exploration and peaceful uses of outer space. The conference, which will review the practical benefits to be derived from space exploration, will no doubt help to bridge the rapidly widening technological gap between the space Powers and the non-space Powers, in particular the developing countries.

As representatives are aware, the Committee agreed at its last meeting to recommend to the General Assembly the postponement of the conference for approximately one year after the original date of September 1967 in order to allow for a better preparation of the conference in a manner which would improve the results of the conference for all participants. In this connexion a period between April and September 1968 was suggested. The exact date of the conference is to be agreed upon in consultation with Member States and the host country, taking into consideration the interests of the developing countries in other international conferences during 1968.

On the basis of this recommendation of the Committee on the Peaceful Uses of Outer Space, the Secretary-General has requested the inclusion in the agenda of the fifth special session of the General Assembly of a supplementary item entitled "Question of the postponement to 1968 of the United Nations Conference on the Exploration and Peaceful Uses of Outer Space". I therefore trust that this matter will be settled by a definite decision of the General Assembly.

The purpose of our meeting today is to organize the work of our Committee and the two Sub-Committees. In the resolution on International Co-operation in the Peaceful Uses of Outer Space, (2222 (XXI)) adopted at the twenty-first session, the General Assembly in effect reaffirmed the terms of reference of the Committee on the Peaceful Uses of Outer Space and, in addition, proposed new matters for the Committee's consideration or drew specific attention to matters already included in its programme of work.

(The Chairman)

Document A/AC.105/CRP.1(IX), containing a note by the Chairman regarding the programme of work of the Committee, has been prepared at the request of a number of delegations in order to provide them with an over-all picture of the questions to be dealt with in the future work of the Committee as a result of the resolutions adopted by the twenty-first session of the General Assembly. The Chairman did not wish to suggest that all the questions should be examined in substance by the Committee during its present session. The document should therefore, in my opinion, be regarded merely as a working paper designed to provide the members of this Committee with an outline of the Committee's mandate.

On the basis of consultations with the members of this Committee, and in the light of a recent meeting of the Bureau, there seems to be general agreement that both the Legal and the Scientific and Technical Sub-Committees should be convened before this Committee draws up its report to the twenty-second session of the Assembly in order to deal with the subjects enumerated in the General Assembly resolutions. It appears, furthermore, that the Legal Sub-Committee should be convened for a period of four weeks and that the Scientific and Technical Sub-Committee should meet for two weeks, as in the past. There also seems to be agreement that the Legal Sub-Committee should meet before the Scientific and Technical Sub-Committee. The exact date and place of those meetings could be fixed in consultation with the members of this Committee, taking into account the availability of the necessary conference facilities in New York and Geneva.

As representatives will recall, the report of the Committee to the twenty-first session of the General Assembly (A/6431) contains a recommendation by the Scientific and Technical Sub-Committee that this committee -- the main committee -- should establish a working group composed of interested members of the Committee and representatives invited from the specialized agencies such as ICAO, IMCO and ITU. In accordance with the recommendation of the Scientific and Technical Sub-Committee the working group "should be composed so far as possible of specialists" and "should be directed to consider in sequence and make recommendations to the Committee regarding the need, feasibility and implementation of a navigation services satellite system, including such aspects ... as costs organization, legal questions, etc." (A/6431, Annex II, p. 3).

(The Chairman)

That recommendation has been endorsed by the General Assembly, in resolution 2223 (XXI), paragraph 4. Therefore the Committee will have to set up a working group on navigation, whose composition could be decided after private consultations by the Chairman with the members of the Committee.

In conclusion, I should like to draw the attention of members of the Committee to the Secretary-General's note (PO/141/3) of 14 April 1967, by which delegations were informed that the Legal Sub-Committee would be convened immediately after the closing of the present session of this Committee in order to elect a new Chairman to replace Mr. Lachs, who has been appointed a Judge of the International Court of Justice. We shall now begin the general debate.

Mr. BUFFUM (United States of America): Mr. Chairman, as you have already noted and recalled to us, the General Assembly has asked this Committee to undertake a number of different tasks. Our mandate is already set out for us in resolutions 2221 (XXI), 2222 (XXI) and 2223 (XXI). I propose today to speak only briefly and on that particular point.

Mr. Chairman, as your remarks have indicated, the General Assembly did not seek to instruct our Committee how best to proceed with the work it assigned to us. Since that task falls to us here, I should like to indicate today how the United States considers it would be sensible to proceed.

First, in our view, one of the most urgent and most promising projects on our work schedule is a study of the need, feasibility and implementation of a navigation-services satellite system. Action on this project is in fact long overdue. Almost a year ago the Scientific and Technical Sub-Committee recommended establishment of a working group to consider this topic, as you have also recalled. The Sub-Committee reported that the technical means for a satellite navigation system are available, but at the same time it pointed out to us the great complexity of the problem and the need for more experimental work and for more careful study. We believe that we should now tackle this important business which is already before us. In the view of the United States, a working group for that purpose should be formed at once and should meet at the earliest possible date.

(Mr. Buffum, United States)

We believe that the working group should be open to all members of this Committee who wish to participate. In addition, as the Scientific and Technical Sub-Committee recommended, representatives from ICAO, IMCO and ITU should be invited as observers.

Secondly, I would note that the Legal Sub-Committee has already before it several important matters of business. In our view, the Legal Sub-Committee should now proceed urgently to seek agreement on liability for damages caused by the launching of vehicles into outer space. This work has already been too long delayed. As members of the Committee will recall, the Assembly took pains in paragraph 4 (a) of resolution 2222 (XXI) to list liability first in the order of subjects requiring immediate attention. In our view, with goodwill and the application of our energies to the problem, it should not be too much to hope that the liability agreement could be completed during the course of 1967.

I would also recall that the Assembly attached similar importance to completion of an agreement on assistance to and return of astronauts and space vehicles. The United States is prepared to continue that work.

In addition there are the topics mentioned as being suitable for study by paragraph 4 (b) of resolution 2222 (XXI), wherein the Committee is asked:

"To begin at the same time the study of questions relative to the definition of outer space and the utilization of outer space and celestial bodies, including the various implications of space communications".

It was, as I am sure members of the Committee will recall, the delegation of France which suggested the timeliness of studying a definition of outer space and utilization; and it was the delegations of Chile, Mexico and the United Arab Republic that brought to the attention of the First Committee the desirability of studying the various implications of space communications.

It seems to us that these matters can be dealt with as two or three quite separate topics. For example, we could begin the study of "utilization" independently of the study of the implications of space communications. Alternatively, the space communications topic could be dealt with as a particular application of the study of "utilization".

(Mr. Buffum, United States)

I would respectfully suggest that this Committee assign responsibilities in those areas to each of our Sub-Committees. The Legal Sub-Committee, despite its heavy schedule, might appropriately begin this year to undertake the study of questions relating to the definition of outer space. In addition to the legal facets of the problem of definition, as members will appreciate, a complex topic of this kind will also require a great deal of factual technical information, and it is quite conceivable that the Legal Sub-Committee may wish to ask the Scientific and Technical Sub-Committee to provide such information. Nevertheless, legal considerations appear to predominate in this part of our work, and we feel that therefore we should make the work assignment accordingly.

On the other hand, studies of questions about the utilization of outer space, including the various implications of space communications, would seem to us to require at the outset a great deal of technical clarification. The subject of space communications embraces a wide variety of factors, and the subject of space utilization is as broad as space itself. The Committee could become bogged down in an endless range of topics, with no hope of conclusive progress on any of them, if it does not define the most important areas with clarity. After the achievement of such a definition, the question of sound work priorities will be greatly eased.

Therefore I propose that at its next meeting the Scientific and Technical Sub-Committee, drawing on technical experts acquainted with the programmes of their Governments in relevant fields, undertake to begin the process of definition and clarification. It will then be possible to determine what related efforts may be necessary in the legal field. Moreover, we should then have the necessary factual data on which we could base sound legal efforts.

Frankly, we do not believe that outside experts could be expected to contribute significantly in that particular area. Such experts could, of course, indicate what they think is possible in their individual spheres of space science, but naturally it is only representatives of Governments who can say authoritatively what is actually planned in existing Government space programmes -- and we believe that the actual plans must be the basis of our priorities.

(Mr. Buffum, United States)

In addition to the enormous variety of topics which might be included under space utilization and communications, the Scientific and Technical Sub-Committee has other, and indeed older, tasks. It has in the past done much useful work on education and is the appropriate forum for considering the request formulated in resolution 2223 (XXI) on this topic. The Scientific and Technical Sub-Committee is also the obvious forum for considering means to increase the Committee's usefulness as a centre of information in the field of outer space. The United States has long attached priority to that goal, as we hope is demonstrated by our comprehensive national reports, detailed space registrations, lengthy bibliographies and submission of library material to the Outer Space Affairs Group. We have also devoted considerable energy to providing information to the world scientific community both in a general sense and through such specific means as the World Data Centres. Frankly, the preparation of this material has involved the application of considerable effort on the part of our scientific community, but we feel amply rewarded by the amount of interest shown in these projects.

(Mr. Buffum, United States)

We have in fact had the impression that more information is probably available today in the field of outer space research and exploration than most countries are able to utilize. But we would certainly listen most attentively, either in the Sub-Committee meeting or before it, to well-supported cases showing a need for additional data, if that appeared necessary to some of the members. In the meantime, we hope that the new measures already endorsed by the Committee and the General Assembly will prove helpful. I am thinking, first of all, of the new format contemplated by the Secretary-General for publication of existing reports and, secondly, of the measures that will allow the Secretariat to prepare national reports for those members that are unable to make timely submissions of their own.

In addition, the Scientific and Technical Sub-Committee has a number of other items which have traditionally been on its agenda, such as that concerning the United Nations sponsored sounding rocket ranges. But I have not attempted in this brief statement to duplicate our Chairman's excellent rendition of some of the points involved.

I should like now to speak briefly on another subject which the Chairman raised in recalling to us the subject of our last meeting and the reports circulated by the Secretary-General, and that is a topic which in a way is perhaps even more important than our normal work programme, namely the date of the outer space conference. My own Government is deeply concerned that there is still no agreement on the date for the holding of a United Nations space conference. We have now assumed, based on the deliberations at our last meeting, that the date will definitely not be September 1967. The simple fact is, of course, that the time has passed when adequate preparations could have been made for that date. But surely it seems to us that the least that we can expect now is firm agreement on an appropriate date in 1968. Frankly, we must point out that the time is growing short even for that date. Even though there is limited time, we for our part cannot yet begin the extensive work that is going to be necessary among our own governmental agencies and within the scientific community of the United States. I say this quite openly and without any sense of acrimony whatsoever, but merely with the sorry experience of the disappointments which we have had over the past two years.

Frankly, we have concluded that it would not be wise to waste the resources of our scientific community in preparations for a conference in 1968 until two firm conditions have been met: First, we must know for certain that a conference will in fact be held and, secondly, we must know when in 1968 such a conference will be held. It is unfortunately true that we must know these things very quickly, because we are at a turning point in terms of the time schedule which was worked out by the Panel of Experts that was assigned to examine these matters a month or so ago.

It will be recalled that when we met as the Outer Space Committee two months ago, the Committee considered a Soviet request for postponement of the conference and suggested a date between April and September 1968. It will also be recalled that the Government of Austria had earlier informed the Panel of Experts that conference facilities in Vienna would be available from 1 to 24 May, 8 to 16 June and 23 June to 23 August 1968. The Chairman has also reminded us of the document which the Secretary-General distributed on this subject. That schedule which has been submitted requires that a detailed letter inviting abstracts of papers for the conference shall be sent thirteen months before the conference, and it fixes various intermediate time-limits which must be met thereafter. This means that because of the two months delay since our last meeting in setting a date for the conference, it has in fact become impossible to fix a date in early May 1968, unless we tear up the schedule which has already been suggested to us by the Panel of Experts in this field.

As it happens, another development during the last month has also eliminated early May as a reasonable date for holding the United Nations conference. As members know, COSPAR has recently selected the period 8 to 16 May as the time for its meeting in Tokyo.

The point is that by allowing time to slip by without setting a date for the United Nations conference, we are gradually eliminating one date after another and, in the light of our experience over the past two years, we do seem to raise a serious question as to whether or not the conference will in fact be held at all. This, in our judgement, is not a serious and expeditious way of organizing a huge and significant conference of this magnitude.

I should like today to make the position of the United States very clear, because this is a subject on which we have come to feel quite strongly. As I said at our meeting on 13 February:

"... The United States Government is prepared to proceed now, in accordance with the unanimous decision of the General Assembly, to convene a United Nations Conference on the Exploration and Peaceful Uses of Outer Space at Vienna in September 1967. ... We can be ready, and we believe that the United Nations can be ready, if the Organization and all its Members proceed with a sense of urgency." (Forty-sixth meeting, pages 37 and 38)

But that was two months ago. The Panel of Experts laid down a schedule of preparations for a conference in September of this year, which we then thought could reasonably have been met. The Panel of Experts did not conclude that the conference could not be held at that time. We were therefore surprised and dismayed, as I have indicated, when a few hours before that meeting of the Panel of Experts the Soviet delegation communicated to the members its desire for a postponement of one year. A number of members here spoke on that point and I have no interest or intention of rehashing the arguments and comments that were made at that time, although I must confess that we, for our part, had not heard what we considered to be a convincing reason for the need for such a delay.

Despite that disappointment, I wish to reaffirm here that my Government does attach great value to this sort of conference, that is, the kind that was agreed upon in this Committee, a conference which would devote itself to the practical benefits of co-operation in space. We have invested considerable manpower and resources in preparation for a conference this year, which now is not going to be held. Because of the rapid pace of technological developments, unfortunately much of that effort has been wasted effort. The work must now be redone. It is because of this pace of technological developments and the requirement for submitting papers and getting preparations made that we, for our part, would not again wish to begin the task of preparing for a conference until we know whether it is to be held and when it is to be held. We also believe that the next time a conference date is established, it should be strictly adhered to, even at the cost of possible inconvenience to one member or another.

Mr. SEYDOUX (France) (interpretation from French): Mr. Chairman, may I be allowed, first of all, to thank you for having mentioned in your statement the latest French space developments, and may I also associate myself with the congratulations that you addressed to the American and Soviet technicians and scientists.

The Committee on the Peaceful Uses of Outer Space is meeting essentially to ensure the implementation of the provisions of General Assembly resolution 2222 (XXI) and to determine the order of the work to be entrusted to the Legal and Scientific Sub-Committees at their next sessions.

My delegation has stressed on different occasions the need to pursue the study of the problems that have been raised by the peaceful uses of outer space. Our delegation feels -- and this was very well expressed in the First Committee by Professor Lachs, the former Chairman of the Legal Sub-Committee -- that the space treaty was only the first chapter of space law. In our view, it is appropriate to proceed without any delay to the preparation of the following chapters, without which the provisions that have now been approved will soon prove to be incomplete and inadequate to cope with the various questions that have already been raised by space activities and to define the conditions in which the rights and obligations of States will be applied.

This indicates how much our delegation is attached to the effective implementation of paragraph 4 of resolution 2222 (XXI). The present statement has the purpose of indicating in detail how we would like this implementation to occur, and also to indicate what we expect from the coming meetings of our Sub-Committees, respecting of course the framework that was established by the General Assembly for their work. I shall try to do this as briefly and as clearly as possible, but I want to ask my colleagues to excuse me if the development of this thesis should perhaps take more time than I would have wished. But the importance of the task confronting us will be my excuse.

The Assembly, first of all, invites the Committee to continue its work and to proceed to prepare an agreement on the liability for damages caused by objects launched into outer space. My delegation feels that it is necessary to seek the conclusion of a special agreement on liability for damages, on the

(Mr. Seydoux, France)

one hand because this is a question which is certainly very topical, with the present pace of space activities; and, on the other hand, because it is necessary to complete and elaborate article VII of the treaty which, in our view -- and we have already expressed this concern -- says either too much or too little on this subject.

Article VII establishes in very general terms the principle of liability for damage caused, but it does not indicate the modalities of the implementation of this liability, the means for defence and recourse at the disposal of a State, or the means of repairing the damage. On the other hand -- and its language does not appear to be very clear on this point -- it seems to establish, at one and the same time, the liability of the State which is launching the space object, of the party actually in charge of the launching, and also the responsibility of the State on whose territory the launching takes place. We believe that it will be necessary to provide for the actual conditions under which all these liabilities can be established. In other words, article VII is not sufficient to settle such a very complex problem, and the preparation of a special agreement seems to be necessary. Our Legal Sub-Committee can very usefully resume the work which it has already undertaken in the past and be guided by it in pursuing this task which has not yet been completed.

But, of course, it will be appropriate to enlarge and elaborate on this study. One is impressed, on reading the text of the treaty, by the fact that the scope of article VII seems to be quite limited if we compare it to the other articles of the treaty. The problem of the liability is limited to damage which results from the launching of objects into space, while other parts of the treaty contain provisions for all kinds of activities which may be undertaken in outer space and on celestial bodies. The operation of launching is only one of those activities. It is then followed by steering operations, control operations, guiding operations and, finally, by activities that are undertaken on the spacecraft or even outside the spacecraft, but starting from the spacecraft. All these operations cannot be isolated from the others, and it is quite evident that it is necessary to provide for rules of implementation which would be more general and which would cover diversified situations.

(Mr. Seydoux, France)

With regard to the preparation of an agreement on assistance to be tendered to astronauts and to space vehicles, the return of the astronauts, and the restitution of space vehicles, we feel that it is necessary to make provision for the preparation of a special agreement. Articles V and VIII of the treaty establish general principles, but it will be necessary to complete them by using, doubtless, the texts which have already been prepared by the Legal Sub-Committee and which already command a certain consensus, possibly bringing them into harmony with the provisions that are contained in the treaty itself.

The Assembly has invited the Committee to undertake at the same time the study of new questions, such as those relating to the definition of outer space, the use of outer space and of celestial bodies, including the various consequences of space communications.

It is well known that my Government attaches the greatest importance to having the study of the definition of outer space appear as one of the main concerns of the Committee, and we have formally requested that it should be put on the agenda of the Committee.

We find, indeed, that this treaty, which for the first time affirms renunciation by States of their sovereignty over outer space, offers no precise provisions on what should be regarded as constituting outer space. We have a lacuna here which has to be filled, the more so since international common law, and the Chicago Convention in particular, recognize, on the contrary, the existence of a sovereignty over air space congruent with the territory of the individual States, with all the rights and all the duties which result from such a notion.

Therefore, it is appropriate to make provision for some adjustment of those two systems of law, one founded on the idea of sovereignty, and the other based on the absence of sovereignty. We recognize the complexity of this undertaking. The problem of the definition of space can be approached in various ways. We can envisage a definition which would be based on altitude. Since there is no clear delimitation between the atmosphere and outer space, and the transition from one to the other is imperceptible, there is no determined altitude which applies automatically. It will therefore be necessary to see whether the definition of a limit cannot be found, for example, on the basis of geophysical or aerodynamic considerations or, perhaps, criteria which would be

(Mr. Seydoux, France)

related to the perigee of the satellites. The choice of the one or the other criterion will certainly present advantages and drawbacks which will have to be weighed against each other. Therefore, it may become necessary to introduce other elements of judgement. It would be useful, doubtless, to consider also the nature of the use of outer space in every case, starting from the ground. The definition of space can then be conceived as related concurrently to criteria of altitude and the criteria of the nature of use to be made of space. A study must then be undertaken of the consequences of the adoption of this or that criterion or of a combination of criteria.

Nothing indicates, of course, that this study will not eventually show that the limits of the application between the law of the air and the law of space cannot be based on a single definition, but may perhaps involve various definitions which would be adjusted to the various activities.

(Mr. Seydoux, France)

Practically speaking, it appears to us that it is necessary for the legal Sub-Committee at its next session to undertake a first study of those various aspects of the search for a definition of space, and then it should ask the Scientific and Technical Committee what elements should be taken into consideration to obtain such a definition so that the Committee would have the benefit of the opinion of the experts which would enable the jurists in turn to establish a formulation.

Then, under the provisions of the resolution, we have the whole of the questions relating to the utilization of outer space and celestial bodies. The question of the use of outer space obviously raises the question of definition of the term "use" of space. The representatives of France in the legal Sub-Committee have repeatedly asked during the preparation of the Treaty that that clarification should appear in the text -- and this seems more necessary than ever now.

Indeed, a reading of that Treaty indicates that certain articles seem to be applicable more specifically to simple scientific exploration, and I am referring now to the third paragraph of article I, to the second sentence in article IX, and article XI, but all the others can also be applied to peaceful uses.

But between the scientific activities which are entirely permissible and military activities, some of which are prohibited, there is room for several other types of activities.

There will be uses which will be clearly scientific, others which will be related to public service and others which will be commercial in nature; they will take different forms, and it will certainly be useful to have a list of those activities because they will have different effects; for example, some of them will be of such a nature as to produce changes in the environment.

Hence it would seem to be useful to establish an order of priority among those various uses of space where necessary to avoid their interfering one with the other; in this regard one can cite the example of astronomical observations which are capable of being hampered by experiments of another kind, for the need to reserve for certain activities areas or orbits or frequencies which would be particularly favourable, and I am thinking in particular here of the needs of meteorology and telecommunications.

(Mr. Seydoux, France)

Therefore, one is led to envisage the need to introduce a set of regulations to govern the utilization of outer space as defined. In that respect, it seems to us to be essential to study from the very beginning a problem which is directly related to the principle of freedom which is established by the Treaty, the right of States to be protected against certain results which may take place on their territories from the use of outer space by another State. In an organized society freedom is necessarily limited, even if only by the freedom enjoyed by others. It is quite obvious that the freedom to use outer space means only that a State is entitled to undertake in outer space activities which would not threaten the sovereignty of other States. The only provisions of the Treaty on this subject which have a relationship to those questions are those which refer to international law, and those appearing in article IX. The first sentence of article IX states:

"In the exploration and use of outer space... States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in outer space... with due regard to the corresponding interests of all other States Parties to the Treaty".

The expression "corresponding interests" and also the language of the following sentences of that article indicates that the authors had a very restrictive idea of the interests of other States since, on the one hand, they speak only of the "potentially harmful interference" which the space activities of a given State can cause to the space activities of another State and, on the other hand, they mention the contamination of space or of celestial bodies and the

"...adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter...".

Our concern goes beyond that and is fixed on certain effects which the activity of a State in outer space or on a celestial body may very well have on the territory of another State, the word "territory" in this case having the broadest meaning of the term, that is, including the territorial waters and the air space above it, without omitting the installations on the continental surface.

The principle should be formulated in a sufficiently general manner so as to cover all the uses of outer space capable of having such effects. Among those which can be presently foreseen, we can cite the organization of direct broadcasts by satellites of radio and television programmes aimed at the territory of a third State, tests which could result in the changing of climates, and certain uses of high altitude photography.

On the other hand, one can very well conceive that the principles which are established by the Treaty can, as a whole, be quite easily applied to the exploration of space; but it will be much more difficult to apply them when spacial activities move into the phase of exploitation. Whether it is a matter of the exploitation of space or of the exploitation of celestial bodies, we must immediately make a distinction between the inevitable "occupation" -- the appropriation -- excluded by the Treaty. Any utilization would necessarily be synonymous with "occupation"; it would be the occupation of a locality on the celestial bodies for the authorized installations or it would be the occupation of a zone in outer space, for example, of an orbit by a satellite or by a space station which necessarily would be of an exclusive character and therefore it would have to be reconciled with the principles of non-appropriation and of freedom of exploration or use.

That will be even more necessary when we come to the phase of the exploitation of the wealth of celestial bodies; the equality in the utilization of celestial bodies which is proclaimed by the Treaty would remain a dead letter if the exploitation of that wealth were not regulated even before the first users undertook it.

Sooner or later other problems will doubtless have to be studied in the interest of all. Thus we would have the problem of the congestion of outer space. Even now it appears in fact to be very desirable to avoid risks of collision or of perturbation of the spectrum of radio frequencies, that objects which have outlived their usefulness should not remain in orbit. In particular I speak of the problem raised by the tendency of so-called stationary satellites to cluster in certain areas. It would therefore be desirable to demand that vehicles in orbit should be equipped to the extent possible with instruments which would make it possible either to recuperate, to destroy or to remove them when they have outlived their usefulness.

Another question which deserves study is that of the registration of space vehicles. That principle is mentioned in article VIII of the Treaty, but the problem itself of the identification of vehicles has not been taken up.

The obligation for every State to keep a register should be stipulated without forgetting the problem of the registration of space vehicles launched by inter-governmental organizations.

(Mr. Seydoux, France)

The status of the vehicles and of the men is partially reflected in article VIII, according to which the State on whose registry an object launched into outer space is carried will retain jurisdiction and control over such object and the personnel involved while they are in outer space or on a celestial body. But the case is not covered in which an astronaut enters a zone which is under the territorial competence of another State; nor is the law specified which is applicable to vehicles and personnel launched by international organizations, or to the situation where installations are inhabited for a long period by nationals of several States on celestial bodies. To specify a particular case, it is certain that the status of personnel will vary depending on whether they are conducting non-profit scientific experiments or undertaking commercial exploitation.

Finally, one may wonder to what extent activities in outer space are likely to raise new problems in the field of private international law through juridical acts in outer space or through violations of law committed on celestial bodies outside installations, or, further, because of injuries suffered by astronauts through acts of other astronauts of different nationality or as a result of the collision of two vehicles belonging to different States.

However, in studying these problems, it seems to us that priorities should be given to those that rise in the field of space telecommunications, as requested in the resolution itself which was adopted on the initiative of the United Arab Republic, Mexico and Chile. For this particular utilization of outer space is without doubt the most important because, whatever the activity being carried on by a given space vehicle, radio-electric communications are essential, and conditions guaranteeing their feasibility are important to all possible uses of outer space.

To ensure satisfactory and constant communications, the best and most desirable procedure would be the employment of stationary or synchronized satellites, the preferred orbit of which would be the equatorial orbit of 36,000 kilometres. One of the first problems would therefore be that of defining the conditions governing the utilization of that orbit so as to avoid the appropriation by certain States of given locations, or the inconveniences that might arise from too close proximity.

(Mr. Seydoux, France)

The second problem is that of the rational distribution of frequencies. The present system, which is established by the regulations of the ITU, makes it possible for a State to claim a broad band of frequencies as soon as communication becomes possible, even if such frequencies are not entirely used. This could result in a sort of "appropriation" of the preferred bands, to the detriment of those who might wish to use them later on. Problems of interference also arise -- interference of broadcasts from a space vehicle with terrestrial communications, or, conversely, interference that could affect the operation of space telecommunications as a result of needless or harmful broadcasting by a terrestrial station to a satellite.

The International Advisory Committee on Radio Communications has already formulated recommendations giving a certain priority to space telecommunications in relation to terrestrial telecommunications. As a counterpart, provision could be made, especially in the case of stationary satellites, for controlling broadcasts, limiting their duration to only what is necessary, so as to keep frequencies open for use by others who may wish to use them.

It seems therefore that a certain number of principles could be worked out that could constitute the framework for the activities of the ITU, principles which would not, however, be placed on the same level as the regulations already issued by that specialized agency.

Another aspect of space telecommunications is that resulting from the possibility of organizing, through the use of satellites, direct radio and television broadcasts. Numerous countries have indicated a certain amount of concern with regard to such activities. They wish to see instituted, at the very least, a system of rebroadcasting, over which they would exercise control, between the broadcasting satellite and the private receiving sets. The regulations of the ITU do not, in fact, seem adequate at present to protect States against the risk of any "saturation broadcasting" in which the States controlling the satellites might choose to indulge. These regulations do not apply to space vehicles.

The question of the possibility of regulation in this matter should be studied. A compromise must be found between freedom of information and respect for national sovereignty.

(Mr. Seydoux, France)

Furthermore, it would be appropriate to bear in mind the problems resulting from the commercial use of satellite telecommunication networks.

On another level, it will be necessary, without doubt, to establish the conditions under which each State will assume responsibility for respecting the commitments agreed to under the terms of the treaty and the subsequent agreements. The principle is already present in the treaty, but it will be necessary to complete it. The treaty provides, in article VI, that States have an international responsibility for activities in outer space, whether undertaken by the States acting individually, collectively, or under the aegis of an international organization, or through non-governmental entities acting with the authorization and under the control of the particular State. It adds that such States must see to it that such activities are carried on in conformity with the provisions laid down in the treaty. It will be necessary, of course, to add a provision covering the more general question of the responsibility for respecting the rules that are to govern the use of outer space.

Finally, when the study of the aforementioned points is undertaken, it will become necessary to envisage the specific problem that arises from the activities of international organizations in outer space and from those of States operating within the framework of a group enterprise. Because of the high cost of any activity in outer space, it is probable that much of the activity that the majority of States may wish to undertake in that field will be carried out in collaboration with other countries, particularly within the framework of international organizations. It is therefore in the interest of many delegations, including my own, to see the status of international organizations recognized and defined.

Thus it appears that the scope of the questions arising from the task of codifying activities in outer space is indeed vast, and I do not at all pretend to have exhausted the subject, despite this long statement. The need for undertaking the study of these problems is to us obvious. As far as we are concerned, however, it cannot be a question of dealing with them all at one time; we must rather make a choice today, we must arrange an order of priority.

(Mr. Seydoux, France)

The French delegation, for its part, would like to propose the following agenda for the tasks to which the Legal and Scientific Sub-Committees will devote their sessions this year:

First, for the Legal Sub-Committee:

- (1) Resumption of work on the draft convention on liability for damages.
- (2) Initial consideration of the question of the definition of outer space, leading, most probably, to referral of the question to the Scientific and Technical Sub-Committee for an opinion.
- (3) Initial consideration of the definition of the term "uses of outer space", and the formulation of a list of activities to be regulated and of questions related to such activities. In our view, it will be necessary, on the one hand, to have a study of the principle of the right of States to be protected against certain effects that might result, in their territories, from the use of outer space by other States, and, on the other hand, the regulation of the various consequences of space telecommunications.
- (4) Resumption of work on the draft convention on assistance to and return of astronauts and their vehicles.

(Mr. Seydoux, France)

These four major points, which deserve the consideration of the Legal Sub-Committee, can be taken up in any order which the Sub-Committee may determine. We wish only to be assured that a part of the 1967 session -- for example, one-quarter of the meetings -- will be devoted to the consideration of new subjects.

Now with regard to the Scientific and Technical Sub-Committee, the agenda could be:

- (1) The study of the question of the definition of outer space in order to answer the question posed by the Legal Sub-Committee.
- (2) A study of the definition of the term "use of outer space" and the establishment of a list of space activities and of questions connected with those activities, also in reply to a request of the Legal Sub-Committee which will have to be enlightened with regard to the technical aspects of the uses of outer space.
- (3) The questions which traditionally are on the agenda, in particular the implementation of resolution 2223 (XXI), about which I have not spoken in order not to prolong my speech and on which my delegation reserves its right to speak at a future date, if necessary.

The conditions under which the Sub-Committee will have to study the first two points, which are those contained in document A/AC.105/CRP.1/(IX), of 7 April, make it necessary for this Sub-Committee to meet after the Legal Sub-Committee has met.

I should like to digress here in order to say that my Government would prefer Geneva as a meeting place. We know, of course, that the European Office of the United Nations has already a very heavy programme for the coming months. However, would it not be possible, in the light of recent consultations, to envisage the convocation of the Legal Sub-Committee next month and that of the Scientific Sub-Committee in September?

Those are the proposals on which my delegation would hope to see the Committee deliberate at this session.

Mr. HILMY II (United Arab Republic): After listening with great satisfaction to the valuable statement by the representative of France my delegation is happy to say that we share his views and aspirations for the future work of the Committee. I believe that our Committee is really indebted to him for the lucid and profound presentation of the items before us.

Members of the Committee undoubtedly will recall that last December the representative of the United Arab Republic expressed in the First Committee his sincere desire in that field:

"... that the Committee on the Peaceful Uses of Outer Space, under its able and distinguished Chairman, should accord more time to ample consideration of its work, in order to provide the General Assembly with comprehensive reports and programmes for furthering international co-operation in the peaceful uses of outer space." (A/C.1/PV.1493, pages 88-90)

✓ In that statement to the First Committee the United Arab Republic representative had singled out two subjects which he considered of great importance to the developing countries which need prompt action by the Committee. The first is direct broadcasting from the communications satellites to which the United Arab Republic delegation, together with Chile and Mexico, submitted an amendment. That was subsequently unanimously adopted in document A/C.1/L.398.

The second is the question of education and training in the peaceful uses of outer space, that is, in order that non-space Powers may join in deriving the benefits of outer space research and activity. The General Assembly reiterated in resolution 2223 (XXI) that the Committee should urgently consider that question. Perhaps it may be useful that the Scientific Sub-Committee, when considering education and training, should be guided by a comprehensive study, this study to be prepared by the Secretariat in consultation with the relevant specialized agencies, covering all aspects of the matter. That, in our opinion, will facilitate its deliberation.

Finally, my delegation would gladly support the proposed agenda which the representative of France has just read out, on the understanding that education and training are to be given priority on the third item of the proposed agenda for the Scientific Sub-Committee.

Mr. IGNATIEFF (Canada): Mr. Chairman, last year this Committee, under your distinguished leadership, played a most constructive and useful part, especially in bringing about a treaty on the principles governing the activities of States in the exploration and use of outer space including the moon and other celestial bodies. That achievement showed what an important role this Committee and in respect of the treaty to which I referred, the Legal Sub-Committee have to play in promoting international co-operation on questions relating to the peaceful uses of outer space. It would perhaps be too much to expect that our Committee can each year record such a substantial achievement. None the less, the lucid and comprehensive statement of our French colleague, suggests how much still remains to be done, especially in the context of the Legal Sub-Committee's work.

Today, however, I will confine myself to some preliminary remarks on our programme of work for the coming year. The Note dated 7 April (A/AC 105/CRP 1(IX) which you were kind enough to circulate. Mr. Chairman, has, of course, been very helpful to us in formulating these views. Using that note as a guide, the Canadian delegation would like to make some brief comments on a number of questions which arise from resolution 2223 (XXI).

There are three particular matters which we would like to refer to. In paragraph 4 of resolution 2223 (XXI), the General Assembly welcomed the Committee's decision to establish a working group to consider the need, feasibility and implementation of a Navigation Services Satellite System. My Government believes that, as you have suggested, Mr. Chairman, the Committee should now take steps to establish the working group, in the work of which Canada would have a substantial interest and which we believe, as has already been suggested today, should be open to participation by all members of this Committee which have a direct interest. We would suggest that the working group should be appointed in time to meet before the Fifth Session of the Scientific and Technical Sub-Committee later this year. The working group should then be able to make a preliminary report to the Scientific and Technical Sub-Committee and, if necessary, receive further guidelines.

(Mr. Ignatieff, Canada)

As emphasized last April during the fourth session of the Scientific and Technical Sub-Committee, the efforts of the Working Group and this Committee must be co-ordinated with related activities in this field by specialized agencies such as ICAO, IMCO and ITU. It is essential that experts in these agencies should participate fully in the deliberations of the Working Group.

The second point relates to paragraph 5 of resolution 2223 (XXI) in which the General Assembly requested this Committee:

"... to continue... the preparation and consideration of suggestions for programmes of education and training... in the peaceful uses of outer space..."

to enable developing countries to enjoy the practical benefits of technological advances.

My Government believes that in developing programmes in these areas it is important to bear in mind that there is an essential difference between education and training. Educational programmes and scholarships are necessary to provide students with a general knowledge of space science and technology needed in the modern world, while training programmes should not be expected to fill these educational voids but should be designed to provide technical expertise related to the specific space needs of the country concerned. While there are many grey areas between education and training, it is important that these should not be confused.

Appreciating this significant distinction, the General Assembly, in paragraph 7 of resolution 2223 (XXI), endorsed the guidelines worked out by the Scientific and Technical Sub-Committee to ensure the effectiveness of training programmes. At its next session the Scientific and Technical Sub-Committee should consider the establishment of one, or possibly two, working groups of specialists to study in detail and report on possible programmes, both national and international, in the two areas of education and training.

As to the third point, in paragraph 13 of resolution 2223 (XXI), the General Assembly suggested that this Committee should examine means to increase its usefulness as a centre of information for Member States, particularly developing countries and those with small space programmes. It is important to note that

(Mr. Ignatieff, Canada)

many centres of information now exist both within Member States and within the framework of the United Nations system, such as within UNESCO and other specialized agencies. It would be unwise, therefore, in our view, to burden this Committee and its secretariat with the task of duplicating the work of any of these centres of information. Nevertheless, it is evident that access to existing centres of information is not always as easy and as convenient as might be desired by Member States. The Scientific and Technical Sub-Committee should therefore be asked to consider ways and means of improving communications between Member States and existing centres of information. If the Committee on the Peaceful Uses of Outer Space and its secretariat were better equipped to direct inquiries for information of Member States to existing centres of information, the Committee would be able to serve more effectively the needs of the countries concerned.

This brings me to the question of the timing of the next sessions of the Legal Sub-Committee and the Scientific and Technical Sub-Committee. My delegation believes that both these sub-committees have important work to do, as the representative of France has said, and should meet during the course of this year. The Legal Sub-Committee will no doubt wish to pursue its efforts to develop an understanding on agreements on the assistance and return of astronauts and objects launched into outer space, as well as on liability for damages caused by the launching of objects into outer space. In addition, there are questions of the definition and use of outer space, to which the representative of France has made reference, which also deserve serious attention. Assuming that agreement can be reached on a further session of the Legal Sub-Committee in the near future, my delegation would only express the hope that the timing of that session would not be allowed to overlap with the proposed further session of the Special Committee on Friendly Relations, as many of the personnel would be concerned with two types of meetings. As for the Scientific and Technical Sub-Committee, my delegation is not yet in a position to express a view regarding the best time for that Sub-Committee to meet, but presumably this would be worked out shortly by means of informal consultations. My delegation believes that both these sub-committees could properly meet in New York.

(Mr. Ignatieff, Canada)

Before concluding, I must express the concern of my delegation on the matter of the establishment of an exact date for the proposed international conference on outer space. During the forthcoming fifth special session, the General Assembly will have to consider the recommendations made by this Committee that the conference be postponed for approximately one year after its initial date of September 1967. It is obviously important that the General Assembly, when considering this recommendation, should be able to reach a decision on an exact date for the conference. My delegation would hope that the pace of consultations on this matter between delegations may be stepped up so that an exact date for this important conference, which will be of primary benefit to all of us here, can be established.

Mr. CUEVAS CANCINO (Mexico)(interpretation from Spanish): The magnitude of the task confronting the Committee on the Peaceful Uses of Outer Space makes it imperative that this part of our work on the organization of future activities be given greater importance. If we merely adhere to the task which the General Assembly defined for us in resolutions 2222 (XXI) and 2223 (XXI), the decision on priorities of the items becomes a first need.

I do not believe that I need stress the efforts which were made by the Mexican delegation in the legal regulation of these new fields which science has opened to mankind in the last few decades. I think that the assistance which Mexico has given in the past to this Committee and to the Eighteen-Nation Committee on Disarmament, as well as to the General Assembly, speaks for itself, attesting to the enthusiasm of my Government's co-operation.

I would merely wish to recall now that in the First Committee of the General Assembly, in the course of the twenty-first session, the delegation of Mexico, speaking about the present treaty on principles governing the activities of States in the exploration and use of outer space, including the moon and other celestial bodies, without minimizing its importance, stated implicitly that that instrument was as yet incomplete. It was pointed out that certain flaws existed and that, without any doubt, a better ruling must be found. I shall refer to this in my statement in due course.

Once the three resolutions on outer space were adopted at the last session of the General Assembly, the Secretary-General stressed the fact that, aside from the success achieved, we were still unable to eliminate the possibility of military activities in outer space since that was part and parcel of the armaments race. Disarmament in outer space is, therefore, part of the general problem of peace. And disarmament must be studied to the end that States will be able to act, convinced that in outer space their real interests are peaceful and not military. Perhaps, along the lines of what took place in the course of the third Consultative Session of the Foreign Ministers of the American Republics which met in Panama in 1939, it might be possible this time to create a neutralized zone in space, where there would be no military activity. The preliminary measures taken for complete and generous co-operation would then have been fixed once and for all.

We might also recall paragraph 4 of resolution 2222 (XXI) in which the General Assembly requested, among other things, that the Committee should continue its work on the preparation of an agreement on responsibility for damage caused by objects launched into outer space.

The Mexican delegation is gratified that the General Assembly considered the need to regulate this subject to which article 7 of the Treaty refers, and I believe that we are fully interpreting the will of that body when we state that the regulation should also include responsibility for damages caused by the total activities of man in outer space. Suffice it to recall that the regulation of responsibility for damages caused by aircraft travelling within the atmosphere has called for very complex international legislation, which might serve as a standard in order to understand that article 7 of the Treaty is timely, but inadequate. The importance of this question has already been stressed by the Mexican delegation in the First Committee in the course of the last session of the General Assembly.

The Mexican delegation considers that the agreement referred to in paragraph 4 (a) of resolution 2222 (XXI), which would broaden the regulation which is called for in articles V and VIII of the treaty, constitutes an indispensable source of security and confidence in international co-operation in the peaceful use of outer space. An agreement on assistance to and return of astronauts and space vehicles, in view of its profoundly human nature and the fact that it is designed to safeguard human lives, will constitute a forward step in international co-operation which will be appreciated by the world community in recognizing the consequences of those articles.

Paragraph 4 (b) of the resolution establishing the guidelines for our work refers to the study of the questions of the definition of outer space and the use of outer space and the celestial bodies, including the various consequences of space communications.

My delegation has no doubt whatsoever that article II of the treaty could hardly be effectively applied until there is a clear definition of outer space. My delegation has stated in the First Committee, as I have mentioned, that there must be a clear definition of the extent of outer space and where it begins, so as to avoid the emergence of problems similar to those that have occurred frequently with regard to the question of the extent of territorial waters.

Obviously my delegation is aware of the numerous difficulties involved in arriving at a definition. If on terrestrial matters there has existed a complex network of imponderables, many incompletely resolved, it is more than obvious that the same would occur in the case of problems being dealt with by men who were born before the space age. Furthermore, there are various, sometimes contradictory, theories regarding the definition of what we know as outer space, but, if the obstacles are serious, there is still the need to overcome them and to arrive at a definition which, even though provisional, will be helpful in our work.

With regard to the study of the use of outer space and the celestial bodies, my delegation believes that in this matter and in the matter of space communications the regulation becomes most complex. Although the step taken by the treaty is of great importance, the elaboration of legal norms determining in as detailed a fashion as possible the rights and duties of States in this matter is, from all angles, a need of the first order.

We are aware that the task is immense -- so much so that my delegation considers that it could not even endeavour to enumerate the different aspects of such utilization, although we may recognize that there is an easily appreciated need for complex regulation, in keeping with the subject itself. Therefore the Mexican delegation considers that the Scientific and Technical Sub-Committee should draw up a list of the possible forms of utilization of outer space and celestial bodies as the first step we should take in order to ensure for the future respect for the rights of others, and this must be decided upon so that the utilization of space will be carried out by carefully charted legal means. In speaking of the rights of others, we must decide also who will be subject to these rights and the correlative obligations, for the utilization of outer space already confronts us as an activity that can be carried out both by States and by international organizations.

My delegation does not need, I am sure, to stress again the importance it attaches to the study of the various consequences of space communications, as the Committee is undoubtedly fully aware that the General Assembly recommended such a study on the initiative of the delegations of Chile, Mexico and the United Arab Republic.

Furthermore, in this regard the Mexican delegation foresees the need, in the first place, to seek the assistance of the Scientific and Technical Sub-Committee and the International Telecommunications Union, so that data at present outside the scope of the Legal Sub-Committee may be made available.

In view of the foregoing, the Mexican delegation is in agreement with the agenda proposed by the delegation of France for this year's activities of the Committee, on the understanding that the Scientific and Technical Sub-Committee will also have to study matters relating to the various consequences of space communications, so that the Legal Sub-Committee may be able to prepare a regulation that will place under international law the utilization of such space communications.

Finally, I believe it is appropriate to recall the paragraph of resolution 2223 (XXI) wherein it is suggested:

"that the Committee on the Peaceful Uses of Outer Space examine means to increase its usefulness as a centre of information for Member States, particularly the developing countries and those with small space programmes".

The competence of this Committee, as an organ of the General Assembly entrusted with the study of the multiple aspects of the peaceful use of outer space, is quite clear; but my delegation also considers that its usefulness could be extended in a practical and satisfactory manner in international relations in the field of the use of outer space if it were to consider the establishment of a centre of information and consultation, entrusted with preparing and presenting the agreements and resolutions of the Committee in a broader form. Perhaps it would not be inappropriate to consider establishing an office that might also serve to encourage multilateral technical co-operation in this field and act as a centre for consultation open to all States. The development of such a centre would be made easier if we considered the possibility of making use, at least in part, of the measures set forth by the General Assembly in paragraph 6 of resolution 2221 (XXI) for the United Nations Conference on the Exploration and Peaceful Uses of Outer Space which has now been postponed for one year. In fact members of the Committee will recall that my delegation has already suggested that it would be appropriate to establish within the United Nations Secretariat a permanent centre for information and consultation, as mentioned in paragraph 13 of the report which the Committee submitted to the General Assembly during the last session. My delegation is still convinced that that is a positive proposal which would cost relatively little, and it is one which has not yet been abandoned.

Mr. FEDORENKO (Union of Soviet Socialist Republics) (interpretation from Russian): Mr. Chairman, allow me first of all to express to you our gratitude for the kind words addressed to the Soviet scientists and personnel on the achievements of Soviet exploration of outer space for peaceful purposes.

(Mr. Fedorenko, USSR)

The Committee on the Peaceful Uses of Outer Space has convened for its spring session, as in the past, to deal with questions pertaining to the organization of its work and also to deal with questions relating to the work of the Legal and Scientific and Technical Sub-Committees, which are to meet this year. Last year the Committee and its Legal Sub-Committee performed considerable work in establishing legal provisions for the space activities of States, work that was crowned, as we know, with the signing by many States of the first treaty in history regulating the activities of States in the exploration and use of outer space.

(Mr. Fedorenko, USSR)

The Treaty on outer space creates favourable conditions for the further development of international co-operation in space exploration and represents a good foundation for further fruitful efforts aimed at solving other legal problems related to space exploration. The expansion of the scope of space exploration and the presence of increased opportunities for using outer space techniques for practical ends create, and will continue to create, new problems in the field of the legal regulation of the activities of States in outer space in the interests of mankind.

The concrete problems which are to be dealt with next by the Committee and its Sub-Committees have been defined in General Assembly resolution 2222 (XXI). In accordance with that resolution, the Committee and its Legal Sub-Committee should continue work on the elaboration of an agreement on assistance to and return of astronauts and space vehicles, an item which is on the agenda of the Committee. We firmly believe that this should be discussed as one of the first items. Work should also be continued on the elaboration of an agreement on liability for damages caused by the launching of objects into outer space, an item which is also on the agenda of the Committee.

At the same time, in conformity with the unanimous decision of the General Assembly, the Committee and the Legal Sub-Committee have been entrusted with the task of beginning a study of questions relative to the definition of outer space and the utilization of outer space and celestial bodies, including the various implications of space communications. (It may be recalled that the study of the former questions was proposed on the initiative of the delegation of France, while the study of the questions related to space communications was proposed on the initiative of the United Arab Republic, Chile and Mexico.

The delegation of the Soviet Union at the session of the General Assembly supported, as is well known, the inclusion of those items in the programme of work of the Legal Sub-Committee. We believe that the Legal Sub-Committee should devote the necessary time to a thorough study of those matters.

(Mr. Fedorenko, USSR)

The representative of France, Ambassador Seydoux, in the statement which he made at this meeting, expressed many interesting considerations which confirm again the timely character of these questions and the importance of their study. The considerations set forth by the representative of France, which are related to various aspects of the problem -- juridical, scientific and legal aspects as well as the aspect of national sovereignty and others -- in our view deserve very close attention and very serious consideration.

With respect to the question of the priority of items and the time to be devoted to them by the Legal Sub-Committee, the Legal Sub-Committee itself is quite competent to resolve those questions. It seems to us that it would not be appropriate to change the order that has been established. We feel that the Legal Sub-Committee itself should determine the priority and the order in which the various questions of its agenda are to be taken up.

The work of the Scientific and Technical Sub-Committee this year will also be considerably simplified. The concrete questions with which the Sub-Committee will deal have been defined in General Assembly resolution 2223 (XXI), which was approved with the report of the Committee on the Peaceful Uses of Outer Space. It is hardly necessary to repeat the questions which have been entrusted to the consideration of the Scientific and Technical Sub-Committee by the General Assembly. The views expressed by the representative of France concerning the desirability of obtaining the consultative opinion of the Scientific and Technical Sub-Committee on various legal problems related to outer space in connexion with the study to be undertaken by the Legal Sub-Committee are, in our view, very reasonable and rational. The Scientific and Technical Sub-Committee, at which highly qualified experts and specialists of many countries are present, could, when necessary, provide useful and helpful scientific information on the concrete questions put to it by the Legal Sub-Committee. In this way the substance of the scientific and technical problems may become clearer, problems on which the consultative opinion of the Scientific and Technical Sub-Committee could be helpful.

(Mr. Fedorenko, USSR)

The Committee will also have to determine the time and location of the meetings of the Legal Sub-Committee and the Scientific and Technical Sub-Committee, taking into account the important tasks which they will have to undertake.

In view of all these considerations, and bearing in mind the experience of the successful meetings of both Sub-Committees in Geneva last year, we believe that it would be desirable to consider the possibility of holding the meetings of the Legal Sub-Committee and the Scientific and Technical Sub-Committee this year also in Europe. We have in mind the practical and businesslike considerations dictated by the need to save the time of the experts in the field of the exploration of outer space and the legal questions related to it and also to save the time of the members of the Sub-Committees.

(Mr. Fedorenko, USSR)

May I be permitted now to outline our views on the question of conducting an international conference on outer space, prompted by the fact that certain representatives felt it appropriate to raise the question at this session of our Committee. It is well known that the question of conducting an international conference on outer space is not on the agenda of the present session of the Committee, and, of course, we see no grounds whatsoever for the Committee again considering this matter. However, certain delegations, for reasons of which we are not aware, have decided to use this meeting to present in a wrong light the situation concerning the convening of the conference. This forces us to recall certain well-known facts.

It is well known to the Committee that in February, at the meeting of the Group of Experts for the preparation of the conference, the Soviet group of experts submitted many considerations explaining that it would be appropriate to postpone the convening of that conference for another year. The Soviet scientists shared their considerations with the rest of the group, and also stated them in the course of the informal consultations with the experts representing various countries.

The Soviet scientists were led to their conclusion after a very thorough analysis of all the factors related to the preparatory work which has already been entrusted to Soviet scientists and Soviet organizations. The Soviet scientists and organizations felt that the time at their disposal was inadequate and that in that period of time it would be almost impossible to ensure appropriately for such an important measure as the convening of an international conference on outer space, at the high level required for such a conference.

On the other hand, as stated in the course of the consultations, it is apparent that several countries were not in a position, or almost in a position, to ensure the proper scientific preparation and the gathering of the necessary material in the period of time which remained available for the convening of the conference.

(Mr. Fedorenko, USSR)

All these factors were discussed in detail by the Group of Experts and, on the basis of the competent views of that group, the Committee on the Peaceful Uses of Outer Space is recommending to the special session of the General Assembly that it postpone the convening of the conference that was originally planned for September 1967 for approximately another year.

As the members will recall, the Committee also decided that the exact date of the convening of the conference would be agreed upon in the course of consultations among Member States and the Government of the country where the conference will be convened, taking into consideration the interests of the developing countries and their participation in other important international conferences in 1967.

It is well known that these consultations are being carried out now among various delegations, and at the same time it is well known that the session of the Assembly has not yet convened. We hope that the Member States of the United Nations, at the forthcoming special session of the General Assembly, will approach the question of the international conference on outer space with proper regard to all aspects and, first of all, bearing in mind the interests of scientific progress in the field of exploration and peaceful uses of outer space for the benefit of mankind. That is why we see no grounds for any concern being expressed by those countries which, quite recently, very definitely opposed the convening of such a conference. Now, they attempt to cast shadows on the position of countries which happen to be the initiators of this idea.

The position of the Soviet Union was and is being determined by the fact that the first international conference on outer space in the history of mankind will certainly be an event of considerable significance. That is why our scientists and the competent organizations certainly will exert every effort to see to it that there be most thorough preparation for this conference so that it may prove most useful to all its participants. In such a case, the conference would certainly contribute to the progress in further exploration and use of outer space for peaceful purposes and would yield more important scientific and practical results.

Mr. MATSUI (Japan): I should like to state very briefly the views of the Japanese Government regarding certain of the items involved in the organization of work of this Committee. With regard, first, to legal affairs, we have on the agenda of the Committee the elaboration of two agreements; namely, an agreement on liability for damages caused by the launching of objects into outer space, and an agreement on assistance to and return of astronauts and space vehicles.

I should like to direct the Committee's attention particularly to the latter agreement. A considerable part of its substance has already been agreed upon and we believe, therefore, that the Legal Sub-Committee should make every effort to complete at an early date the drafting of this agreement.

Second, we have just heard the views of the representative of France, Mr. Seydoux, to the effect that the definition of outer space should be taken up for consideration. His detailed and comprehensive explanation, which I will qualify as "magistrale" in the French language, has certainly given us much food for thought, both in the legal and in the scientific and technical fields, and, I am certain, has impressed us by the magnitude of his vision on this important question. We would like to suggest in this regard that an expert Committee should be established to consider the problem and then report its conclusions to the Legal Sub-Committee.

Third, with regard to space communications, views have been expressed that certain regulations should be effected in order to harmonize the use of communication satellites. On this point it is our belief that, first of all, the technical aspects of this question should be considered by the Scientific and Technical Sub-Committee.

Fourth, I should like to refer to General Assembly resolution 2223 (XXI), paragraph 4, which endorsed the establishment of a working group to consider the need, feasibility and implementation of a navigation services satellite system. This proposal was also referred to, of course, in paragraph III (ii) (a) of the 7 April note (A/AC.105/CRP.1 (IX)) by the Chairman on our programme of work. In the view of my Government, the establishment of such a working group would be highly desirable.

(Mr. Matsui, Japan)

Finally, we have no special preference with regard to the time or place for holding the meetings of both the Legal Sub-Committee and the Scientific and Technical Sub-Committee. After the necessary consultation by the Bureau, we would be ready to participate in the work of the Sub-Committees as then decided.

Mr. RUDA (Argentina) (interpretation from Spanish): In this statement, I shall dwell only on the note from the representative of Argentina which is contained in document A/AC.105/L.34.

First of all, I should like to thank you, Mr. Chairman, for your kindness in acceding to the request of the Republic of Argentina that my note seeking United Nations sponsorship for the establishment of a sounding rocket base be included in the agenda of this Committee.

The Committee on the Peaceful Uses of Outer Space, in its report for 1962, stated that the Committee:

"Believes that the creation and use of sounding rocket launching facilities (especially in the equatorial region and the southern hemisphere) under United Nations sponsorship would contribute to the achievement of the objectives of General Assembly resolution 1721 (XVI)..."

(A/5181, para. 21)

Resolution 1721 (XVI) recognized the common interest of all mankind in furthering the peaceful uses of outer space and the urgent need to strengthen international co-operation in this important field, considering that the United Nations should provide a centre for international co-operation in the peaceful exploration and uses of outer space.

The setting up of those bases for the launching of sounding rockets could doubtless be the main source of international co-operation in the field of research in outer space and would, furthermore, allow some countries at a certain level of technological development in space to train their technicians, with the practical assistance of the more advanced nations in that field. Furthermore, those more advanced States could in their turn use those bases to carry out research in the interest of those who, for economic or technical reasons, could not themselves carry out launchings on a large scale.

On the other hand, for the more advanced States and also for the less-developed States in this field, the setting up of those bases would allow them to combine their resources for the purpose of carrying out experiments on a much wider scale.

(Mr. Ruda, Argentina)

For all those reasons, and others, our Committee proposed to the General Assembly in 1962 twelve basic principles which must be complied with in setting up installations of that type which would be of an international character under the sponsorship of the United Nations.

The General Assembly in its resolution 1802 (XVII) took note of the views of the Committee in this matter and noted that the creation and use of sounding rocket launching facilities under United Nations sponsorship

"... would contribute to the achievement of the objectives of resolution 1721 (XVI) by furthering international collaboration in space research and the advancement of human knowledge, and by providing opportunity for valuable practical training for interested users;"

That resolution endorsed the twelve basic principles suggested by the Committee and affirmed, moreover, in paragraph 7 of part II that:

"... such facilities, when established and operated in accordance with these principles, shall, at the request of the host Member State, be eligible for United Nations sponsorship".

In 1963, the Committee approved the sending of a group of five experts to visit the launching station for sounding rockets in Thumba in India for the purpose of granting United Nations sponsorship to that base.

Moreover, the Committee asked the Member States located in the appropriate regions, that is to say, in the equatorial zone and in the southern hemisphere, to study, individually and jointly, the possibility of establishing installations of that kind in conformity with the twelve basic principles mentioned above.

General Assembly resolution 1963 (XVIII) endorsed the recommendations contained in the report of this Committee for 1963 on the subject of international installations for the launching of that type of rocket and approved the sending of the mission mentioned above to India.

In 1964 the group of scientists which had visited Thumba recommended granting to India sponsorship of the United Nations so that the international equatorial base for the launching of sounding rockets would continue to function. That recommendation was repeated in the report for 1965.

(Mr. Ruda, Argentina)

Resolution 2130 (XX), adopted by the Assembly in 1965, ratified the recommendations contained in the 1964 and 1965 reports on the international installations for the launching of sounding rockets, and granted to India United Nations sponsorship for the Thumba base, in accordance with the basic principle I have already mentioned.

Last year, annex II of the Committee's report contained a recommendation of the Scientific and Technical Sub-Committee that the United Nations should continue to sponsor the Indian base. That recommendation, together with some others, was approved by the General Assembly in resolution 2223 (XXI), and it was recommended that all necessary assistance be granted to ensure continuation of the operation of the Thumba base.

The Government of Argentina, encouraged by the success achieved by India and desirous of encouraging international co-operation in this field, requested, in a note addressed to the Chairman of the Committee on 16 November 1966 that the United Nations should sponsor in the Republic of Argentina the establishment of an experimental centre for the launching of self-propelled projectiles with characteristics similar to those of the Thumba base.

(Mr. Ruda, Argentina)

In my country there is the Chamical base in operation at this time, which has been carrying out continuous and regular operations for more than four years and which has evolved a great number of programmes of scientific and technical research with balloons and rockets. This base has been used not only for the execution of national plans; it has also carried out international programmes in collaboration with the National Centre for Space Studies of France; in cooperation with the NASA of the United States; and within the Inter-American Meteorological Research Programme, which involves the over-all study of the upper atmospheric layers through the co-ordinated launching of sounding rockets by the space agencies of the United States, Brazil and Argentina. This latter programme was initiated in January 1966, according to information furnished me by technical agencies of my country.

If it is decided to grant United Nations sponsorship to a base in the Argentine Republic, my Government here and now wishes to declare that the functioning of that base will be in conformity with the twelve principles that were laid down in 1962 and that have proved so effective in the case of the Thumba base.

I wish also to state that the Chamical base is devoted exclusively to scientific and technical research for peaceful purposes.

Furthermore, if in due course it is so decided, my country will be glad to follow in the footsteps of India and act as host to such experts as may wish to report authoritatively to the Committee in this matter.

Considering the complexity of the process for obtaining United Nations sponsorship for this type of base, I would, Mr. Chairman, consider that this request of my country might best be submitted to the consideration of the Scientific and Technical Sub-Committee at its forthcoming meeting.

Mr. FIORIO (Italy): I wish first to thank you, Mr. Chairman, for the note which you prepared, with your usual clarity, presenting a synthesis of the programmes pending before this Committee.

Secondly, I wish to congratulate the representative of France for the vivid picture of the goals of this Committee which he has painted for us, in the tradition of the great Impressionists of his country, perhaps with a touch of the modern electronic image-changing techniques used by the space-scientist painter Frank Molina, who lives in Paris. Ambassador Seydoux has brought to our

(Mr. Fiorio, Italy)

Committee new ideas and foresight which are badly needed lest we lose all contact with the rapidly-developing pace of the space programmes in the universities, laboratories, research centres and launching-ranges in the far corners of the world. Of course I fully agree on the need for discussing the subjects he has mentioned. I might suggest for them a different priority or a different practical approach for some of them -- such as, perhaps, the appointment of a special panel of experts on the matter of the definition of outer space -- and if necessary, my delegation will be ready to clarify the details in due time.

Considering now organizational matters, I agree with several of my colleagues who have preceded me that both Sub-Committees should meet before September, and that the meeting of the Legal Sub-Committee should precede that of the Scientific and Technical Sub-Committee. It might also be useful if this latter could receive some preliminary opinions from the working group on navigation satellites, which should start its work as soon as possible. As for the composition of that working group, it is the opinion of my delegation that it should be open to specialists from all the members of this Committee and to the potential users of the system, that is the ICAO and the Maritime Organization, and so forth. Then, primarily for its own logistic reasons, my delegation is in favour of a meeting of the Legal Sub-Committee in Geneva and of the Scientific and Technical Sub-Committee in New York, but is, of course, ready to accept the wishes of the majority of this Committee on this subject.

Finally, as stated on several previous occasions, the Italian delegation would like to see included in the agenda of each Sub-Committee the question of the composition of the Bureau of the Sub-Committee itself, in order to facilitate and accelerate the respective work of each Sub-Committee without placing an excessive burden on the shoulders of its lonely Chairman.

As far as the United Nations Space Conference is concerned, the Italian delegation hopes that the consultations now taking place, as mentioned by the representative of the Soviet Union, will reach an early agreement, so as not to be forced, as was the case last year, to play the role of Cassandra in forecasting its doom, and so that no time will be wasted in setting the date it will start and the time in which it will be held.

Mr. McKEOWN (Australia): The useful and very extensive debate we have just had has enabled my delegation to be very brief in setting forth a few views on one of the points that have emerged in the course of the discussion. A number of delegations have referred to the desirability of early implementation of the decision to establish a working group to consider the need, feasibility and implementation of the navigation services satellite system. As this proposal emerged as one of the main recommendations of the last session of the Scientific and Technical Sub-Committee and was endorsed by this Committee and by the General Assembly, it might be helpful if I outlined in a very few words the views of my delegation on this question.

Both from the point of view of its geographic location in the world and from consideration of the distances separating its principal cities, Australia has shown a particular interest in the question of the application of the technology of satellites to the service of man. We accordingly hope that a working group can be established and that it will commence its work in the near future. In this connexion, we would agree with the view that has already been expressed by a number of representatives, that the working group could be open, and should be open, to all members of the Committee who might wish to participate. In this connexion, we would hope to participate ourselves at the appropriate time in the work of that group.

Mr. CHAMMAS (Lebanon): My remarks will be concerned with something that is perhaps not very important and that could wait for consultations, but I should like to make one point clear on this particular matters.

I know that consultations will take place regarding the place and the date for the meetings of the two Sub-Committees. It goes without saying, Sir, that we agree with your statement that the Legal Sub-Committee should meet for four weeks and the Scientific Sub-Committee for two weeks -- the former to meet before the latter. But I should like to point out to those representatives of large delegations that the smaller delegations find themselves in an impossible position when asked to take certain decisions in haste -- the decision, for example, whether the Legal Sub-Committee should meet in Geneva or in New York. My delegation wishes to record that it would find it extremely difficult to commit itself, if consultations indicated that there was a preference to meet in Geneva, to participate actively. We know, for example, that the Committee on Friendly Relations and Co-operation among States has already scheduled meetings to begin on 17 July and to continue for five or seven weeks. Therefore, unless delegations have more than one legal expert in their missions, they would scarcely be able to serve in the Legal Sub-Committee and, at the same time, to attend meetings of the Committee on Friendly Relations. My Government, for one, would find it difficult to send two or three experts to participate in the work of both Committees.

We should like to bring this point to the consideration of representatives in the hope that the consultations might lead to the Legal Sub-Committee's meeting in New York some time after the adjournment of the special session of the General Assembly and before 15 July.

As far as meetings of the Scientific and Technical Sub-Committee are concerned, we have no preference.

We would hope that other delegations will take a similar position.

I must take this opportunity of expressing the hope that the important ideas put forward by the representative of France will be given due consideration in the future work of the Committee. We found these ideas extremely illuminating; the problems mentioned are indeed acquiring a sense of urgency. Nevertheless, we should like to draw the attention of the Committee to the stand which the representatives of the developing countries adopted in Geneva when the Treaty was being considered. We expressed the hope that the Legal Sub-Committee would consider as a matter of urgency the question of the agreement on liability for

(Mr. Chammas, Lebanon)

damages caused by the launching of objects into outer space and, of course, also the second part, agreement on assistance to and return of astronauts and space vehicles.

We shall consider very carefully the proposal to establish a group of experts to consider a definition of outer space. This is an important subject. We are very happy that some thoughts on this matter were advanced by the representative of France.

The CHAIRMAN: Does any other representative wish to make any comments?

A number of valuable suggestions have been made in the course of this debate -- for example, with regard to the timing of the meetings of the two Sub-Committees, as well as with regard to the Working Group on Navigation. As was pointed out by some delegations, the Legal Sub-Committee should be convened as soon as possible, preferably in May or June of this year. There seems to be general agreement that that Sub-Committee should be convened for a period of about four weeks and that its meetings should take place before those of the Scientific and Technical Sub-Committee and should not overlap -- as the representative of Lebanon pointed out - with the meetings of the Committee on Friendly Relations which are to be held from 17 July to 31 August in Geneva. In addition, it has been stated that the Scientific and Technical Sub-Committee's meetings should continue for two weeks.

In these circumstances, it is obvious that this Committee should hold further consultations in order to clarify the situation as to the place and dates for the meetings of the two sub-Committees, and, of course, also with regard to the composition of the Working Group on Navigation. I would suggest, therefore, that the Committee should meet again on Wednesday morning, 19 April. I have had the opportunity to discuss the matter of our next meeting with the Secretariat and I have been informed that it will be possible for us to meet on Wednesday morning. Thus delegations will be able to hold informal consultations tomorrow in order to clarify the points which I have just mentioned.

The Committee will meet on Wednesday, 19 April, at 10.30 a.m.

The meeting rose at 5.45 p.m.