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Chairman: Mr. Otto R. BORCH (Denmark).

AGENDA ITEMS 30 AND 31 (continued)

International co-operation in the peaceful uses of outer space: report of the Committee on the Peaceful Uses of Outer Space (A/9020 and Corr.1, A/C.1/L.669)

Preparation of an international convention on principles governing the use by States of artificial earth satellites for direct television broadcasting: report of the Committee on the Peaceful Uses of Outer Space (A/9020 and Corr.1, A/C.1/L.669)

1. Mr. GÜVEN (Turkey) (*interpretation from French*): The Turkish delegation would, first of all, like to offer its congratulations to the Permanent Representative of Austria, Ambassador Jankowitsch, for the constructive and comprehensive report of the Committee on the Peaceful Uses of Outer Space [A/9020 and Corr.1], of which he is Chairman. We should also like to thank him for the objectivity and clarity of his report and the practical sense that he displayed in his work. Thanks to our deliberations on the various items relating to outer space in our Committee, the interests of the international community have appeared in a more proper perspective. It is time, in our view, to make a realistic evaluation of the situation in order to do what is necessary to ensure the co-ordination of national policies with regard to the various questions, particularly the exploration and use of the moon and other celestial bodies, the registration of objects launched into outer space, remote sensing of the earth by satellite, exchange of information, direct television broadcasting by satellites and the principles to govern the use by States of artificial satellites for direct television broadcasting.

2. The position of the Turkish Government has been repeatedly set forth ever since the creation of the Committee on the Peaceful Uses of Outer Space. I shall therefore not dwell here in detail on our views on the questions before the Committee. I shall confine myself to saying that, in our view, outer space should in no way be used as an instrument for the political, economic or

military domination of any country. The protection and exploitation of its resources should be for the benefit of all mankind. Our hope is that the system to be established to govern activities in outer space will be placed in the service of the international community, peace and the common welfare.

3. Although my country is not a member of the Outer Space Committee, it has always attached great importance to the Committee's work and followed it closely. In this regard, I should like to make a suggestion. We think that it would be useful if its members kept non-members informed from time to time so as to enable them more easily to make their contribution to the Committee's work.

4. The Turkish delegation also agrees with the views expressed here with regard to increasing the membership of the Committee and its subsidiary bodies. The number of the members of the Committee has not changed since 1961, at which time the membership was increased from 24 to 28 to ensure more equitable geographical distribution. At that time there were only 80 States Members of the United Nations; at present there are 55 more States Members. That reason alone makes it just and logical, in our view, to increase without any further delay the membership of the Committee on an equitable geographical basis, that is to say, taking into account the interests of the countries of the various regional groups. That is why we are ready to support any suggestion that may result in a compromise on this subject. Let me also add that, when the time comes to increase the Committee's membership, it would be more equitable and just, it seems to us, to give more consideration to the developing countries of each region—without, of course, denying the need to have space States participate in the Committee's work.

5. As suggested by the representative of Romania at the 1981st meeting, it might perhaps be better to think of appropriate measures to make possible the participation of all interested States in the Committee on the Peaceful Uses of Outer Space, since the purposes and activities of that Committee are to improve our knowledge of the universe and to put science and modern technology at the service of the world community.

6. Mr. BRANKOVIĆ (Yugoslavia): The report of the Committee on the Peaceful Uses of Outer Space which is before us clearly shows that between the twenty-seventh and twenty-eighth sessions of the General Assembly the Committee has achieved considerable results with regard to the adoption of legal regulations concerning outer space. Without wishing to minimize the importance of the Committee's work on other issues, I should like to lay stress on the progress achieved in regard to the codification of the draft treaty relating to the Moon and the draft

convention on registration of objects launched into outer space. My delegation believes that the Committee will rapidly complete its work on those documents and thereby take a very important step towards the attainment of one of the basic objectives, namely, the use of outer space for peaceful purposes.

7. I wish to emphasize, in particular, the dedication and exceptional efforts exerted by the Chairman of the Committee, Mr. Jankowitsch, which had a direct, positive impact on the Committee's work and on the results achieved; for this, my delegation wishes to pay tribute to Mr. Jankowitsch.

8. My delegation has already stated on several occasions its views and positions of principle on questions of outer space, underlining at the same time the importance and the urgency of solving the key problems relating to the peaceful uses of outer space. May I now briefly draw your attention to some of them.

9. There is no longer any doubt that the regulation of the peaceful uses of outer space and of space research is in the interest of the international community as a whole and that as many countries as possible should take part in solving those problems. The rapid progress of science and space technology has created unheard-of possibilities for the concrete solution of a number of problems, which until recently had been within the realm of theoretical considerations, and has thereby opened great prospects for the establishment of fruitful international co-operation.

10. Generally accepted international co-operation in this field should be based on the following principles: not to allow outer space to become a zone of conflict and competition between the Powers; to ensure that the results of space research will benefit all countries, regardless of their level of development of scientific contribution, and primarily the developing countries; and that action regulating research and the uses of outer space is co-ordinated through the United Nations, which should be the centre of all activities. In that way our Organization would obtain the place that belongs to it in initiating and orienting co-operation in a field that is gaining increasing importance for the future of international relations.

11. The progress achieved so far with regard to the elaboration of a treaty relating to the Moon is proof of the existence of good will to succeed in that enterprise. A basis for compromise already exists and there will probably be no difficulty in achieving and adopting compromise solutions. In this connexion, my delegation attaches particular importance to the régime of natural resources and wishes to emphasize its firm attachment to the principle of common heritage. Any other solution would be a retrograde step in comparison with what has already been achieved in other fields of international life.

12. There is no doubt that one of the important issues is the elaboration of a convention on the registration of objects launched into outer space. It is obvious that, for the effective implementation of the provisions of such a convention, as well as of other international agreements, it is indispensable to know exactly to whom the object that caused the damage belongs and the basic characteristics of

the object. The need for regulating the question of registration of objects launched into outer space is becoming more and more urgent, both because of the increased number of objects and because of the extension of the "space club" to include an increasing number of countries. Registration, accompanied by the submission of as much data as possible, would assist the international community in having a clearer insight into the uses of those objects.

13. Regarding the practical results achieved with respect to the application of space technology, it is certain that the most spectacular progress so far has been registered in the field of telecommunications. At the same time, it has brought to the forefront certain questions involving international law, questions to which replies will have to be found, the more so as the development of telecommunications has cut into some classical postulates of international law as applied to "earth" telecommunications.

14. I think I am expressing the view of the majority in saying that the use of artificial earth satellites for direct radio and television broadcasting is at present attracting the greatest attention. Such a possibility raises a whole complex of legal, political and other problems. These are questions of sovereignty and of the necessity to protect national cultures and economies and to contribute to the general education of the population, on the one hand, and the intensification of international exchanges and the need for ensuring the free flow of objective information, on the other. The use of artificial earth satellites for the direct television broadcasting of educational programmes is of particular importance to developing countries, which are not in a position to develop their own television networks, particularly in sparsely populated areas. Mention should be made of the use of artificial earth satellites by the various specialized agencies of the United Nations, such as UNESCO and others.

15. Primarily interested in this matter are the small and very small countries, potential recipients of such broadcasts, which cannot remain indifferent to the nature of broadcasts addressed to their populations, particularly those received on television sets in private homes. It seems to us desirable, therefore, to elaborate a convention which proceeds from the need for international co-operation and the role of the free flow of objective information within the framework of such co-operation, and also from the need to protect national cultures and education from distorted views of the world spread by foreign agencies and from interference in the internal affairs of other countries.

16. We deem it necessary that, without neglecting questions of principle, the Committee should direct its future work primarily towards the practical problems of this world. Those are, for instance, the use of artificial earth satellites for meteorological, geological, and other research. All these questions are closely linked with the development of the world as a whole and the development of the developing countries in particular. Without excluding, of course, co-operation of a bilateral or a regional character. It is undoubtedly of the greatest importance to the international community as a whole, and in particular to countries lacking the necessary technology and experts, that the activities regarding these questions should be channelled through the United Nations and linked with

kindred problems, such as that of protection of the human environment and problems relating to the development of the underdeveloped parts of the world.

17. It is indispensable, above all, to extend appropriate assistance to the developing countries to enable them to make use of the achievements of science. In this respect, the development of techniques for the remote sensing of the earth by satellites, which will make it possible to follow developments not only in the atmosphere but also on the ground and underground and to follow various natural phenomena, is of great importance. The benefits to be derived from such development by the developing countries are obvious. In this connexion it is, of course, necessary to protect the sovereign rights of States and to prevent the abusive use of the data obtained, that is, it is necessary to respect the norms of international law and to organize co-operation in a way that will prove to be beneficial both to the international community and to the developing countries themselves.

18. The great achievements of science in outer space will promote the creation of new relations in the world only to the extent to which they facilitate the solution of one of the burning problems of the world, that of development, if they contribute towards narrowing the gap between the developed and the developing countries. We should like, therefore, to reiterate an idea that we have already mentioned on several occasions, namely, that it is necessary to consider the question of including a larger number of developing countries in the work of the Committee on the Peaceful Uses of Outer Space. In this connexion my delegation believes that the membership of the Committee should be increased in such a way as to ensure a more equitable geographical representation of all regions and in particular that the number of developing countries taking an active part in its work should be increased.

19. Before concluding I wish to stress that the draft resolution in document A/C.1/L.669 encompasses, on the whole, all that in the present phase of activity we can expect the Committee to accomplish in the near future, especially with regard to what are referred to in the text as "matters of the highest priority". My delegation will vote in favour of the draft resolution.

20. Mr. PALACIOS TREVIÑO (Mexico) (*interpretation from Spanish*): My delegation wishes to speak at this moment specifically on the report of the Committee on the Peaceful Uses of Outer Space and to make some comments, if we may be allowed to do so, on certain points of special interest to us.

21. In its resolution 2915 (XXVII) of 9 November 1972, the General Assembly requested the Legal Sub-Committee to do all in its power to complete, at the 28th session, the draft treaty relating to the moon and the draft convention on registration of objects launched into outer space.

22. As far as the treaty regarding the Moon is concerned, my delegation understands that the most important problem still pending is that of natural resources, which we believe can be satisfactorily solved only if the régime to be established takes as its point of departure the principle that the moon and its resources are the common heritage of

mankind and, therefore, must be the subject of equal participation by all nations both in exploitation and in the benefits to be derived therefrom, bearing in mind particularly the needs of developing countries.

23. In the meantime, we believe that until this is settled no activity should be undertaken that is incompatible with that régime, the basis of which is the principle that the Moon and its resources are the common heritage of mankind.

24. Furthermore, we consider that the draft treaty relating to the Moon should be broadened to include the other celestial bodies because, although some delegations have objected to this on the grounds that we still do not know enough about them, we consider that this is hardly sufficient reason not to state that they too are the common heritage of mankind.

25. With regard to the draft convention on registration of objects launched into outer space, the Mexican delegation would like once again to stress that we must conclude a convention on this subject as soon as possible and thus complete the other three international instruments on space questions that have already been accepted. My delegation is ready to give its full co-operation in this task.

26. However, the text to be drafted must represent true progress over the present regulations on the matter, and to that end we deem it imperative that a binding system of registration and markings should be adopted allowing an effective listing of objects launched into outer space and thus permitting the definition of responsibilities in case of damage. For this reason, and bearing in mind the fact that there has been no consensus on the compulsory nature of the markings in the course of the meetings of the Committee held from 25 June to 6 July this year, the Mexican delegation requested that the draft convention be referred back to the Legal Sub-Committee to be dealt with at the next session with the highest priority. My delegation hopes that the Legal Sub-Committee will be able soon to complete its drafting of the international instruments to which I have referred so that next year part of its time can be devoted to the study of questions relating to the application of space technology, whose regulation becomes daily more urgent in view of the imminence of its use.

27. With regard to the preparation of principles governing the use by States of artificial earth satellites for direct television broadcasting, with a view to arriving at an international agreement or agreements in accordance with General Assembly resolution 2916 (XXVII), my delegation is aware of the fact that a number of difficult problems have arisen, problems which the Sub-Committee will have to tackle and which will be resolved only if the norms to be adopted provide for the right of all countries to participate in this activity on the basis of equality and respect for sovereignty, on the one hand, and for true international co-operation, on the other. The benefits which peoples can derive from this activity are undeniable if it is placed at the service of the highest human values; but the dangers inherent in this activity are also undeniable if it is inadequately regulated. We believe that the material already on hand constitutes a good basis on which to start regulating this matter.

28. I should now like very briefly to refer to the request of the Working Group on remote sensing of the earth by satellite that the Legal Sub-Committee should give it the benefit of its views on the legal consequences of the study of resources through remote sensing satellites, to which paragraph 29 of the Committee's report refers.

29. First of all, my delegation would like to add its voice to those who have expressed the need for the Sub-Committee to deal with this problem, since State activity in this field is already a fact. In fact, my country has already participated in various research programmes through co-operation agreements, and I should merely like to express the hope that we shall very soon have international regulations governing these activities, regulations which must be based on the principle of the sovereignty of States over their territory and natural resources.

30. Finally, I should like to speak on the question relating to the enlargement of the membership of the Committee. I should like to express our whole-hearted support for the concept that as soon as possible there be a proportionate increase in the number of the members of the Committee, appointment to which must be on the basis of the principle of adequate geographic representation.

31. Mr. ROSE (German Democratic Republic): The report submitted by the Committee on the Peaceful Uses of Outer Space is extremely informative and gives a good survey of the activities undertaken so far within the United Nations with regard to the peaceful exploration and uses of outer space. This is of high value in particular for those States which so far have not been able to take part in the discussion of these problems.

32. The report reflects also the excellent chairmanship of the Committee and work of the other officers of the Committee.

33. The German Democratic Republic follows with great interest the progress made in the exploration of outer space and, together with other socialist States, within the framework of INTERSPUTNIK takes part in practical measures according to its abilities.

34. We are also guided by, and take into account, the recognition that space research increasingly influences other fields of science and technology.

35. The German Democratic Republic has proved its positive and constructive attitude on world-wide co-operation regarding outer space not least by having become a party to all universal treaties concluded on the subject. It has acceded to the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies [*resolution 2222 (XXI), annex*], the 1968 Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space [*resolution 2345 (XXII), annex*] and the 1972 Convention on International Liability for Damage Caused by Space Objects [*resolution 2777 (XXVI), annex*].

36. In the opinion of my delegation, it is essential to incorporate the international co-operation of States regard-

ing outer space in the process of political détente and the strengthening of international security. This is all the more necessary since the co-operation of different States in the exploration and use of outer space quite essentially depends on a permanent improvement of the international situation.

37. Therefore, any legal regulation must take into account the fundamental aim that the activities of States in outer space should serve exclusively peaceful purposes.

38. For the mutual behaviour of States in outer space, only the basic rules of international law as contained in the Charter of the United Nations can be valid. Here we think in particular of the principle of respect for sovereignty, of non-interference in the internal affairs of other States and of the prohibition of the use of force in international relations.

39. The agreements on outer space concluded so far pay regard to these basic rules, and we deem it indispensable that these same rules should apply also in the agreements to be concluded in the future. In this sense the German Democratic Republic, being now a Member of the United Nations, will make its contribution to the further elaboration of legal regulations for outer space.

40. In its statement of 7 September 1971 addressed to the Secretary-General of the United Nations,<sup>1</sup> the German Democratic Republic had occasion to approve the elaboration of an international treaty relating to the Moon as an urgent and necessary step towards the formulation of space law.

41. In the meantime, remarkable progress has been made in this direction. The urgency of this matter, however, requires increased efforts so that the treaty will be ready for signature by 1974. As a party to the 1967 Treaty, we support the position of those States which, with regard to the Moon and its legal norms that are to be created, proceed from the established international status of the natural earth satellite.

42. The application of this basic principle with regard to the treaty on the Moon should make it possible to solve problems still in dispute in a form acceptable to all States and thus to promote scientific and technological progress by international law.

43. As a socialist State the German Democratic Republic always supports long-range progressive development of international law. However, this requires, in any case, a realistic approach. The different levels of advancement and the quantity of findings reached in natural science and technology may not be disregarded entirely. Therefore, in our view, the question is to solve problems ripe for solution without unnecessary delay in the interest of the peaceful co-operation of States in outer space. Also in this connexion, general experience shows that complicated international problems should be solved step by step.

44. With regard to space research, there already exists a field of practical application in which many States are

<sup>1</sup> See A/C.1/1017 of 9 November 1971.

greatly interested. We are thinking of the use of satellites for the various forms of news communication. This achievement of the human mind offers great possibilities for the promotion of international understanding. Its implementation, however, requires the strict application of the generally recognized rules of international law.

45. Guided by this idea, the German Democratic Republic has welcomed the initiative of the Union of Soviet Socialist Republics to agree upon rules to be applied by States in using artificial earth satellites for direct television broadcasting.

46. By the elaboration and adoption of an appropriate agreement, it should be guaranteed that scientific and technological progress should be placed exclusively in the service of peaceful international co-operation between States for the benefit of the peoples, and that its misuse, aimed at interference in the affairs of other States, should not be tolerated.

47. As for draft resolution A/C.1/L.669, it contains, in our view, all the questions which should be items on the agenda of the Committee. The priorities are also pointed out clearly enough. My delegation supports the demands contained in operative paragraph 5 to give supreme priority to the treaty relating to the Moon.

48. Special attention should furthermore be paid to the elaboration of principles governing the use of television satellites for direct broadcasting, as within a measurable time it can be expected that the technical conditions for this will be created. Therefore, we also approve particularly of the stipulation in operative paragraph 6 of the draft resolution.

49. Finally, may I underline once again the special interest of the German Democratic Republic in the work of the Committee on the Peaceful Uses of Outer Space and our readiness to take part in its activities.

50. Mr. CHARVET (France) (*interpretation from French*): The French delegation approves of the report of the Space Committee and congratulates its Chairman, Mr. Jankowitsch, who, with his genial authority and remarkable competence in dealing with the problems before the Committee, presided over our deliberations, which he has summarized in a very clear and precise text that will be of the greatest usefulness to States and to the growing number of specialists who are interested in the problems of outer space. We should like to congratulate also all those who this year have improved, through new experiments and new exploits, our knowledge of outer space.

51. At this very moment, a man-made device is hurtling through space in the vicinity of Jupiter and is about to pursue its adventures beyond our solar system. This fact alone is a measure of the fascinating rapidity with which we have witnessed developments in space technology ever since the time when United Nations Member States decided to set up a Committee on the Peaceful Uses of Outer Space. This rapidity of technological development justifies the traditional position of my country, which, throughout the sessions devoted to space, has ceaselessly drawn attention to the fact that space law should be developed at an equal

rate if we want to prevent a situation in which the advent of new space technology, instead of benefiting humanity, as we all wish, becomes, in fact, a source of tension among nations.

52. This concern seems to us particularly justified at this time when, after the remarkable explorations of the moon, the use of space is more and more being oriented towards such activities as, for example, direct broadcasting by satellite and remote sensing of earth resources—activities which are of prime interest to our planet and all its inhabitants, including those Powers which do not yet possess the means of engaging in space activities.

53. The great problem that will occupy our attention in the years to come is that of reconciling the principle of liberty enshrined in the Outer Space Treaty<sup>2</sup> with that of the sovereignty of States, which is one of the pillars of traditional international law. We attach equal importance to both principles, which will have to be reconciled. Of course, this is a difficult problem, but we have no doubt that the undertaking to bring about international co-operation, to which we have expressly subscribed in the Outer Space Treaty, will enable us to overcome all difficulties.

54. At this stage of our debate, the French delegation will confine its statement to a few brief comments on questions the solution of which seems to be the most urgent. Turning first to the treaty regarding the Moon, our position, which is moderate and realistic, has been set forth so often that I think it unnecessary to revert to it here. I shall, therefore, only confirm that we are ready to support any compromises that emerge, because we consider that the Legal Sub-Committee should conclude its work on this important problem as soon as possible so as to proceed to a prompt examination of other urgent questions of even greater concern to the whole international community.

55. The same may be said for the draft convention on registration of objects launched into outer space, on which the Committee has spent even more time because, if I am not mistaken, it was in 1968 that, for the first time, the matter was raised in the Committee on the initiative of the French delegation. Several speakers have expressed their disappointment here at the Sub-Committee's delay in arriving at a solution. We share this sense of disappointment, but, to be fair, we should also recall that at first Member States were sharply divided on the issue and that all the articles drafted so far bear eloquent testimony to the concrete results which can be achieved when a spirit of co-operation is shown.

56. All that remains to be done in order to complete this convention on the registration of space objects, is to draft a single article on the marking of those objects. The French delegation is more than ever convinced that the spirit of compromise and co-operation which it has shown, and which others, I hope, will also demonstrate, will make it possible for us, at the beginning of the next session of the Legal Sub-Committee, to arrive at the result which we have long been awaiting. This result is all the more desirable in

<sup>2</sup> Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (resolution 2222 (XXI) annex).

view of the growing pressure to have other urgent questions considered, such as that of direct broadcasting or remote sensing by satellites of the earth's resources, or even of the definition and the delimitation of space. These matters are essential if we want to know the real field of application of the convention on space responsibility which we recently adopted.

57. With regard to direct broadcasting, the position of France has not changed since May 1970, when it drew the attention of the Committee to the need to adopt as quickly as possible rules governing international activity in the matter, suggesting, to that end, principles which might be laid down in a possible international convention, the urgent need for which it emphasized.

58. In resolution 2916 (XXVII) of last year, the Assembly considered that these principles should be formulated before we attempted to draft one or more conventions. Pursuant to that resolution, Sweden and Canada have presented today a draft declaration of principles on direct broadcasting [see *A/AC.105/117, annex IV*]. By and large, my delegation approves of this declaration for two reasons: the first is that among its other merits, while confirming the principle of freedom, the draft does make adequate reference to respect for the sovereignty of States, an idea which we find in such varied texts as the French working paper of 1970 [*A/AC.105/83*], the draft convention submitted by the Soviet Union,<sup>3</sup> and even the UNESCO declaration [*A/AC.105/109*]. The second reason is that, since the adoption of the resolution to which I referred, the draft represents an essential stage if we want to arrive at a real solution, namely the stage of international regulation.

59. The French delegation has consistently maintained that regional conventions should flow out of a more general convention, valid for the international community as a whole. Now it would seem today that direct broadcasting will be developed first of all on a regional basis. That is therefore one more reason for us to adopt the Swedish-Canadian draft, because any regional development would have to conform to these principles, pending the international convention which nothing can replace and which must finally emerge. In other words, it is important that we bind ourselves by moral commitments as soon as possible before we can bind ourselves by formal commitments. This moral commitment is the more easily acceptable to us because we find in the Swedish-Canadian text most of the ideas which we should like to see included in a future convention.

60. That is why the French delegation would like to see the Sub-Committee start its consideration of this problem as soon as possible, for we attach to it the same urgency and the same order of priority as to the treaty relating to the Moon and the draft convention on registration of objects launched into outer space.

61. At the same time, my delegation hopes that technical considerations will not be raised to delay consideration of the juridical aspects of remote sensing of the earth by

satellite. We have had occasion to point out some principles which may be adopted on this subject, although we have not yet decided on our final position. We consider that consideration of the substance might begin at the next session of the Legal Sub-Committee if, as we hope, we can quickly complete the convention on the registration of space objects.

62. I shall not refer to the other points mentioned in the Committee's report, because we already had occasion to state our views. The most important point for us all is therefore to submit to the Assembly as soon as possible the juridical solutions required for the problems under study. A race against time has started between technology and law. We are falling behind in this and we must hurry if we want to safeguard international harmony. That is why my conclusion would be, in the First Committee, to appeal to all States members of the Outer Space Committee to conclude its work on the draft treaty on the moon and the draft convention on the registration of space objects as soon as it can and proceed to consider, in substance and without delay, other space problems which the international community is impatiently waiting for us to resolve.

63. Mr. OLSZÓWKA (Poland): I would start my statement by paying sincere tribute to the Chairman of the Committee on the Peaceful Uses of Outer Space, Ambassador Jankowitsch, for his fruitful leadership, and by congratulating the Secretariat's Outer Space Affairs Division for its excellent and effective work.

64. The Polish delegation wishes to join all those delegations which expressed in this Committee their highest appreciation to all the scientists, technicians and cosmonauts who have contributed so greatly to the exploration of outer space. My delegation wishes also to take this opportunity to congratulate the delegations of the Soviet Union and the United States on the recent spectacular achievements of their countries in the conquest of outer space.

65. In particular, we would like to convey our felicitations to the United States for the successful completion of the Skylab project and for the ambitious flight of the unmanned spacecraft Pioneer 10, and to the Soviet Union for its successful launching of the automatic stations Luna 20 and Luna 21, which brought to the surface of the moon the automatic self-propelled machine Lunokhod 2, and also for the successful manned space mission of the Soyuz spacecraft.

66. In Poland we have continued our co-operation within the framework of Intercosmos. Since Poland joined the INTERSPUTNIK system in 1971, its efforts in space communications have been directed towards constructing appropriate ground-base facilities. A site in central Poland has been chosen for a transmitting and receiving station, which is expected to be operational in 1974 or 1975.

67. This year, Poland, as well as the whole international community, has celebrated the 500th anniversary of the birth of the famous Polish astronomer and scholar Nicolaus Copernicus. While on the subject of this anniversary, I should like to express the profound satisfaction of the people of Poland over the way in which tribute has been

<sup>3</sup> Official Records of the General Assembly, Twenty-seventh Session, Annexes, agenda items 28, 29 and 37, document A/8771.

paid to the great astronomer in many countries of the world. In addition to many scientific events, such as conferences, symposia, lectures, seminars and exhibitions, the 500th year anniversary of Copernicus's birth was also celebrated by activities in space. On 21 August 1972, the United States launched the Copernicus orbiting astronomical observatory; and on 19 April 1973, the Union of Soviet Socialist Republics put into orbit its scientific research satellite Intercosmos-Copernicus-500, a joint mission by the Soviet Union, Poland and Czechoslovakia. At this juncture I should like to express to the Scientific and Technical Sub-Committee of the Outer Space Committee the highest appreciation of my delegation upon the adoption of the following paragraph in the report of its tenth session:

"The Scientific and Technical Sub-Committee noted with appreciation the way in which the 500th anniversary of the birth of Nicolaus Copernicus had found its reflection in space activities, in particular in launchings of two satellites named after the great Polish astronomer: one by the USSR, created in co-operation between scientists of the USSR and Poland, and another by the United States. There was a direct road leading from Copernicus's discovery to space exploration, a fact being widely commemorated all over the world in many scientific symposia, seminars and lectures. All this significantly contributed to the promotion of international scientific co-operation in the peaceful exploration of outer space." [A/AC.105/116, para. 9.]

68. Since we now have under discussion the draft resolution in document A/C.1/L.669, which was so ably presented at the 1979th meeting by the representative of Austria, my delegation wishes to suggest that the sponsors of the draft resolution include in it the text of the above-mentioned paragraph. Of course, the above text, if accepted, would have to be slightly redrafted in order to adjust it to the language of the draft resolution.

69. Now I would like to make a few comments on the report of the Committee on the Peaceful Uses of Outer Space and on some of the problems confronting the Committee during the current year.

70. In the view of my delegation, the Committee, although unable to agree on some important issues, has achieved substantial progress in its work.

71. Considerable progress has been achieved by the Legal Sub-Committee in the preparation of the treaty relating to the Moon and of the convention on registration of objects launched into outer space.

72. In particular, the draft treaty relating to the Moon has been agreed upon to a very great extent and the existing differences have now been substantially narrowed down. Unfortunately, some outstanding questions concerning this draft still remain to be solved, despite the strenuous efforts which were made in order to reconcile conflicting views

73. However, even the most difficult problems at issue, that is, the question of the scope of the treaty and of the legal régime of the Moon's natural resources, and the question of information to be furnished on missions to the Moon, could be resolved soon if certain members of the

Committee would adopt an attitude of greater compromise. At this juncture I wish to stress that my delegation considers the compromise working paper presented by the delegation of Bulgaria during the March and April session of the Legal Sub-Committee to be a useful basis for a solution of all the remaining problems.

74. The Polish delegation considers also that in view of the advanced stage of the preparation of the draft treaty relating to the Moon, the Legal Sub-Committee should, as a matter of highest priority, make all possible efforts to complete the draft in question. We hope that, if such efforts continue, the draft treaty could be agreed upon during the next session of the Sub-Committee.

75. My delegation also shares the view that the same kind of priority should be given to the elaboration by the Legal Sub-Committee of another important international instrument, which is the draft convention on registration of objects launched into outer space.

76. Now, I would like to turn to the very important problem of the elaboration of the principles governing the use by States of artificial earth satellites for direct television broadcasting. The elaboration of such principles would be a new step towards the promotion of international co-operation in the field of the use of outer space in the interests of all peoples. It is very important to ensure that direct television broadcasting should be carried out exclusively in the interests of peace, the reduction of international tension, the development of friendly relations among peoples and the expansion of exchanges of information and of educational and cultural values. For this reason appropriate legal regulations on direct television broadcasting are necessary and urgently pending. Accordingly, the draft resolution should recommend the Committee to proceed with the elaboration of principles governing the use by States of artificial earth satellites for direct television broadcasting as a matter of the highest priority at its next session.

77. Before concluding my statement, I wish to emphasize that my country attaches great importance to the work of the Outer Space Committee. It does so because, for many years now, the Committee and its subsidiary bodies have been doing most constructive work in developing standards of international co-operation in the exploration of outer space. It should not be forgotten that the Committee has been doing very constructive work also in the preparation and drafting of international treaties—which are elements of a new branch of international law of outer space—and thus it has contributed to the codification and progressive development of this law.

78. Mr. AWOPETU (Nigeria): My delegation would like to express its appreciation of the report of the Committee on the Peaceful Uses of Outer Space, which we have found to be both interesting and useful. We also thank the Chairman of the Committee for the lucid manner in which he introduced the report at the 1977th meeting.

79. I must confess that activities and programmes in respect of outer space are comparatively new and relatively rudimentary in Nigeria. This is not due to any lack of will. On the contrary, we are most anxious to take full advantage

of the scientific, technical and organizational resources available in the field, as we proceed to lay the foundation stone upon which the future economic and social development of Nigeria will be based. Consequently, we have actively participated in the satellite telecommunications programme since its inception. Our communications satellite earth station at Lanlate has opened our eyes to the infinite possibilities of the space age in the field of telecommunications technology.

80. Since the birth of the atomic bomb, no other subject has evoked so much controversy as the exploration of outer space. In the opinion of many, a national space programme tends to distort the shape, priorities and objectives of the domestic economy. In the perspective of international relations, the military and other obnoxious aspects of a space programme have been known to result in breaches of the sovereignty and security of other nations. It is indeed a mark of the success of the United Nations as an instrument of international peace and security that we now accept outer space activities, as though they were normal and legitimate exercises in all respects. The Committee on the Peaceful Uses of Outer Space ought to be justly proud that its work has contributed immensely to this change of attitude.

81. Against this background, my delegation sincerely hopes that the belief that benefits from space activities and programmes must be shared by all humanity will be universally respected. We also hope that the international community will regard the works of the Committee on the Peaceful Uses of Outer Space and the impending Conference on the Law of the Sea as closely interrelated. This is because, as stated earlier, we believe that material and intellectual gains from "frontiers" beyond national jurisdiction, belong to all mankind.

82. We notice with great satisfaction that the past year has been remarkable for its historic achievements in the field of space exploration. From the Molniya I-22 communications satellite which was launched by the USSR on 2 December 1972, to the Skylab series of the USA and to the exceptional feats of the United States Pioneer 10—the first man-made satellite to escape the solar system and to send clear pictures of Jupiter to earth—man has taken truly giant strides to conquer nature. We all take pride in this record of human achievements and we warmly congratulate both the Soviet Union and the United States of America on that record.

83. These feats which have no precedent lead us to plead for more realistic programmes of international co-operation in the peaceful uses of outer space. By international co-operation, we do not mean a concert of super-Powers or of military blocs arrived at in the name of mutual fear and suspicion. We refer, of course, to genuine international co-operation; to the necessity for active participation in, and the sharing of the resulting benefits, by the developing and developed countries of the world alike, in peaceful outer space programmes. Therefore, while we gladly welcome the historic agreement of September 1972 between NASA and the USSR Academy of Sciences to launch the Apollo-Soyuz on 15 July 1975, we equally hope that its success will be a prelude to joint efforts, in one form or another, in outer space between developed and developing

countries, to their mutual advantage. My delegation hopes that this is the direction which future United Nations and outer space activities will take. We also hope that it will not be too long before we resolve the basic legal problems of the exploration of outer space. Thereafter, all future programmes and developments relating to outer space should be on the basis of international co-operation.

84. The ground for practical international co-operation in outer space has to be prepared properly and in good time. Facilities and knowledge acquired from the new science and technology of outer space should be shared liberally with those, particularly in the developing world, who need them for the critical task of nation-building and economic take-off. The training and fellowship programmes referred to in paragraphs 31 to 34 of the report in document A/AC.105/116 and Corr.1 should be given wider publicity in Africa and elsewhere and expanded significantly. While we are not yet technically in a position to go to the Moon, we have geographers, soil scientists, agronomists, foresters, geologists, marine scientists, and so on, who can be trained in the techniques of interpretation and the use of remotely sensed data about earth resources and the human environment. If international co-operation is not to be construed narrowly as avoidance of big-Power confrontation, greater emphasis ought to be given to the application of outer space science and technology in the fields of agriculture, education, health and culture.

85. My delegation would have been happier if the Committee's report had recorded more progress in the critical areas of its current assignment, for instance, the work of the Legal Sub-Committee. In paragraph 20 of the report we are told that the Sub-Committee has yet to resolve some differences of view on its texts of the draft treaty relating to the Moon and draft convention on registration. In paragraph 26 we are further told that matters relating to the definition and/or delimitation of outer space and outer space activities, the various implications of space communications, direct broadcast satellites and matters relating to the activities carried out through remote sensing satellite surveys of earth resources are yet to be adequately considered by the Sub-Committee. This is a matter for regret, but not for censure.

86. Judging by its past performances, we are confident that the Legal Sub-Committee will acquit itself very well. We therefore appeal, in the spirit of General Assembly resolution 2915 (XXVII) of 9 November 1972, for the Sub-Committee to conclude its current assignment with as much speed as possible. The legal aspects of the matters enumerated are crucial to the whole concept of international co-operation in outer space. The Moon and other celestial bodies must not, like the continent of Africa in the 1880s, be victims of power struggles and scrambles and grotesque exploitation.

87. Secondly, with regard to the United Nations programme of space application, my Government was pleased to welcome Mr. Murthy, the new Expert on Space Applications, to my country recently; we understand that he also visited a number of other African countries. We readily receive United Nations and other officials like him who are engaged in outer space projects, because through them we hope to be able to formulate specific programmes relating



to telecommunication, mass communications and education, meteorology, agriculture and so on, from which Nigeria, indeed all Africa, would benefit in the immediate future. Unfortunately, this hope may not be realized in the near future, judging from the paltry sum of \$87,000 approved for the United Nations programme for 1974, as stated in paragraph 36 of the Committee's report. This would be most unfortunate because the world community cannot afford to lose the opportunity of helping Africa in agriculture and animal husbandry through the space technology of remote sensing, particularly in view of our drought-ridden grazing and farm lands. After the very commendable initiative of the Philippines last year, we had expected that our present plight would attract some attention. Similarly, we shall not be enabled in the immediate future to link our countries with transcontinental networks of communication satellites with a view to promoting greater economic and cultural cohesion in our continent and to facilitating broadcast and television sources for educational and cultural purposes throughout the continent.

88. We therefore wish to appeal for a more imaginative understanding of the peculiar problems facing us in Africa. In so doing, we profoundly hope that the financial and staffing situation of the United Nations Outer Space Affairs Division and of the Office of the Expert on Space Applications will be significantly increased to enable them to discharge their functions more effectively. We wish to seize this opportunity to pay tribute to the great dedication they have brought to their work.

89. Lastly, we do not understand paragraph 67 of the report, which has probably given rise to operative paragraph 28 of the draft resolution in document A/C.1/L.669, which was so ably introduced by the representative of Austria. After the views expressed in paragraph 67 of the report and the logic of the argument advanced by the representative of Indonesia for increasing the membership of the Committee, one wonders if there is not some misunderstanding of the proper powers and functions of the Committee on the Peaceful Uses of Outer Space.

90. The arguments put forward the day before yesterday in favour of operative paragraph 28 of the draft resolution sounded so familiar, particularly during the period before the amendments to Articles 23, 27 and 61 of the Charter were adopted by the General Assembly on 17 December 1963. What is not so familiar is that they should have been advanced by some of those who have now put them forward.

91. Both Article 22 of the United Nations Charter and rule 162 of the rules of procedure of the General Assembly seem to place the Committee on a par with similar committees or subsidiary organs of the United Nations. Unless we are putting an erroneous construction on these provisions, the determination of the membership of such bodies falls squarely within the purview of the General Assembly.

92. No committee has the right to perpetuate its membership and mandate. The normal criteria for the composition of United Nations bodies are considerations of fair and equitable geographical representation, needs, objectives,

political climate and so on. Once we have succeeded in moving the outer space activities from the danger of big-Power confrontation and the arms race to the serene realm of peace and international co-operation, we must not hesitate to reflect the true character of the United Nations in the membership and the work of the Committee on the Peaceful Uses of Outer Space.

93. Finally, my delegation has the highest respect for the Chairman and the other members of the Committee on the Peaceful Uses of Outer Space. It will therefore not permit itself to confer on the Committee powers it cannot legitimately justify. It is in this spirit that we shall join in the efforts to modify operative paragraph 28 of draft resolution A/C.1/L.669.

94. Mr. JANKOWITSCH (Austria): It seems appropriate, perhaps, to remember that at the very first meeting of the Committee on the Peaceful Uses of Outer Space, exactly 12 years ago, on 27 November 1961, the then Chairman of that Committee, Mr. Matsch, said:

"From time immemorial man has turned his eyes towards the sky and the stars, longing to explore the mysteries of outer space and to venture into realms beyond his reach. For thousands of years this has been but a dream. Now, at last, we stand on the threshold of the day when this dream will come true, when man will write his name in the annals of space."

95. That dream, to which many of the most brilliant minds in mankind's history have devoted their efforts—and, appropriately, the name of Copernicus has been mentioned here many times in connexion with his 500th anniversary—has come true. The United Nations, through its Outer Space Committee, has assumed an important role in an endeavour to make the benefits of space-exploration research available to all mankind, and I thought it appropriate to quote Ambassador Matsch, first Chairman of the Outer Space Committee, who passed away during the summer of this year, and to whom you, Sir, as Chairman of the First Committee, so graciously paid tribute on the occasion of the first meeting of this Committee in October.

96. The debate we have had so far in the First Committee on the items concerning outer space has provided many thoughtful and stimulating contributions from many delegations and has emphasized, at the same time, the nature of the characteristic and long-standing qualities of the Committee on the Peaceful Uses of Outer Space. It is a Committee whose strength lies in the constructive approach from all sides, in exemplary co-operation between the major space Powers and all nations anxious to reap the benefits of space exploration, in the absence of confrontation and acrimonious debate. This spirit of consensus, this common effort not only to introduce, improve and progressively develop the rules of law in outer space, but also to try to make the benefits of the practical applications deriving from space research and technology available to all mankind, has made the Committee a most valuable instrument of the United Nations. Outer space activities are by their very nature of global concern and will require, to an ever-increasing degree, the co-operation of all nations. Co-operation on all political and practical levels, between nations as well as between people in different walks of life,

is becoming more and more indispensable for the survival of this world, and it is in this context of international relations that we shall have to assess and evaluate the significance and importance of international co-operation in outer space. We feel that the debate we are having here, the annual consideration of United Nations work relating to activities in outer space, of matters dealt with by the First Committee and the Assembly, is most valuable both for those inside and for those outside the Committee and thus for all who feel closely associated with this work. For those outside the Committee it is an opportunity to become acquainted with the various activities and programmes; for the members it is a possibility to benefit from fresh and new ideas, from support as well as from constructive criticism.

97. As we look at the report of the Committee which is the subject of our discussion here, we find that, despite apparently sincere and patient efforts on all sides, a number of questions have not yet been solved and, in a number of instances, the Committee has not yet been able fully to carry out the mandate entrusted to it by the General Assembly at its twenty-seventh session. I think the reason for this lies in the fact that many of the questions to which I am referring and which we all hope will promptly receive satisfactory solutions, are not simply questions of a strictly technical nature, which might seem to be easier to solve, but rather that behind every question basic political and legal considerations prevail, considerations which might have a far-reaching impact, perhaps not only upon ourselves but also upon generations to come. I feel that that must be said in order for it to be understood why progress in the Committee, encouraging as it has been in many instances, is not always as rapid as we might wish.

98. I do not want now to go into the details of the report before us, as the views of my delegation on the various questions have been made clear in the Committee and its subordinate bodies on numerous occasions. I should like, therefore, to confine myself to some remarks of a more general nature.

99. Touching first upon the legal field, we have witnessed the fact that final agreement on the two instruments under debate, relating to the Moon and to registration of objects launched into space, is still outstanding, and our delegation, like many others, sincerely hopes that the Legal Sub-Committee will make a supreme effort at its next meeting to present the Committee, and subsequently the twenty-ninth session of the General Assembly, with agreed texts of both instruments. That would clear the way for the remaining heavy and ever-increasing workload entrusted to the Sub-Committee.

100. In the scientific and technical field, the programme of space applications, which my delegation considers to be at the very heart of the Committee's activities in this respect, has further advanced, due not least to the most valuable work of the Expert on Space Applications, Mr. Murthy, recently appointed to that function. We cannot, however, hide our disappointment at the insufficient funding of the programme. We have repeatedly taken the position that the programme should not only continue to develop but also should be expanded from year to year. Expansion certainly does not and should not mean keeping

development programmes which have proved to be of limited value only. Expansion means increasing those activities which have borne fruit and devising new forms in order efficiently to render service to non-space Powers, especially the developing countries.

101. The Working Group on Remote Sensing of the Earth by Satellites had a very successful session and tribute must be paid to the Chairman of the Group, Mr. Fiorio of Italy, as well as to the United States which, in offering data derived from its ERTS experiments, has given the work of the Working Group a new perspective. We express the hope that the questionnaire, which was carefully prepared, will receive a wide response and therefore will be a most valuable basis for further work in this field.

102. Remaining within the realm of technical questions, I should like also to pay tribute to the delegation of the United Kingdom, which has rendered great service to the Scientific and Technical Sub-Committee in stimulating debate on the future role of that body. Also, we firmly believe that the Sub-Committee plays a most useful role, especially in co-ordinating the ever-increasing workload with respect to scientific and technical matters. We certainly share the view of others that a thorough look at the functioning of the Sub-Committee would be beneficial.

103. I should like also to place on record my delegation's gratitude for the very important work which the specialized agencies in the United Nations family have again performed in space-related matters. My delegation has already taken the opportunity in the past to stress the necessity for proper co-ordination, which is the only way to preserve the principle which we all adhere to, namely, to see that the Committee on the Peaceful Uses of Outer Space remains the focal point for space activities in the United Nations.

104. The Working Group on Direct Broadcast Satellites was reconvened and carried out most useful work under the dedicated and dynamic leadership of its Chairman, Mr. Rydbeck of Sweden. I think we are all grateful to the delegations which have presented principles which might govern the use by States of direct broadcast satellites. I must say that I fully agree with the representative of Sweden, who said the other day that the direct broadcast item was sometimes portrayed as a battle for or against the principle of freedom of information. We share his view that a satisfactory solution cannot be found if the question is thus expressed in absolute terms. My delegation, like others, has from the very beginning favoured a balanced approach to this question, an approach which takes into account the furtherance of international co-operation and, at the same time, protects the legitimate rights of States.

105. Finally, I should like to say a few words on a question which has received, and rightly, a great deal of attention in the present debate: the enlargement of the Committee on the Peaceful Uses of Outer Space. It might be recalled in this context that last year my delegation was among the first to stress that the Committee needed greater co-operation from Members of the United Nations and especially from developing countries.

106. In witnessing the present debate, we find it highly encouraging that a very constructive response to the work

of the Committee is forthcoming and that a number of countries Members of the United Nations have shown keen interest in being associated with the Committee. We feel equally encouraged by the favourable response on the part of the present members of the Committee to this desire. The debate, therefore, does not revolve around the question of whether the time has come to enlarge the Committee, but rather in what way this objective can be achieved—taking into account the interest of those countries wanting to become members as well as the preservation of the efficiency of the Committee.

107. My delegation is therefore in favour of enlarging the Outer Space Committee by the addition of those States which have expressed an interest in becoming members, and our suggestion is that members of the Outer Space Committee and those interested in joining it co-operate in this Committee in order to achieve this objective. My delegation is therefore ready to co-operate with all those who have manifested an interest, with the aim of finding a solution satisfactory to all of us, a solution which will strengthen the Committee on the Peaceful Uses of Outer Space and make it more effective and more representative.

108. Mr. EVANS (United States of America): The First Committee is now considering the report of what I feel to be the most outward-looking, and perhaps the most forward-looking, organ in the United Nations family, the Committee on the Peaceful Uses of Outer Space. I am confident that all of us must have been impressed by the way in which this expanding peaceful activity in space continues to enlarge man's intellectual horizons.

109. Surely, members were thrilled, as we were, that this past week Pioneer 10 fired our imagination as it sped past Jupiter at more than 96,000 miles per hour—the equivalent of four times round the earth every hour—giving mankind its first close-up view of that giant planet. We, with you, eagerly await the analysis of the images and other data that Pioneer 10 has sent back and still has to transmit as it continues its voyage past the farthest reaches of the solar system and beyond.

110. Pioneer 10 demonstrates mankind's ingenuity in devising technology to do its work in the vast distances of space still far beyond his reach. This month man himself is making his unique contribution to our knowledge of the universe when Skylab and its astronauts take advantage of an unparalleled opportunity to observe the comet Kohoutek. With the instruments on Skylab, they will be able to observe this comet when it is closest to the sun and at its very brightest. At that time, ground-based observations will have very limited scope because of scattered sunlight in the atmosphere. The astronauts will be able to react to such transient events as the sudden flaring and the changes in shape that are characteristic of comets.

111. Space research does far more than help man see himself and the universe truly in perspective, important as that may be. Space research promises—and this to me is the crux of our all being here—to improve the quality of life for all of us here on earth.

112. We are reminded daily of how space meteorology and communications help us in our life and our work here on

the surface of the earth. Participating in the World Weather Watch—I am not sure how we fully realize this—over 70 countries of this world now make direct use of data from United States weather satellites. Communications satellites such as INTELSAT link peoples and continents instantaneously, and several members of this Committee have remarked on the clarity of their telephone conversations back to their home countries.

113. More and more we are learning of a promise of a new form of earth-oriented space technology: remote sensing by satellites, which was many times discussed here. To see if this promise can become a reality, scientists from 37 countries and 2 international organizations—the Food and Agricultural Organization of the United Nations and the United Nations Economic Commission for Asia and the Far East—have, along with scientists here in the United States, initiated investigations on the basis of data from the Earth Resources Technology Satellite, better referred to as ERTS-1, and the Earth Resources Experiment Package on Skylab.

114. We are proud to announce that Brazil has joined Canada in establishing its own earth resources data acquisition and processing facilities, and other countries have expressed genuine interest in doing the same.

115. One result of the investigations to date bears significantly on the studies of the long drought in Sahelian Africa on the location—think of it—of subsurface water in close proximity to usable soils.

116. We take particular note also of India's upcoming experiment in instructional television by satellite. Using the ATS-F satellite, which the United States will make available from four to six hours a day during the experiment, India in 1975—now think of this—will transmit its own programmes primarily on family planning and agricultural production from its ground station at Ahmedabad via the spacecraft directly to 2,000 specially equipped village ground receivers.

117. The United States take great pride in the degree to which our national space programme is based on co-operation with other countries. That pride is based not only on our commitment to the principle of co-operation but especially on our conviction that we have a better programme because of your co-operation. The participation of other nations in remote sensing investigations, in the development of satellite meteorology and communications and in scores of other flights and ground-based projects in space science and applications most surely underline this point.

118. We are pleased that during the past year the scope and the depth of co-operation in space research were extended significantly. A prime example is the Apollo-Soyuz Test Project, the joint US/USSR flight in 1975 to test compatible rendezvous and docking systems. Flight crews have been named and joint training has begun. The United States and Soviet docking system development units are undergoing joint testing right now and a host of operational details have already been worked out, such as trajectories, control centre operations and crew activities. At a joint mid-term project review in October, senior

representatives of NASA and the Soviet Academy of Sciences confirmed that all joint Working Group activities were on schedule and that the mission could be expected to proceed as planned. Our astronauts, incidentally, have just returned from the Soviet Union and are very high in their praise of the extent of the co-operation and understanding they received.

119. Also particularly worthy of note is the recent agreement between NASA and the European Space Research Organization (ESRO) which provides for development by Europe of a manned orbital laboratory called Spacelab for use in manned missions with the NASA Space Shuttle. ESRO will design, develop, manufacture and deliver to NASA a Spacelab flight unit on behalf of the nine European countries which are funding the \$400 million effort. Spacelab will play a vital role in realizing the full potential of the Shuttle, whose development will employ European skills on the frontiers of space technology. Incidentally, this Shuttle will be available to many countries and its availability—I remind all of you—will provide the first opportunity for experimental astronauts from other countries to follow their American counterparts into space and to take advantage of that environment in their work.

120. In addition to the joint manned mission and Spacelab projects, we are moving ahead on bilateral satellite and sounding-rocket projects, as well as arrangements for launch services, with a number of member countries. In all of these activities, may I remind my fellow representatives, the United States is guided by an underlying policy favouring the broadest possible international co-operation in the peaceful uses of outer space. This policy was first proclaimed by President Dwight Eisenhower, and it has been constantly upheld through all succeeding administrations of the United States. John F. Kennedy enunciated it with characteristic eloquence a decade ago in praising the accomplishments of pioneer astronauts Yuri Gagarin and Alan Shepard, when he said:

“We have a long way to go in the field of space. But we are working hard and we are going to increase our effort. In addition, we are making available the scientific information which we have gathered to other scientists in the world community and people who share our view that the probe into space should be peaceful, and should be for the common good, and that will continue to motivate us.”

Motivate us it has and does. Just next week, in Washington, a symposium will convene to evaluate further the results of the ERTS-1 experiments which, as I have noted, reflect broad international participation. That symposium is thus the latest fulfilment of President Nixon's pledge to this very Assembly that the United States will share the benefits of our earth resources survey programme “as it proceeds and fulfills its promise”.

121. Now, before leaving this survey of our co-operative activities in space, I should like to extend my delegation's sincere and genuine thanks for the many kind words addressed to us by previous speakers concerning those activities and United States accomplishments generally. Once again, we consider that in a very real sense they all belong to mankind, or, as I prefer to call it, the human family.

122. Let us turn now to the work of the United Nations in outer space, the affairs of this past year. Let me say at the outset that my delegation thinks the results have been, on the whole, positive. The work, as we know, is concentrated in the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies, which have had a very busy year.

123. The Working Group on Remote Sensing of the Earth by Satellites held its first substantive session; the Working Group on Direct Broadcast Satellites met for the first time since 1970; the Scientific and Technical and Legal Sub-Committees held their regular sessions. All made progress.

124. The Working Group on remote sensing, in our view, achieved a proper perspective for the next phase of its work when it recommended the creation from its ranks of a specialized task force to identify, study and analyse possible alternatives for international dissemination and optimum utilization of environmental and resources data, keeping in mind the requirements of developing countries for such data. The over-all purpose will be to promote the best possible use of remote sensing technology for the benefit of individual countries, as well as the international community.

125. My delegation is gratified that this suggested approach was approved by both the Scientific and Technical Sub-Committee and the parent Committee and that, with the approval of the General Assembly, the task force is to convene early next year. We think this practical, pragmatic approach is the best one to take at the present stage of remote sensing technology. The United States hopes to make a worth-while contribution to the task force study.

126. Besides reviewing the work of the Working Group on remote sensing, the Scientific and Technical Sub-Committee has focused on the United Nations programme on space applications, taking particular note of the report of the Expert on Space Applications, Mr. Murthy of India. The Sub-Committee approved continuation of the Expert's work on what we regard as a satisfactory if not ideal basis, keeping in mind the financial straits in which the United Nations finds itself. I would like this occasion, however, to reiterate my Government's continuing support for the Expert and his programme, which is well calculated to bring wider awareness of the prospective benefits of space applications to countries in varying stages of development.

127. The Working Group on Direct Broadcast Satellites was asked to consider new developments in the field since it met last in 1970. It had considerable ground to cover, and at the same time many delegations wanted to record their views in the general debate. While we have to admit that relatively few conclusions were reached, the broad exchange of views clarified positions and resulted in generally acceptable guidelines for the Working Group's next session in the spring of 1974.

128. Delegations, of course, are aware that views differ on the question of possible principles on direct satellite broadcasting. The United States continues to believe that any meaningful consideration of such principles must also take relevant technical and economic factors into account. We are confident that the Working Group will do this in the

light of paragraphs 77-79 of its report, as endorsed by the Committee.

129. Now I would like this opportunity to look at the work of the Legal Sub-Committee, about which some delegations have expressed a degree of disappointment. We share their regret that it proved impossible for the Sub-Committee to complete the text either of the convention on registration of objects launched into outer space or of the treaty concerning exploration and use of the Moon, planets and other bodies of the solar system. I refer to the latter treaty in this fashion deliberately, since it is our understanding that such an expansion of the scope of the original draft treaty relating to the Moon has been agreed to in principle. In this connexion, I should like to reiterate my delegation's appreciation to the representative of Sweden for having originally brought before us this cogent argument in favour of the limited extension of the reach of the treaty itself. Especially in view of the planetary exploration going on now and projected for the near future, we cannot see any reason why rules applicable to the Moon should not apply also to other bodies of the solar system.

130. Now, regarding the issues which still remain unsolved in this treaty, my delegation continues to hope that the most difficult of these, the one on which we are stumbling, concerning the possible future exploitation of natural resources, can be settled. I would note that the persisting differences relate only to that period before an appropriate and mutually acceptable international régime for resource exploitation comes into effect. There seems to be no disagreement that such a régime should be established.

131. Now, besides the resources question, it appears that only two other issues in the treaty are outstanding. These concern the timing of international notification of planned missions to the Moon and other celestial bodies and the way in which the scope of the treaty is to be formulated. We continue to believe that, once the resources issue is solved, the others should be within our ability to settle.

132. The Legal Sub-Committee came even closer to final agreement on the treaty on registration of objects launched into outer space. The United States, responding to the stated interests of other delegations, took a very active part in the Sub-Committee's negotiations on the registration treaty, even though we had not been previously convinced of the need to change the present system of voluntary registration submissions to the Secretary-General of the United Nations.

133. Showing the will towards mutual accommodation that has long characterized the work of the Legal Sub-Committee, we must admit that the negotiators made some fine progress. At the end of the Sub-Committee's session, only one issue remained: the question of external marking of objects launched into earth orbit or beyond. My delegation's views as to the lack of utility of such a provision are familiar. I would only repeat that we do not consider that a marking requirement could help in identifying a space object that might return to earth and cause damage, which we view as the basic purpose of a registration treaty. We hope that this point of view will in the end be persuasive to those members which up to now have regarded a marking provision as necessary.

134. This leads me to a parenthetical remark. Some have suggested that our political and legal endeavours in the outer space field are not keeping pace with the operational and scientific developments. The problems of reconciling national interests with regard to space activities sometimes may seem even more complex than the problems which technology has solved in making those activities possible. But I do not think that we need to be discouraged when we look back only six years to 1967 and note the international space agreements which have been achieved since then: the outer space Treaty, the astronaut rescue and return agreement and the outer space liability Convention. With two more treaties near to agreement there is the real possibility of success in negotiating—and I think this is impressive—five treaties—international instruments dealing with extremely complicated and politically sensitive matters—to completion in considerably less than 10 years. This, I submit, would mark quite a record. This, I submit, is exciting progress.

135. In view of the substantial areas of agreement in the draft treaties on registration and on the Moon and other celestial bodies, it is only logical to assign the highest priority to efforts to complete them at the Legal Sub-Committee's next session. We therefore support the approach set out in operative paragraph 5 of draft resolution A/C.1/L.669, of which my delegation is proudly a sponsor. And we agree with the scale of priorities for other items on the Sub-Committee's agenda as set out in operative paragraphs 6 to 8. I should like now to record my delegation's genuine appreciation to the authors of the draft resolution for accurately reflecting the delicate balance of different views and interests in relation to these items. They are truly to be congratulated.

136. In fact, it is our view that the draft resolution as a whole sets out the work programme for the Outer Space Committee and its subsidiary organs for 1974 and appropriate guidelines for the relationship between the Committee and other United Nations bodies in a fair, in a balanced, and in a comprehensive way. We believe this Committee should unanimously recommend adoption of the draft resolution by the General Assembly.

137. I should like to conclude now with a personal remark. I do not know whether the Committee knows who Buck Rogers was; but he inspired American youth and the youth of the world with his cartoons of futuristic things. I remember, as a youth, seeing the cartoons depicting man flying through space and conquering the Moon, being on the Moon and so on and so forth. Now, looking back, I do not find him so amazing because many of those things are realistically achieved.

138. The other evening the Swedish Ambassador—I am sorry he is not here to hear this—related an experience about his grandfather or his father-in-law, who had grave doubts concerning space and all the prognostications. He related how, as they watched Neil Armstrong set foot on the Moon, he saw the tears roll down the cheeks of the aged man as he recognized and realized that within his lifetime he had moved from riding on a horse to witnessing a man walking on the Moon. It was an understandable tearful reaction.

139. This Neil Armstrong, who, incidentally, is a good friend of mine, made a cogent remark when he said that he took one small step for man and a giant step for mankind. I apply that giant step to the Outer Space Committee.

140. I recognize that what I am about to say has an element of crystal-ball gazing. But since space activity has been born and has developed so rapidly and so far, perhaps the Committee will forgive me for relating an experience of my own that gave me great hope for tomorrow.

141. Perhaps for the last few seconds of my remarks I want you to dream a little bit. Some years ago I spent two days in Southern California at one of the aerospace companies which has done most in pushing the space technology frontier forward. There I looked down on a large enclosed area covered with strange-looking tripod devices. I thought how silly it was at the time, that we were required to wear surgical masks, surgical hats and surgical aprons: it was explained to me that that was a precaution against any foreign matter, however miniscule it might be, jeopardizing the many celestial missions whose journeys began on that assembly room floor. At the end of the tour we sat mesmerized; we were completely enthralled as a

modern-day prophet graphically depicted the possibility that one day satellites, possibly equidistant in the skies, could contain in computerized form all of mankind's recorded knowledge to be drawn upon by all on earth. It boggles the mind to contemplate what this could mean to the human family and to the betterment of all men throughout the earth.

142. Visionary? Certainly. But that is the direction in which international space co-operation can lead us all. How appropriate that this item should come towards the end of our work leaving a sense, at least for me, and I hope for the Committee, of realistic hope for our children and our children's children. Let us here, at the United Nations, continue in that direction in the years to come as we share the inspiring adventure that is the peaceful uses of outer space. And I paraphrase again the remarks of Mr. Armstrong that we might also wear his shoes because we take here one small step for man and one giant step for mankind.

143. The CHAIRMAN: We have now concluded our general debate on draft resolution A/C.1/L.669.

*The meeting rose at 12.40 p.m.*