EXAMINATION OF PROPOSALS RELATING TO THE PREVENTION OF AN ARMS RACE IN OUTER SPACE*

Sune Danielsson+

1. *Introduction*

The prevention of an arms race in outer space is important not only because outer space is an area of human activity which has up to now been free from conflict and military confrontation, but also because the introduction of space weapons may affect the relative stability in the world.

Military use of outer space is not something new but has been going on since the early days of the Space Age. However, what is happening at this juncture is a new turn of developments. The space systems used for military purposes are in general of a passive nature. They are *inter alia* used for information gathering such as reconnaissance, communication and navigation. What we are facing now is the threat of specific weapons systems meant to be used in outer space, anti-satellite weapons and perhaps beam weapons for anti-ballistic warfare.

This development could have far-reaching implications for peace and security. Furthermore, the introduction of space weapons would have negative effects on civilian space programmes, national as well as international. Therefore, something has to be done to prevent a weaponization of outer space.

Certain measures have already been taken in this area. Some provisions of international law which are of importance in this field will be summarized below as a background to an examination of proposals relating to the prevention of an arms race in outer space.

2. *Existing rules of international law*

The existing provisions of international law relevant to the use of weapons in space are both of a general nature, such as the United Nations Charter, and of a specific nature, such as those provisions which apply to space activities. Specific rules can be found in multilateral instruments and in bilateral treaties between the Soviet Union and the United States.

Article 2, para. 4 of the Charter of the United Nations prohibits the use of force and the threat of use of force. An attack on a spacecraft belonging to another country must be forbidden according to this Article. This general ban on the use of force is worth noting, in particular since an attack on a spacecraft could be carried out by simply ramming it with another space object, *i.e.* without necessarily using a weapon.

Could an attack be justified as a measure of self-defense in accordance with Article 51 of the Charter? It is inconceivable that this Article could permit an attack on non-military space systems. As far as military systems are concerned some of them, *e.g.* surveillance satellites used for verification, are protected as national technical means of

---

*This article is an elaboration of the author's presentation at a Symposium on "Conditions Essential for Maintaining Outer Space for Peaceful Purposes" organized by the United Nations University and the International Institute of Space Law at The Hague, March 12-15, 1984. The views expressed herein are those of the author and do not necessarily reflect the views of the Swedish Government.

+Counsellor, Permanent Mission of Sweden to the United Nations.

verification under the SALT Agreements[1] and early warning satellites under the US-Soviet Accident Measures Agreement.[2] For other military space systems the situation might not be as clear. An attack on "force amplifiers", *e.g.* communication satellites, as a measure of self defense seems far-fetched.

The ban of the use of force in the Charter and the limitations in certain bilateral agreements between the Soviet Union and the United States, thus, provide an important sanctuary for satellites and exclude application of Article 51. However, the situation could be different as far as specific weapons systems are concerned.

Among specific multilateral treaties the 1963 Partial Test Ban Treaty[3] was the first treaty to contain provisions relating to the use of weapons in outer space. This treaty bans the testing of nuclear weapons *inter alia* in outer space.

In 1967 the United Nations adopted the Outer Space Treaty[4] which contains the fundamental principles for space activities. It also marked an important step in banning certain, but not all, arms from outer space.

Article 4 prohibits the placing of nuclear weapons and other kinds of weapons of mass destruction in earth orbits and on celestial bodies. This provision does, however, not impose restrictions on conventional weapons or on military space systems. The moon and other celestial bodies shall be used exclusively for peaceful purposes and all kinds of military activities are prohibited on those bodies.

The Treaty says that space activities shall be carried out for the benefit and in the interests of all countries,[5] and in accordance with international law, including the UN Charter, and "in the interest of maintaining international peace and security and promoting international cooperation and understanding."[6]

The Outer Space Treaty also contains provisions on potentially harmful interference with peaceful space activities of other states. Other provisions are of interest for verification, but they do not contain any clear obligation to give information or about inspection.

Since radio communications are vital for space activities Article 35 of the International Telecommunication Convention[7] is worth special mention. This Article prohibits harmful interference with radio services which are operated in accordance with the Radio Regulations of the ITU.

---

[1]Interim Agreement Between the U.S. and U.S.S.R. on Certain Measures with Respect to the Limitation of Strategic Offensive Arms (hereinafter "SALT I Agreement"), May 26, 1972, 23 U.S.T. 3463, T.I.A.S. No. 7504 (effective Oct. 3, 1972) (expired but still applied). For details regarding the SALT II Agreements, *see* U.S. ARMS CONTROL AND DISARMAMENT AGENCY: ARMS CONTROL AND DISARMAMENT AGREEMENTS 128 *ff.*

[2]Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War, Sept. 30, 1971, [1972] 22 U.S.T. 1590, T.I.A.S. No. 7186, 807 U.N.T.S. 57 (effective Sept. 30, 1971).

[3]Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water, Aug. 5, 1963, [1963] 14 U.S.T. 1313, T.I.A.S. No. 5433, 480 U.N.T.S. 430 (effective Oct. 10, 1963).

[4]Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (hereinafter "Outer Space Treaty"), Jan. 27, 1967 [1967] 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205 (effective Oct. 10, 1967).

[5]*Id.*, art. I.

[6]*Id.*, art. III.

[7]International Telecommunications Convention (Malaga-Torremalinos), Oct. 25, 1973, 28 U.S.T. 2495, T.I.A.S. No. 8572 (effective April 7, 1976 for the United States). The 1973 Convention is still in force. (*Editor's* comment: The 1982 Nairobi Convention is not yet in force for the United States).

Notification to the UN is dealt with in the 1975 Registration Convention.[8] However, the information supplied is so general that it can only be guessed what purpose a space mission has and sometimes considerable time passes between launch and notification.

The latest of the international space agreements which have been elaborated by the UN is the 1979 Moon Agreement[9]. This Agreement will soon enter into force like the four other UN space treaties. From its provisions it can be concluded that the Moon Agreement demilitarizes all of outer space except the proximity of the Earth, or more precisely orbits around the Earth.

Some provisions in the bilateral arms control agreements between the United States and the Soviet Union relate to space activities.

The two SALT Agreements (the Interim Agreement of 1972[10] and the SALT II Agreement of 1979,[11] to which the Soviet Union and the United States abide unilateraly awaiting ratification or new negotiations) contain similar provisions about verification[12]. According to these provisions the Contracting Parties shall use "national technical means of verification" to monitor the adherence to the provisions of the Agreements. These national "means of verification" must not be disturbed or "interfered with". It is assumed that surveillance satellites are among those "means".

The SALT II Agreement[13] contains a relatively unnoticed expansion of the Outer Space Treaty by forbidding development, testing and deployment of systems for placing in orbit nuclear weapons etc. In addition, this Agreement prohibits testing, development and deployment of Fractional Orbital Bombardment Systems (FOBS).

According to the ABM Treaty of 1972[14] "Each party undertakes not to develop, test or deploy ABM systems or components which are sea-based, air-based, space-based or mobile land-based".[15] It is, thus, clear that the placing of ABM systems in outer space is prohibited, nor should such systems be developed, tested or deployed.

The Accident Measures Agreement of 1971[16] and the Prevention of Nuclear War Agreement of 1974[17] together oblige the Soviet Union and the United States to refrain from interfering with or attacking early warning systems of either side, which would include satellites that are components of such warning systems.

---

[8]Convention on Registration of Objects Launched into Outer Space (hereinafter "Registration Convention"), Jan. 14, 1975, [1978] U.S.T. 695, T.I.A.S. No. 8480 (effective Sept. 15, 1976).

[9]Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, U.N. GAOR, 34th Sess., Supp. No. 20 (Doc. A/34/20).

[10]*See supra* note 1.

[11]*See supra* note 1.

[12]SALT I Agreement, *supra* note 1, art. V; see also SALT II Agreement, *supra* note 1, art. XV.

[13]SALT II Agreement, *supra* note 1, art. IX.

[14]Treaty on the Limitation of Anti-Ballistic Missile Systems, May 26, 1972, [1973] 23 U.S.T. 3435, T.I.A.S. No. 7503 (effective Oct. 3, 1972).

[15]*Id.*, art. V (1).

[16]*See supra* note 2.

[17]Agreement on the Prevention of Nuclear War, June 22, 1973, 24 U.S.T. 1478, T.I.A.S. No. 7654 (effective June 22, 1973).

From what has been said above it is clear that some important measures relating to the risks for an arms race in outer space have been taken. However, the existing body of international law contains too many loopholes to put a stop to the present trends towards an arms race in outer space. What has become known about tests and development of anti-satellite weapons confirms that additional measures need to be taken.

3. *Examination of proposals made*

Three proposals have been presented in intergovernmental fora containing draft agreements relating to the prevention of an arms race in outer space. The first was presented in 1979 by Italy in the Committee on Disarmament (now the Conference on Disarmament).[18] The second one was put forward by the Soviet Union in 1981 in the UN General Assembly[19] and the third proposal, also made by the Soviet Union, was presented to the General Assembly in 1983.[20]

(a) Italy's Proposal

The proposal by Italy[21] contains six articles of which the first three are the most important ones. The last three articles concern duration, entry into force, accession and similar provisions.

According to the first paragraph of Article I, outer space shall be used for peaceful purposes *only*. The Parties to the Protocol should also undertake to refrain from measures of a military or a hostile nature, such as the establishment of military bases or installations and the stationing of other devices having the same effect (presumably in outer space). Furthermore, the prohibition in the Outer Space Treaty of the placing of weapons of mass destruction in earth orbit is repeated with the addition of a prohibition of launching such weapons also beyond earth orbit. It furthermore contains a prohibition of the launch of other types of "devices designed for offensive purposes" which presumably refers to ASAT systems. Finally, testing of any type of weapon in outer space would be forbidden.

Paragraph 2 of Article I expands the Outer Space Treaty's permission to use military personnel for only scientific purposes to include also verification.

According to Article II the Parties should undertake to prohibit any activity which is contrary to the Protocol.

The complaints procedure foreseen in Article III in case of a breach of the provision of the Protocol refers the parties to present their complaints to the Security Council of the United Nations. The Security Council may initiate an investigation.

It seems natural that as a first proposal presented before the discussions had evolved further in the UN and the Committee on Disarmament the proposed Additional Protocol does not take into account many important aspects. Some of the weaknesses in the proposal will be mentioned below but before doing so it should be underlined that this in no way is attempted to belittle the efforts behind the Italian proposal. On the contrary, it

---

[18]Additional Protocol 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 with a View to Preventing an Arms Race in Outer Space, Doc. CD/9, Mar. 26, 1979, *reproduced in* 8 J. SPACE L. 53-57 (1980).

[19]Draft Treaty on the Prohibition of the Stationing of Weapons of any Kind in Outer Space, U.N.G.A. A/RES/36/97 (Jan. 15, 1982), *reproduced in* 10 J. SPACE L. 27-30 (1982).

[20]U.N. Doc. A/38/194 (1983), *reproduced in* 12 J. SPACE L. 92 (1984).

[21]*See supra* note 18.

was an important first proposal in the efforts by the international community to take measures to prevent an arms race in outer space.

Looking at some of the shortcomings of the Italian proposal it appears to be both too general and too specific. It proposes that outer space should be used for peaceful purposes only which seems to mean that all military space activities should be forbidden. This is a laudable aim but such a provision may cause problems because of military satellites used for verification and early warning. It may also be too general if some countries propose to say that their military space activities only have peaceful purposes.

The proposal concerning prohibition of stationing and testing in outer space of other types of weapons than weapons of mass destruction is, furthermore, too limited since, such a prohibition for example, would not forbid ASAT weapons to be deployed on the ground or in the atmosphere which is where these weapons would normally be kept until actually used. Thus, the proposed prohibition would unfortunately not ban the ASAT systems we know of today.

Finally, the proposal does not contain any provisions regarding verification and the complaints procedure in the Security Council would not be very effective since those two countries which today have the possibility to act in breach of the undertakings foreseen are also in a position to put an effective stop to any investigations by using their veto.

(b) The 1981 Soviet Proposal

The first proposal by the Soviet Union in 1981[22] indicated a change in the attitude of the Soviet Union. Before this proposal the Soviet Union seemed to be of the opinion that this question should not be discussed in multilateral fora but bilaterally. The proposal by the Soviet Union could be seen as a response to the concern expressed in the United Nations by many countries about the militarization of outer space. It is to be welcomed that one of the major space powers took this action. This, however, does not mean that the 1981 proposal of the Soviet Union does not contain shortcomings. Indeed, some of them are as fundamental as those which were mentioned regarding the Italian proposal.

After a summary of the proposal of 1981 the provisions contained therein will be examined in more detail.

The proposal is a draft Treaty on the prohibition of the stationing of weapons of any kind in outer space[23]. According to Article 1 the Parties would "undertake not to place in orbit around the Earth objects carrying weapons of any kind". They would also not "install such weapons on celestial bodies or station such weapons in outer space in any other manner, including on reusable manned space vehicles" of existing or future types. Parties would also undertake not to assist or encourage any state, group of states or international organization to carry out activities contrary to this prohibition.

Article 2 proclaims that the Parties shall use space objects in strict accordance with international law including the UN Charter in the interest of maintaining peace and security and promoting international cooperation and mutual understanding.

According to Article 3 the Parties would undertake "not to destroy, damage or disturb the normal functioning of space objects of other States Parties" on one condition, namely "if such objects were placed in orbit in strict accordance with" the first Article.

Article 4 concerns verification. It is only proposed that the verification of the compliance with the provisions of the treaty shall be made by using "national technical

---

[22] *See supra* note 19.

[23] *See supra* note 19.

monitoring facilities available". Parties would also undertake not to place obstacles in the way of the monitoring facilities of other states. Furthermore, the Parties shall when necessary consult each other, make inquiries and provide information in connection with such inquiries in order to promote the implementation of the purposes and provisions of the treaty. These proposals resemble the verification provisions of the SALT agreements.

Articles 5, 6, 8 and 9 contains provisions concerning amendments, unlimited duration, signature, accession, ratification, entry into force and authentic texts.

According to Article 7 each Party "shall in exercising its national sovereignty have the right to withdraw from the treaty if it decides that extraordinary events related to the subject-matter of (the) treaty have jeopardized its supreme interests". Notification of withdrawal shall be given to the Secretary-General six months in advance and include a statement of the extraordinary events which have jeopardized its supreme interests.

An examination of Article 1 shows that it suffers from a lack of definition or explanation of what is meant with the term "weapons of any kind". The lack of precision in this context presents a problem; *e.g.* almost any manoeuverable space object - military or non-military - can be used to collide with another satellite in order to destroy it or incapacitate it in one way or the other. Thus, almost any such space object could be considered a weapon. This lack of precision becomes even more important in the context of Article 3 (see below).

Another shortcoming is that the proposed prohibition of weapons only relates to the placing or stationing of weapons in orbit around the earth. This means that the ASAT systems in existence or planned today would be covered only to a certain extent. Their deployment would not be forbidden and only the use of certain types of ASAT weapons would be prohibited. As has been pointed out above, the ASAT systems we know of today are operating from bases on the ground or from aircraft where they are kept until they are launched. This goes for the "co-orbiting" type of ASAT weapons which enter into orbit and hunt the target during a few orbits before they are close enough to be exploded in order to destroy the target. The proposed provision would cover the use of this kind of ASAT systems. As far as "direct-ascent" systems planned today are concerned they do not enter into earth orbit but attack the target at the end of a ballistic trajectory which starts from an aircraft in the atmosphere and ends by colliding with the target without exploding. The use of this latter type of ASAT weapons does not seem to be covered at all by the proposed prohibition to place or station weapons in earth orbit since it never enters into orbit.

The same problem relates to the stationing of weapons "in any other manner". Since the proposed prohibition is related to stationing it seems to imply that the object in question should have entered earth orbit which is not the case for an object flying in a ballistic trajectory.

It has been mentioned above that deployment of ASAT weapons would not be forbidden by this proposal. Furthermore, the proposal does not mention the prohibition of development and testing which are important ingredients in the efforts to prevent the use of arms in outer space.

The next question in Article 1 is whether there is any need to mention reusable space vehicles. Different kinds of weapons could be mounted on different kinds of space vehicles, reusable or disposable, manned or unmanned. It seems questionable to single out reusable space vehicles as more useful as platforms for weapons than disposable ones. The military implications of new space transportation systems are rather that an increased transportation capacity can be used for military purposes. Of greater importance seems to be if a space vehicle can be used for aggressive purposes. In this context maneuverability, *i.e.* capacity to get close to a target in space, appears to be more significant than whether a space vehicle is reusable or not. However, these questions are of the nature best to be solved during negotiations.

Turning to Article 2 of the proposal by the Soviet Union it shows many similarities with Article 3 of the Outer Space Treaty. One difference is that in the proposal by the Soviet Union the phrase "carry on activities in the exploration and use of outer space, including the moon and other celestial bodies, in accordance with international law . . ." has been changed to "*use space objects* in *strict* accordance . . ." (emphasis added here). What the implications of these differences are are not entirely clear. However, if the proposed Article 2 could be referred to in order to justify retaliatory actions against space vehicles which—in the opinion of one country—are not used in accordance with international law, in the interest of maintaining international peace and security and promoting international cooperation and mutual understanding, it would seem advisable to consider its implications further.

The proposed Article 3 presents a major problem in that it permits the use of force and interference against or the disturbance of space objects which one state considers to be a weapon. The Article states that "Each State Party undertakes not to destroy, damage, disturb the normal functioning . . . of space objects of other States Parties, *if such objects were placed in orbit in strict accordance with article 1, paragraph 1* of this treaty" (emphasis added here). As has been pointed out above the lack of definition of "weapons of any kind" leaves it open to interpretation what is to be considered a weapon. This means that it is possible for one state to qualify another state's space object, which it for some reason or another does not like, as a weapon under the proposed treaty. The proposed Article 3 would then give it the right to intervene with force or in some other manner against that space object. This would make legal actions which are now forbidden. It would be contrary to Article 2:4 of the UN Charter which prohibits the use of force. It would have implications as regards the provisions of the Outer Space Treaty and it would undermine Article 35 of the International Telecommunication Convention which prohibits harmful interference of radio communications. Thus, as it has been formulated the proposed Article 3 contains limitations of the prohibition to use force *etc.* which would undermine fundamental provisions of international law. Because of these limitations this Article could well create international problems or lead to tension instead of solving problems and ease tension.

The proposed Article 4 on verification is an improvement compared to the Italian proposal in that it attempts to take care of the problem of verification. In addition it is an improvement of that proposal because it does not refer to the Security Council in the "complaints procedure" described in paragraph 3 and, thus, does not subject complaints to the possibility of a veto.

However, verification by national technical means does not seem to be sufficient because of the difficulties, *e.g.* in distinguishing what is a launcher for a non-military satellite and an ASAT weapon, or the monitoring of aircraft-borne ASAT missiles. International on-site inspection appears to be necessary for this.

The "complaints procedure" proposed contains an obligation to supply information and this should be welcomed. The absence of a mechanism which is more effective than consultations in solving disputes certainly seems to weaken the procedure to make the proposed provisions work.

Finally, the proposed Article 7 which makes it possible for a State to withdraw from the treaty if "extraordinary events . . . have jeopardized its supreme interests" suggests that the treaty may not be upheld in a situation of tension. Such a provision would be unfortunate since it is essential that a treaty on disarmament works also—or perhaps in particular—during periods of tension. A more strict approach which would rule out or at least limit to a much greater extent the possibilities of withdrawal would certainly be preferable.

(c) The 1983 Soviet Proposal

In August 1983 the Soviet Union presented a new proposal in a letter from Mr. Gromyko to the Secretary-General of the United Nations.[24] The proposal contains a draft Treaty on the Prohibition of the Use of Force in Outer Space and from Space against the Earth.

This proposal seems to be more comprehensive than the proposal of 1981.

The preambular part contains in its first paragraph a reference to the obligations of the Members of the United Nations to refrain from the use of force. This is of course a fundamental principle of the Charter of the United Nations and a reference to it seems most appropriate. The exact formulation of the reference should be subject of discussion so as to find the language which best reflects the obligation under the Charter of the United Nations not to use force.

According to Article 1 it should be prohibited to resort to the use or threat of force in outer space and the atmosphere and on the Earth by using space objects in orbit around the Earth, on celestial bodies or stationed in space in any other manner. Furthermore, the use or threat of force against space objects should be prohibited.

This general provision on the prohibition of the use of force contains a welcome improvement of Article 1 in the 1981 proposal in that the limitation of the ban of force—permitting force against objects which are considered as weapons—has disappeared.

However, it can be questioned why there should be a special article on this subject when the Charter of the United Nations—which is also applicable in outer space, as is explicitly stated in the Outer Space Treaty—already contains a clear ban on the use of force. Thus, the use of force is already banned from outer space. Since a new article may cause confusion it would seem more advisable to simply confirm the provision of the UN Charter in this context.

Article 2 contains the following proposed specific undertakings of states:

(1) not to test or deploy space-based weapons for destruction of objects on the Earth, in the atmosphere or in outer space;

(2) not to use space objects as a means to destroy targets on the Earth, in the atmosphere or in outer space;

(3) not to destroy, damage or disturb the normal functioning or change the flight trajectory of space objects of other states;

(4) not to test or create new anti-satellite systems and to destroy any existing anti-satellite systems, and

(5) not to test or use manned spacecraft for military, including anti-satellite, purposes.

The proposed undertakings address a number of technical options and the testing, deployment and use of space weapons. To be more comprehensive it would be necessary to add a ban also on development of weapons for use in space. This aspect is not covered in the draft treaty with the possible exception of the proposed ban of the "creation" of new ASAT systems (see below concerning the fourth undertaking).

The first of these proposed undertakings addresses "space-based" weapons. To refer specifically to "space-based" causes the same problems as Article 1 of the 1981 proposal and implies a limitation which renders the undertaking irrelevant bearing in mind that the ASAT systems as conceived today are based on the ground or in the atmosphere. Thus, it would seem more appropriate to make such an undertaking apply to any weapon system which is meant for use in space.

---

[24] *See supra* note 20.

The second undertaking draws the attention to the fact that space objects can be incapacitated by a simple ramming using an object which is not a weapon. This is certainly an aspect that should be covered. What is proposed in this undertaking touches on the ban on the use of force. It would, therefore, seem useful to consider it in the context of proposed Article 1 but also together with the third undertaking.

The third undertaking proposes a welcome expansion of Article 9 of the Outer Space Treaty and of Article 35 of the International Telecommunication Convention. Space activities can be disturbed by other means than direct attacks. Radio signals are vital for the command and control of space craft, for transmitting data to and from a satellite, *etc.* That is why such signals should be protected. It would have to be discussed whether the provisions of the International Telecommunication Convention are sufficient and should be confirmed or if they should be supplemented. A number of other actions could be taken against a satellite to make it useless or function less efficiently but without destroying it. New forms of disturbances, *e.g.* blinding of the sensor on board a space craft or a change of its attitude may be as effective as the complete destruction of a satellite. For this reason a ban of the proposed nature would be useful.

The most important new proposal in the draft treaty is contained in the fourth undertaking. This sub-paragraph proposes a ban on new ASAT systems and the destruction of existing ones. If accepted it would mean a significant step in preventing the weaponization of outer space. Compared to the 1981 proposal this proposal is a great improvement in that the ban comprises all ASAT weapons, ground-based, air-based or space-based, and not only space-based ones. Thus, ASAT systems known today would be covered by the ban. The proposed prohibition relates to testing and "creation" of new ASAT systems. What "create" means is somewhat unclear. It would seem better to use traditional terminology and ban development, testing and deployment of all ASAT weapons.

The fifth undertaking refers to the use of manned space craft for military purposes. As has been stated above with regard to the 1981 proposal it would, from a technical point of view, seem more relevant to take up maneuverable space vehicles, manned or unmanned, than to single out manned space craft. The capability to maneuver a space-craft can be used for docking but it can also be used *e.g.* for ramming another space-craft. But, again, these questions are of a nature best to be solved in negotiations.

Article 3 proposes that states parties do not encourage other states *etc.* to engage in activities prohibited by the Treaty.

Article 4 proposes verification by national technical means and that such means must not be interfered with. As with regard to the 1981 proposal this provision suffers from the fact that it would only be states like the Soviet Union and the United States that have the capacity to verify compliance with the Treaty. This could well be an obstacle when trying to convince other states to become parties to it. Again it would seem preferable to have a clause which provides for some kind of international on-site verification.

Article 5 is new compared to the 1981 proposal. It contains a proposal to establish a consultative committee for the solution of problems that may arise on the implementation of the Treaty. This is a model which has been used in the SALT agreements and the ABM Treaty. However, this committee is only one of the proposed avenues for solving problems in connection with the Treaty. Paragraph 1 proposes consultations between the parties and paragraph 2 envisages procedures within the UN. This could create a confusion as to which should be the right approach to follow in a given case. Would for instance actions in accordance with one of the procedures preclude the use of any of the others? The procedures within the UN would seem to imply recourse to the Security Council where action could be stopped with a veto. The proposed procedures do not envisage third party settlement which would guarantee that complaints would

be followed by action. Finally, compared with the 1981 proposal Article 5 does not contain a specific obligation to supply information in connection with inquiries.

From the above can be concluded that the proposed complaints procedure should be subject to detailed discussion and scrutiny.

Article 8 concerns the peaceful settlement of disputes and should be considered in the context of Article 5. As stated earlier a specific provision making third party settlement obligatory should be seriously considered.

It can be noted that it is proposed that the Treaty be of unlimited duration and that it does not contain any provision on withdrawal which is an improvement in comparison with the 1981 proposal.

To sum up, the 1983 proposal for a draft treaty banning the use of force in or from outer space is interesting and deserves close study in the Conference on Disarmament. It addresses a number of important issues that need to be solved to prevent the extension of the arms race into outer space. A number of clauses should, however, be further discussed before any final decision is taken.

The Soviet Union when presenting this new proposal to the United Nations undertook to observe a moratorium on ASAT weapons, *i.e.* not to launch any kind of anti-satellite weapons for as long as other states refrained from launching such weapons. This undertaking was repeated as late as in February 1984 in the Technical and Scientific Sub-Committee of the UN Committee on the Peaceful Uses of Outer Space.[25] At that time, no mention was made of the first test of the United States new ASAT system which was carried out on 21 January 1984.

4. *Concluding remarks*

It has stated above that further measures are needed to prevent an arms race in outer space. It is unlikely that all problems will be solved by the adoption of one single agreement. Rather, it seems necessary to initiate a process through which step after step could be taken to develop further measures progressively, in parallel with terrestrial disarmament measures, to reduce militarization of outer space and as a final goal put a halt to the possibility of an arms race in outer space. In this process it may well be necessary to elaborate more than one agreement.

It is not yet too late to preclude an extension of the arms race in outer space. However, time is running short. Therefore, certain measures should be taken as soon as possible before major investments have been made in space weapons systems and before such systems have been deployed on a larger scale.

These measures should be elaborated on a multilateral basis, but the United States and the Soviet Union should also resume bilateral talks to facilitate a solution of the most pressing problems, notably the prevention of anti-satellite warfare.

The measures to meet the most urgent needs should include a ban of certain activities. Article 2, para. 4 of the UN Charter and of Articles 1 and 3 of the Outer Space Treaty should be confirmed. Damage, disturbance and harmful interference of the normal functioning of space objects should be forbidden in order to strengthen Article 9 of the Outer Space Treaty and confirm Article 35 of the ITU convention.

Furthermore, weapons systems—in particular ASAT systems—meant to be used for activities mentioned above should be banned. This ban would have to include the development, testing and deployment of such systems on or under the ground, on or

[25]U.N. Comm. on the Peaceful Uses of Outer Space, Report of the Scientific and Technical Sub-Committee on the Work of its Twenty-First Session, Doc. A/AC.105/336 (1984).

under the surface of the sea, in the atmosphere or in outer space. Such a measure would be a complement to Article 4 of the Outer Space Treaty. This ban should also provide for the dismantling of existing systems.

The ban of the development, testing and deployment of space-based ABM systems in the 1972 ABM treaty between the Soviet Union and the United States should also be confirmed.

A prohibition of FOBS should likewise be included in line with SALT II.

Strict measures should be adopted regarding the verification of the compliance with such a treaty. The best method in this respect would be international on-site inspection of some kind.

Disputes should be solved by the International Court of Justice or by arbitration.

The measures mentioned above would not completely rule out the risk for an arms race in outer space. As mentioned above, they should rather be seen as the beginning of a *process* to achieve this objective. In such a process it could be discussed if certain military space systems have a particular destabilizing effect. It would be essential to recognize that certain military space systems have a stabilizing effect and can contribute to disarmament measures.

The international use of satellites for the monitoring of disarmament agreements and crises should be considered in line with the proposal to establish an International Satellite Monitoring Agency (ISMA). Furthermore, it should be discussed if there are any risks for expanding the arms race – not only in outer space but also on the earth – in the proliferation of such space technologies as those related to the launching of space vehicles. Also, measures should be undertaken to increase the openness as regards all kinds of space activities, both military and non-military. The notification procedures in the 1975 Registration Convention should be further developed. Such measures would facilitate the prevention of an arms race in outer space and lead to increased confidence.

As increased involvement by more countries in peaceful outer space activities would strengthen the interest to keep outer space free from armed conflicts. International cooperative efforts for this purpose should be stimulated.