UNITED NATIONS

GENERAL ASSEMBLY

Distr.
GENERAL

A/AC.105/PV.172
20 July 1977

ENGLISH

COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

VERBATIM RECORD OF THE ONE HUNDRED AND SEVENTY-SECOND MEETING

Held in Vienna, Austria,
on Wednesday, 22 June 1977, at 3 p.m.

Chairman: Mr. JANKOWITSCH (Austria)

General debate (continued)

77-70346

(53 p.)

The meeting was called to order at 3.10 p.m.

GENERAL DEBATE (continued)

Mr. CONTEH (Sierra Leone): Conscious of the fact that we have limited time at our disposal and that the work load before us is very heavy, I shall be brief with the very few comments I have to make regarding our item.

Mr. Chairman, please permit me to associate myself with those sentiments already expressed to you by previous speakers and also with those expressed to the Government and people of the Republic of Austria for offering to host the meetings of the twentieth session of our Committee. Less than one week ago, the Austrian Government also acted as host to a training seminar organized by the United Nations Institute for Training and Research (UNITAR) at which 28 participants from developing countries were in attendance for a period of three weeks. The cost, I understand, was borne by the Government of Austria.

The theme of that seminar was the New International Economic Order and Multilateral Diplomacy. The outcome of that seminar is not, I agree, the business of this Committee, but perhaps its relevance to some of us is the gesture of goodwill on the part of the Government of Austria and the emphasis placed by most speakers in this Committee on the need to assist developing countries to develop.

I turn now to some specific issues relating to our agenda. My delegation appreciates the very excellent job our two Sub-Committees have done and would like to express its thanks to both their Chairmen and to the Chairmen of the various working groups, whose tasks were no less difficult.

My delegation strongly believes that there is a need for a United Nations conference on outer space matters, notwithstanding the proposed conference on science and technology for development scheduled for 1979. Indeed, tremendous strides have been made in the field of space technology, and perhaps endeavours might be necessary not only to take stock of those strides but also, as the President of Austria said in his address to us:

> "to point with vision and imagination to the way in which these extraordinary human achievements can to an even greater extent alleviate human misery and social and economic injustice...". (168th meeting, p. 6)

(Mr. Conteh, Sierra Leone)

We are indeed aware of the fact that the United Nations Conference on Science and Technology for Development will provide a forum for considerable discussion of matters related to space applications, especially when it is preceded by one on outer space matters, but I do not foresee the complications that one forum may on the other. The holding of a post-1979 space conference will therefore be most welcome to my delegation. The problems are there, but they must not be over-emphasized so that we lose sight of their solution.

The issue of remote sensing of the earth is as complex as the technology itself, especially when one stops to think about the very wide gap in the possession of this technology. Therefore, the view expressed by the Swedish delegation that all the technical aspects relating to remote sensing will be clarified when dealing with its legal questions is a laudable one. And here I emphasize the need for good faith. The motive of good faith applies not only to international relations but is of particular importance to the strengthening of the United Nations.

It is the view of my delegation that the time has come for us to act with courage in order to arrive at an acceptable compromise on the issue of direct television broadcasting by satellites, which has been with us for quite a while now. The Swedish and Canadian delegations have put forth proposals with which my delegation seems to be in sympathy. I therefore look forward to our reaching a definite conclusion on this issue at this session.

Mr. MOGHTADERI (Iran): We of the Iranian delegation wish to express our appreciation to the esteemed President of the Republic of Austria for his kind remarks and for the opportunity to meet in this beautiful city of Vienna. Everywhere in Vienna there exists a harmony of beauty, art and music. We are certain, Mr. Chairman, that under your skilled direction and in such a beautiful environment, our deliberations here will reflect a similar harmony.

(Mr. Moghtaderi, Iran)

As we acknowledge the passing of the first 20 years of man's venture into space, the quickening of the technological pace in space science increases the urgency for consensus in the principles that will govern the activities that are made possible by that science. The ability to improve aspects of our space technology -- for example, the spatial resolution of satellite imagery -- requires a concurrent ability to govern the use and distribution of the more definitive data and information which result.

(Mr. Moghtaderi, Iran)

Similarly, the technological progress in the ability to deliver educational and informational services to remote areas by satellite direct television broadcasting requires equal progress in the ability to preserve the sovereign integrity of neighbouring States. While we investigate the phenomena of space, we must realize that parallel levels must be established between the scientific capability to perform a space-related function and the legal capability to govern that performance in a manner that promotes equity and peace between States.

Twenty years ago man's horizons were expanded exponentially as Sputnik, the historic achievement of the Union of Soviet Socialist Republics, penetrated the traditional atmospheric barrier of space. The report of the Scientific and Technical Sub-Committee on the work of its fourteenth session documents the dramatic progress that has followed that initial launching. The subsequent proliferation of activities by a growing number of States substantiates the practical aspects of this new science.

In particular, remote sensing of the earth by satellite appears to provide a practical tool for assessment and management of a State's physical resources. Even with its previous level of spatial resolution, remote sensing allows broad inventories of a State's cultivated land, its arable land suitable for cultivation and its land being damaged by erosion. The finite resources of a State must be protected so that renewable resources, such as agricultural crops, forests and sea life, can be harvested to sustain the people and the State's economy. Satellite remote sensing provides a tool for a cyclical comparison system to monitor the conservation of these natural resources.

We seek to preserve our seas through remote sensing of increased pollution levels which threaten the very viability of sea life. We share the view of the delegation of the United Kingdom in the Scientific and Technical Sub-Committee that the function of monitoring sea pollution by remote sensing is perhaps an appropriate agenda item to be undertaken by the Scientific and Technical Sub-Committee. The problem of sea pollution is not discrete to the territorial waters of any State, and vast areas of seas are under the sovereign jurisdiction of States that do not possess the necessary resources to undertake monitoring activities. In establishing this task as a United Nations project,

(Mr. Moghtaderi, Iran)

all States can participate to the limit of their scientific capability. Earlier programmes of weather information systems and communication systems, both of which have been operational, demonstrate the potential acceptability of this approach when the interests of all States are involved.

Establishment of standard definitions of "data" and "information", or the expanded terms of "primary data" and "analysed information", would contribute to a common scientific and legal language with which to describe the text and context of agreements on remote sensing. Working papers submitted by the delegations of France, Sweden, the Union of Soviet Socialist Republics and Belgium suggest several means of categorizing the preliminary and processed products of remote sensing. The matter of spatial resolution, in the working paper in document A/AC.105/C.1/L.95, becomes a critical definition when related to the legal question of dissemination of primary data and analysed information to third-party States. The capability of remote sensing of the earth with spatial resolutions of less than 50 metres makes the legal question of a State's sovereignty over information obtained by remote sensing more pressing than before.

Thus the relationship of activities between the Scientific and Technical Sub-Committee and the Legal Sub-Committee is apparent. The co-ordination of the activities between the two Sub-Committees should be enhanced, by whatever means prove most effective.

In the area of "Existing and planned space and ground segments", the information papers submitted to the Scientific and Technical Sub-Committee by the Secretariat were extremely useful reviews of the activities of our Member States. We compliment the Secretariat on these comprehensive papers, and we congratulate those States whose achievements are cited. As Iran prepares to establish a ground receiving station for receiving and processing remotely sensed data, we find the information which the Secretariat also provided on certain equipment for image analysis and interpretation in document A/AC.105/C.1/L.88 to be of particular value. These types of informational analyses contribute to the progress of States entering the experimental and pre-operational phases of space applications.

(Mr. Moghtaderi, Iran)

As we speak on the activities of the Legal Sub-Committee, we wish to add our endorsement to the tribute paid to the Chairman of the Legal Sub-Committee, Mr. Wyzner of Poland. His 10 years of wise and able leadership have been a major contribution to the accomplishments of this Committee. Our highest regards also go to Miss Kwen Chen, Secretary of the Legal Sub-Committee, as she leaves her post after 15 years.

Regarding the legal implications of remote sensing, the elaboration by the Legal Sub-Committee of draft principles VI through XI is to be strongly commended. While the delegation of Iran would welcome the elaboration of the draft principle concerning the permanent sovereignty of all States over their wealth and natural resources, as well as the inalienable right to dispose of those resources, and information thereon, we recognize with appreciation the progress already accomplished. The recognition of the important contribution that remote sensing can provide in the economic development of a State will accelerate the evolution of this application from experimental and pre-operational to operational. Activities in agricultural crop assessment, as well as experiments in mineral-deposit identification and other non-agricultural applications have added a special dimension to remote sensing in so far as developing States are concerned. The continued inclusion of those States in the scientific training and experimentation of more advanced States and agencies is of the highest importance. The record of assistance to students and officials of developing States stands to the credit of those States and agencies and to the credit of the efforts of this Committee.

Regarding the question of satellite direct broadcasting, our sincere congratulations go to Chairman Wyzner for the achievements of the Group under his direction. With the notable progress in drafting principles relating to the remaining questions of "consent and participation", or as we now call it "consultation and agreements between States", "programme content" and "unlawful/inadmissible broadcasts", we acknowledge his wise and patient leadership.

(Mr. Moghtaderi, Iran)

His success gives rise to the hope that the principles governing direct broadcasting from satellites will soon be the subject of a plenary consensus among States. Certainly the agreement and plan concluded at the World Administrative Radio Conference for the Planning of Broadcasting Satellite Service held in Geneva in January and February of this year is a significant contribution to the resolution of questions of State-to-State broadcasting and spillover.

The principle of respect for State sovereignty and non-interference in the internal affairs of States is of primary importance. The delegation of Iran reiterates our continuing adherence to that basic concept. Prior agreements between the broadcasting and the receiving States ensure that this sovereignty is properly observed.

As in other States whose scientific communities are investigating the benefits of educational direct television broadcasts, particularly to the remote areas of the State, Iran foresees a great potential for this application. Because direct television broadcasting will represent a new element in the lives of the people, the integrity of the programme content is of great concern. Delicate social and cultural values must be considered, and such consideration is both the responsibility and the prerogative of the governing State.

As further consideration is given to the draft preamble and the body of the draft principle on the matter of consultation and agreements between States, we are confident that a proper balance between the principles of the free flow of information and respect for the sovereign rights of States will be achieved. The ultimate conclusion of agreements governing direct television broadcasts will provide a proper context in which States can pursue their educational and communications programmes.

In conclusion, may we speak briefly of our current space-related activities in Iran.

Since 1974, when the United States and Iran executed a memorandum of understanding which provided for co-operation between the scientists of the United States National Aeronautics and Space Administration (NASA) and our own scientific community, we have been developing plans and proposals for the establishment of a centre for receiving and processing remotely sensed data. Our interests are concentrated in the areas of cartography, land use, inventories of agricultural crops, forests and geological applications. The tracking and receiving facility has been specifically designed to receive LANDSAT and NOAA data. The system will be

(Mr. Moghtaderi, Iran)

installed at a specifically developed site at Shahdasht-Karaj, which is about 50 kilometres from Teheran. This facility is projected to be operational later in 1977 or early in 1978.

Associated with the tracking and receiving facility will be a large-scale electronic data processing facility. This electronic data processing system will process high density digital tapes from NOAA and NASA into corrected computer-compatible tapes and into laser-beam-produced imagery. This system, which will also be located at the Shahdasht site, is expected to be operational in 1978.

Because the Government of Iran has reasoned that the maximum potential utility of LANDSAT data exists in digital image processing and analysis, a proposal for the development and procurement of an advanced digital system is being evaluated. It is envisaged that this system will be operational in 1978 also.

Concurrent with these activities, intensive training is going on both in the scientific and technical facets and in the management applications of remote-sensing techniques to various programme objectives. To assist in the proper utilization and management of the data, a data management system is being procured for implementation during 1978.

The experience of India in pre-operational experiments in educational television broadcasts direct from satellites to remote areas is under study for application to our own scientific needs. We continue to pursue the study of the communications capabilities which direct broadcasting from satellites can provide.

Thus the Government of Iran joins the new legion of States whose eyes are lifted to the newly broadened horizons of space. We are determined to ensure that the benefits of this science shall be directed to the betterment of the people of developed and developing States alike.

Mr. ARAI (Japan): Mr. Chairman, at the outset my delegation wishes to associate itself with previous speakers in expressing its pleasure at seeing you once again presiding over this session of the Committee on the Peaceful Uses of Outer Space, which is this year marking the twentieth anniversary of man's first venture into outer space and also the tenth anniversary of the Outer-Space Treaty.

My delegation would also like to express its deep gratitude to the Government of the Republic of Austria for hosting the current session here in this beautiful city of Vienna with such warm hospitality. In particular, we are most grateful to the

(Mr. Arai, Japan)

President of the Republic of Austria for his opening statement honouring this Conference.

My delegation is convinced that under your experienced and wise guidance, Mr. Chairman, this Committee will hold meaningful deliberations in a spirit of international understanding and co-operation and will thereby make further contributions to the peaceful uses of outer space in the interests and for the benefit of all mankind. My delegation is prepared to co-operate fully with you in the discharge of your important task during this two-week session.

(Mr. Arai, Japan)

Since man's venture into outer space opened a new page in our history 20 years ago, spectacular achievements have been made in the fields of space science and technology, and consequently these practical applications to bring about benefits to all mankind are becoming more and more important to our international community of nations. Such applications are indeed of global concern and do require international co-operation. In this connexion my delegation is of the firm view that there would be an important role for the United Nations -- particularly this Committee on the Peaceful Uses of Outer Space -- to play in encouraging the co-operation of all nations.

Speaking for Japan, my country has thus far successfully launched seven scientific and three applications satellites. Among them, my delegation would like to make particular reference to a satellite called Engineering Test Satellite II (ETS II), which was launched last February by the National Space Development Agency of Japan and which has become Japan's first geosynchronous satellite. The relevant information on this satellite is contained in a United Nations document which was circulated recently. These are some of our latest activities in this area, and Japan is determined to make sustained efforts to advance further its own technology for the exploration and use of outer space and the practical application thereof, thus making considerable contributions to the promotion of economic and social welfare, particularly in developing countries.

Now let me turn to the substantial work of this Committee, which is to review the work contained in the latest reports of its two Sub-Committees.

Firstly, I should like to deal with the report of the Legal Sub-Committee. Regarding the moon treaty, my delegation takes note of the statement in the report of the Chairman of Working Group I of the Sub-Committee that, despite the efforts made by a great number of delegations, no text relating to this issue was agreed upon. Accordingly, there still remain before us three main issues: namely, the question of the natural resources of the moon, the scope of the treaty and the information to be furnished on the mission to the moon. However, my delegation notes with appreciation the three reference papers compiled by the Secretariat, which contain all the drafts and working papers

(Mr. Arai, Japan)

submitted by delegations and the texts formulated or approved by the Working Group and the Sub-Committee on the foregoing three outstanding issues. It is my delegation's hope that the next session of the Legal Sub-Committee will make continued efforts to work out a generally acceptable formula on a consensus basis.

With regard to the question of direct television broadcasting satellites, my delegation takes note with appreciation of the statement in the report of Mr. Wyzner in his capacity as Chairman of Working Group II of the Sub-Committee to the effect that, in an effort to harmonize the differing views of delegations and in order to facilitate general agreement, the Working Group proceeded to formulate a tentative text of a principle of "consultation and agreements between States" and a draft preamble, the former seeking to replace the text of the principle of "consent and participation".

It is the understanding of my delegation, however, that the aforementioned tentative text of a principle of "consultation and agreements between States" and a draft preamble were formulated to serve for further deliberations, and the delegation of Japan would be prepared to participate in such deliberations.

With regard to the question of remote sensing of the earth from space, my delegation notes with satisfaction that the Sub-Committee has successfully formulated the texts of six additional draft principles on the basis of the common elements previously agreed upon, which owes so much to the outstanding chairmanship of Mr. Tuerk, then representative of Austria in Working Group III of the Sub-Committee.

As for the question of the proposed drafting of a principle relating to the permanent sovereignty of States over their natural resources and information with respect thereto, there were no common elements identified despite the extensive discussions held at the last session of the Sub-Committee. Therefore, the text within special brackets in appendix A to the report of the Chairman of Working Group III should not be interpreted, in our view, as an agreed text on this issue.

(Mr. Arai, Japan)

Regarding the proposal concerning the tenth anniversary of the Treaty on Outer Space my delegation is pleased to endorse the draft resolution contained in paragraph 13 of the report of the Sub-Committee, to be forwarded by this Committee to the thirty-second session of the General Assembly for consideration and adoption.

Now I should like to turn to the report of the Scientific and Technical Sub-Committee. Regarding the question of remote sensing of the earth from space, my delegation wishes to express its deep appreciation to the Scientific and Technical Sub-Committee for its work on the definitions of the terms "data" and "information", since this will be most useful to the Legal Sub-Committee in considering legal implications of remote sensing. My delegation hopes that the Scientific and Technical Sub-Committee will continue its work on this issue with a view to facilitating future deliberations by the Legal Sub-Committee.

With regard to the proposals made by some delegations at the last session of the Scientific and Technical Sub-Committee for classifying data derived from remote sensing, my delegation believes that the aforementioned proposals for date classification should be subject to our careful study in the future.

As for the United Nations programme on space applications, to which my Government attaches great importance, my delegation would be pleased to approve the relevant part of the report of the Sub-Committee.

Finally, with regard to the question of convening a United Nations conference on outer space, my delegation is prepared to support the recommendation contained in the report of the Sub-Committee that this Committee consider, inter alia, the establishment of a small task force or an ad hoc working group of Member States to study the specific objectives, organizational aspects and financial implications and so on and to report to the next session of the Scientific and Technical Sub-Committee.

Mr. DAYRELL de LIMA (Brazil): Mr. Chairman, on behalf of the delegation of Brazil, I would like to express our profound gratitude to the Government of Austria for hosting this session of the United Nations Committee on the Peaceful Uses of Outer Space. We have been welcomed to inspiring Vienna in a manner which indeed only confirms the well-known traditional qualities of hospitality, congeniality and elegance of the Austrian people. We have been deeply honoured by the presence of His Excellency Mr. Rudolph Kirchschlager, Federal President of the Republic of Austria, at the opening of our session, and we wish to thank your Foreign Minister for receiving us last evening.

Sir, it is with great pleasure that the Brazilian delegation is once more taking part in the work of the Committee on the Peaceful Uses of Outer Space under your able and experienced leadership. As many delegations and you have stressed, this year marks a series of significant commemorations relating to the conquest of outer space by man which began 20 years ago. It is only fitting, therefore, that we should express at this time, in the general debate, considerations of a more ample nature reflecting our views on the fundamental tasks which have been undertaken by the United Nations since this Committee came into being in 1957, and also on our prospects for the future.

Brazil attaches the utmost importance to international co-operation in the peaceful exploration and use of outer space, a concept which, in our case, is daily being translated into practice by several joint undertakings with other nations in scientific and technological fields and is traditionally represented in this Committee by our most sincere and concrete endeavours.

International co-operation in this field could not be better expressed, in our view, than by the encouragement of an orderly development of space activities carried out for the benefit and in the interests of all countries, irrespective of their stage of economic or scientific development, and in a manner that should contemplate both the enthusiastic encouragement of technological advancement and the necessary extension of the rule of law beyond the terrestrial sphere.

Ten years after the coming into force of the Treaty on Prinicples Governing the Activities of States in the Exploration and Use of Outer Space, Brazil, a party to this international instrument, reaffirms its importance and value as the basic norm for the activities of States in space. The accelerated development

(Mr. Dayrell de Lima, Brazil)

of space technology and the ever-growing number of its applications, which have a direct bearing on the life of man on earth, have brought about, nevertheless, the constant elaboration by the international community of other international instruments destined to regulate specific aspects of these activities, thus strengthening and giving more substance to the process of establishing a legal framework for outer space which was installed by the 1967 Treaty.

It seems clear to us that this tendency towards the elaboration of a specific legal framework for each space application, or for those situations which are not referred to in the 1967 Treaty, obeys a dynamic of its own, related to the development of technology and the ever-growing awareness of its impact on the life of nations, and is in tune with the constant enhancement of international co-operation.

We should emphasize in this context that the bulk of these activities -- although undertaken in outer space, where peaceful exploration and use are free, according to the Outer Space Treaty -- in their application exert a direct influence on the economic, social and political spheres of sovereign States. Therefore, in our opinion, international co-operation in this field should not be restricted to arrangements of a purely scientific or technical nature and be deprived of the necessary advance backing of agreed norms that would explicitly determine the rights and duties of States in the undertaking of these activities.

It also seems clear to us that, as the 1967 Treaty affirms, the exploration and use of outer space should be carried out for the benefit and in the interests of all countries, whatever their stage of development. That is tantamount to stressing the particular relevance for the less-favoured countries not only of the enormous benefits that will be available to them through the utilization of certain space techniques but also of the possible nefarious uses of these new techniques against their less well-protected interests. It does not seem justifiable, in particular, that space activities, especially those which are related to applications of direct interest to the less-developed countries, should evolve in a climate of total laissez-faire which would conceal under the cloak of rationality new ways for an abusive exercise of power by those who exert control over technology, or which would deliberately consolidate faits accomplis policies.

(Mr. Dayrell de Lima, Brazil)

The position of Brazil on matters related to outer space is based on our adherence to the general principles of the Treaty on Outer Space. Of particular relevance are the following principles: first, the common interest of mankind in the exploration and use of outer space; second, national non-appropriation of outer space, the moon and other celestial bodies; third, the exclusively peaceful utilization of outer space; fourth, the encouragement of international co-operation; and fifth, international responsibility of States in their outer-space activities.

It is the view of my delegation that the following elements unfold naturally from the consideration of these principles contained in the 1967 Treaty:

First, in those cases where certain space applications have a direct incidence in the process of economic and social development, and in the political and legal sphere of States, their sovereign rights have to be respected.

Second, the special interests of the developing countries in the benefits of space applications should be recognized.

Third, outer space, the moon and other celestial bodies should be considered as the common heritage of mankind. This principle should apply to situations where, in practice, the existence of dissimilar conditions between States in the exploration and use of outer space could imply a de facto occupation or the depletion of resources of a finite character and of universal interest. These situations require internationally agreed and specific régimes that should recognize the rights and duties of all the parties affected and concerned.

(Mr. Dayrell de Lima, Brazil)

Fourth, the adoption of specific measures for the imposition of a strictly peaceful use of outer space in the context of negotiations towards general and complete disarmament under effective international control should be urgently promoted. Not only should we prohibit the emplacement in space of objects carrying nuclear weapons or other types of weapons of mass destruction -- which has already been done -- but we should also exclude the use of any equipment of a military nature in outer space or its use for other hostile purposes. Verification systems and international safeguard clauses should be agreed upon in this context.

Fifth, the necessity of the promotion of an equitable transfer of technology in this field should be recognized. Scientific and technological development should be undertaken in the context of a new international economic order.

Sixth, it is only fair to ask those countries which undertook the pioneering task of exploration and use of outer space to undertake, with the same enthusiasm, the consequent reponsibilities which fall upon them in terms of ensuring an orderly development of their space activities, taking into account the legitimate interests and the sovereign rights of other States, through the negotiation of internationally agreed and binding instruments.

Seventh, it is high time that we take a decision on the definition and delimitation of the concept of "outer space", so as to clarify first of all the question of the scope and field of application of the 1967 outer space Treaty. We should also develop a solid base for the study of the question of the general use of geostationary orbits. My delegation supports the inclusion of an item relating to the study of this particular question. As I pointed out before, the existence of dissimilar conditions among States in the use of this orbit, for example, can result in the de facto occupation and the exhaustion of this finite resource of general interest. This situation requires an internationally agreed régime which would recognize the sui generis character of the orbit and the rights of all parties concerned. There is no incompatibility here between the general principles of the Outer Space Treaty and a special treatment for the geostationary orbit, as the very scope of application of this Treaty has not yet been clearly defined. The support of my delegation for the study by this

(Mr. Dayrell de Lima, Brazil)

Committee or one of its Sub-Committees of this important matter does not of course prejudge the form which will be taken by such an internationally agreed régime for this sui generis situation.

Eighth, the United Nations constitutes the focal point for international co-operation in outer space, and it will of course assume an increasingly important co-ordinating role in this field. In this context the Outer Space Committee should exercise its co-ordinating functions to its full capability. The dispersion of efforts brought about by the creation of new subsidiary bodies or panels should not, in the view of our delegation be encouraged

Ninth, it is important that we should maintain a strong link between the constant evolution of space technology and its applications and the necessary elaboration of legal instruments to regulate activities of States in this field. There is not necessarily a contradiction between the strengthening of international co-operation in outer space and respect for the legitimate interests and sovereign rights of States. The coming of age of new space technologies of global reach should not conflict with the principles laid down in the United Nations Charter itself.

Tenth, among the more evident sovereign rights of States raised by the introduction of space applications, the following could be enumerated: the right of States to oppose the utilization of space applications which would imply restrictions of their sovereignty over their natural resources or which would constitute an obstacle to the full implementation of programmes essential to their economic development; the rights of States regarding data and information, obtained through space technology, related to territories under their jurisdiction; the rights of States regarding the flow of information transmitted by outer space means; and the rights of States regarding the utilization of the finite resources of outer space.

Eleventh, the convening of a United Nations conference on outer space, if carefully prepared, will favourably contribute to the rationalization of space activities. Our delegation is prepared to go along with any practical suggestions to this end.

(Mr. Dayrell de Lima, Brazil)

Those were the remarks of a general nature which my delegation wished to make at this stage. We shall deal with the specific topics of our agenda when the Committee considers items 5, 6 and 7.

I should like to conclude my general remarks by expressing to the Committee, through you, Mr. Chairman, our appreciation for the Committee's taking a decision which enabled my delegation to occupy until the end of this week the post of Rapporteur in the absence of its nominal occupant, Mr. Lindenberg Sette.

Mr. CEAUSU (Romania) (interpretation from French): I should like to begin by expressing the thanks of the Romanian delegation to the Government of Austria, which invited the Committee to hold its twentieth session in Vienna. I should also like to express our heartfelt gratitude to the Federal President of Austria, Dr. Kirchschlager, for his welcoming address, which will be a source of inspiration in our future deliberations.

The holding in Vienna of this anniversary session of the Committee is undoubtedly a testimony to the role played by your country, Mr. Chairman, with regard to the involvement of the United Nations in the organization of international co-operation for the peaceful uses of outer space. The Romanian delegation is particularly happy at seeing you, Sir, once again presiding over the work of the Committee on the Peaceful Uses of Outer Space. In view of the positive results of our work since you have been at the head of this important organ of the United Nations, which is due to your active interest and to your tireless efforts, we are convinced that this session will in turn also be a success.

It is for me a great honour to be participating for the third time as the representative of Romania in the work of the Committee, which, under your leadership, Mr. Chairman, will greatly contribute to the promotion of international co-operation in the utilization of outer space for the benefit of all peoples.

(Mr. Ceausu, Romania)

This year we celebrate two important events in space activities. They are, the twentieth anniversary of the beginning of the space era, opened by the launching by the Soviet Union of the first artificial earth satellite, and the tenth anniversary of the entry into force of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space.

Thanks to the inventiveness of the mind of man and to his capacity to put into practice the boldest of ideas, the 20 years of the space era have been marked by spectacular progress in the exploration and exploitation for peaceful purposes of outer space.

Over and above the flight of spacecraft, of which the most spectacular were flights to the moon carried out by the United States of America, which placed the first earth creatures on that natural satellite of our planet, these last 20 years have seen the development, at an impressive pace, of the utilization of space techniques to solve the economic and social problems in the everyday lives of peoples.

Those applications of space techniques to development will open new perspectives for the improvement of life on this earth. Particularly noteworthy are satellite communications, with their various applications -- the transmission of radio and television broadcasts, the utilization of space techniques for meteorology and maritime navigation. But the most promising area of space applications remains that of remote sensing of the earth by satellite because it covers a wide gamut of economic activities, such as agriculture, forestry, hydrological resources, environmental control, geology and mineralogy, geography and cartography, and so on. By launching the Laser Geodynamics Satellite, one began utilizing satellites to sense movements of the earth's crust, which will be able to help the forecasting of earthquakes, or seisms. Similarly, henceforth one talks of the possibility of using in the very near future space techniques to gather solar energy and transmit it to earth.

These are but a few examples of the progress realized and the prospects opening to us in the application of space technology to development. But they give a suggestive picture of the potentialities of modern science and technology when they are placed at the service of man and not used in order to develop new means of destruction.

(Mr. Ceausu, Romania)

The preoccupations and achievements of Romania in the field of space activities illustrate the progress which a middle-sized country can make without being a space country. Thus, for instance, my country has developed and is in the process of carrying out a programme of activities of remote sensing of the earth's resources and environment by satellites and other space platforms.

At present, research and experiments are being carried out for evolving techniques for the utilization of data emanating from satellites and the production of scientific apparatus. For this purpose, satellite recordings are used as well as airborne-platform recordings. Studies carried out have led to the conclusion that the main operational utilization of remote-sensing satellite data will be in the fields of agriculture, forestry, hydrology, oceanology and quality of water.

Since these areas call for real-time data, it has been decided to build a ground station for the direct reception of satellite data.

In the fields of meteorology and hydrology, Romanian departments and experts have received and utilized television and infra-red pictures from the NOAA-4 and 5 satellites. At present, they are carrying out studies to prepare conditions with a view to receiving meteorological geostationary-satellite data from the METEOSAT satellite.

With regard to telecommunications, a ground station has been built and put into operation in order to use the INTELSAT satellites, and in the near future telecommunication links with INTERSPUTNIK are going to be assured.

A great deal of what we have done and of what we intend to do in the future depends on co-operation with other States. That is why I should like to reaffirm on this occasion the importance that my country attaches to the development of international co-operation in the peaceful uses of outer space. Indeed, my country believes that practical applications of space technology constitute a catalyst in development and for the reduction and elimination of economic gaps between the industrialized countries and the developing countries.

The United Nations and its specialized agencies are the most adequate framework in which to develop multilateral international co-operation in the field of outer space as well. In that connexion, the Romanian delegation would

(Mr. Ceausu, Romania)

like to stress with satisfaction the Committee's contribution to the peaceful uses of outer space and its help in organizing international co-operation in that area. Likewise, I should like to thank and to congratulate the Outer Space Affairs Division of the United Nations Secretariat for its untiring activity with a view to stimulating the interest of the developing countries in the achievements and possibilities offered by space science and technology and for its promotion of practical applications of space technology, particularly by organizing numerous seminars, schools and other means for the instruction and training of executives. Nevertheless, I should like to point out that, in the light of the budgetary and financial restrictions of the United Nations, the present programme of the United Nations for the application of space techniques is, in our opinion, far from meeting the present and future needs of developing countries, particularly with regard to technical assistance and training.

We are witnesses of an unprecedented continuous progress in science and technology, which are opening up new prospects in peaceful uses of outer space and in outer space techniques. But the disparities with regard to the present level of scientific and technical riches of the majority of countries and the limited resources at their disposal constitute so many obstacles to the enhancing of the potential of science and technology, particularly in the space area. These are further reasons for intensifying the activity of the Committee on the Peaceful Uses of Outer Space, notably in the promotion of multilateral co-operation with regard to practical applications of space technology. The contribution to the economic and social development of countries should become the principal criterion for judging the effectiveness of United Nations activity in this area.

It is in this spirit that the Romanian delegation supports the proposal to convene an international conference on space matters. That conference, which we contemplate as being geared to action, should assess globally the results achieved and the potentialities in the field of the application of space technology, with a view to adopting a set of concrete measures and recommendations in order to develop multilateral and bilateral international co operation.

(Mr. Ceausu, Romania)

The accent which we place on the technical and scientific aspects does not signify that we are neglecting the legal questions posed by the peaceful use of outer space. Quite the contrary, in our opinion, in order for international co-operation to be able to take place in an orderly fashion and for the rights and legitimate interests of all States to be safeguarded, it is necessary to evolve and adopt legal standards governing the activities of States in the new fields of the application of space technology. Indeed, up to now important international instruments have been adopted, the most important of which is the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space. But we consider that the progress recorded and the perspectives which are taking shape with regard to the peaceful uses of outer space make the elaboration of legal rules and the speeding up of their introduction absolutely necessary so that the activities of States and co-operation between them should go forward without any hindrance and in an orderly fashion.

For many years the Committee and its Legal Sub-Committee have been, among other things, in the process of evolving legal principles relating to the use by States of satellites for direct broadcasting and for the remote sensing of the earth.

My country considers that the regulations contemplated should be based on respect for the principle of sovereignty of States and non-interference in their domestic affairs and, at the same time, should encourage international co-operation with a view to promoting the optimal exploitation of those techniques for the benefit of all countries, in particular the developing countries. With regard to direct television broadcasting in particular, we feel that it is our duty to see to it that this new technique serves to promote friendship and understanding between all peoples and contributes to the development of friendly relations and co-operation between States. Thus, these regulations in the process of being evolved should also be conceived in such a way as not to allow direct television broadcasting to be used to conduct misleading campaigns or to sow hatred and distrust among peoples or to denigrate the policies and the economic and social development programmes of other countries.

(Mr. Ceausu, Romania)

The peaceful use of outer space is a domain of human activity the potential of which will not be fully enhanced unless it is within the framework of large-scale international co-operation. Consequently, the main object of our preoccupations in the United Nations and here in this Committee should be that all the countries of the world should play an active part in this co-operation and obtain the benefit of its fruits.

We feel that the space order should and must be different from that of the classical earth order. We are also convinced that with regard to outer space activity, relations between States can be built on new bases, on rational principles inspired by the idea of solidarity and guided by the destinies and common aspirations which unite all our peoples. It is towards this noble objective that the activity of our Committee should be directed.

Mr. HALACHEV (Bulgaria) (interpretation from Russian): Mr. Chairman, I should like at the outset to join with those speakers who have spoken before me in expressing our sincere gratitude to the Government of the Republic of Austria for its invitation to hold the twentieth anniversary session of the Committee in this lovely city of Vienna, the capital of friendly Austria. I cannot fail to note that the city of Vienna is attractive not only because of its beauty but also because of its hospitality, which has created most favourable conditions for the work of many international forums, thereby encouraging the successful completion of their tasks. This fully applies also to the work of our Committee. Moreover, the fact that we had the honour of listening to the statement of the Federal President of the Republic of Austria, Mr. Kirchschlager, further attests to the great significance that your country attaches to the continued development of international co-operation in the area of the peaceful uses of outer space.

On the basis of the foregoing, Mr. Chairman, I should like to express the hope that under your skilful and able guidance in your home country, the Committee will be able successfully to complete the tasks confronting it.

(Mr. Halachev, Bulgaria)

As many speakers have already stressed, the year 1977 is outstanding in many ways. For us it is a landmark in that along with the Soviet people we solemnly celebrated the sixtieth anniversary of the Great October Socialist Revolution. I shall not delve into the profound significance of the great October victory for my country. May I simply express our deep conviction that Bulgaria in the not too distant past was an exceedingly backward agricultural country, where the only life known was peasant life and where the iron plow was a rarity. Today Bulgaria, even with its modest achievements, has entered the circle of space States, and we were able to make such progress precisely because of that historic event. The victory of the Great October Socialist Revolution has played the role of that rocket which 20 years ago placed in orbit the first artificial satellite, thus marking the beginning of the space age.

From that moment on, more and more States have followed in those space footsteps, and activities in this field have increased in the area of exploration and use of outer space for peaceful purposes. It is difficult, indeed impossible, to list all that has been done during that short period, but we shall always be interested in such events as the launching of the first artificial earth satellite, the first flight of man into space, the first walk in space and so forth. The footsteps of United States astronauts on the moon have not disappeared. We are still profoundly moved by the deep meaning and significance of the Apollo-Soyuz experiment. Life has indeed shown the need for international co-operation, and particularly for co-operation between the two space States. That is why we welcome the new Soviet-United States agreement on co-operation in the peaceful uses of outer space, which undoubtedly will be of benefit not only to those two countries but to the whole of mankind as well.

(Mr. Halachev, Bulgaria)

Ten years ago the Outer-Space Treaty came into force. It was the beginning of the establishment of a legal order in the new sphere of activity of States. This anniversary is dear to us also because the Treaty was agreed upon in this Committee with the participation of representatives of my country.

In attempting to assess the significance of that Treaty from the standpoint of the current tasks of our Committee, I consider that although these tasks, which should strengthen the legal order of space law and the development of international co-operation therein are difficult they are none the less much easier and much more pleasant than the question of the denuclearization of outer space or that of the settlement of disputes among States which we would now have to solve.

In my view the Treaty is an example for our further work if we want at least at least to lighten our task in the future. In this connexion I should like to express my hope and my conviction that the resolution adopted by the Legal Sub-Committee contained in paragraph 13 of its report will be adopted by acclamation.

I should like again to assure the members of our Committee that the People's Republic of Bulgaria is fundamentally loyal to the purposes and principles of work in the area of the peaceful uses of outer space. That is logical because our country is not only co-operating in this area but also benefiting from the achievements of space science and technology. As members of the socialist community, we are particularly pleased to see that daily the space co-operation among socialist countries is being strengthened and developed. This has a material basis the comprehensive programme of socialist integration, the regular launching of INTERCOSMOS satellites and experiments with geophysical rockets, which are being carried out single-mindedly to study the problems of space physics, meteorology, biology, and medicine and further research into the natural resources of the earth.

The space activities of the socialist countries in the area of the INTERCOSMOS programme, in which my country participates, achieved new scope after the signature last year of the new agreement on co-operation in the area of the peaceful uses of outer space. We are pleased that on the basis of that agreement, and first and foremost thanks to the magnanimity and

(Mr. Halachev, Bulgaria)

generosity of the Soviet Union, the citizens of Bulgaria will also have the chance to participate in space flights on board Soviet spacecraft and orbital stations. Such flights will of course be of great benefit to our own national space science and moreover will auspiciously mark the thirteen-hundredth anniversary of the creation of the Bulgarian State.

Speaking of the INTERCOSMOS programme I cannot fail to note the marvellous spirit of democracy and mutual co-operation which enhances the completion of the tasks we have set ourselves. Bulgaria's experience in participating in the INTERCOSMOS programme gives striking proof that small countries which do not possess means by which they themselves could launch satellites can, within their means, make useful contributions to space research and can benefit from its achievements.

In this connexion may I briefly refer to our national and international space activities in 1976.

Last year we developed installations for the reception of aerospace information as well as methods of interpreting that information for geology, geomorphology and agriculture, and for other purposes. On the basis of aerospace information received from Soviet aerospace installations we have drawn up maps of certain sectors of the territory of the country. On the basis of aerospace surveys we have studied the geology and volcanic structure of the Rhodope Mountains.

As for meteorology, on the basis of aerial and rocket data we have drawn up a method for the objective analysis of meteorological fields in the stratosphere and a method of reconstructing the geopotential through the concurrent use of satellite and ground stations. Within the physics programme we have developed equipment to measure the temperature and ion concentration in the atmosphere. It was mounted on the VERTIKAL-4 rocket, and we have come up with a full scientific interpretation of the results obtained. With the assistance of this apparatus on board the COSMOS-14 satellite we have received information regarding variations, with very fine resolution, of the ion concentration within a range of 500-1500 kilometres. We have continued our research into the dynamics of the atmosphere, and so on.

(Mr. Halachev, Bulgaria)

In seeking broad international co-operation, our delegation attaches great importance to the work of the Committee and its Sub-Committees. We appreciate the work done, and we express our gratitude to the Chairmen of the two Sub-Committees and the Working Groups, as well as to the Director and the Secretariat staff of the Outer Space Division for their efforts to discharge their duties as effectively as possible.

Our approach to the solution of the problems confronting the Committee is based on the understanding of the principle that that solution should serve the lofty goals of the development of space co-operation and friendly relations among States and, in the final analysis should enhance the strengthening of international peace and security.

We consider space, which cannot be encompassed, an indivisible whole. However, there are many States on earth, and they are divided by interests which do not always coincide. They are separated by different traditions, different cultures, and so on. But they are joined by the common desire to explore outer space and to use it for practical purposes for the benefit of mankind. Outer space is open to all.

(Mr. Halachev, Bulgaria)

However, it is quite clear that activity in space and from space should take account of the interests and national sovereignty of all countries in the world. To this end, it is essential that this activity should be, in a promising manner, regulated by a body of law. We do not regard legal regulation as a hindrance to benefits from the uses of outer space. Much less do we regard it as a hindrance to the development of international co-operation. On the contrary, we are firmly convinced that legal regulation which is accessible on the basis of the observance of the interests of all countries and their sovereignty and legal regulation on the basis of their general and mutual agreement will speed up these processes and by the same token will strengthen friendly relations among States. The sooner this is done, keeping pace with the development of science and technology, the better.

On the basis of the foregoing, we define our position on the problems confronting the Committee, and first and foremost the task of ultimate agreement on principles governing the use of artificial earth satellites for direct television broadcasting. It is clear to us that this work can be completed successfully only on the basis of two generally recognized principles of international law: the sovereignty of States and non-interference in their internal affairs. We hope that the Committee will carry out its tasks and will submit a document to the thirty-second session of the General Assembly for its adoption.

My delegation also welcomes the considerable progress achieved in the formulation of principles concerning the legal implications of remote sensing of the earth from space. Along with this, we support the proposal of the Soviet Union and other delegations concerning a delimitation between regional and global data, which are accessible for free distribution, and local data, which cannot be circulated or distributed without the consent of the State concerned. In that connexion, we have always supported the idea of a relevant role to be played by the United Nations in the area of co-ordinating efforts in remote sensing of the earth from satellites. We hope that very soon an appropriate forum will be set up for this co-ordinating role.

(Mr. Halachev, Bulgaria)

As for the treaty relating to the moon, we should like to point out that, despite the great efforts undertaken by many delegations to attain a consensus on the key question of the natural resources of the moon, the Legal Sub-Committee was not able to change the existing situation, which is characterized by deadlock. However, we believe that a solution to this problem is possible in the near future if only all delegations take a realistic and flexible position. Moreover, we should like to stress that the United Nations programme on space applications is being successfully pursued, and we pay a tribute to the United Nations Expert on Space Applications.

As for the question of a possible United Nations conference on outer space, Bulgaria in principle does not object to the convening of such a conference and is ready to participate in it. However, at this time, when all our efforts are channelled towards the active use of accumulated experience in space technology for practical purposes, we continue to adhere to the belief that questions connected with the convening of the conference and alternative possibilities require the most thorough analysis. Therefore we support the proposal to study these questions in a working group, which could meet during this session of the Scientific and Technical Sub-Committee.

In conclusion, Mr. Chairman, we pledge our readiness to co-operate with you so that our Committee, which is a co-ordinating centre for international co-operation in the area of the peaceful uses of outer space, may complete its tasks at this session and successfully continue its work in the future in the interests of peace and progress.

Mr. SANCHEZ PEÑA (Argentina) (interpretation from Spanish): I should like to express the satisfaction of the delegation of Argentina at participating in this session of the Committee on the Peaceful Uses of Outer Space. This satisfaction is the greater because the Committee's deliberations are taking place in the lovely city of Vienna, so rich in history and wealthy in culture, which causes my delegation's admiration to become greater every day. Besides these traditions and culture, there is also the characteristically spontaneous, pleasant and courteous welcome we have had. So we are very happy to be working here, particularly as this is your own land, Mr. Chairman, and we are meeting under your brilliant leadership.

(Mr. Sánchez Peña, Argentina)

We were most pleased to hear the emphasis in previous statements on international co-operation, for we believe that without it there would indeed be no space activity -- at least, not to the extent desired by all peoples. We also heard the strong expressions of hope that this session of the Committee in Vienna will leave a lasting memory of significant achievements in the work entrusted to us. That is the wish of my own delegation as well.

May I now outline briefly Argentina's space activities, which might be of interest to our Committee.

In the past year the National Space Research Commission of Argentina has actively pursued its space programme through the use of rockets and balloons. In this connexion, beginning in June 1976 at the Mar Chiquita Launching Base, we have been carrying out weekly launchings of meteorological rockets as part of the Experimental American Meteorological Network programme (EXAMETNET) within a network composed of the United States, France, Brazil and Spain. We have initialed agreements with NASA to expand that network to Antarctica, a step towards the installation of launching facilities at the Vice-Commodore Marambio Base of the Argentine Air Force in Antarctica.

A new programme for the launching of stratospheric balloons of the GALAXIA series was carried out in April and May 1977 from Río Cuarto for the measurement of neutrons, high-energy gamma radiation, far infra-red observation and other parameters. Our facilities and capabilities for the measurement of these various parameters in the southern hemisphere by means of very large balloons has aroused the interest of research workers from the Federal Republic of Germany, Belgium and Sweden, who have joined in experiments with out own researchers. Similarly, we are still using sounding rockets actually developed in Argentina, and very shortly we shall be carrying out an operational trial of the CLAG II rocket as part of the anti-hailstorm programme and a technological test of the TAURO sounding rocket. The purpose of the latter is to carry a payload of photographic and other sensors applied to the use of remote sensing to supplement satellite information.

In October 1976, under the AIDSAT programme, there was a demonstration in Argentina of the ATS-6 satellite to explore its possibilities. It culminated in a round-table discussion between Argentine officials, including the Secretary of

(Mr. Sánchez Peña, Argentina)

Science and Technology, and officials and experts from the United States. They all conversed by satellite, just as if they were sitting in the same room. The National Space Research Commission together with other institutions of our country, has launched an active programme for the exploitation of non-conventional sources of energy, particularly solar and wind energy.

Ionospheric research, with applications to radio transmission, has been continued nationwide by various research groups.

Turning to remote sensing, in the second half of 1976 we signed a Memorandum of Understanding with NASA for the installation, at the CELPA Mar del Plata Rocket Launching Station, of a LANDSAT satellite unit as well as the requisite computing and processing systems, and we shall shortly be accepting bids from the international community for the acquisition of such systems.

In that connexion, meetings of the Working Group of LANDSAT ground station operators (LGSOWG), held in October 1976 in Ottawa, Canada, and in March 1977 in Sao Paulo, Brazil, together with the consultations carried out with NASA, have enabled us to produce a detailed set of technical specifications so that the station to be set up will be compatible with LANDSAT-B and C satellites, as well as with future satellites of the same series, such as LANDSAT-E.

We have laid particular stress on staff training. In this connexion, there was held, in Buenos Aires in November 1976, the First Latin American Course on Remote Sensing. It was an intensive theoretical and practical four-week course, with the co-operation of the United States Geological Survey and NASA. There we trained 34 specialists in various disciplines for the interpretation of satellite pictures. At the present time, the Second Latin American Course on Remote sensing is in progress, having begun on 6 June last. There we are training not only Argentine specialists but also professionals from Chile, Paraguay, Peru and Uruguay, a total of of 29 trainees. We are planning a third course for the first half of 1978.

With the experience we are acquiring, we feel we are in a position now to offer our country as the headquarters for a regional remote-sensing centre for the training of professionals in various disciplines in the exploitation and application of satellite technology designed for the detection of natural resources.

(Mr. Sánchez Peña, Argentina)

I should like to take this opportunity to formulate this offer officially and to request that the Outer Space Division take note of it. I should also like to request that we co-ordinate efforts aimed at the establishment of this centre.

In the interest of brevity, I shall mention only the regular use which we are making of the meteorological and communication satellites -- the various APT receiving stations for meteorological purposes. We have at our disposal two sounding rocket launching stations one at Chamical and the other in CELPA Mar del Plata, near Mar Chiquita, and, as I have already mentioned, we are now readying a third in Antarctica.

We have carried out experiments with balloons of up to 15 million cubic feet at two other bases. All this is of great importance to the southern hemisphere, an area for which there is normally little information regarding the upper atmosphere.

We have various ongoing programmes for the application of remote sensing to agriculture, hydrology and soil studies. In the near future, we shall hold a seminar on the use and applications of data collecting platforms with a view to implementing a system for hydrological programmes.

The agenda for this session contains various items of great importance. We observe from the report of the Legal Sub-Committee (A/AC.105/196) that three of the four subjects under review have a "high priority" ascribed to them by the General Assembly in its resolution A/31/20.

With regard to the draft treaty relating to the moon, the main questions relates to the principle governing the legal régime of its natural resources. The elaboration of the draft treaty is already at an advanced stage, and it only remains to resolve in clear, precise, frank and direct terms the problem of the legal nature of these resources, as a fundamental step towards solving the other questions still pending and awaiting consensus.

With respect to the elaboration of principles governing the utilization by States of artificial earth satellites for direct television broadcasting, important progress was made at the last session of the Legal Sub-Committee. Nevertheless, there remain to be resolved a number of vital questions to which Argentina is giving special attention. In this respect, there is a technical regulation, with adequate procedures, established by the International Telecommunication Union (ITU), which my country faithfully respects. It is now

(Mr. Sánchez Peña, Argentina)

necessary to establish for the first time a legal framework -- which is not devoid of political consequences -- for which we must make every effort so that there will emerge the kind of framework which will preclude a repetition of what is already in force with respect to technical processes or a version of such weak principles that they would be meaningless in so far as the desired progress in the regulating of space activities.

In particular, I should like to recall that my country presented in July 1974 in document A/AC.105/134 a broad draft international agreement on direct broadcasting by satellite, in which some of the questions with which we are grappling today were solved, such as the régime of consultations, which is dealt with in article 17 of the Argentine draft.

In view of the fact that the three questions of high priority are connected with direct television broadcasting, the hope has been expressed that the task entrusted to the Sub-Committee would be completed at the present session of the Main Committee, and Argentina will spare no effort to achieve this end, provided that the texts elaborated will offer sufficient content and represent a step forward in our tasks and not be the fruit of haste and impatience, which would bring more difficulties than benefits.

Since 10 October next will mark the tenth anniversary of the Outer-Space Treaty, the Argentine delegation warmly supported at meetings of the Legal Sub-Committee the draft resolution in this respect and participated in the final drafting of the text. I believe that the Committee will be able to approve this draft resolution and transmit it to the General Assembly for approval.

A number of new items have been proposed for consideration by this Committee. I should like to put on record here that, upon the initiative of the Chairman, a number of views were expressed on the subject of solar energy coming from outer space and exploited by making use of space technology. I am speaking of solar energy in a very broad sense, including in the term all other sources of energy connected with or derived from solar activity, and, as I had the opportunity to point out previously, Argentina is working on other non-convention sources.

(Mr. Sánchez Peña, Argentina)

With regard to the legal consequences of remote sensing of the earth from space, we have noted clear progress in the work accomplished by the Legal Sub-Committee. We have listened to statements relating to what might be called the "negative" aspects of the use of remote-sensing technology, or, to put it differently, its misuse. But we have also heard that it must not be forgotten that there are secure guarantees against misuse. In this connexion my delegation recalls the draft treaty presented in 1975 jointly by my country and Brazil, which was sponsored by all the Latin American States members of this Committee.

In this particular case the idea of entrusting such an important responsibility to the United Nations appears to be a good guarantee, and it has received support. We wish to congratulate the United States for the effective results achieved with the ATS-6 satellite which was first used in that country, was then transferred to the Indian Ocean to serve the Indian SITE programme and is now being used for similar programmes in the Western hemisphere, in addition to the CTS satellite, which disseminates health and education programmes in the United States and Canada. We also hope that the LANDSAT programme in which Argentina will participate by means of an earth station will not be delayed.

With regard to a second United Nations conference on outer space, we would refer to item 17 of the note by the Secretariat in document A/AC.105/179, which indicates that the convening of this conference is justified. We have no doubt that this conference will have to be held. In our view, it should not overlap with the conference to be held in 1979 but should be held after that time. However, taking into account the highly positive results of the first conference, which was held in the city of Vienna in 1968, we must emphasize the benefits hopes for from another meeting of this kind. At the second conference, as at the preceding one in 1968, we must be sure to consider the legal aspects, particularly bearing in mind the progress made in this sphere by our Committee.

(Mr. Sánchez Peña, Argentina)

With regard to the report of the Scientific and Technical Sub-Committee, my delegation believes that it deserves our commendation. I believe it is timely to use this opportunity to pay a tribute to the continued sponsoring of the CELPA Mar del Plata station by the United Nations, as mentioned in paragraph 128 of the report.

As mentioned in the work on co-ordination of space activities within the framework of the United Nations family, my delegation believes that a much broader consideration of the problem should be initiated to take into account the many activities which have been accomplished by a number of specialized bodies of the United Nations family, without forgetting that the Committee on the Peaceful Uses of Outer Space is, of course, the nucleus from which all the work is carried out at the international level, so that its co ordinating function is most appropriate.

I should not like to conclude without highlighting expressly the extraordinary contribution of Austria to the work of the United Nations by the action which has been taken by its Government and the personal duties discharged by people in this Committee in leadership positions and in working groups. To conclude, I should like to recall the words of the Federal President of the Republic of Austria, Mr. Kirchschlager, when he said that the work which we are doing here in the field of space is a tremendous challenge and an enormous responsibility. We shall certainly strive to deserve the honour which assuming such responsibility entails.

Mr. MAGNO (Italy) (interpretation from French): Mr. Chairman, I should like to join, on behalf of the Italian delegation and on my own behalf, the other speakers who have extended to you their congratulations for the wise and efficient manner in which you preside as Chairman in your wonderful city of Vienna.

This year marks the tenth anniversary of the entry into force of the 1967 Treaty on Outer Space. That is the international protocol which has laid down for the entire world the fundamental and innovative principles of legislation in a new field by officially giving birth to space law. Today, 10 years later, it is necessary to stress the legal importance of that document, a Magna Carta of the international regulation of States. Ten years ago there were those who

(Mr. Magno, Italy)

criticized that Treaty as premature and maintained the Roman principle of law "ex facto oritur jus", that is, the law should derive from facts. The growing difficulties which we find in regulating new space activities constitute the most striking proof of the fact that the Treaty on Outer Space was concluded at the right time. The resolve and courage that existed 10 years ago should now encourage us to overcome present difficulties.

These difficulties affect the four items on the agenda of our current session:

The first item concerns the draft treaty relating to the moon. In this connexion the Italian delegation would like to take up two preliminary issues: (a) The draft treaty relating to the moon should be considered within the international space régime as one of the conventions deriving from the Treaty of 1967, which is the basic constitutional charter: consequently, it should be entitled "Convention relating to the moon"; and (b) We should avoid any repetition of principles already set forth in the Treaty of 1967 in order to eliminate doubts and problems of interpretation.

With regard to the substance of the draft treaty, the Italian delegation submitted a proposal on the legal régime applicable to the natural resources of the moon. Those resources may be used by anyone in loco, that is, on the spot, and they should be subject to an equitable distribution among all the peoples of the world.

The first subject of debate which this Committee confronts today is the declaration that the moon and the other celestial bodies are the common heritage of mankind and that any results of their use, occupation of possession belong to mankind as a whole. That declaration is considered by the Italian delegation to be a priority element.

A second subject for debate concerns the equitable distribution of benefits that can be derived from the natural resources of the moon and, according to our proposal, the natural resources of any celestial bodyxwhich are brought to earth.

The Italian delegation would not like to exclude third countries, aside from the two space Powers and the developing countries, from the enjoyment of those resources. The Italian proposal, based on "equitable distrubtion" remains valid.

(Mr. Magno, Italy)

The second item relates to direct television broadcasting from satellites:the use of artificial satellites for direct television broadcasting calls urgently for appropriate regulation which will make possible the use of a very important means of communication for understanding among peoples and for the creation of a common cultural base.

A great deal of work has been done by the Committee in order to prepare a set of rules. It is now up to us to fulfil the mandate which the General Assembly entrusted to to us several years ago and to meet the general expectations, particularly the expectations of the young people, who are increasingly interested in universal brotherhood and eager to know the realities and ideas existing in other regions of the world.

To that end Italy reaffirms its conviction that the work of drawing up legal principles regulating direct television broadcasting by satellites must be based on the free dissemination of information and ideas, whether it be actively or passively.

(Mr. Magno, Italy)

But freedom should not mean wanton misuse. Italian law, for instance, makes it a criminal offence to disseminate false or tendentious information.

I turn now to the third item, remote sensing. The Italian delegation hopes that due attention will be given to the need to encourage the broadest possible application of this new technology, in particular for the benefit of programmes of developing countries. We should be mindful of the fact that in applying a restrictive policy in the area of the dissemination of data we might considerable reduce the advantages derived from remote-sensing activities. The legal and practical difficulties that might arise in connexion with the sovereign right of States over their natural resources may be avoi[illegible] if, in this connexion, there is the necessary flexibility to enable each [illegible]ountry to determine its positio[illegible]cording to its own peculiar circumstances.

It is in this sense that the Italian delegation fully shares the ideas expressed in the Final Act of the Conference on Security and Co-operation in Europe relating to the exchange of information.

In the area of direct television broadcasting and remote sensing, Italy attaches particular interest to the problem of "spill-over". Italy's geographical position at the hub of the Mediterranean indeed places it in several areas of reception and remote sensing.

Consequently, the Italian delegation would like the relevant protocols to take into account the situation and interests of countries that are largely subject to "spill-over".

The fourth item is that of the delimitation of space, a question that was not taken into consideration by the 1967 Treaty on Outer Space. The Italian delegation would like to reaffirm what we have already pointed out and what is contained in the excellent document A/AC.105/C.2/7/Add.1 of 21 January 1977, drafted by the Secretariat.

The Italian proposal, which was advanced in 1975, proposing the so-called vertical frontier between air space and outer space at a height of 90 kilometres -- or, possibly, 100 kilometres -- above sea level, remains valid.

(Mr. Magno, Italy)

On 3 December 1976 a number of equatorial States claimed, in the Declaration of Bogota, their sovereignty over the geostationary band approximately 36,000 kilometres above the surface of the earth.

But such a major extension of national space would run counter to an already adopted space principle by permitting national appropriation of a space zone that is so broad and so necessary to all.

I should like to conclude this general statement by expressing the satisfaction of Italy at having been the headquarters of the FAO Centre for the study and teaching of specialized technology for processing data transmitted by remote sensing satellites.

Courses organized by the Centre last year and this year in Rome have been greatly appreciated, especially by the representatives of developing countries which took part in them.

Italy is ready to continue administering these courses and extending hospitality, as it has done in the past, to students from different countries.

I should like to conclude by sincerely thanking the Austrian Government for the kind welcome it has extended to us all and for the excellent organizatien of the work of the Outer Space Committee.

Mr. TASSARA-JIMENEZ (Chile) (interpretation from Spanish): At the outset the delegation of Chile would like to thank the Government of Austria and the Federal President of the Republic, Mr. Rudolf Kirchschlager for the kind welcome extended to this Committee and for the kind expressions of welcome. At the same time, Mr. Chairman, my delegation would like to greet you and to express its conviction that under your chairmanship the present session of the Committee will be of great usefulness to the progress of our work.

My delegation would also like to express its gratitude to the Legal Sub-Committee and to the Scientific and Technical Sub-Committee for drafting the reports on their respective sessions.

My delegation has deemed it of interest to set forth in this general debate some of our views on the agenda. First and foremost, inasmuch as the debate of the Legal Sub-Committee at its last few meetings did not make much progress on the major points pending with respect to the draft treaty relating to the moon, my delegation would like to highlight the importance of those negotiations and our interest that they continue in order to complete as soon as possible this draft which, as everyone knows, has been the subject of debate for more than six years.

For the benefit of our work, my country believes that the Committee should, in its report to the General Assembly, attempt to outline a sufficiently clear background on the points debated and on the main positions taken by various countries, in order that that body might adopt the relevant guidelines.

In connexion with the natural resources of the moon, the delegation of Chile would like to recall the precedent set by resolution 2749 (XXV), in which the General Assembly declared that:

"The sea-bed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction... are the common heritage of mankind".

This is a concept of clear significance in contemporary international law, which involves the establishment of a régime and an international machinery destined to regulate the exploration and exploitation of the resources of outer space as well as the equitable distribution of the benefits derived therefrom. Those resources should benefit the progress of mankind as a whole, and it is neither fair or acceptable that they should favour just a few States possessed of the necessary technology and of greater financial possibilities for the exploration and use of these new elements.

(Mr. Tassara-Jimenez, Chile)

In the interest of peace we should adopt a path which, instead of widening the gap separating the industrialized countries from the developing countries, would narrow it.

The appropriation of the moon and its natural resources cannot be warranted by the feasibility of technology, much less so by acts of occupation or the deployment of installations or lunar stations, because that would be tantamount to a radical contradiction and violation of the Outer Space Treaty opened for signature in 1967.

Chile does not discern the reasons or arguments for not extending similar treatment to the other celestial bodies and the relevant natural resources. However, the Chilean position is flexible concerning the articles being drafted, and we could accept other formulas which, without departing from this trend, might gradually be adopted. For our part, we are firmly resolved to achieve the prevalence of law in outer space for the protection of the interests and legitimate aspirations of the vast majority of States in a disadvantaged position to compete in the space domain.

In the area of direct broadcasting, Chile has unswervingly maintained that the free dissemination of information facilitated by these activities and the sovereign right of States to preserve their social, political, cultural and economic values are not mutually exclusive principles. Rather, they could be compatible in the light of the general principle of international co-operation, which is recognized as the corner-stone of the development and use of direct broadcasting from satellites, a principle sufficiently recognized in 1975. Great progress in this connexion is represented by the initiative of the United States of America in accepting that the establishment of the system should be accompanied by consultations among the States concerned.

However, Chile has stressed the need to specify the contents and scope of the consultations, which cannot sidestep the issue of the consent of the receiving State or fail to provide for participation in the respective programmes.

In Chile's view, neither direct television broadcasting nor other, traditional methods can be used by certain States to interfere in the internal affairs of other States or to attack them. In this connexion, what is at stake is the principle of non-interference, whose importance the Chilean Government has traditionally and steadfastly maintained.

(Mr. Tassara-Jiménez, Chile)

Chile is a party to the International Convention concerning the Use of Broadcasting in the Cause of Peace signed in Geneva on 23 September 1936, which entered into force on2 April 1938. My Government therefore regrets that that instrument has not obtained a satisfactory number of ratifications and that some reservations that have been formulated, including some by developing countries, rendering illusory the full applicability of the Convention.

In this context, my country deems it of interest to draw attention to the statement of the representative of Canada at the Committee's last session, in which he said that those States which plan direct television broadcasting should obtain permission from the receiving State.

As regards the remote sensing of the earth from space, the Chilean position is contained in the draft treaty on the remote sensing of natural resources by space technology initiated by Argentina and Brazil in 1974 and subsequently sponsored by my country and other Latin American countries.

Moreover, my delegation would like on this occasion to announce that Chile has become a party to the Convention on International Liability for Damage Caused by Space Objects, opened for signature on 29 March 1972, with the deposit of the relevant instrument. That Convention has become a law of the Republic through its promulgation in the Diario Oficial dated 22 March 1977.

With respect to scientific and technical matters, specifically regarding the scientific aspects of remote sensing, my delegation wishes in the general debate to say that the information provided to the United Nations by my Government in relation to the installation for the reception of LANDSAT images in Chile was provided subject to the relevant governmental approval.

Finally, in relation to the question of convening a United Nations conference on space applications, my Government has in document A/AC.105/142/Add.8 affirmed that it considers it necessary to convene the conference in the near future but not before 1978, at United Nations Headquarters in New York. That conference would have the important mission of objectively setting forth the applications of space technology for developing countries, particularly the application of remote sensing to the study of natural resources; of establishing a training programme so that the technical staff of developing countries may interpret and effectively apply the information provided by national-resources research satellites; to examine future

(Mr. Tassara-Jiménez, Chile)

LANDSAT programmes or similar programmes to determine whether, from the standpoint of cost-benefit analysis, the installation of new real-time receiving stations is worthxwhile. Moreover, my country believes that the conference should include political and legal subjects, so as to give final momentum to the elaboration of a legal régime regulating the activities of States in outer space.

Mr. MACAULAY (Nigeria): Mr. Chairman, please permit me to convey to you, and, through you, to the officers of the Committee, the apologies of my Ambassador, who has been called away to another meeting at rather short notice.

The Nigerian delegation associates itself with all the warm expressions of appreciation for the excellent arrangements made by the Government of Austria to facilitate this session of our Committee. The inspiring tone for the twentieth-anniversary observance of the Committee. My delegation particularly appreciates the personal appearance of the President, a further confirmation of the abiding interest of the President personally and of the Government of Austria in the furtherance of international relations through multilateral co-operation.

It is only 20 years since the major breakthrough into what was hitherto considered the realm of science fiction. Within the relatively short period since the first Sputnik was launched into orbit, the advances in space exploration have been tremendous. So also has been the progress made by the United Nations through the instrumentality of this Committee in promoting international co-operation in this new frontier of knowledge.

(Mr. Macaulay, Nigeria)

My delegation looks forward to further progress by the conclusion of work on the several draft instruments being considered. Towards this end, we pledge our co-operation with you, Sir, and all members of the Committee.

As we will have the opportunity to comment later in the discussion of the reports of the two Sub-Committees, we shall at this stage confine ourselves to making a few general remarks on the main issues before the Committee.

On the draft treaty relating to the moon, my delegation believes that there is need to recognize, for formulating a treaty on the moon, the basic interest of all mankind not only in the moon and other celestial bodies but also in the resources that may be available. This, in effect, entails a need to devise means of ensuring that benefits that may accrue from exploratory activities, as well as exploitation of resources, can be enjoyed by all mankind. The definition of resources as given yesterday by COSPAR has further reinforced the conviction of my delegation that man can develop the technology to harness the possible benefits from the moon. The concept of common heritage which has been accepted in another context ought to be applicable in this case. We do recognize, of course, that there would be need to continue to examine the entire spectrum of shared responsibilities in, and equitable distribution of, exploitation of the resources of the moon and other celestial bodies. The suggestion that a separate optional protocol as an adjunct to the main treaty could be considered before exploitation becomes feasible is one that ~~ought to~~ be thoroughly discussed in this parent body.

As far as work on the principles governing direct broadcasting by satellite is concerned, my delegation shares the optimism expressed in the Legal Sub-Committee as well as in the many statements that have preceded mine, that with a sustained spirit of accommodation we may soon reach agreement.

This is not to underestimate the divergence of views which still prevails on some important aspects. For instance, the ITU Agreement and Plan adopted in January-February 1977 has dealt with some aspects of the technical operation of direct broadcasting by satellite, to the extent that some have even implied that this Agreement has rendered unnecessary further work in this Committee. My delegation, of course, recognizes the importance of the ITU Agreement, particularly as Nigeria subscribed to it and as it has already been designed to cover the area of Africa. Nevertheless, we believe that a technical agreement of this

(Mr. Macaulay, Nigeria)

nature has not obviated the need for continued work on an all-embracing instrument which would take care, as well, of the legal and political aspects of DBS. In this respect, my delegation finds very interesting the proposal jointly submitted by Canada and Sweden, and we hope at the appropriate time to comment in greater detail on it.

My delegation is particularly interested in remote sensing activities, inasmuch as the primary base for economic development in all developing countries lies in their natural resources. However, this important information is generally not available because of a lack of sufficient knowledge about the nature, quantity and location of such natural resources. Traditionally, this has been acquired from different sources, gathered by a variety of means and often maintained in separate agencies. For this reason, planners find difficulty in incorporating current and accurate information and environmental factors in their planning processes towards better development planning and resource management. In this respect, we think the principal resource sectors about which information is needed comprise weather, water, soils, crops and vegetation, minerals, energy, cartography, land use, urban and regional planning, demography, environmental protection, marine resources, disaster warning and assessment, etc.

In this context, my delegation wishes to draw particular attention to the activities within the African region in developing co-operation in the area of remote sensing. Reference has been made in the course of this session to the conference held under the auspices of the Economic Commission for Africa, which led to the establishment of an African Remote Sensing Council. My delegation is particularly gratified that it will have the opportunity of making a positive contribution to this regional co-operative effort through the establishment of one of the Regional Training and User Assistance Centres in Ile-Ife in Nigeria.

I should also make reference here to the observation made during the African Regional Conference organized by ECA that the two remote-sensing ground receiving stations -- one located in Kinshasa, Zaire, and the other proposed for Ouagadougou, Upper Volta, might not provide adequate coverage for the entire region of Africa. Nigeria is particularly anxious that the benefits to be derived from these receiving stations can be enjoyed without any further delay, and it is seriously considering, therefore, the establishment of a ground receiving

(Mr. Macaulay, Nigeria)

and data-processing centre. It is our hope that such a centre will fill the present vacuum in our part of Africa. Nigeria has already installed two pieces of automatic data-processing equipment for reception of weather information from satellites.

Remote sensing itself presents for developing countries in particular several problems which have been the subject of discussion. The technology for space exploration being limited to very few countries, the interests of the rest of us will have to be protected. And even if we may appear impatient, there is no intention of hampering the advance of science. Thus those with the technology have to recognize the natural interest of other countries in being aware of the activities of general and in particular of special concern to them. Naturally, the data gathered over the territory of a particular country should be of special interest to that country and should be automatically made available to it. In the same spirit, such data of special interest should not be made available to third parties without the consent of the "sensed" State. The determination as to what body of information can be considered sensitive or of special interest, and what body can be of universal dissemination, can to good effect form one of the subjects to be studied in depth by the Secretariat. My delegation wishes to reiterate its view that respect for State sovereignty in the context of remote sensing must include protection from disclosure of sensitive information regarding resources to third parties without the expressed consent of the "sensed" State.

The co-ordinating role of the United Nations in space activities will continue to be important if mankind as a whole is to derive benefits from these activities. My delegation will therefore emphasize the importance of the work of our Committee, as well as the very useful support which the Committee has received from the Outer Space Affairs Division of the Secretariat. We appreciate the constraints on that Division and the possible need for a more elaborate apparatus to be able to cope with all the ramifications of space activities.

(Mr. Macaulay, Nigeria)

Nevertheless, we think that a final decision on the form the expansion should take will have to await the results of two projected conferences, namely, the United Nations Conference on Science and Technology, scheduled for 1979, and the proposed world conference on outer space. While speaking of the latter, my delegation would also say that it recognizes the need for such a conference but is not in a position to suggest any definite date at this stage. In this respect we have indeed noted the suggestion that the conference be held in 1980.

Mr. Chairman, in conclusion, I should like to pay you a well deserved tribute, for your untiring efforts and your wise leadership of this Committee. You have endeared yourself to all the members of the Committee, and we are confident that our deliberations will, under your guidance, be channelled to fruitful results.

Mr. RUPOFSKY (Austria): The Austrian delegation takes particular pleasure in participating in this anniversary session of the Committee on the Peaceful Uses of Outer Space. We wish to express the deep satisfaction of the Austrian Government and people at being able to welcome in Vienna the members of the Committee, the other delegations and the staff of the Outer Space Affairs Division of the United Nations Secretariat. We are confident that this session will give us an opportunity for an interesting exchange of views on the achievements of the past and our current work, as well as the challenging tasks of the future.

Since its inception the Committee has been guided by a spirit of compromise, mutual understanding and co-operation. We have reason to be proud of the work which we have accomplished in the course of these years: Four conventions were elaborated and have entered into force, among them the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, the tenth anniversary of which we are now commemorating. The Committee has before it a draft resolution proposed by the Legal Sub-Committee relating to this fundamental instrument of space law. The Austrian delegation whole-heartedly endorses its approval by our Committee with a view to final adoption by the General Assembly at its forthcoming session.

(Mr. Rudofsky, Austria)

A special tribute is due to the Chairman of the Legal Sub-Committee, Ambassador Wyzner, whose extraordinary skill and diligent leadership over the past 10 years have so greatly contributed to the progress achieved in the development of space law. We are pleased to note that this contribution has been applauded in a resolution adopted by that Sub-Committee at its last meeting. We should also like to take this opportunity to express our deep appreciation to Miss Kwen Chen, the Secretary of the Sub-Committee, who has so excellently served in this function for 15 years and whose duties have, much to our regret, ended this year.

The progressive development of rules of international law is certainly one of the main functions and achievements of our Committee. In addition, great progress has been made in the promotion of international co-operation and in the expansion of the benefits to be derived from space technology and its application by all countries irrespective of the level of their development. In this context, we wish to commend in particular the work which the Expert on Space Applications, Mr. Murthy, has accomplished within the framework of the United Nations programme. Numerous activities designed to promote the utilization of space technology in various fields are also being carried out by the specialized agencies, as well as by Governments, under the sponsorship and with the assistance of the United Nations and its organs. These programmes must, in our view, continue to be actively pursued and expanded in order to ensure that all countries, in particular the developing nations, benefit to the maximum extent possible from the unique opportunities offered by space technology.

In the context of practical space programmes, I should like briefly to elaborate on the experiences and projects of my own country, Austria.

Our national activities have been extended by the transformation in May 1976 of the Austrian Space Agency, a governmental body, into the Austrian Solar and Space Agency (ASSA). As far as the space activities are concerned, the SPACELAB project of the European Space Agency (ESA) is one of the most important international programmes in which Austria is involved. The effort is not only in the design and manufacturing but also in the utilization of the SPACELAB.

(Mr. Rudofsky, Austria)

Several proposals for the first SPACELAB payload have been forwarded to the European Space Agency (ESA). Three Austrian experiments have been accepted for the first mission, two on material sciences and one in the area of plasma physics in the earth's magnetosphere. Eleven Austrian candidates are eager to be chosen to fly on board the first SPACELAB missions as payload specialists.

For a small country like Austria, international and bilateral co-operation is vital in the area of such complex studies and projects as space research and applications. Bilateral co-operation agreements have been signed with national space research centres in France, Norway, Sweden and Switzerland.

The national activities can be divided into four major areas: space sciences; telecommunications; remote sensing; and material sciences.

The great progress in the field of communications satellites demonstrated recently by ATS-6 and CTS will be continued this year by the launching of the first European communication satellite, OTS.

Austria has carried out absorption measurements for COMSAT during the time ATS-6 could be received in Europe. These propagation tests, together with meteorological data collection, provide important information for the design of future communication systems utilizing the frequency range above 10 GHz. In December 1976 a satellite receiving test station for transmission experiments in this frequency range was put into operation. Two further stations -- one for 14 and 11 GHz and the other for INTELSAT frequencies -- are being planned for the near future.

Remote sensing, which is considered to be of great benefit for our future, is currently performed by aeroplanes -- photographic and multispectral scanner imagery -- as well as by the evaluation of LANDSAT data. The main interest at present is the observation and protection of the environment -- land, water, lower atmosphere -- and the use of remote sensing data for hydroelectric power plant operation (water run-off in the alpine region).

Looking back at the current year, the Austrian delegation is gratified to note that the work done by our two Sub-Committees has been especially fruitful and productive. We wish to express our sincere appreciation to the Chairmen of the Sub-Committees for their leadership, which has made such positive and encouraging results possible.

(Mr. Rudofsky, Austria)

The Scientific and Technical Sub-Committee succeeded in examining in depth the question of the proper definition of "data" and "information" in remote sensing, which should benefit the Legal Sub-Committee in its deliberations on this technology. The thorough discussion on classification of data, as well as the study to be prepared by the Secretariat on this subject, should enable the Scientific and Technical Sub-Committee further to elaborate on this important question at its next session.

(Mr. Rudofsky, Austria)

Another noteworthy result was attained by that Sub-Committee as regards a co-ordinating role for the United Nations in the area of remote sensing, a matter to which my delegation attaches particular importance. The creation and enlargement of two co-ordinating centres have been recommended. We feel that as remote-sensing technology develops and its application is expanded, the question of effective co-ordination will continue to gain significance and that therefore further discussion on this matter will be essential, particularly with a view to the future operational phase of that activity.

Another matter dealt with in the Scientific and Technical Sub-Committee concerns the holding of a possible United Nations conference on outer space matters. The Austrian delegation favours the holding of such a conference, which would, inter alia, greatly enhance the general awareness of the importance of the exploration and use of space for the solution of many terrestrial problems. We are gratified that this question has been included, as a separate item, in the agenda of our present meeting, and we endorse the idea of establishing a small task force or ad hoc working group in order to discuss extra-sessionally all the factors involved in the holding of such a conference. In our opinion, such a group should consist of member States reflecting the various points of view on the subject.

The Legal Sub-Committee, for its part, made substantive progress in the elaboration of principles relating to remote sensing of the earth from space and to direct television broadcasting via satellites. On the basis of common elements set out the previous year, as well as in working papers submitted by delegations, the Legal Sub-Committee was able to add six new, basically agreed draft principles to the five already existing principles on remote sensing. A number of other questions remain to be solved, but we are confident that rapid progress will continue to be made by the Legal Sub-Committee at the next session.

As regards the set of principles applicable to direct television broadcasts via satellites, the progress achieved is especially noteworthy. Indeed, the Sub-Committee, encouraged by that development, was of the opinion that those principles could be finalized by our Committee at this session. The Austrian

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delegation believes that every effort should be made to achieve that aim and it therefore welcomes the establishment of a working group to discuss and possibly to solve the few outstanding questions on the basis of the tentative formulations contained in the report of the Chairman of Working Group II.

The Austrian delegation regrets that no substantive progress could be achieved by the Legal Sub-Committee as concerns the completion of a draft treaty relating to the moon. We find this all the more deplorable since the major part of such a draft was already formulated and approved by the Sub-Committee five years ago, and we continue to hope that, in a spirit of compromise, the few outstanding differences of opinion may be resolved in the near future.

As I pointed out at the beginning of my statement, this session should also allow us an opportunity to discuss some of the challenges of the future. The Austrian delegation feels that it is essential for our efficiency and for the success of our endeavours that we continue to keep abreast of new technology and of applications of space science with regard to both their political and legal implications and their technological and organizational aspects in order that the United Nations may fulfil its role as a focal point of international co-operation in the exploration and use of outer space for peaceful purposes. Such challenges of the not-so-distant future were indicated to us by you, Mr. Chairman, the other day -- solar power stations in space to help solve the pressing problem of securing sufficient energy; space transportation, the need for effective and equitable use of the geostationary orbit; contact with extraterrestrial civilizations; the question of manufacturing in an outer space environment, and so forth. The Austrian delegation has listened and will continue to listen with great interest to the observations of other delegations on the future work of the Committee and its Sub-Committees and hopes that as a result we may be in a position to entrust the Sub-Committees with new important tasks.

Finally, my delegation pledges its full support to the successful outcome of this anniversary meeting of the Committee and reserves more detailed comments on the subjects before us for a later stage.

The meeting rose at 6 p.m.