



VERBATIM RECORD OF THE 42nd MEETING

Chairman: Mr. BOATEN (Ghana)

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77-73249

Distr. GENERAL
A/C.1/32/PV.42
25 November 1977

ENGLISH

The meeting was called to order at 10.55 a.m.

AGENDA ITEMS 35 AND 36 (continued)

INTERNATIONAL CO-OPERATION IN THE PEACEFUL USES OF OUTER SPACE: REPORT OF THE COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE (A/32/20; A/C.1/32/L.39)
PREPARATION OF AN INTERNATIONAL CONVENTION ON PRINCIPLES GOVERNING THE USE BY STATES OF ARTIFICIAL EARTH SATELLITES FOR DIRECT TELEVISION BROADCASTING: REPORT OF THE COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE (A/32/20; A/C.1/32/L.39)

Mr. ZEA (Colombia) (interpretation from Spanish): The agenda item on international co-operation in the peaceful uses of outer space is one of the most thrilling that the General Assembly of the United Nations is studying, and it is also a matter of increasing concern on the part of all nations around the world. It is a truism today to say that the progress of space technology is the most marvellous and surprising event of this century. Enormous scientific breakthroughs are owed to the advanced investigation in this field, as well as the speed and facility in communications which have brought much closer together and made better known the peoples of the world to one another.

The Committee on the Peaceful Uses of Outer Space established by the General Assembly of the United Nations has since 1958 done truly admirable work credit for which, in large part, is due to the presiding officers, and lately, in particular, to its present Chairman, the representative of Austria, His Excellency Ambassador Jankowitsch. My delegation wishes to express its appreciation to all the members of that Committee for the work it has done, and particularly to its Chairman, and we are ready to support the draft resolution on this subject which, like those of previous years, was adopted by consensus. My delegation also wishes to express its appreciation to the Government of Austria which, with praiseworthy interest and enthusiasm, made available to the Committee all the facilities it needed to carry out its important work.

(Mr. Zea, Colombia)

It is most encouraging to note the report of the Committee on the Peaceful Uses of Outer Space, as well as to read the statement made by Ambassador Jankowitsch in introducing it to this Committee. In the fields of both law and science the Committee has worked with prudence and discretion, and has shown a natural capacity to judge matters correctly. This was only to be expected in the study of a subject that is almost in the embryonic stage, in a period of discoveries and inventions.

We also understand that it is an extremely difficult matter to achieve a consensus in all the different subjects before the Committee, and particularly those that are assigned for consideration in the Legal Sub-Committee. We would only hope that in the course of the coming meetings of the Sub-Committee the draft treaty on the moon will be completed, and also that principles will be drafted to govern the use by States of artificial earth satellites for direct television broadcasting.

My delegation intends to study very carefully the draft preamble that appears in Annex IV of the report, as well as the texts formulated by the Working Party on Consultation and agreements between States contained in Annex V. We are also gratified that the Legal Sub-Committee showed interest in other aspects of the peaceful uses of outer space, such as the legal consequences of the remote sensing of natural resources of the earth, bearing in mind the need to respect and preserve the sovereignty of States and particularly of the developing countries as far as their natural resources are concerned.

(Mr. Zea, Colombia)

My delegation is saddened by the fact that insufficient progress has been made in the definition and delimitation of outer space. Doubtless this is one of the fundamental matters if we are to try to frame universal legislation on the subject. We are happy, however, to note that some of the members of the Sub-Committee stressed the need for that definition and that delimitation and considered that it should be the subject to be given the greatest priority among the items on the agenda of the Legal Sub-Committee. In fact, until we know clearly what is meant by outer space, until the international community has laid down clear parameters for that space, until a precise area has been defined in which the legal norms considered appropriate are to be applied, any efforts to define such norms will lack body. Or we might say that there could be no regulation governing outer space until we know what outer space is and how far it goes. For these reasons, my delegation shares some of the concerns of the members of the Committee on the matter and with all due respect would urge the Legal Sub-Committee not to include this matter as merely another item on its agenda, but that it be given priority consideration and on which all other subjects must hinge.

We also welcome the achievements of the Scientific and Technical Sub-Committee. My delegation wishes to stress and greet the dedication with which that Sub-Committee has dealt with the most urgent subjects, such as satellite remote sensing, particularly its co-ordination at the world-wide level, the application of the United Nations programme for the definition of space technology and the convening of a world conference of the United Nations on outer space. The same applies to the Sub-Committee's study on investigations regarding remote sensing of the earth from outer space, the application of space technology in the life and welfare of peoples, incidentally a field in which the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Food and Agriculture Organization of the United Nations (FAO) have shown great interest. This is a very vast field, but there are immediate possibilities of applying space science in order to improve communication among the inhabitants of the earth, to increase their agricultural production and to forecast meteorological disasters. In one word, we have opened up an enormous area allowing people to increase productivity and thus to improve their economic welfare.

(Mr. Zea, Colombia)

The Committee on the Peaceful Uses of Outer Space was created 20 years ago and in these two decades it has seen how international co-operation has become essential to the carrying out of its mandate. When the Committee was first created, science and technology obviously had not reached their present level of development, and we did not quite see how those discoveries we then considered to be related to astronomy alone could affect the lives of people, their political institutions, their social organizations, even their economic trends. That is perhaps why the Committee was looked upon as an exclusive club to which only the technologically advanced countries could belong. We know today, however, that those activities have given rise to many consequences that affect us all in equal measure and that all of us are also interested in knowing more about them, studying them, taking initiatives and making suggestions regarding their solution. This has been Colombia's position not only as regards outer space. For a long time we have considered that in the solution of problems affecting mankind, the co-operation of all nations must be sought, regardless of their political or economic conditions. This is all the more true in those fields of outer space which are essentially an enormous challenge to man's imaginative capacity, not only as far as science and technology are concerned, but also politics, communications, agriculture, meteorology and all that these activities entail in the lives of communities.

That is why my delegation together with a number of others have felt that the time has come to expand the membership of the Committee on the Peaceful Uses of Outer Space so as to allow a number of countries to participate and co-operate in its technical, scientific and legal work. Accordingly, I have the honour to submit formally to the First Committee, on behalf of the delegations of Algeria, Bolivia, Colombia, Congo, Ecuador, El Salvador, Honduras, Iraq, Libyan Arab Jamahiriya, Madagascar, Nicaragua, Niger, Norway, Panama, Paraguay, Philippines, Spain, Syrian Arab Republic, Uganda, Uruguay, Yugoslavia and Zaire a draft resolution that has been circulated in document A/C.1/32/L.43, in which we ask that the membership of

(Mr. Zea, Colombia)

the Committee on the Peaceful Uses of Outer Space be increased to 47. Today there are merely 37 members, that is to say, less than a quarter of the current membership of the United Nations. We believe that in submitting this draft resolution we are expressing the desire of all to contribute to the work of the Committee and also to express our fears and hopes. We have seen that the science of outer space not only touches on sophisticated means of communication but also creates political problems affecting the sovereignty and culture of peoples that cannot be ignored.

(Mr. Zea, Colombia)

We should not be unduly alarmed at the possibility of expanding the membership of the Committee, since such an increase would merely respond to the natural growth of our Organization and would also reflect the many new problems to be confronted and studied by the Organization. The policy of our Organization has been a democratic one, allowing for a gradual increase in the membership of other Committees, such as that on the review of the Charter, and also has led to the creation of somewhat larger committees, such as, for example, the Preparatory Committee for the special session of the General Assembly on disarmament. The Outer Space Committee thus will be able to hear the views of States other than those of its present membership. If its membership is not expanded, the chance of prospective member countries will be dashed, because it is a standing committee with permanent members who therefore cannot be replaced by a process of rotation.

My delegation would like to address itself to the point made by Mr. Jankowitsch in his statement, when he said that it was time for all Members of the Organization to co-operate with the Committee on the Peaceful Uses of Outer Space since only thus can its work truly reflect the interests of the international community. It is obvious that the problems of outer space, like those concerning the sea-bed, health, the organization of labour and so on, are of interest to all nations, and therefore their study and solution requires the full co-operation of all.

My delegation and the other delegations sponsoring the draft resolution on an increase in the membership of the Committee trust that the First Committee will support our view and will see its way clear to adopting our proposal, preferably by consensus.

I had already written the above statement, when the delegation of Austria caused us some surprise by submitting a draft resolution in which it asked the General Assembly to postpone consideration of the question of an increase in the membership of the Committee on Outer Space to the thirty-third session with

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view to reaching an agreement. I say that we were surprised because when the draft resolution to which I have referred in the text of my statement was presented we were told that at that time no other draft resolution had been submitted on that subject. Yet the draft resolution submitted by the delegation of Austria has the symbol A/C.1/32/L.42, whereas ours has the symbol A/C.1/32/L.43. I must say it is somewhat curious that this draft resolution opposes the request for an increase when, if these numbers are to be believed, the sponsors of document A/C.1/32/L.43 had not yet submitted their draft resolution requesting the increase.

These matters have been raised at previous sessions, and in recent years a number of the Members of the United Nations have expressed the desire to join the Committee on the Peaceful Uses of Outer Space, and the same question has always been asked: would it not be better to wait until the next session of the General Assembly? If we consider that this might be advisable next year, then why not this year and why not take an immediate decision?

For all these reasons, the sponsors of the draft resolution that I have the honour to submit will press for a discussion of this matter although we are prepared to reach an agreement, but only on the condition that the question of an increase be decided upon during the present session of the General Assembly.

Mr. CANALES (Chile) (interpretation from Spanish): Before beginning the statement of my delegation on the item before us, I should like to convey to the delegations of Argentina and India a message of sympathy and solidarity at the catastrophes that have stricken their respective countries and have caused great loss of life and material damage.

As we all know, this year marked the twentieth anniversary of the Committee on the Peaceful Uses of Outer Space, and we believe it is appropriate to view in retrospect the work done by that organ of the United Nations. It might be helpful to recall that, according to the request made by the General

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Assembly, the Committee on Outer Space was to: first, examine the possibility of achieving international co-operation in the sphere of its competence; secondly, carry out programmes under the auspices of the United Nations, particularly in support of the continued research in outer space, and organize mutual exchanges of information; thirdly, disseminate information acquired in the course of that research; fourthly, examine the legal consequences of the exploration of outer space.

The rate of progress in the exploration and exploitation of outer space, the product of human ingenuity and technological progress, developed particularly by the United States and the Soviet Union, has stressed the urgency that should guide the work of our Committee in the creation of a legal body that will regulate State activities in the exploration and use of outer space. There can be no doubt that, from the political point of view, the international community is extremely concerned that space activities be carried out in an orderly and harmonious way, ensuring respect for the sovereignty of States and of all the rules of international coexistence, particularly those included in the United Nations Charter.

The Committee on Outer Space has been able to prepare a body of basic principles which are now embodied in the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, which this year is celebrating the tenth anniversary of its entry into force. This important treaty was complemented by three other legal instruments, and I am happy to tell this Committee that at the end of last year my country ratified the Convention on International Liability for Damage Caused by Space Objects.

For its part, the General Assembly will have to decide on the recommendation contained in paragraph 34 of the report of the twentieth session (A/32/20), which recognizes the importance of the treaty and renews an invitation to States not yet parties to that instrument to ratify or accede to it.

(Mr. Canales, Chile)

I am happy to say that my delegation intends to support that draft resolution, and we take advantage of this opportunity to inform the Committee that my Government, through its competent organs, is continuing its study of the 1967 Treaty with a view to ratifying it.

The honour of preparing the legal instrument to which I have just referred fell to one of the subsidiary organs of the Outer Space Committee, namely, the Legal Sub-Committee. As a member of the Outer Space Committee, this year we were present at the sixteenth session of that Sub-Committee whose report can be found in document A/AC.105/196. We also participated in the discussion of the items which the General Assembly has entrusted to that Sub-Committee with priority rating for the last few years.

First of all I should like to refer to what occurred with the Treaty concerning the moon and other celestial bodies, for that required enormous efforts on the part of delegations for its completion. As is known, the disagreements surrounding the question of the legal nature of the resources of the moon still paralyse the codification of that draft. Everyone recognizes that the solution of that problem would facilitate agreement on the others, in other words, those regarding information that should be made available with respect to missions to the moon and the scope of the Treaty itself.

My delegation would like to reiterate here its definitive support of the extension of the common heritage of mankind to the natural resources of the moon and other celestial bodies, which is a concept that is shared by almost all delegations. The concept of the common heritage of mankind, which this same General Assembly adopted in its resolution 2749 (XXV) relative to the seabed and the ocean floor beyond the limits of national jurisdiction, belongs to contemporary international law and is common currency in the discussions of the Third United Nations Conference on the Law of the Sea which, within the framework of its own competence, has already defined and delimited its scope.

(Mr. Canales, Chile)

Therefore it is a requirement of the international community that the Treaty to be adopted regarding the moon also contain a clear-cut definition of the concept of the common heritage of mankind covering the natural resources of the moon. We believe that that is an ineluctable need if we are to implement the new international economic order. Otherwise we would be failing to achieve the equity and justice which we all maintain should prevail in relations between the wealthy and the poor nations, and hence legitimizing the advantage enjoyed by the rich nations, because of their technological progress, in the exploitation of what nature has provided to benefit all.

The 1967 Treaty, for its part, is a legal precedent in favour of that doctrine, according to outer space, including the moon and other celestial bodies, a legal nature which expressly excludes any type of claim to sovereignty by individual States. There is therefore no ambiguity in the matter.

As we have pointed out, we believe the time has come for this General Assembly to undertake a substantive debate on the matter and in full sovereignty, decide along the lines demanded by the great majority, in other words, proclaim the aforementioned resources extrajurisdictional and "the common heritage of mankind". Otherwise the Committee on the Peaceful Uses of Outer Space itself will have to recognize that it is not appropriate to continue to give this item priority and that it should be replaced by another of those on its agenda.

The item that has second priority refers to the elaboration of principles to govern the utilization by States of artificial earth satellites for direct television broadcasts. The Legal Sub-Committee made praiseworthy efforts to solve the main problem pending in that matter, namely, that related to prior consent of the receiving State. Working Group II prepared a provisional text of principles on "consultation and agreements between States" and a draft preamble, which were ultimately studied by a Working Group set up during the twentieth session of the Committee. In the course of meetings

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we noted some progress being made since we deleted the square brackets from the draft preamble and we improved the wording of some of its paragraphs. We must point out, however, that we did not agree on paragraphs proposed for inclusion in the preamble. We personally are in favour of the principle of consent being set forth solemnly in the text to be adopted so that States will have guaranteed to them respect for their cultural values and assurances that there shall be no interference in their internal affairs.

The principles adopted in direct broadcasting by the World Administrative Conference of the International Telecommunications Union were technically geared, with a few exceptions, to establish a service of direct radio broadcasting carried out by a State to serve its own territory. That is an indispensable, orderly approach to frequencies which must be complemented now by a political agreement that will put into practice the principles of the Charter, and particularly that which touches on the strict compliance by States with the obligation not to interfere in the internal affairs of any State, which is an essential condition for ensuring peaceful coexistence among States.

We have stated in the past, and today we wish to state again the experience of Chile, which has been the victim of patent interference in its internal affairs through conventional radio broadcasting, which leads us to consider it extremely deplorable that a similar experience might befall other countries as the result of the use of more sophisticated methods such as direct television broadcasts.

We trust that in the course of the next session the necessary consensus will be arrived at concerning the problems that I have outlined, so that we can conclude the preparation of principles to be applied to direct satellite television broadcasting which will make it possible to turn this system into a means of bringing people together, and thus contribute to the cultural enrichment of all mankind.

With regard to the item entitled "Legal implications of remote sensing of the earth from space", we must admit that some progress has been made since we have identified the six draft principles that appear in Annex III of the Sub-Committee's report. We believe that of these the principle dealing with the responsibility of States in this field is particularly important. We feel

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that the activity of remote observation by satellite applies clearly both to States and/or their agencies and to all those others who find their natural resources being remotely sensed.

As a formula for negotiation we wish to reiterate our support for the Argentine-Brazilian document A/C.1/14047, in which is recognized the need for the prior consent of the sensed State as a basic requirement for such activities of remote sensing.

(Mr. Canales, Chile)

We feel that the Sub-Committee in its future work should be guided by that initiative which lays down clear-cut guarantees in these key issues: participation of the remote-sensed countries in current activities as well as in the information produced; the indispensable prior consent to authorize such activities over natural resources and the agreement that third parties or international organizations be informed of the existence or scope of such resources.

Another matter on the agenda of the Legal Sub-Committee and one which we regret has not been adequately discussed as yet, is the definition or delimitation of outer space and space activities. We support the idea of giving that item greater priority since it is extremely important that the extension of outer space be precisely defined in order to avoid any confrontation arising from increased space activities.

The prodigious technological progress achieved in the exploration and utilization of outer space compels us to speed up our activities in the preparation of a body of space law which will guarantee equity for all States.

I shall very briefly refer to some other aspects of the report of the Scientific and Technical Sub-Committee which we consider to be most important. First of all, I should like to mention the debates that have taken place on definitions of certain fundamental terms applicable to activities of remote-sensing, particularly those relating to information and data acquired by such means. We believe that technically we ought to clarify the concept of space exploration and the effects that resolutions of this nature may have on the sovereignty of remotely-sensed States.

The imminence of such remote-sensing activities becoming commonplace makes it incumbent upon the United Nations to redouble its efforts to achieve the greatest possible compatibility among the different systems, and also to ensure the complementarity of their capacities and functions. Furthermore, we feel that those countries providing assistance in this field should do so without imposing conditions of a political or other discriminatory nature. We would like to express publicly our appreciation to the Government of the United States which continues to give the very valuable co-operation of the Landsat system to more than 100 countries, including my own.

(Mr. Canales, Chile)

I should also like express note to be taken of our support of the United Nations programme on the application of space technology and also the work done by the expert, Mr. Murthy.

We agree with those delegations which feel that the above-mentioned programme should be expanded both in scope and content, and should be given greater financial support. The formative and training aspects are extremely important since it is the experts from developing countries who are being given this assistance and we believe that, to ensure the fullest utilization of all the applications of space technology in the economic development of those regions, this is of inestimable value.

We are grateful to those countries which voluntarily have given courses or sponsored scholarships, since all these are so many efforts to the same end.

Paragraph 73 and those that follow in the report of the Sub-Committee refer to the possible United Nations conference on outer space. The comments that my delegation submitted on this matter in which we supported the holding of such a conference make it unnecessary for me to go into the subject at greater length. However, it is imperative that we mention that we would prefer the adoption of a broad approach in the preparation of the agenda of that possible conference in order to include political problems - which would imply the adoption of legal texts - as well as the dissemination of possibilities for applying space technology to development.

There is, however, one subject which is of concern to us and about which we cannot remain silent, namely the increasing military use that is being made of outer space. World public opinion has been amply informed of the prodigious progress achieved in the exploration and exploitation of outer space for peaceful purposes. An awareness has been created of the great benefits that might be obtained in the future for the progress and welfare of mankind, since these activities in outer space must be carried out for the benefit and in the interests of all countries regardless of the degree of their economic and scientific development. But world public opinion has been kept somewhat in the dark regarding the threat inherent in the increased use of outer space for military purposes.

(Mr. Canales, Chile)

We all recognize that through the Committee on Outer Space the United Nations has done most praiseworthy work in the preparation of legal instruments to regulate all activities of exploration and utilization of outer space and to ensure its peaceful use, as well as granting all States equal opportunities to benefit therefrom. The United Nations has also encouraged international co-operation so that progress in the spheres of communications, meteorology, remote sensing and so on, benefit the greatest number of States, particularly the developing ones.

There are a number of international instruments that have specified what military use can be made of outer space and some agreements have been reached to prohibit the use of nuclear weapons or weapons of mass destruction in this new environment which man's genius has opened up. Thus, for example, General Assembly resolution 1884 (XVIII), in operative paragraph 2:

"Solemnly calls upon all States: ... to refrain from placing in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, installing such weapons on celestial bodies, or stationing such weapons in outer space in any other manner;"

The outer space Treaty of 1967 in article IV, first paragraph sets out that:

"States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station weapons in outer space in any other manner." (General Assembly resolution 2222 (XXI), annex)

In 1963 a Treaty was approved which prohibited the testing of nuclear weapons in the atmosphere, in outer space or under water. My delegation feels that because we are imbued with the urgency of studying the peaceful uses of outer space we have not as yet given due attention to the military uses of that environment in order to prevent the application of space technology in the military field from opening up new areas of the arms race.

(Mr. Canales, Chile)

The Secretary-General's report on the Economic and Social Consequences of the Armaments Race (document A/32/88), on page 14, paragraph 31, clearly informs us of the decisive importance of developments in the military use of outer space achieved in the progress of both nuclear warfare and so-called "conventional" warfare.

All these reasons dictate the need to include in the studies made by our Committee the possible military uses of outer space in order to acquire the necessary information that will allow us to adopt measures to complement the relevant provisions contained in the 1967 Treaty by an agreement on the future demilitarization of outer space that will guarantee for it an exclusively peaceful use.

If we do not include this responsibility, which appears logical to us, in the terms of reference of the Committee on Outer Space we will allow the military use of outer space to be generalized and sophisticated to such an extent that subsequent efforts to avoid the development of an arms race in outer space will be fruitless and will perhaps allow the use of new methods of warfare, the destructive power of which is unforeseeable.

(Mr. Canales, Chile)

If it were felt inappropriate to give wider scope to the studies of the Committee on Outer Space so that it could take up the military uses of outer space as well as its peaceful uses, then perhaps it might be appropriate to include a new item among the disarmament questions touching on the problems raised by the development of artificial earth satellites for military purposes.

In the 1977 yearbook of the Stockholm International Peace Research Institute we are told that more than 60 per cent of the satellites put into orbit in the last few years are engaged in military activities such as electronic photographic reconnaissance and geodesic, meteorological, navigational or research work on improving military satellites.

At present the major space Powers are involved in rivalry concerning systems of satellite interceptors and destroyers. In other words, the arms race has acquired new dimensions which constitute as many new threats to international peace and security.

We do not believe that we can yet speak of a new type of space war, but rather of an additional space strategy of tridimensional space operations that will make war increasingly lethal and threatening to mankind's aspirations to peace and progress.

The interest shown by a number of delegations of member States in joining the Committee on Outer Space is clear proof of the importance attached to the practical uses of space technology in the development of countries and the legal aspects of such activities. We should specifically like to stress the efforts made by the delegations of Colombia and Ecuador, which have been represented in the work of the Committee and its subsidiary organs this year. We believe that now that our Organization has almost achieved universality we should encourage the widest possible participation in the working bodies of the United Nations, and therefore we shall wholeheartedly support the draft resolution just submitted by the representative of Colombia, sponsored by more than 20 delegations, calling for expansion of the membership of the Committee on Outer Space.

We could not conclude this statement without expressing our appreciation to the Chairman of the Committee on Outer Space, Mr. Jankowitsch, for his

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constant dedication and care in presiding over that Committee. We would ask him to inform his Government of our appreciation of the consideration, hospitality and assistance given the delegations present in Vienna for the twentieth session of the Committee.

Mr. PAWLAK (Poland): This year we have before us the report on the results of the twentieth session of the Committee on the Peaceful Uses of Outer Space. Once again the Committee was fortunate to work under the able and dedicated guidance of Mr. Peter Jankowitsch of Austria. This time he was given the well deserved opportunity to preside over the proceedings of his Committee in Vienna. My delegation very much appreciated the traditional Austrian hospitality as well as the efficiency with which the business of the Committee was conducted. Here in the First Committee we have also benefited a lot from the introductory statement made by Mr. Jankowitsch at the beginning of or consideration of the two items concerning international co-operation in the field of the exploration and peaceful uses of outer space.

The twentieth session of the Committee this year coincided with the twentieth anniversary of man's first venture into outer space. The successful launching of the first Soviet satellite, Sputnik I, in October 1957 marked the beginning of the new era in the history of mankind. The anniversary mood leads us to meditate upon past achievements and possible future developments in this area.

The United Nations record in promoting international co-operation in the exploration and peaceful uses of outer space is very impressive indeed. It is through the United Nations that the rule of law has been extended to cover new dimensions. The United Nations has provided an appropriate forum for co-ordinating scientific activities and furthering the exchange of information. Our Organization has reaffirmed the common interest of mankind in promoting the exploration and use of outer space for exclusively peaceful progress. The United Nations has thus become a true centre for harmonizing the actions of nations in this new and promising field of human endeavour.

It is gratifying to note that space technology has already helped to resolve many problems, both theoretical and practical. The co-operation between

(Mr. Pawlak, Poland)

the two leading Powers, the Soviet Union and the United States, has been raised to a higher level. We were all impressed in particular by the successful completion of the joint Apollo-Soyuz programme two years ago. Many other States are now in a position to make their own contributions to the exploration and peaceful uses of outer space. Accordingly, international co-operation in this domain is nowadays based on the broad participation of various countries, scientific bodies and individual experts.

In Poland the research activities within the framework of our National Scientific Space Programme are concentrated on space physics, satellite geodesy, space biology and medicine. We are also very interested and involved in the implementation of space-application programmes related to the remote sensing of the earth and to communication via satellites. These activities are being carried out mainly within the ambits of two agencies grouping socialist countries, namely Intercosmos and Intersputnik. In July 1976 the character of an intergovernmental agreement was given to the Intercosmos co-operation programme, and shortly afterwards an additional agreement was signed on the basis of which scientists from the States parties were given the possibility of participating in space flights on board Soviet space vehicles. The training of specialists from Poland and other socialist countries is now in progress at the Gagarin Centre, near Moscow. Some research programmes are also being carried out by Polish specialists on a bilateral basis in co-operation with many other countries from different regions of the world.

This year's report of the Committee on the Peaceful Uses of Outer Space contains a number of important recommendations and decisions concerning the future work of the Committee as a whole and its subsidiary bodies. May I in the first place offer some comments with regard to the recommendations and decisions related to the questions that are being dealt with by the Legal Sub-Committee.

(Mr. Pawlak, Poland)

We highly appreciate the contribution made by the Legal Sub-Committee to the elaboration of basic principles and specific rules of outer space law. We earnestly hope that the tenth anniversary of the entry into force of the main outer space Treaty will be marked by new ratifications or accessions to this instrument which has laid down the foundations for harmonious international co-operation and activities of States in the exploration and use of outer space, including the moon and other celestial bodies.

There is now a great need for new instruments to regulate man's activities in some specific areas related to peaceful uses of outer space technology. I have in mind, in particular, the elaboration of principles governing the use by States of artificial earth satellites for direct television broadcasting. My delegation has noted with appreciation the considerable progress made by the Legal Sub-Committee in this respect. We have also welcomed the results of the World Administrative Radio Conference for the Planning of the Broadcasting Satellite Service held earlier this year in Geneva. We expected that the arrangements made there under the auspices of the International Telecommunication Union (ITU) would help to resolve not only technical but also legal problems, especially those connected with the spill-over of the satellite signal.

Alas, as can be seen from the Committee's report, additional efforts undertaken during the course of its twentieth session to reach a compromise solution proved unsuccessful owing to lack of consensus. The matter will now go back to the Legal Sub-Committee. We hope that it will not take too much time for the Legal Sub-Committee to arrive at an agreed solution of the question of "consultation and agreements between States" and, consequently, to adopt a complete set of principles on direct television broadcasts.

In this connexion I should like to repeat once again that in our approach to the question of direct television broadcasting by means of artificial earth satellites we are not guided by any time-serving or tactical considerations. Direct broadcasting will never be made in a vacuum. It is not true that there are no rules governing State activities in the field of direct broadcasting. In the first place, there are rules of general international law and there are agreed principles of peaceful coexistence. Technological advances must not be taken as a pretext to override such fundamental principles as national

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sovereignty and non-interference in domestic affairs of other States. What we are also concerned with is the safeguarding of the cultural heritage of various nations, as well as the prevention of abuses, violence and racist and hostile propaganda. That is why we are of the view that the problems that may arise in connexion with direct broadcasting should be resolved by means of consultation and agreements between States directly involved.

We have also followed with keen interest the work of the Scientific and Technical Sub-Committee and we very much appreciate its stimulating and co-ordinating role with regard to scientific and technical aspects of man's activities in outer space.

We share with other delegations the highest appreciation of the outstanding contribution made by Professor Carver of Australia in his capacity as Chairman of the Sub-Committee.

The remote sensing of the earth is another matter of immediate practical interest for us as well as for other countries. We have noted the progress made in this respect both by the Legal Sub-Committee and by the Scientific and Technical Sub-Committee. I have in mind, *inter alia*, the proposed definition of the notion of "data" in the context of remote sensing. Perhaps the findings of the scientists will serve as a useful criterion for the Legal Sub-Committee in its efforts to elaborate general principles relating to remote sensing and, in particular, in its search for appropriate formulations concerning the dissemination of data obtained from remote sensing.

There are many other important questions that are currently under study. But since the recommendations and decisions adopted at the twentieth session of the Committee meet with my delegation's general approval, I should not like to dwell upon them any longer.

I have a feeling, however, that I should fail to do my duty if I did not say how happy we were in our delegation on learning of the recognition given to our colleague, Mr. Eugeniusz Wyzner, on the occasion of the tenth anniversary of his chairmanship of the Legal Sub-Committee. It was a source of particular pleasure to us that the Committee as a whole added its own words of appreciation for the contribution made by Mr. Wyzner during his 10-year term of office as Chairman of the Legal Sub-Committee. I should

(Mr. Pawlak, Poland)

like to take this opportunity to express our thanks to the Committee for its kind gesture. We shall convey with pleasure all the kind words addressed to Mr. Wyzner by speakers during our debate in the First Committee.

In conclusion, I should like to express our support for the approach to the question of wider participation by other States in the work of the Committee on the Peaceful Uses of Outer Space contained in the Austrian draft resolution in document A/C.1/32/L.42, which was distributed this morning.

Mr. HERDER (German Democratic Republic): My delegation has with great interest taken note of the report of the Committee on the Peaceful Uses of Outer Space as well as followed the statement of its Chairman, Mr. Jankowitsch. We note with satisfaction that the activities of the Committee are contributing to ensuring the peaceful use of outer space. For this we should like to express our gratitude and appreciation to its Chairman and members.

International co-operation relating to outer space has made it clear that this new area, which was opened up by man's creative activity and ventured into for the first time exactly 20 years ago with the pioneering feat of the Soviet Union, the launching of Sputnik I, can be used on a lasting basis for the benefit of mankind only if the peaceful nature of the activities of States in outer space is ensured. The outer space Treaty, whose tenth anniversary we are marking this month, has provided a solid foundation in this respect. We consider the prohibition against the installing of any kind of nuclear weapons and other weapons of mass destruction on celestial bodies as laid down in the Treaty an important accomplishment. It has been instrumental in using activities in outer space and on celestial bodies exclusively for peaceful purposes. This has led to strengthening international security and had a favourable effect on the struggle to curb the arms race.

(Mr. Herder, German Democratic
Republic)

The Treaty was at the same time an important step towards the codification of the law of outer space, which is determined by the fundamental principles of the United Nations Charter and which has to be regarded as an important part of our present-day democratic international law. For that reason the delegation of the German Democratic Republic supports the draft resolution prepared by the Legal Sub-Committee which pays tribute to the Outer Space Treaty, in particular the invitation to further States to accede to this important Treaty.

It is indeed imperative to strive for the universality of this and all other agreements relating to questions of outer space. It cannot be in the interest of the security of the peoples and States that certain quarters keep their hands free in order to misuse outer space at their discretion. The obligation to use outer space exclusively for peaceful purposes must be respected by all States and must apply to all continents.

General concern was aroused by reports on the establishment of a huge rocket-testing ground in the southern hemisphere of Africa. The Orbital Transport- und Raketenaktiengesellschaft (OTRAC) of Stuttgart is said to have obtained through an agreement, the unrestricted right to use that area for the testing of all types of rockets. Mindful of the historic experience of the armament policy of German imperialists, one rightly raises the question in that connexion whether this agreement aims at bypassing international provisions imposed upon the States for the limitation of certain weapons. That would run counter to the security interests of all States, and in particular would complicate still further the situation in southern Africa.

The agenda of the sessions of the Committee on Outer Space and its sub-committees includes important questions concerning the codification and progressive development of the law of outer space as well as problems relating to the scientific and technological use of outer space. Our efforts should be directed at solving these problems as early as possible. That solution cannot be advanced by dealing with problems which are of secondary importance or are not of topical interest. We should, rather, concentrate on the key issues.

(Mr. Herder, German Democratic
Republic)

May I be allowed, therefore, to make the following remarks on the activities of the Legal Sub-Committee of the Committee on Outer Space. The delegation of the German Democratic Republic holds the view that considerable progress has been achieved regarding the elaboration of draft principles on remote sensing of the earth by satellites. We consider it necessary from the political and legal point of view to include also in the principles to be elaborated the principle of the permanent sovereignty of States over their natural resources. It is well-known that that principle is contained in numerous resolutions of the United Nations which were adopted by the overwhelming majority of Member States. We hold that the principle of the freedom of outer space cannot be brought into contrast with the principle of state sovereignty as a binding norm of international law. The principle of the freedom of outer space can, therefore, only be implemented in strict observance of the principle of the permanent sovereignty of States over the natural resources on their territories.

In that connexion the readiness of the Soviet Union to take photographs of the territory of interested States and to make those photos available to them deserves great appreciation. Such "cosmic service" would effectively help the countries concerned to locate their natural wealth more quickly and to utilize it still more efficiently.

With regard to the elaboration of principles governing the use by States of artificial earth satellites for direct television broadcasting, we welcome the fact that further progress has been made in the formulation of draft principles concerning "consultation and agreements between States". It is our opinion that direct television broadcasting by means of satellites to another State can only be made if the broadcasting State has notified the receiving State in time of its intention to broadcast, if relevant agreements are concluded between the States concerned and if the satellite service is rendered on the basis of the regulations of the International Telecommunication Union (ITU).

Some delegations have been in favour of including in the Treaty relating to the moon provisions which would declare the moon and its natural resources the "common heritage of all mankind". As we know, the Outer Space Treaty states that

(Mr. Herder, German Democratic Republic)

"The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind."

(resolution 2222 (XXI))

What consequences could arise - going beyond the Outer Space Treaty - from including the term "heritage of mankind" in a treaty under international law?

We take the liberty of pointing out that that term is totally unknown to international law. It is clearly a term used in civil law implying the recognition of status of ownership. Its inclusion in the treaty relating to the moon, a treaty under international law, allows only the conclusion that common possession of the moon and of its natural wealth by all States would be postulated. That, however, is in contrast with the Outer Space Treaty which, as is well-known, says that the moon is not subject to appropriation by anyone, which also means not by all mankind. Moreover, we fail to see the legal implication of adopting this term in the treaty relating to the moon since, as is generally known, mankind is not a subject of international law and hence cannot exercise rights and duties resulting from international relations.

The delegation of the German Democratic Republic believes that, given a realistic approach, the elaboration of a treaty relating to the moon could be concluded at an early stage.

So far as the question of the legal status of the orbit of geostationary satellites is concerned, the delegation of the German Democratic Republic is guided by the following principle: that orbit, just as any other orbit of satellites, is an integral part of outer space which, in accordance with the generally recognized norms of international law, is not subject to national appropriation.

As far as the space activities of the German Democratic Republic in the past year are concerned I should like to stress that the German Democratic Republic has participated continuously in the work within the framework of "Interkosmos". Emphasis was placed on the evaluation of the results obtained by the Soviet space venture Soyuz 22, which had the multi-spectral camera MKF 6 manufactured

(Mr. Herder, German Democratic Republic)

in the German Democratic Republic on board. The results obtained so far show that the results of space research technology are widely applicable in various fields of national economy. The activities of the German Democratic Republic within the framework of that experiment illustrate what can also be achieved by smaller countries of the community of socialist States, if there is a certain specialization. That experiment illustrates the transition from pure basic research and practice-oriented research to specific field application of satellite technology.

The German Democratic Republic will report in detail about its outer space activities in 1977 in the annual report on national and co-operative international space activities to be prepared under resolution 2223 (XXI). Furthermore, I should like to refer to the statements made by the representatives of the German Democratic Republic at the sessions of the Committee on Outer Space and its Sub-Committees in which further activities of the German Democratic Republic were mentioned.

(Mr. Herder, German Democratic Republic)

In our country also all other scientific and technological results of the peaceful exploration of outer space are followed with special attention. The achievements made in the field of space research figure prominently on the balance sheet of the peoples of the USSR prepared on the occasion of the sixtieth anniversary of the Great October Socialist Revolution. One of the recent highlights was the launching of the second international bio-laboratory "Cosmos 936". The recent Soviet "Sputnik of Life", in which, in addition to the other Socialist countries, the United States and France also participated, continues research work of great scientific and practical importance. During the 20 years since the first Soviet bio-satellite "Sputnik 2" with the dog Laika on board orbited the earth for seven days, biological experiments have been made on board about 40 satellites and probes, space vehicles and orbital stations. These experiments serve the humanitarian goal of ensuring the health of man in space and on earth as is called for by the World Health Organization in its 12-point outer space programme.

Just as in the successful experiments with "Cosmos 936", co-operation between the USSR and France proves once again that great successes in strengthening and expanding the process of détente can be reached in the interest of all mankind. The continuous scientific and technological co-operation between these two space nations, which was crowned only recently by the launching of the French probe "Signe 2" with the help of a Soviet carrier rocket, started more than 10 years ago. The advantages resulting therefrom in the scientific and technological field demonstrate once again how necessary it is to implement and fully apply the principles of peaceful coexistence between States of different social systems.

My delegation would like also to convey its congratulations to the representatives of the United States on their country's programme to venture into unexplored areas of outer space with its "Voyager 1 and 2" missions. Our appreciation also goes to all other States which have made a further contribution to the peaceful uses of outer space in 1977.

(Mr. Herder, German Democratic Republic)

Today two draft resolutions were distributed, and are before us, concerning the increase in the membership of the Committee on the Peaceful Uses of Outer Space. My delegation understands very well the wish of certain delegations to give more States than has been the case up till now the possibility of taking part directly in the work of the Committee by an increase in its membership. We would, however, prefer this problem to be thoroughly discussed in the Committee on the Peaceful Uses of Outer Space before the General Assembly takes any decision on the subject.

Taking this stand, we are guided by the consideration that this Committee is a working organ involved in negotiations on complex matters. It is well known that the composition of such organs should, therefore, be carefully studied in order to make such bodies workable and effective before changing them.

The exploration and uses of outer space and of celestial bodies have clearly shown the natural interrelationship between earth and outer space. It is obvious that peaceful co-operation of States in the use of outer space can only be lasting and stable when there is progress on earth in strengthening peace, in deepening and expanding the process of political détente, and in the area of disarmament.

Mr. NYAMDO (Mongolia) (interpretation from Russian): Twenty years ago, with the launching in the Soviet Union of the world's first artificial satellite, a beginning was made in the new era of the conquest of space by man. Credit for this belongs to the Soviet people, which recently, together with the whole of progressive mankind, celebrated the sixtieth anniversary of the Great October Socialist Revolution. We have every reason to say that its logical consequence was the development of co-operation between States in a totally new field of international relations, namely, the field of international co-operation in the use of outer space for peaceful purposes.

(Mr. Nyamdo, Mongolia)

The first international legal instrument governing this co-operation was the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. In the 10 years since it was signed, this Treaty has played an important role in the progressive development of contemporary international law, in particular space law. Our delegation would like to express its whole-hearted support for the recommendation made by the Outer Space Committee in connexion with the tenth anniversary of the entry into force of this Treaty. The Mongolian People's Republic attaches great importance to this and other treaties and agreements produced by the Outer Space Committee. It believes that they should be made universal, and also that all States in their activities in space should observe strictly the agreed norms of these international instruments.

In the last 20 years contemporary space travel has achieved really remarkable success, from the first artificial earth satellites and the first flight of man into space up to the major orbiting stations and the landing of man on the moon, from the purely research launchings of space devices right up to the broad practical application of space technology for the good of mankind.

We can say today that space travel has ceased to be an exceptional event and has become a constant factor in the life of man, and the conquest of outer space for peaceful purposes is assuming an organized character. Clearly, active co-operation between States in the field of research into and use of outer space is an imperative need of the day. Broad co-operation between States in this area is an extremely important condition for the successful solution of those problems which still face mankind in the field of space travel.

In this regard, the United Nations, in particular the Committee on the Peaceful Uses of Outer Space, is playing an important role.

(Mr. Nyamdo, Mongolia)

The Mongolian People's Republic, within the limits of its resources, is continuing to participate in research programmes, in particular in the Interkosmos programme carried out within the framework of the countries of the socialist community. Last year, the Mongolian People's Republic, within the Interkosmos programme, took part in scientific research work in the field of space physics, meteorology, communications, biology and medicine, and also remote sensing of earth by means of artificial satellites. We have every reason to say that the results of co-operation with Socialist countries have been having a good effect on the solution of the most varied economic problems of our country.

I should like now to make a few brief comments on the report of the Committee on the Peaceful Uses of Outer Space. On the whole, the Mongolian delegation takes a favourable view of the Committee's work. The Committee and its Scientific and Technical Sub-Committee and its Legal Sub-Committee have made great efforts to complete the tasks assigned to them.

(Mr. Nyamdo, Mongolia)

We note with satisfaction that the Legal Sub-Committee has made considerable progress in its work on the principles to govern the use by States of artificial earth satellites for direct television broadcasting for the purpose of concluding an international agreement or agreements, and in particular in the formulation of the text of the principle of consultation and agreements among States and also of a draft preamble. We should like to stress particularly here that a large number of members of the Committee now acknowledge the need for prior consent for the carrying out of direct television broadcasting if it is aimed at a foreign State.

In so far as concerns the question of the legal consequences of the remote sensing of earth resources, the Sub-Committee did some useful work. It should be pointed out that a number of delegations favoured the concrete regulation of activities in this area. The course of the discussion on this subject showed that the problem of the dissemination of the data obtained as a result of remote sensing is of great significance. In this regard our delegation believes that the Soviet proposal on this subject is constructive - a proposal submitted to the Legal Sub-Committee at its sixteenth session. We believe that among the principles governing the remote sensing of the Earth, the principle of the total and constant sovereignty of all States and peoples over their natural resources and wealth should occupy an appropriate place, and also the principle of their inalienable right to dispose of their own natural resources and information regarding such resources. We should like to express our regret at the fact that because of the negative attitude of certain States the last session of the Legal Sub-Committee was unable to produce a generally acceptable text on this important principle.

The delegation of the Mongolian People's Republic would like to stress that in the consideration of the draft principles to govern remote sensing the Legal Sub-Committee should give priority to efforts aimed at producing a single text of a universally agreed upon principle for respecting the sovereign rights of all countries both over their natural resources and over information relating to those resources.

(Mr. Nyamdo, Mongolia)

With regard to one of the high priority questions - the work on the draft treaty on the moon - we believe that further intensive efforts should be made to conclude as soon as possible work on this draft treaty. In this regard our delegation welcomes the proposal of the delegation of the Soviet Union that on the question on the status of the natural resources of the moon a separate document should be prepared in the form of an additional protocol to the draft treaty on the moon. We believe that this proposal could help the Committee to overcome the present state of stagnation with regard to the completion of work on the draft treaty on the moon.

As members of the Committee will recall, members of the Committee on Outer Space, in the course of the discussion in the Sub-Committee, a reference was also made to the question of geo-stationary orbit. Our delegation believes that these orbits should not be considered in isolation from outer space. In connexion with the work of the Legal Sub-Committee, the delegation of the Mongolian People's Republic would like to express its whole-hearted support for the resolution of the Legal Sub-Committee which pays tribute to Ambassador Wyzner of the Polish People's Republic who for 10 years has so skilfully and so tactfully conducted the proceedings of the Sub-Committee.

In so far as concerns the work of the Scientific and Technical Sub-Committee, our delegation supports the conclusions and recommendations contained in the Committee's report. Our delegation believes it appropriate here to confirm our position on the convening of a possible United Nations space conference. The Mongolian People's Republic in principle supports the idea of convening such a conference and believes that it should be very carefully prepared for so as to ensure its success.

In conclusion I should like, on behalf of the delegation of the Mongolian People's Republic, to express our deep gratitude to the Federal Government and people of Austria for the opportunity given to hold the twentieth anniversary session of the Committee in the beautiful city of Vienna where it received such warm hospitality.

The CHAIRMAN: I now call on the representative of Austria to introduce draft resolution A/C.1/32/L.42.

Miss HOLZER (Austria): The Austrian delegation is fully aware of the wish of a number of States to become members of the Committee on the Peaceful Uses of Outer Space in order to participate directly and actively in its work and contribute to its achievements. In our view this wish corresponds to the growing importance of space exploration and the application of space technology for all countries and underlines the role of the United Nations and in particular the Committee continue to play as a focal point for international co-operation in this field.

It is not the first time that such desires for wider participation have been advanced. The membership of the Outer Space Committee has almost doubled since its inception. It can thus be said that the growth rate has certainly kept abreast with that of the United Nations itself. The last enlargement took place only three years ago upon the unanimous decision of the General Assembly in its resolution 3182 (XXVIII). This resolution emanated from a unanimous recommendation made by the members of the Outer Space Committee and others. As a result nine new members, seven of them developing countries, joined the Committee and have since made invaluable contributions to its work.

Now a new proposal for expansion is being put forth by a number of countries, not members of the Committee. My delegation would like to emphasize that we understand this proposal as the expression of a legitimate and welcome wish to involve an even greater number of countries than is now the case in the important decision-making process of the Committee.

(Miss Holzer, Austria)

I should like to point out that in the past the Committee, whose meetings are open, has never failed to agree to requests from non-members to present their viewpoints and to participate in its discussions. Thus, in the course of the last sessions of the Committee itself and of the Legal Sub-Committee, delegations of non-member States were given an opportunity to attend and address the meetings in an ad hoc observer capacity. The views of non-members expressed in the debate at the General Assembly, furthermore, constitute an important input into the deliberations of the Committee.

However, my delegation fully appreciates the wish for fuller participation which is offered by membership itself and believes that this deserves our most sincere consideration. While this is the case - and I should like to underscore that we are not motivated by a desire to exclude anybody and to remain some sort of privileged club as some may feel - serious thought must be given to the various possibilities of accommodating this wish for participation and to the implications of whatever decision we may take on this matter.

As far as concerns immediate expansion of the Committee, now proposed by the sponsors of draft resolution A/C.1/32/L.43, my delegation believes that - apart from possible negative effects on the efficiency of the work of the Committee and particularly of the Legal Sub-Committee, which to a large extent functions as a drafting body - we must take a long-term view of the matter: it is entirely likely that in the foreseeable future other countries will also want to join the Committee and thus request further expansion. We should, therefore, ask ourselves whether it is desirable to start upon a course which could eventually lead to a membership extended to a degree which might seriously jeopardize its workability.

Taking this into account and, as I have said, fully appreciating the legitimacy of the desire for wider participation in the Committee's work, the Austrian delegation believes that, before taking any decision on expansion, we should seriously explore all possible ways and means to provide for such participation. Since this is a matter of great importance, particularly for the future of the Committee, we furthermore believe that the Committee itself and all its 37 members should have a chance to discuss the matter in full detail.

(Miss Holzer, Austria)

One alternative option which might be worth looking into is, in the opinion of this delegation, the possibility of a rotation system of membership in the Outer Space Committee - also mentioned this morning by the representative of Colombia. By adopting such a procedure, which could, for example, involve the exchange of one third of the members every two or three years, a greater number of countries would be given an opportunity to participate. That number would indeed over the long run be larger than that achieved by simple expansion. Rotation would offer the advantage of providing for wider participation without the possible negative implications of increasing the size of the Committee.

The Austrian delegation has, therefore, decided to present the draft resolution contained in document A/C.1/32/L.42 which I now have the honour to introduce. I should like to assure the representative of Colombia that this draft was submitted to the Secretariat for issuing by Tuesday morning. The draft notes the desire of some member States to participate in the work of the Committee and for that purpose bring about an expansion of its present membership. This desire has been demonstrated in the past, *inter alia*, in the course of the last meeting of the Committee, when two of the co-sponsors of draft resolution A/C.1/32/L.43 were given an opportunity to address the Committee. In full awareness of this desire, which has come to the attention of this delegation also in contacts with other delegations, we decided to offer this draft resolution as a possible compromise.

In operative paragraph 1 it requests the Committee to examine ways and means by which it can accommodate the desire for wider participation and to report on the results to the next session of the General Assembly, which should then agree on the action to be taken. Operative paragraph 2 makes it quite clear that it will be for the General Assembly itself to discuss this matter and take a final decision.

My delegation, convinced that this approach, which we offer as a compromise, reflects the viewpoint of the majority of the members of the Committee on Outer Space, believes that this draft resolution corresponds to the great importance of this particular question, and we hope that it will receive broad support.

Mr. ALBORNOZ (Ecuador) (interpretation from Spanish): We have listened with close attention to the presentation made by the Chairman of the Committee on the Peaceful Uses of Outer Space, Mr. Jankowitsch, and we have also received the report of that Committee. We believe that the optimistic words of the Chairman are to be welcomed, as they place in good perspective the work done by the Committee, which has one of the most dramatic mandates in the United Nations - confronted by the tremendous mystery of the years to come, in the development by science of the exploration of outer space by man and in the new prospects for the use of outer space to benefit mankind. We have been reminded of all this, and he has also reminded us that this has all happened a mere 20 years after the launching of the first Sputnik and only 10 years after the landing on the moon - two memorable occasions through which the present generation has lived.

In the part of the report that refers to the Legal Sub-Committee, note has been taken of the fact that sufficient progress has not been made on the question of the natural resources of the moon, and we trust that some progress will be made at the next session on the matter, particularly regarding the treaty on the moon. On the other hand, we are told that some progress has been made in the preparation of texts for agreements among States regarding artificial earth satellites for direct television broadcasting, which comes under agenda item 36. We are happy that the drafts of six additional principles have been prepared concerning the legal consequences of the study of the earth's resources by remote sensing. This is a matter of particular importance to the developing countries, since, apart from wishing to safeguard our own sovereign rights over our own natural resources and the information pertaining to them, we do not wish to be mere witnesses to the programmes of world observation. Together with the right of prior consultation of the sensed country, we trust that there will be recognition of the latter's right to share immediately in the process of observation and the technical information to be derived therefrom. In this matter we share the view of those States that have contended that the concept of sovereignty also covers sovereignty over information on natural resources.

(Mr. Albornoz, Ecuador)

Were we to act otherwise, we would then be seeing the developing world despoiled by those who for the moment are in a position to despoil it, without account being taken of the juridical modalities of human solidarity and equity that are implicit in that concept. It is a concept that is very closely linked to the very struggle and duty of man to fight against underdevelopment.

I think it opportune that the Committee and its Sub-Committees have considered the need for a definition or a delimitation of outer space. That gap has to be closed because, in the various views expressed on the matter, we find serious discrepancies which might seriously delay the usefulness to mankind of activities in outer space.

It is for that reason that we note with satisfaction the interest shown by the Committee concerning geostationary orbit, and it is encouraging to note that the Committee requested the Legal Sub-Committee to take into account matters dealing with that orbit.

Together with the other 10 equatorial countries over whose territory the dividing line of the world passes, Ecuador has raised its rights over the segment of the geostationary orbit located over our continental, maritime and insular territory. Our claim is based on the Declaration of permanent sovereignty of the developing States over their natural resources and on the principles of the Charter relating to economic rights and duties of States, documents that were approved by the United Nations.

In the general debate the Foreign Minister of Ecuador stated:

"By virtue of its equatorial location, my country views with particular interest the scientific progress in the field of outer space exploration; this opens up new prospects for the improvement of man's life on this planet." (A/32/PV.9, p.7)

He furthermore pointed out that:

"Ecuador hopes to become a member of the Committee on the Peaceful Uses of Outer Space and asks for the Assembly's support in order that its hopes in this regard may be fulfilled." (Ibid.,)

And he recalled that:

(Mr. Albornoz, Ecuador)

"In its Legal Sub-Committee this year Ecuador once more stated its reasons for declaring, together with other equatorial States, its will to exercise its sovereignty over the segments of the geostationary synchronous orbit ... (that) is a separate and different entity from outer space, the latter being a concept for which the States have not yet found a valid and satisfactory definition." (Ibid.,)

Those States over which the equatorial line passes met in Bogota in December of 1976 and agreed to take a joint stand in their claim over the segments of the synchronic orbit located over their territories.

Sovereignty is exercised; it is not negotiated, it is not subordinated to the will of other States. Furthermore, the item does call for prompt attention, particularly because the geostationary orbit is a limited resource and according to the Legal Sub-Committee, 50 per cent of the available possibilities of occupying the orbit have already been saturated by satellites that are not owned by equatorial countries.

I will say that the equatorial countries do not object to free orbital transit nor of communications required by the satellites that have been planned and authorized by the Conventions of the International Telecommunications Union when those satellites cross our territorial skies in gravitational flight out of their geostationary orbit. On that matter we have taken note of the fact that the report of the Committee indicates that in the debate mention was made of the geostationary orbit and of the fact that a number of delegations stressed the need for a definition or delimitation of outer space.

This item has been suggested as deserving of the greatest priority when the Committee has concluded the other subjects on its agenda. But here, although we take note of the annexes to the report, we do not share all the views expressed in them, precisely because outer space has not been defined, not even from a functional approach, despite the fact that work has been done on it since 1970. We are still arguing whether outer space would begin at the minimum altitude at which satellites can be maintained in orbit, and in this respect an objective study has been prepared by the Secretariat in document A/AC.105/C.2/7/Add.1, which is a compilation of the views expressed on the matter.

(Mr. Albornoz, Ecuador)

The delegation of Ecuador also reaffirmed its views at the general meetings of the Committee and contended that in no case can the geostationary orbit be considered as an integral part of outer space since such factors as gravitation, speed and altitude depend fundamentally on natural phenomena which are features of the earth itself and its planetary rotational force.

Because of all this, a number of countries, including Ecuador, are keenly interested in being guaranteed access to the Committee on the Peaceful Uses of Outer Space, and to that end request that the Committee's membership be increased as the best way of stressing its universality and of balancing the composition of the group of countries that at present participated in it because of their interest and the degree of progress. For that reason, together with 22 other delegations, we are proposing the expansion of the number of members from 37 to 47. We trust that draft resolution will receive unanimous support in the Committee. We believe that with the contribution of wider points of view from the developing countries, the Committee's work will be enriched from more universal sources and will achieve even greater benefits than those that were promised by the Chairman of the Committee when speaking of the very healthy effect that the previous expansion of the membership of the Committee has given it. As he pointed out, the Committee has at no time wanted to be termed an exclusive club. But since four years have passed, an increase of the nature of the one requested can only be beneficial to all the geographical regions concerned, as well as to the countries that have a constructive desire to participate in the work and at the service of the Committee.

With regard to draft resolution A/C.1/32/L.43 that was formally submitted today by the representative of Colombia, I would like to say that to the 22 co-sponsors we have been asked to add the delegations of Cyprus, Bahamas and Kuwait. I should also like to echo the surprise expressed by the representative of Colombia at the symbol number given to the document which was submitted on Tuesday morning. We trust that some formula will be found to satisfy the aspirations of the co-sponsors and of other delegations that have expressed their support for the concept of dealing with the expansion of the membership at the

(Mr. Albornoz, Ecuador)

present session. As members of the Committee will recall, the idea of leaving this matter for another year was already discussed last year. So, with all due respect for the technical aspects that were raised, we would venture to think that there has surely been sufficient time to ponder the question. Far be it from us to believe that the present suggestion to postpone is a dilatory tactic.

The representative of Austria was very kind when she referred to the desire of a number of members of the Committee to increase the membership of the Committee on the Peaceful Uses of Outer Space. We have raised the question of expanding the membership, so that it will be the General Assembly that will decide upon the membership of one of its own Committees. We are grateful to the representative of Austria sincerely for her intention to study this matter, as she says, and we hope that a decision will be arrived at as soon as possible at the present session and by common agreement.

(Mr. Albornoz, Ecuador)

We do not believe that an increase in membership will have an adverse effect on the work of the Committee, for the very same praiseworthy reasons given by the representative of Austria herself when referring to the results of the previous expansion.

We have also been very interested in the report submitted by the Scientific and Technical Sub-Committee. We note with particular satisfaction the view of the Sub-Committee, in turn endorsed by the Committee itself, that there is no scientific or technical reason for any remotely-sensed State not to have due access without discrimination to information regarding its own territory.

In this matter, however, I think we should go further. Together with the desire that the use of data obtained by satellite should be added to the national economy and the planning functions of the Government, co-operation is required in the training of staff through the transfer of technology and participation in scientific research into that technology on the part of the sensed State as part and parcel of the international responsibility of the sensing State. Otherwise the technological gap which is so alarming in this matter will never be bridged to the benefit of the developing countries.

We have taken due note and were gratified at the conclusion arrived at by the Committee that a working group should be set up to prepare a possible United Nations conference on outer space that would be the universal forum in which we could assess the progress achieved on such an important subject. It is also encouraging to note that aspect of the work of the specialized agencies of the United Nations system as defined and outlined in the report. That mustering of all the forces of the international services of our day in spatial technology can only contribute to a beneficial reduction of the technological gap I mentioned earlier.

As an equatorial country my country is deeply interested in the correlative study of these items including solar energy which possesses such great potential benefit for the future of mankind and which has such wide promise for countries which, because of their geographical location, have so many days of sunshine in the yearly cycle.

(Mr. Albornoz, Ecuador)

For all of the above reasons, we are gratified at the report of the Committee submitted to us and reserve our right to participate in the specific aspects of the debate when we deal with them in this Committee.

Mr. SCALABRE (France) (interpretation from French): France is particularly interested in outer space matters and has a number of recognized technical bodies in this field. The French National Centre for Spatial Studies, apart from its own research institute, acts as co-ordinator between the different laboratories and specialized agencies whose activities in remote-sensing deal not only with equipment carried in space but also with data reception, processing and evaluation.

France is also co-operating abroad in a series of projects: at the European level we are closely linked to the AGRESTE pilot project of the European Community which covers a number of aspects of agriculture; to the European METEOSAT space agency programme and the European experimental satellite telecommunication programme, OTS, which will train the necessary experts for a future operational satellite. France is also in charge of the European ARIANE launcher. In close liaison with the Federal Republic of Germany, the French National Centre for Spatial Studies has communicated to the European Space Agency the results of a study on SPACELAB. It was also in close collaboration with the Federal Republic of Germany that we placed in orbit the France-German experimental telecommunications satellites, Symphonie I and Symphonie II, thanks to which the developing countries are benefiting from a programme of educational television relayed by a station set up in Bouake in the Ivory Coast and placed at our disposal by the authorities of that country. It is also thanks to Symphonie that we were able to set up a link between Paris and Nairobi for the Nineteenth General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO).

At the bilateral level, France has continued its long-standing and fruitful co-operation with the Soviet Union and, thanks to a Soviet launcher, was able to place in orbit on 17 June last the SIGNE III satellite which is equipped to measure solar ultraviolet rays. Other experiments planned by French

(Mr. Scalabre, France)

laboratories will be carried out in Soviet satellites. Furthermore, the research group on spatial biology, together with the Biological and Medical Institute of Moscow has set up the experiment BIOBLOC 1.

In this same way France also co-operates with the National Aeronautics and Space Administration (NASA): and it is on board an American satellite that the system of localization and collection of AGROS information has been launched. We are participating on the other hand in the AEROSAT programme to assist aerial navigation and a number of experiments on the solar chromosphere and we are planning research work that will launch in 1978 an American satellite to Venus. We are also co-operating in the ISEE project with NASA for the study of the magnetosphere.

The desire of France to co-operate is particularly aimed at the developing countries. Thus, we have associated with the National Institute of Agronomical Research in Tunisia so as to control the ecological imbalances in the arid zones of the south of Tunisia. Two French bodies participated in the preparation of the Mali project SAPHYR. I have already mentioned our activities in Bouake in the Ivory Coast. I should also like to add that so far as technical research is concerned, there is the preparation, together with the Indian Space Research Organisation of a programme to experiment with the different parts of a future domestic system of communication.

I apologize for this somewhat arid enumeration but it is intended to show the interest of France in space activities and, more particularly, those that rely on international co-operation for their success.

I come now to another item on our agenda. The question of the delimitation and definition of outer space has always been a matter of concern to the French delegation. There are considerable implications since we are in fact dealing with determining the frontier between air law, based on national sovereignty, and space law, the major principles of which, defined by the Treaty on outer space of 1967, are in particular, freedom and non-appropriation. This is a complex problem. The unceasing technological progress and the difficulty of understanding it lead us to hope that the Legal Sub-Committee will continue to study all these matters, applying working procedures that have already stood the test of time.

(Mr. Scalabre, France)

With regard to the remote sensing of earth's resources, remarkable progress has been achieved. This success is due largely to the method of work followed which is basically to seek a consensus in order to define and formulate principles accepted by all rather than to set up a project for immediate discussion.

(Mr. Scalabre, France)

Following that procedure the Legal Sub-Committee was able to draft six new principles dealing with certain methods of broadcasting information and data. Doubtless a number of problems still remain to be solved, but the remarkable spirit of co-operation and compromise constantly shown by delegations should allow us to take new steps towards a solution.

In this regard the distinction drawn by the Scientific and Technical Sub-Committee between primary data and analysed information should be studied by the Committee in the near future. With that in mind, the study requested of the Secretariat to give a definition of spatial revolution and to determine the elements of data that might meet particular applications constitutes an interesting initiative. By the same token, the problems relating to the compatibility of future systems warrant attention because of the interest shown by those who use this technology.

Thus, quite justifiably, the Scientific and Technical Sub-Committee attaches great importance to the implementation for the benefit of the developing countries of the training methods required to allow them to draw maximum advantage from such technology within the framework of international co-operation.

Finally, it is clear, as the Committee on the Peaceful Uses of Outer Space has pointed out, that the work of the two Sub-Committees will be that much more fruitful if there is co-ordination of their respective activities.

The question of the composition of the Committee itself has now been raised. As far as we are concerned, we see no reason to stop countries interested in outer-space matters from participating in the work of that Committee and its Sub-Committees, since the importance of that work can but increase in the future. This question must therefore be studied very carefully and with all the attention it requires. It should not be the subject of a hasty decision. However, in discussing it we ought not to lose sight of the need to maintain the conditions that have thus far allowed the Committee to adopt all its decisions by consensus. With that idea in mind, my delegation will support draft resolution A/C.1/32/L.42, submitted by the Austrian delegation.

In conclusion I wish to greet the members of the Committee on Outer Space and all countries concerned with its activities and to congratulate them on

(Mr. Scalabre, France)

the extremely fruitful co-operation they have shown this year, as previously. May I, finally, thank our Chairman, Mr. Jankowitsch and, through him, his country, Austria, for his outstanding presentation of the report of the Committee on the Peaceful Uses of Outer Space.

Mr. VINCI (Italy): My delegation has followed with great interest the statements made by previous speakers and the stimulating and at times provocative ideas they have put forward. In presenting our own remarks on both items 35 and 36 of our agenda I shall not try to compete with those statements, but I shall attempt at least to maintain the level of interest they have raised.

In the 20 years that have elapsed since Sputnik I first orbited the earth, in 1957, very great scientific and technological achievements have been accomplished. I shall not even attempt to list the major space events that occurred between Sputnik in 1957 and Viking in 1977. Suffice it to say that space research has not only revolutionized science from geophysics to astronomy but has also provided new technologies which are altering the lives of all peoples throughout the world. I would offer just a few examples.

In the field of communications many intercontinental telephone calls and all live transoceanic television broadcasts are relayed by satellite. Ninety-eight nations spanning the entire range of the political spectrum have joined the world-wide system operated by the International Telecommunications Satellite Consortium (INTELSAT). Communications satellites are also assuming an essential role in navigation. Anyone who watches the late-night television news sees space technology at work. Pictures of cloud patterns are transmitted from meteorological satellites which have, in particular, been most effective in the detection and monitoring of severe storms.

The early advocates of space flight overlooked cartography and earth-resource surveys in their predictions and planning for the new age. But when the first astronauts returned with stories of how well they could see the earth below geologists conceived the idea of the American Landsat series of

(Mr. Vinci, Italy)

multi-spectre scanning satellites. By circling the earth several times a day the satellites transmit images used in mapping remote regions, in searching for water in arid lands, in tracing heretofore undetected geologic fault zones and in prospecting for minerals and other natural resources. This information has in turn been used to predict yields and to spot diseased crops.

Other kinds of space technology have found their way into brain surgery and cancer treatment, the study of human health, home design and waste disposal, fire prevention, computers and industrial processes.

All these space developments and others have created complex and delicate problems - scientific, technical, legal and organizational. For the solution of these problems significant and substantial help is provided within the framework of the United Nations with the great skill and open and constructive spirit that has always characterized the work of the Committee on the Peaceful Uses of Outer Space, a body on which Italy has served since its foundation.

Allow me at this point to join many other colleagues who have commended the Chairman of the outer-space Committee, Mr. Jankowitsch of Austria, and the Chairman of the Legal Sub-Committee, Mr. Wyzner of Poland, for their dedication and untiring efforts in bringing about working solutions to the many problems confronting them during these past years. Our deep appreciation goes also to Professor Carver of Australia, who has with wisdom and skill conducted the endeavours of the Scientific and Technical Sub-Committee. And last but not least I should like to thank Mr. Perek, Mr. Murthy and the members of the Outer Space Division of the Secretariat, who have all significantly contributed to the success of our work in the outer-space Committee and its Sub-Committees.

We have taken note of the wish expressed by some Member States non-members of the Committee, clearly reiterated this morning by the representative of Ecuador, to participate in the work of the Committee. This interest constitutes clear recognition of the vital and constructive role played by the outer-space Committee. We believe that the implicit purpose of those States should not be discouraged and that all Member States willing to contribute their ideas to the work of the two subsidiary organs of the Committee - that is, the Legal Sub-Committee and the Scientific and Technical Sub-Committee - should be allowed

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to do so next year. The question of the Committee's membership could thus be taken into consideration in the usual constructive and open spirit by the Committee itself at its next session, in full awareness of the interest of these Member States and the further contribution that each of them, beginning with one space Power, can make to the work of the Committee without detracting from its efficiency. I do not think that in so doing we would unnecessarily delay a decision. Having enabled other countries to participate practically at once in the Committee's work, we would be in a better position to make the right decisions when the time comes.

I should like now briefly to discuss the main subjects dealt with by the outer space Committee during 1977.

The first of these concerns the draft treaty relating to the moon. In particular I should like to refer to the question of the legal régime applicable to the natural resources of the moon. We are convinced that since the moon and the other celestial bodies are the common heritage of mankind, as established by the pertinent treaty which has marked an historic turning-point in international law, whatever the result of the use, occupation or possession of those resources, they belong to mankind as a whole. That is why we have suggested that the natural resources of the moon may be used by anyone in loco, on the spot, but that they should be subject to equitable distribution among all the peoples of the world when they are brought to earth.

(Mr. Vinci, Italy)

Turning now to the question of direct television broadcasting from satellites, we think that the use of such satellites urgently requires appropriate regulations which would enable their communications technology to be utilized for increased understanding among peoples and for the creation of a common cultural base. A great deal of work has already been done by the Committee towards the preparation of a set of rules. We think that the time is ripe now for the fulfilment of the mandate that was entrusted to the Committee several years ago, in order to meet general world-wide expectations, but especially those of the young people, who are interested in universal brotherhood and increasingly eager to learn the empirical realities and intellectual concepts of other regions of the world. To that end Italy reaffirms its conviction that the drafting of legal principles for the regulation of direct television broadcasting by satellites must be based on the principle of free dissemination of information and ideas. But freedom should not mean licence or abuse. Italian law, for instance, makes it a criminal offence to disseminate false or tendentious information.

Another subject before the Outer Space Committee is that of the delimitation of space, a question that was not taken into consideration by the 1967 Outer Space Treaty. Several delegations, including my own, have already put forward suggestions for approaching the problem of the delimitation of space. But, whatever the results of this study may be, we find it hard to imagine how the geo-stationary orbit could be removed from outer space. I am referring, of course, to the demand of a number of equatorial States to expand their sovereignty over the geo-stationary band approximately 36,000 kilometres across the surface of the earth. But such a major extension of national space would not only deprive mankind of a broad space zone vitally necessary to all but also contradict the principle already adopted that outer space cannot be subject to national appropriation. This does not mean, of course, that we should not study carefully other arguments such as those put forward this morning in the Committee by our colleague from Ecuador.

I turn now to remote sensing. The Italian delegation hopes that the broad application of these new technologies will continue to be encouraged, especially for the benefit of developing countries. We should be mindful of

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the fact that the application of a restrictive policy in the area of the dissemination of data might reduce considerably the benefits derived from remote sensing activities.

In this respect I should like to stress that both remote sensing of the earth from space and direct television broadcasting from satellites, especially in the educational field, are promising, peaceful means for raising the standards of living - both material and cultural - of all peoples. For that reason my delegation notes with satisfaction that the report before us contains several paragraphs dedicated to the future tasks of the Outer Space Committee to assess all the implications of such new techniques and to promote their use. To those paragraphs my delegation wishes to add a philosophical consideration, namely, that in future debates on complex issues, in particular those related to both remote sensing and broadcasting, the Outer Space Committee and its subsidiary bodies should try to minimize the difficulties created by centuries-old international rules that were shaped for our planet and not for what lies beyond it. And they can do so by pursuing with renewed dedication a definition of new international principles of conduct consistent with the ones embodied in the basic Convention of 1967, which would achieve benefits for all.

Concerning this year's omnibus draft resolution, which originates directly from recommendations and proposals elaborated by the Outer Space Committee and its subsidiary bodies, my delegation, as an active partner in the work of those bodies and as a co-sponsor of that draft resolution, hopes that it will be adopted by the Committee. I think that the draft resolution on the whole reflects rather well what I shall call "the sense of this Committee" and that the differences of opinion existing on some of the points are not so strong as to prevent the unanimous support of the members.

I should like at this point to offer a few remarks on remote sensing techniques, which, as has been amply confirmed, seem to be most promising in a wide range of practical applications.

In Italy, the ground receiving station at Fucino, near Rome, has already been fully operating for over a year. This station makes possible the reception and elaboration of data gathered from the earth's surface by NASA LANDSAT satellites. Through its utilization we have had confirmation, inter alia,

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of the importance of remote sensing techniques. The results were positive in terms of their practical applications also in the light of the experience drawn from the two United Nations international training courses held in Rome during the last 12 months, with the contribution of the Government of Italy, for the benefit of developing countries. The Fucino ground station is entirely Italian - planned, equipped and designed by Telespazio - and has a modern computer for the elaboration of data which might be supplied to users in the form of images or on digital magnetic tapes. This ground station has brilliantly passed its qualifying tests and now constitutes the focal point of a regional system already in operation.

In order to give further impetus to the dissemination of data furnished by the Fucino station, an agreement was recently concluded between Telespazio and the European Space Agency. We in Italy hope that all the countries of the region and others as well will be able to make fuller use of these facilities in order to make available the data received from the LANDSAT satellites under the best possible conditions of quality, practical applications and timeliness, while respecting, of course, currently accepted laws.

The LANDSAT data cannot be applied by themselves but must be integrated with other data and with the full range of interdisciplinary skills which imply, as well, the co-operation of technical experts. The data furnished by the Fucino station, at the moment in which they reach the hands of the user, become in fact of practical use only when combined with other data traced on the ground or, for example, through aeroplane surveys.

For our part we are ready to offer the experience that we have been acquiring in this field to whoever may ask us for information. We are also open to proposals for joint studies and to joint participation in all of those cases that might require innovative developments, whether regulatory or organizational, for all parties.

We were gratified to contribute to the actualization of the two international training courses in remote sensing techniques that took place in Rome at the Food and Agriculture Organization headquarters under the auspices of the United Nations for the training of experts from developing countries.

(Mr. Vinci, Italy)

In both cases the participants were able to visit the Telespazio installations at Fucino and to engage in practical on-site field work under the supervision of Italian experts.

The first course, held in the fall of 1976, was reserved for experts from member countries of the Economic Commission for Africa, and we feel that the contribution represented by this course will surely aid in the solution of the complex problems of that continent. In any case, I can assure this Committee that the skills originally acquired in Italy in the field of remote sensing may be put to use in combination with current technologies whenever a request is made.

The second course, held in the spring of 1977, was reserved for high-ranking experts from developing countries of various regions for the purpose of applying the techniques of remote sensing and allowed for further confirmation, on the one hand, of the developments in the applications of these techniques and, on the other, of progress in the organization, efficiency and interests of the initiative.

Held in Rome, as was the first course, this one dealt with the application of remote sensing to surveys of widespread interest and high priority, such as prediction of harvest yields, topographical issues, agricultural census and so forth.

The report of the United Nations Secretariat contained in document A/AC.105/198 includes extremely favourable evaluations which should encourage follow-ups to this initiative.

It should be noted that in this second course the contribution of the United Nations Educational, Scientific and Cultural Organization (UNESCO) was added to that of the Italian Government, the Food and Agriculture Organization and the United Nations. This represents a broadening of interests which we hope will become ever more widespread.

(Mr. Vinci, Italy)

My Government is more than willing to consider how best to contribute at this time to the third course envisaged for 1978, and it intends thereby to show the greatest sensitivity to the fact that during the second course the number of candidates from developing countries far surpassed the resources available, both financial and structural, for their sponsorship by FAO.

References appearing in the report before us, and in various documents issued by the Secretariat - in particular, document A/AC.105/154/Add.2 - are a constructive contribution at this stage of refinement of the initiative and a contribution of major importance, if we bear in mind the prospects, inter alia, for diversification and specialization of future satellites which will be used for land surveys, from meteorology to agricultural resources, and from oceanography to geodesy.

We are also pleased to note that the omnibus draft resolution endorses the recommendation to strengthen, again within available resources, the role of the two remote-sensing centres in Rome and in New York and in that connexion acknowledges the value of the role played jointly by my Government, FAO and UNESCO for the holding in Rome of the United Nations international training courses I mentioned a moment ago.

The concept of establishing permanent international centres for remote-sensing from satellites continues to be supported by my Government and we are most appreciative of the interest and support shown by so many delegations towards that end.

Before concluding, I should like to inform the Committee briefly on the latest developments in the field of Italian space activities. I refer in particular to the recent launching of the first Italian experimental communications satellite, called SIRIO. Some literature, together with translations, has been circulated by the staff of my Mission. It should not be taken to be some sort of advertising operation; its purpose is to make clear at once what the SIRIO operation means.

The SIRIO satellite was successfully launched from Cape Kennedy on 25 August 1977 by a NASA Thor Delta vehicle and injected into the geostationary orbit by an Italian-made solid propellant apogee boost motor.

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The SIRIO programme is sponsored by the Italian Government Research Agency, Consiglio Nazionale delle Ricerche (CNR), acting as contractual authority for three joint partnerships: one with NASA, which provided the launching vehicle and all services connected with it, one with the Consorzio Industrie Aereospaziali, which provided the spacecraft, and one with the Italian company Telespazio which provided the ground support and ground-receiving stations, complete with facilities for monitoring and control. In that connexion I should like to thank NASA again for the assistance it provided and for its unstinted willingness and spirit of co-operation in this experiment, as in previous experiments throughout the year.

The SIRIO programme is entirely Italian. Its principal on-board experiment is designed for the study of the propagation characteristics of radio waves transmitted at super high frequencies during adverse weather conditions, including rain, snow and fog. From its on-station position SIRIO transmits, on an experimental basis, voice, data and television signals in the super high-frequency range for regional and intercontinental links.

In addition to experimenting with various types of technical transmissions and communications tests via satellite, the SIRIO programme will allow us to expand our technical knowledge and expertise in advanced space technology. In particular the practical adaptation of super high-frequency bands to telecommunications systems via satellite seems most appropriate at this time, since we anticipate having to make use of it in the near future, in view of the practicable saturation of the 4 and 6 gigahertz bands now in use. This might be one of the responses to make on the question of equatorial orbits.

In that way it will be possible to ensure an appropriate future development of satellite communications, which are one of the most promising means for economic and social development, especially for developing countries. In that realization, Italian industry has demonstrated its capacity to confront a whole range of technical problems involved in advanced space technology - specifically, in this case, in the satellite communications field; it may be recalled that the Consorzio Industrie Aereospaziali includes all the major Italian industries in that field.

(Mr. Vinci, Italy)

The SIRIO satellite is now operating perfectly in orbit. Qualification tests were satisfactorily completed and television, voice, and data links have been successfully attempted by SIRIO with very encouraging results.

On the basis of those conclusions, we may confirm our full willingness, in this field of television, voice and data telecommunications proposals for joint participation and collaboration which would permit at an early date the most widespread use of these systems for the benefit of all countries. These systems consist of the segment in orbit, that is, the satellite, and the segments on the ground, that is, the whole range of receiving-stations, from telephone networks to installations for the reception and transmission of data as well as for their elaboration. That is because we view satellite communications as an integrated and harmonious complex of activities, as in the case of satellites for natural resources, which would allow for the fullest use of the possibilities opened up by these technological advances.

I should like to conclude this general statement by recalling that this year marks the tenth anniversary of the 1967 Treaty on Outer Space, one of the main successes - if not the main success - so far achieved by the Committee. The Treaty in fact represents the Magna Carta of space law.

The Outer Space Treaty's emphasis on international co-operation in space-related programmes as the fundamental objective of the community of nations remains as bright a beacon for the future as it has been for the past ten years. Its establishment of a régime characterized by openness and non-appropriation, the guarantee of freedom for every nation to explore and use space without discrimination, the requirement that scientific information be exchanged freely and continuously and the expressed goal that space activities be carried on for the benefit of all mankind rather than for selfish purposes represent an encouragement for the future as well as an achievement of the past.

As I said in different words when the final text was agreed upon, we should all wish to see, not too late, those same principles brought down to earth and adapted to the life of mankind inside our own common and unique spaceship.

The meeting rose at 1.30 p.m.

United Nations
**GENERAL
ASSEMBLY**
THIRTY-SECOND SESSION
Official Records *



FIRST COMMITTEE
41st meeting
held on
Tuesday, 22 November 1977
at 10.30 a.m.
New York

VERBATIM RECORD OF THE 41st MEETING

Chairman: Mr. BOATEN (Ghana)

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77-73243

Distr. GENERAL
A/C.1/32/PV.41
23 November 1977

ENGLISH