was something which the Sub-Committee should examine carefully in due course. Remote sensing activities represented another area of active Canadian interest. He assured the Chairman of his delegation’s continued co-operation in the two areas of prime concern to the Sub-Committee, namely the treaty relating to the moon and the draft convention on registration.

The CHAIRMAN requested delegations intending to submit proposals regarding the formulation of the instruments to be considered by the Working Groups to transmit them in writing to the Secretariat.

The meeting rose at 4.35 p.m.
GENERAL EXCHANGE OF VIEWS (continued)

The CHAIRMAN recalled that the draft treaty relating to the moon had first been placed on the Sub-Committee's agenda at its previous session, during which it had occupied the full text of the preamble and 21 articles. At its fifteenth session, the Committee on the Peaceful Uses of Outer Space had considered the report of the Legal Sub-Committee on the work of its eleventh session and had expressed satisfaction that the Sub-Committee had made considerable progress in its consideration of the draft treaty. At the same time, it had noted in its report (A/8720, para. 17) the various related issues which remained unresolved. The General Assembly, in resolution 2453 (XXVII) of 9 November 1972, had noted that the Legal Sub-Committee had achieved significant progress in approving a substantial part of the draft treaty relating to the moon. It had observed at the same time that some issues were still unresolved and had agreed that the Legal Sub-Committee should at its next session pursue, as a matter of priority, its work on the draft treaty.

Mr. CHAVET (France) pointed out that all the items on the agenda had already been taken up during previous sessions so that the chief task to be undertaken was the preparation of the definitive text of the draft instruments before the Sub-Committee. The French delegation hoped that work on the draft treaty relating to the moon would be completed during the current year and was prepared to support any necessary compromise in that connexion in the hope that a similar spirit of goodwill would lead to the conclusion of a definitive text of a convention on the registration of objects launched into space. The French delegation regarded the latter question as urgent and, as early as 1968, had officially submitted a draft with a view to its settlement. It seemed that the Sub-Committee was currently in a position to take up the same purpose a question which so many States hoped to see resolved in a satisfactory manner - namely, in accordance with the principles stated in the Treaty on Outer Space. A convention formulated in the spirit of the French-Canadian draft which had been submitted to the Sub-Committee at its previous session would cover the whole range of the problem in that it extended to both the question of the identification of the objects launched into space and that of the formal link between the space object and the launching State. Registration was the visible expression of a relationship between an object and a State and conferred a nationality on the object, thereby rendering it subject to a specific juridical regime. Furthermore, the fact that registration was necessary had been brought out in the three recent international agreements on outer space. Nevertheless, only registration in a national register, which would safeguard the principle of State sovereignty, could constitute proof of a juridical link between a State and a space object. Any register maintained by the United Nations would be without juridical value, although it would serve to identify objects launched into space, would enable the various States to be kept informed of launchings and would facilitate action by them where damage occurred. Accordingly, consideration should be given to a system involving two complementary registers, one maintained by the United Nations and the other at the national level.

Once the draft instruments relating to the moon and the registration of objects launched into space had been completed, the French delegation considered that the Sub-Committee should give priority to the two questions of satellite surveys of earth resources and space broadcasting, which involved economic, cultural, social and political issues requiring serious thought. The French delegation had already raised the problem of direct broadcasting in that it had already, in 1970, submitted a working paper to the Working Group on Direct Broadcast Satellites. At that time, the Soviet Union had also submitted a paper which, on many points, reflected similar feelings of concern. The USSR had subsequently submitted a draft convention on the same subject while the most recent UNESCO General Conference had adopted a draft declaration on guiding principles containing many ideas already stated in the papers to which he had referred.

As to matters relating to the definition and/or delimitation of outer space and outer space activities, the French delegation thought it logical and essential that the areas to which treaties and conventions relating to space would apply should be stated. The remarkable report of the Secretariat on the question, however, showed that the present divergence of views prevailed in that connexion. The question inevitably arose, therefore, as to how far it was profitable to
include item 4 as it stood in the agenda of one session after another. It might be more realistic to change the wording. Simply as a suggestion, the French delegation thought that it should read: "Matters relating to the definition of space activities and space objects".

Mr. BEHE (United States of America) introduced his delegation's proposal for a draft convention on the registration of objects launched into outer space (A/AC.105/C.2/L.85). It hoped that the proposal would make possible the successful conclusion on a mutually acceptable basis of the negotiations for an international registration agreement that had begun in 1972 with the consideration of the joint draft of Canada and France. The French and Canadian initiative was certainly constructive but, in certain respects, it went beyond what would be appropriate in accomplishing the central purpose of a registration agreement. The United States delegation considered that that purpose should be the implementation of the 1972 Convention on International Liability for Damage Caused by Space Objects. A State might be unable to make use of the compensation provisions of that Convention if it could not identify the State that had launched the object responsible for damage in its territory, especially bearing in mind that the time-limit fixed by the Convention for filing a claim was relatively short.

In the view of the United States, an international agreement on registration should, first, create a cost-effective and practicable international census of vehicles in orbit and, second, offer an assurance that States possessing tracking and analytical facilities would assist in identifying fragments in connexion with possible damage. With regard to establishing an international census of orbiting vehicles, he recalled that the idea of a centralized international registry of such objects had been proposed by the United States some 10 years previously and had led to the adoption of resolution 1721 (XVI) of 20 December 1961. Under the terms of that resolution, each launching State would voluntarily transmit to the Secretary-General information concerning each of the vehicles it launched into orbit or beyond so that an orderly census of orbiting man-made objects could be compiled. That resolution had been in force for 12 years and a number of launching States - Australia, France, Italy, Japan, the United Kingdom, the Union of Soviet Socialist Republics and the United States - had transmitted registration statements to the Secretary-General. The reporting statements of the United States constituted a continuing and accurate census of the objects which it had launched into space. The United States transmitted, on a month-to-month basis, information as to the object launched, the type of launch vehicle, the purpose of the vehicle, the date of launch and the nodal period, inclination, apogee and perigee. Information was also transmitted on objects previously registered as being in orbit which were no longer in orbit.

Those 12 years of experience had shown that voluntary international registration had been useful but could be improved by the adoption of a standardized reporting format which would be used by all States reporting launchings.

As to assistance to States in identifying fragments of man-made objects which returned to earth and caused damage, the possibility of establishing an international centre for that purpose might be envisaged, although that would involve very large costs, particularly as cases of damage caused in that way were extremely rare. Consequently, the United States, together with other members of the Committee on the Peaceful Uses of Outer Space, had turned its attention to alternative possibilities. One solution would be for States needing assistance to be able to obtain it from States or international organizations with the necessary facilities and technical capacity for the identification of space objects.

During the Sub-Committee's previous session, the United States had announced its willingness to provide assistance in that connexion and he noted that other States, too, possessed the necessary capability to identify space objects returning to earth and causing damage. The United States now proposed to offer to undertake a treaty-based obligation to grant such assistance in appropriate cases although, given the human, technical and economic resources which would be required, that offer of assistance was limited to cases of damage.
The Working Group established to consider the possibility of preparing a treaty on registration, in whose work the United States delegation had not participated, had been obliged to leave many issues pending. Nevertheless, its work had been helpful and had revealed a widespread desire to create a "juridical link" between a State launching an object into orbit and the object itself - an idea which already appeared in the 1967 Treaty on Outer Space. The new proposal of the United States also incorporated that notion.

Ex then turned to details of the draft convention proposed by his delegation, pointing out that the preamble indicated the main purpose, which was to establish a mandatory international registration system and procedures for the provision of assistance in the identification of space objects which caused damage. Article I defined the terms "space object" and "launching State", using the same definitions as the 1972 Convention on International Liability for Damage Caused by Space Objects. Article II, paragraph 1, concerned "national" aspects of registration and proposed that every launching State should maintain a register of space objects it had launched into earth orbit or beyond; no specific format was imposed on States. The register would help to create the "juridical link" referred to. Article II, paragraph 2, and articles III and IV concerned the international register and were intended to transform the existing voluntary registration system into a treaty-based system. What was needed was to codify the 12-year practice of registration under General Assembly resolution 1721 (XII). Article IV set forth the types of information which should be furnished as soon as practicable after each launching; a launching State should likewise report any space object it had launched which no longer remained in orbit. The United States felt that the international register should be open to access by all States, which was consistent with the 1967 Treaty on Outer Space and would best serve to implement the 1971 Convention on Liability.

Article V concerned assistance on the part of States possessing State monitoring and tracking facilities and the obligation of the States requesting identification of the objects to co-operate in the process. Article VI extended the provisions of the Convention to the international organizations concerned, on the analogy of the 1968 Agreement on the Rescue of Astronauts and the 1972 Convention on International Liability for Damage caused by Space Objects.

Finally, articles VII to X contained final clauses similar to those of the other treaties concerned with man's activities in outer space. His delegation hoped that the draft Convention he had just introduced would make it possible for the current session to complete a valid agreement on international registration.

Mr. PERSSON (Sweden) referred first to the question of registration of objects launched into outer space and said that the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space and the 1968 Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space implicitly started from the principle that a space vehicle was carried on a national registry since, for instance, they both provided in different forms for the return of astronauts and space objects to the State of registry. The French and Canadian delegations should therefore be praised for having submitted a joint draft Convention on the registration of space objects. The first part of the draft Convention amplified the provisions of the 1967 Treaty. According to the French delegation the purpose of the new articles was to create a legal link between the State of registry and the space object in question and thus to give the space object a distinct nationality. The registration of an object on the national register would thus be a means of establishing in an indisputable manner the national law applicable to the particular space object and hence to the ownership. His delegation would accept the idea of attributing a nationality to space objects. However, such a registration should be limited to specific kinds of space objects (particularly space stations and shuttles, space probes, satellites and other payloads) whether manned or unmanned, for which it could be of value to know the national law applicable to them. On the other hand, it was hard to see how national registration of a space launch vehicle and/or its various stages which were
abandoned in outer space would help to identify them. Moreover, attention should
be given to the possibility of a joint registration and to the registration of
space objects of international organizations.

If national registration was thus limited to specific objects, it might be
easier to define the term "space object" or, alternatively, a definition could
be replaced by an enumeration of the objects concerned.

The second part of the draft Convention was intended to facilitate the
identification of each registered space object by furnishing detailed information
concerning it to the Secretary-General of the United Nations. The importance of a
correct identification was not questioned by anybody, particularly with regard
to liability for possible damage. However, the problem of identification did not
arise in the case of a controlled descent and the particular furnished to the
Secretary-General could be useful, in some limited degree, only for identifying
space objects in an uncontrolled descent. His delegation was willing to lend
its support to the idea of an international central registry accessible to all
interested parties if such was the wish of the majority. It must, however, be
borne in mind that the registration of an object gave little clue to the
identification of a fragment deformed following its re-entry into the earth's
atmosphere. Moreover, the creation of a United Nations registry should not
impose too heavy a financial burden on the United Nations budget or on the
individual space Powers.

With regard to the draft treaty relating to the moon, he felt that the treaty
should cover not only the moon but other celestial bodies as well; the 1967
Treaty, for its part, made no distinction between the celestial bodies. Perhaps,
however, the scope of the treaty should be limited to the solar system.

If it was accepted that the exploration and use of the moon was "the province
of all mankind" - an expression which was related to the concept of "common
heritage of mankind" used in relation to the sea-bed - it became necessary to
create an international machinery for the exploration of the celestial bodies.
However, it was too early to enter into the details of the question.

Mr. GRINBERG (Bulgaria) said that he was very pleased at the constantly
increasing co-operation among members of the Sub-Committee and the remarkable
results they had achieved.

He recalled that several events relating to space had occurred since the
previous session which should be mentioned, particularly the fact that the USSR had
sent a Luna-7 machine to the moon, the recent expedition by the United States
astronauts to the moon, the creation of a new international association for
Sputnik communications, the USSR initiative for the formulation of principles for
the use of satellites by States. All those activities resulted in a strengthening of
international co-operation and harmony. At its previous session, the
Sub-Committee had in many cases managed to overcome the disagreements which had
arisen during consideration of drafts relating to the moon and the registration of
space objects. At its current session some difficulties still remained,
particularly with regard to the scope of the treaty, natural resources and
information to be given on missions, but it was to be hoped that the
Sub-Committee would once again show the spirit of compromise which had already
enabled it to settle apparently insoluble problems. His delegation, for its
part, was entirely willing to co-operate.

Mr. ZANDAH (Egypt) said that, since the beginning of space exploration,
the international community had been convinced of the need to regulate man's
activity in space in a spirit of understanding and co-operation. A number of legal
instruments had already been concluded in the field and he informed the
Sub-Committee that his country had begun the process of ratification of the
Convention on International Liability for Damage Caused by Space Objects.

However, the Sub-Committee still had to consider a number of draft international
instruments and new proposals. Despite the progress achieved at the previous
session on the draft treaty relating to the moon, a number of problems still
remained. With regard to the scope of the treaty, his delegation felt that it
should essentially relate to the moon and should also apply to the other celestial
bodies for which no treaty existed. Moreover, the treaty should govern all
activities on the moon and below its surface. Finally, all those activities
should be governed by the applicable principles and rules of international law,
including the Charter of the United Nations and the Declaration on Principles
of International Law concerning Friendly Relations and Co-operation among States
in accordance with the Charter of the United Nations.
With regard to the second unresolved issue - the legal régime over the natural resources of the moon and eventually other celestial bodies - the treaty should provide that these resources were part of the common interest of mankind. The exploitation of the resources should be carried out according to an international scheme in which all countries, in particular developing countries, would participate; each country would have an equitable share in the benefits of exploitation. Under article III of the treaty, all States should be prohibited from placing in orbit around the moon, or on another trajectory towards or around the moon, any objects bearing nuclear weapons or any other type of weapons.

The treaty should provide that all States must promote international co-operation in scientific investigations on the moon. Finally, with regard to the lunar environment, not only should the moon's ecological balance be preserved, but the use of toxic or dangerous substances should be prohibited.

The draft Convention on the registration of objects launched into outer space, submitted by the delegations of France and Canada, was an important contribution to co-operation efforts and the system of registration provided therein would help determine liability for damages caused by objects launched into outer space. The new draft proposed by the delegation of the United States established a link between the 1972 Convention on International Liability for Damage Caused by Space Objects and the 1968 Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space. His delegation would return to that proposal later.

The Egyptian delegation would participate with great interest in the discussions on matters relating to the definition and/or delimitation of outer space and outer space activities (item 4 of the agenda).

With regard to item 5 of the agenda, he was pleased to note the entry into force of the INMARSAT agreement as well as the growing number of States parties to that agreement. In resolution 2016 (XXVII) the General Assembly had requested the Committee to undertake the elaboration of principles governing the use by States of artificial earth satellites for direct television broadcasting; the Legal Sub-Committee should examine the legal aspects of the question, while the