

**The results of the UNCOPUOS Legal Subcommittee Working Group on
“Practice of States and international organizations in registering space objects”
2005-2007**

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Abstract

From 2005 to 2007 the Legal Subcommittee (LSC) of the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) debated the issue of "Practice of States and international organizations in registering space objects". The purpose of this work plan was to enhance the adherence to the Registration Convention¹. States identified this as necessary since the registration practice had been rather unsatisfactory during the preceding years and new problems had arisen with the application of the Convention. Such problems had already been touched upon during the deliberations on the legal concept of the "launching State", which led to the adoption of the respective UN General Assembly Resolution in 2004.

The working group dealt with the subject under a multi-year work plan. In 2004, States and international organizations reported on their practice of registering space objects. In 2005, the Working Group started its work with the examination of

these reports and turned in 2006 to the identification of common practices and began to draft recommendations for enhancing the adherence to the Registration Convention. In 2007 the work of the Working Group was finalized and a Draft UN General Assembly Resolution was adopted by the UNCOPUOS Main Committee containing recommendations on enhancing the adherence to the Registration Convention. This Draft Resolution is expected to be adopted by the UN General Assembly in December 2007.

This paper describes the work of the Working Group and assesses its achievements. The co-authors have been chairman (Kai-Uwe Schrogl, 2006-2007) and chairman/secretary (Niklas Hedman, 2005/2006-2007) respectively of this working group.

1. Background to the Working Group

The agenda item on "Practice of States and international organizations in registering space objects" (Registration Practice) demonstrates a concrete example of a highly productive work conducted by the Legal Subcommittee of the Committee on

* The authors present their personal views.

¹ Convention on Registration of Objects Launched into Outer Space - UN General Assembly Resolution 3235 (XXIX), annex.

the Peaceful Uses of Outer Space (UNCOPUOS). The deliberations under this agenda item under a multi-year work plan can be regarded as a follow-up of the deliberations on the legal concept of the “launching State”. These were conducted from 2000 to 2002 and were the first example of the successful implementation of the new tool of a multi-year work plan in the Legal Subcommittee. The good results of this mode of work² made the delegations confident that another effort should be taken to select a topic, appropriate to be treated in such a way. In fact, the discussions under the agenda item “launching State” had made it clear that the registration practice was an area, where an in-depth investigation seemed to be necessary.

It was the delegation of the United States, which gave the specific impetus through explaining its problems with the registration of foreign payloads on board of the Space Shuttle. Other delegations agreed on the importance of this topic and the need of the Subcommittee to continue with substantive work, and submitted in 2003 a working paper with a proposed work plan³. The same year the new agenda item on Registration Practice was adopted by the Legal Subcommittee and work plan was laid out.⁴ This multi-year work plan contained the following steps:

² See in detail Kai-Uwe Schrogl/Charles Davies, *A New Look at the Concept of the “Launching State”*. The Results of the UNCOPUOS Legal Subcommittee Working Group 2000-2002, in: *German Journal of Air and Space Law ZLW* (51,3) 2002, 359-381. The UN General Assembly Resolution was adopted in 2004: UNGA Res. 59/115 of 10 December 2004, “Application of the concept of the ‘launching State’”.

³ Working paper submitted by Australia, Austria, Canada, the Czech Republic, France, Germany, Greece, India, Japan, the Netherlands, Sweden, Ukraine, the United Kingdom of Great Britain and Northern Ireland and the United States of America (A/AC.105/C.2/L.241 and Add.1).

⁴ It might be noted that the question of registration practice was already part of the working paper submitted by Germany on behalf of 19 other European States, UN Doc. A/AC.105/C.2/L.211/Rev.1 of 30 March 1998 on

“2004: Presentation by Member States and international organizations of reports on their practices in registering space objects and submitting the required information to the Office for Outer Space Affairs for inclusion on the Register.

2005: Examination by a working group of the reports submitted by Member States and international organizations in 2004.

2006: Identification of the working group of common practices and drafting of recommendations for enhancing adherence to the Registration Convention.

2007: Report to the Committee on the Peaceful Uses of Outer Space.”

The mandate was as restricted as the mandate under the work plan on the “launching State”: neither modifications of the Convention should be proposed nor an authoritative interpretation of the Convention was envisaged. The item should simply lead to non-binding recommendations on enhancing the adherence to the Convention – and not the Convention itself. As with the work plan on the “launching State” it was very much up to the Chairman of the working group to lead the discussions to any specific resulting format, with the options ranging from a mere statement to formal conclusions.

Throughout the work plan of the Subcommittee and its Working Group on this item, member States of the Committee actively participated in the discussions and several member States provided background information in accordance with the work plan⁵. The Working Group

improving the Registration Convention., which initiated the agenda item on the “launching State”.

⁵ Reports were received from the European Space Agency and the following States: Australia, Czech Republic, France, Germany, Italy, Morocco, Myanmar, Netherlands, Peru, Republic of Korea, Russian Federation and Sweden (UN Docs. A/AC.105/C.2/L.250 and Corr.1 and Add.1, A/AC.105/C.2/2004/CRP.3 and A/AC.105/C.2/2004/CRP.7), as well as a note by the Secretariat containing replies received from Germany and Morocco on harmonization of

had before it several background documents prepared by the Secretariat and the Chairman of the Working Group⁶:

The plenary of the Subcommittee and the Working Group also heard presentations by the Secretariat on the United Nations Register, by Germany on findings of the Project 2001 Plus workshop on current issues in registration of space objects⁷, and

practices, non-registration of space objects, transfer of ownership and registration/non-registration of foreign space objects (UN Doc. A/AC.105/867 and Corr.1).

⁶ UN Doc. A/AC.105/C.2/L.255 and Corr.1 and 2 of 25 January 2005, Practice of States and international organizations in registering space objects -Background paper by the Secretariat, UN Doc. A/AC.105/C.2/L.262 of 9 February 2006, Practice of States and international organizations in registering space objects: benefits of becoming a party to the Convention on Registration of Objects, Launched into Outer Space, UN Doc. A/AC.105/C.2/L.266 of 30 January 2007, Practice of States and international organizations in registering space objects – Working paper submitted by the Chairman of the Working Group, UN Doc. A/AC.105/C.2/L.265, Information on the activities of international intergovernmental and non-governmental organizations relating to space law – Note by the Secretariat containing comments by the Space Law Committee of the International Law Association on registration issues. In addition, the Secretariat prepared two Conference Room Papers: UN Doc. A/AC.105/C.2/2005/CRP.10 with statistical information on the number of space objects launched and registered or unregistered during the period 1957-2004, and UN Doc. A/AC.105/C.2/2006/CRP.5 with statistical information on States and intergovernmental (or former intergovernmental) organizations that operate or have operated space objects in Earth orbit or beyond 1957-2005.

⁷ See Stephan Hobe/Bernhard Schmidt-Tedd/Kai-Uwe Schrogl/Stephan Mick (eds.): Current Issues in the Registration of Space Objects, Proceedings of the „Project 2001 Plus) Workshop, 20/21 January 2005, Berlin. See also Bernhard Schmidt-Tedd/Michael Gerhard: How to adapt the present regime for registration of space objects to new developments in space applications?, IAC-05-E.6.4.08 and Bernhard Schmidt-Tedd/Michael Gerhard: Registration of Space Objects – Which are the Advantages for States Resulting from Registration, in: Marietta Benkő/Kai-Uwe Schrogl (eds.): Space Law – Current Problems and Perspectives for Future Regulation, Utrecht 2005, 121-140.

by the European Space Agency on the registration policy of ESA.

2. Problems in registration practice and legal issues addressed in the Working Group

The background paper by the Secretariat, presented to the Working Group during its first year of work, in 2005, (UN Doc. A/AC.105/C.2/L.255) provided the information necessary for the substantive work, thus highlighting several issues of concern in the current practice of registering space objects. The following examples taken from that report give a broad picture of the variances in registration practice.

At the outset, the United Nations, through the United Nations Office for Outer Space Affairs (UNOOSA,⁸ maintains two separate, yet complementary, registers on objects launched into outer space. One register is maintained with information provided by States in accordance with UN General Assembly Resolution 1721 B (XVI) of 20 December 1961 and the other with information provided by States Parties to the Registration Convention. The Resolution Register is today used to provide information submitted by States that are not parties to the Registration Convention. While the Registration Convention specifies what information should be provided with regard to a space object, Resolution 1721 B (XVI) does not. In the majority of cases, States provide basic orbital information similar to that requested in the Registration Convention. However, in some cases, other types of information are provided, including data sets known as “two-line elements”, which,

⁸ Information on the UN registers, official registration documents and an on-line index of objects launched into Outer Space, as well as treaty status and texts of the space law treaties can be found on the website of the Office (www.unoosa.org).

using mathematical formulae, can predict the space object's position relative to the Earth at a given time as well as the basic orbital characteristics required under the Convention. Article IV of the Registration Convention specifies the types of information to be provided on a space object and the time frame for submission. States that register space objects in accordance with UN General Assembly Resolution 1721 B (XVI) generally provide the same information as required under Article IV of the Convention. Most States that operate launch vehicles for their own use or for customers provide information on a bimonthly, quarterly or yearly basis. Others provide information on a case-by-case basis. This practice can range from immediately after the launch to months afterwards. Furthermore, the Registration Convention and Resolution 1721 B (XVI) do not require provision of the geostationary satellite orbit (GSO) position. However, of the States that have registered space objects in this orbit, most provide the GSO position. In the majority of cases, GSO positions are registered with the International Telecommunication Union.

Another concern relates to the fact that as at 1 January 2005, only 16 of the 51 parties to the Registration Convention had informed the Secretary-General of the establishment of national registers, in accordance with Article II, paragraph 1.

In some instances, a space object has been registered by one State in compliance with the Registration Convention and also registered by another State under Resolution 1721 B (XVI). Multiple launching States can also result in the registration of a space object being overlooked. Consequently, a State may refer to a space object that its launch capabilities placed in orbit as being carried on another State's national registry as opposed to its own. A common issue affecting which Party should register a space object is when ownership is

transferred from a commercial entity of one State Party to a commercial entity of another State Party. It should be noted that the Registration Convention has no specific provision for the "change of ownership" of a space object. Such changes in ownership have become common for geostationary communication satellites, which are leased or even sold years after their launch, so that the original State of registry may no longer have control over the space object. In most instances, such transfers of ownership are not reported to the United Nations.

In instances where a space object is placed in orbit on behalf of another State, parties jointly determine the State of registry, pursuant to Article II of the Registration Convention. In some cases, the State that provides the launch services registers the "foreign" object in its national registry. China has registered a number of space objects on behalf of its international launch clients. In cases where the State that provides the launch vehicle does not register the "foreign" functional objects, it only registers space objects associated with the launch vehicle, such as third stages and shrouds. France and the United States follow this practice. Other States include a notification in registration submissions that their launch vehicle were used to place "foreign" space objects into Earth orbit but do not include that object on its national registry. The Russian Federation follows this practice. France, in addition to registering space objects associated with the launch vehicle, also follows this practice. In other cases, States do not provide any information on such objects.

In practice, all States provide the common name of a space object. Most States provide more than one identifier for a space object. Some States also use the Committee on Space Research (COSPAR) international designator. This designator is nominally assigned by the World Warning Agency for Rockets and Satellites (SPACEWARN) on behalf of COSPAR,

which has been done since 1957. The international designator is based on the year of launch, the number of successful launches and the priority/order of the space object's deployment/detection. The international designator is made publicly available through SPACEWARN bulletins, which are in turn made available by facsimile and on the Internet. Other States provide designators based on entries in their national registry, in which case the common name is also provided. Some States also use a designator assigned in a catalogue of space objects maintained by the United States Strategic Command (USSTRATCOM). The catalogue is based on observational/radar data and is made available through the Orbital Information Group of the National Aeronautics and Space Administration of the United States (NASA). This numerical designator is based on the numerical sequence in which the United States space surveillance network detects an object. In a few cases, States provide the international designator, the USSTRATCOM catalogue designator and the common name.

Some States provide basic orbital parameters for the initial orbit of a space object. Other States provide parameters for the intermediate (parking) orbit and still others for the final operational orbit. Most States provide the nodal period in minutes. On occasion, the nodal period is provided in hours and minutes. This practice is most common when States register space objects in the GSO.

The majority of States use Greenwich Mean Time (GMT), also referred to as Universal Coordinated Time (UTC). GMT is the standard against which all other time zones in the world are referenced. In other cases, parties use the local time at the place of launch or the national meridian time. Most States provide detailed information on where a space object is launched. The information can be specific as the launch facility from which the object was launched. In cases where a space object is

deployed from a parent object (i.e. the deployment of a satellite from the Space Shuttle or a space station), some States provide the date of launch of the parent space object, while others provide the time and date of deployment from the parent space object. A few States indicate only the territory from which the space object was placed into Earth orbit or beyond. Instances can occur when an object that was launched from outside a State's territory is not reported as being so.

The amount of information on the function of a space object ranges from a two-word statement of its function to a detailed account of its mission objectives, the science payload and radio frequency plans. Most States provide very basic information on the space object's function. In the case of States that launch space objects frequently, a standardized list of functions has been developed by each party, which is applied to a space objects on a case-by-case basis.

Article IV, paragraph 3, of the Registration Convention requires Parties to notify the Secretary-General, to the greatest extent feasible and as soon as practicable, of space objects concerning which it has previously transmitted information, and which have been but no longer are in Earth orbit. In practice, of the 16 Parties to the Convention that have objects that have re-entered Earth's atmosphere, only 8 have forwarded this information to the United Nations. Of the States that have, some provide the actual date of re-entry and others provide information on a monthly basis, that is, an objects ceased to exist by the end of a particular month. Some use GMT as a time reference, while others use national time meridians when an object is no longer in Earth orbit. It should be noted that the lack of information or non-specific dates of decay affect the ability to identify a space object that has returned to Earth.

Of the approximately 5,730 functional space objects launched into Earth orbit or

beyond since 1976 (as of 1 January 2005), 390 have not been registered with the United Nations in accordance with the Registration Convention or UN General Assembly Resolution 1721 B (XVI). Of the 39 States that have launched space objects into Earth orbit or beyond, 16 are not Parties to the Convention. The presence of multiple parties in the launch of a space object may contribute to non-registration of space objects. Cases of non-registration are also due to the understanding by States that have acceded to the Registration Convention that registration is only required of objects launched after accession. Consequently, States may have space objects in Earth orbit that are not registered because their launch occurred prior to the State acceding to the Convention. Modules of space stations are sometimes not registered with the United Nations. This may occur even when the modules are the primary payload for the mission. Some space objects that perform national security functions have not been registered by some Parties to the Registration Convention. Probes and recoverable capsules that separate from a space object and either return to Earth or land on another celestial body are also sometimes not registered.

The examples above demonstrate the wide spectrum of registration practice. The Working Group considered not only technical issues of registration. Legal issues and concerns were on the table throughout the workplan. The main legal issues brought up related to the relationship between responsibility under Article VI of the Outer Space Treaty, liability under Article VII, jurisdiction and control under Article VIII, and how the provisions of the Outer Space Treaty relate to the regime laid down in the Liability Convention and Registration Convention. The concept of the launching State, in particular the element of procurement, also acquired attention in the debate.

In the debate of the Working Group, the view was expressed that when a space object was transferred from the jurisdiction and control of the State of registry to the jurisdiction and control of another State, the State of registry, following the transfer of ownership, would no longer bear international responsibility for the space object under article VI of the Outer Space Treaty. Another concern raised in the Working Group, was that registration of a space object other than by a launching State was not conceivable under the Registration Convention. The obligation to register provided for by the Registration Convention had a different purpose than was provided for under article VIII of the Outer Space Treaty, which had to be linked to the liability system set up by article VII of the Outer Space Treaty and by the Liability Convention. The point was also made that, with regard to jurisdiction and control over a space object launched by multiple launching States, the State that had registered a space object would retain jurisdiction and control over that object according to article VIII of the Outer Space Treaty. In case jurisdiction and control over the space object were to be changed, an appropriate agreement had to be concluded among launching States in accordance with Article II of the Registration Convention.

As can be seen from the elements of conclusions of the Working Group, as constituted by the Draft Resolution (see below), most recommendations target practical and technical issues for enhancing registration practice. Operative paragraphs 3 (a-d) and 4 (a-b), however, go deeper into legal issues, and defines in carefully negotiated consensus language the minimum common denominator for the interpretation of various central legal concerns related, in particular, to a case of multiple launching States and the transfer of ownership of space objects in orbit. These elements in the Draft Resolution might look simple at the outset, but in fact provide quite a strong common

understanding at the political level on the application of the provisions laid down in the legal regime on outer space. There will of course be views that the Draft Resolution is without teeth in a legal sense and that the Working Group failed to provide a thorough legal analysis, but taking into consideration the political dimension involved, the text nevertheless demonstrate outstanding progress. This is furthermore shown by the development in language between paragraph 3 of the „launching State” Resolution, with its recommendations on voluntary information regarding on-orbit transfer of ownership, and the detailed recommendations put forward in paragraph 4 of the new Draft Resolution on registration practice.

3. The conduct of the Working Group

The Working Group, in 2005 and 2006, was informed of different practices by States in registering space objects and in their respective implementation of the Registration Convention. In particular, the focus of attention was on the establishment and maintenance of national registries and the activities of authorities responsible for maintaining such national registries, criteria for including space objects in national registries, procedures applied in cases where more than one party was involved in the launch or where private entities or international organizations were involved, and practice relating to the registration of functional and non-functional objects.

Information provided by member States in the plenary in 2004 and during the first year of the Working Group in 2005, together with the information provided in the background paper by the Secretariat, opened for the agreement in the Working Group to focus its attention in the following year, on the following four main issues:

- a) Harmonization of practices (administrative and practical);
- b) Non-registration of space objects;
- c) Practice with regard to transfer of ownership of space objects in orbit;
- d) Practice with regard to registration/non-registration of “foreign” space objects.

On the basis of those issues, the Working Group in 2006 agreed on elements that could constitute the basis for consensus on specific recommendations and conclusions to be included in the report to be prepared by the Subcommittee in 2007.

The breakthrough on the road to a General Assembly Resolution occurred in early 2007. Following the presentations by States and international organizations and the strategic layout of the work during the first two years supported by highly valued background analyses prepared by the Secretariat, the working group held intersessional consultations (in January 2007 in Berlin)⁹, paving the way for adopting concrete recommendations in the regular session of the Legal Subcommittee in March/April of this year. It was only for the second time in recent history that the Subcommittee stimulated such intersessional consultations, but it proved to be useful for the chairman and the secretariat to prepare a comprehensive set of recommendations and finalize them in the form of the draft UN General Assembly Resolution already after only three years of deliberations (while the translation of the recommendations from the working group on the “launching State” into a General Assembly Resolution took two more years). This speedy conclusions were made possible through an interim agreement at the Legal Subcommittee session and a finalization at the Main Committee session in June on the

⁹ See UN Doc. A/AC.105/C.2/L.266 of 30 January 2007, Practice of States and international organizations in registering space objects. Working paper submitted by the Chairman of the Working Group on the Practice of States and International Organizations in Registering Space Objects.

basis of a paper presented by the Chairman of the working group¹⁰, which reflected the agreement that the results from this endeavour was substantive enough for a UN General Assembly Resolution.

4. The Draft UN General Assembly Resolution

The Draft UN General Assembly Resolution (see the Annex to this paper) reflects all issues discussed in the course of the work plan and contains concrete recommendations where an agreement could be reached. The Draft Resolution is composed of a preamble (p. paragraphs 1-12, four sets of recommendations (paragraphs 1-4) and a set of requests addressed to UNOOSA (paragraph 5) as well as a concluding recommendation (paragraph 6).

The preamble contains in p. paragraph 7 the most important benefits for States of becoming parties to the Registration Convention (utility of the Register, identification of space objects). Following the noting of the obligations of States parties to the Convention (furnishing of information, establishing a registry) in p. paragraph 8, paragraph 9 provides a picture, what positive effects a universal accession and acceptance, implementation and observance of the provisions of the Registration Convention could have (i.a. contribution to common procedures). P. paragraph 10 then leads to a central statement by highlighting the actual framework conditions, which lead to need for action (in particular the emergence of non-governmental actors). This paragraph – taken from the preamble of the UN General Assembly Resolution on the “launching State” - is important in the way that it reiterates the joint assessment of the States, how space activities have changed

during the past years. P. paragraphs 11 and 12 finally contain the desire of the States to achieve a most complete registration and to enhance the adherence to the Convention.

The first set of recommendations (paragraph 1) calls upon the States and international intergovernmental organizations to ratify or declare their acceptance of the Convention. The second set of recommendations (paragraph 2) contains a number of concrete proposals in order to achieve a harmonization of practices (i.a. specific rules with regard to the uniformity in the type of information, suggestions for additional information and transparency in the designation of focal points for the registries). These two sets of recommendations aim at making the Register and the registries more up to date and more uniform so that they can stay a relevant source of information besides their legal consequence.

The third set of recommendations (paragraph 3) is a core element of the Draft Resolution, since it tackles four areas, which have been the causes for incomplete registration in the recent past. They comprise first the registration of space objects operated by international intergovernmental organizations, where a general fallback option is proposed (such organizations - respectively the responsible States - have in the course of their privatizations drastically neglected the registration of their space objects). Secondly, it deals with the growing number of providers of launch facilities, which should not lead to situations, where it is too complicated or where it is “forgotten” to determine the State, which should register the space object. In addition, it suggests a way to deal with joint launches of space objects and finally proposes a way to find appropriate States to register in the nowadays broad sector of private space activities. With this set of recommendations the identification of the changed space environment is dramatically highlighted. This set of recommendations

¹⁰ UN Doc. A/AC.105/2007/CRP.5 of 5 June 2007, Practice of States and international organizations in registering space objects: Elements of conclusions of the Working Group.

has only declaratory character and is non-binding for States, but if the application of existing international law will not be uniform in the future, formal amendments of the treaties might actually be inescapable. This would then be the only way of maintaining the basic principles of the space law regime (responsibility, liability) in a level-playing field, where flags of convenience will be made impossible. The States will then have to be more courageous than simply drafting UN General Assembly Resolutions with restricted scope.

Another epitome of the new situation is contained in the third set of recommendations. It deals with the issue, already identified by the UN General Assembly Resolution on the “launching State” (paragraph 4), the transfer of ownership of space objects in orbit. For the cases of “changes in the supervision of a space object in orbit” (this legal expression relating to Article 6 of the Outer Space Treaty was used in the text instead of “transfer of ownership) some proposals are made about the content of information to be provided and who should be in charge of that.

The second last operative paragraph deal with a request to UNOOSA to make available registration forms and provide transparency on information to be provided by the States on their contact points and national registries. Finally, States and international organizations are recommended to report on new developments relating to their practice in registering space objects.

The perspectives for the UN General Assembly Resolution are that States will consider reflecting the recommendations in

their national regulatory practice. Since numerous States are currently working on such regulation, it was very timely to agree on specific elements. The recommendations aiming a greater transparency might also be implemented soon by the respective actors (States, international organizations and the UNOOSA). The high visibility of a UN General Assembly Resolution will certainly help to keep track of the developments in this field.

Another positive impact is the proof that multi-year work plans are useful and successful tools for the UNCOUOS Legal Subcommittee. The agenda items on the “launching State” and the Registration Practice have both lead to UN General Assembly Resolutions containing substantive recommendations. While they cannot replace real law-making, they can at least highlight - through this kind of soft law – the needs for development in the practice of implementing the provisions of space law. In this spirit, the successful conclusion of the agenda item on Registration Practice was the impetus for the adoption of a new agenda item, which will also be dealt with under a multi-year work plan (2008-2011) in the framework of a working group. The topic will be “General exchange of information on national legislation relevant to the peaceful exploration and use of outer space”. This item will bring together recommendations by the both preceding agenda items and although the title is formulated in the most cautious possible way (“General exchange of information”) it will again be up to the Chairperson and the joint will of the member States, whether they will aim for and accept meaningful and substantive results.

Annex

Draft UN General Assembly Resolution emanating from the working group on the agenda item "Practice of States and international organizations in registering space objects" as contained in the 2007 Report of the Committee on the Peaceful Uses of Outer Space:

The General Assembly,

Recalling the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies,¹¹ in particular articles 8 and 11,

Recalling the Convention on Registration of Objects Launched into Outer Space,¹²

Recalling its resolution 1721 B (XVI) of 20 December 1961,

Recalling also its resolution 41/66 of 3 December 1986,

Taking note of the report of the Committee on the Peaceful Uses of Outer Space on its fiftieth session¹³ and the report of the Legal Subcommittee on its forty-sixth session, in particular the conclusions of the Working Group on the Practice of States and International Organizations in Registering Space Objects, annexed to the report of the Legal Subcommittee,¹⁴

Noting that nothing in the conclusions of the Working Group or in the present resolution constitutes an authoritative interpretation of or a proposed amendment to the Registration Convention,

Bearing in mind the benefits for States of becoming parties to the Registration Convention and that, by acceding to, implementing and observing the provisions of the Registration Convention, States:

(a) Enhance the utility of the Register of Objects Launched into Outer Space established under article III of the Registration Convention, in which information furnished by States and international intergovernmental organizations conducting space activities that have declared their acceptance of the rights and obligations under the Registration Convention is recorded,

(b) Benefit from additional means and procedures that assist in the identification of space objects, including, in particular, in accordance with article VI of the Registration Convention,

Noting that States parties to the Registration Convention and international intergovernmental organizations conducting space activities, having declared their acceptance of the rights and obligations under the Convention, shall furnish information to the Secretary-General in accordance with the Convention and shall establish an appropriate registry and inform the Secretary-General of the establishment of such a registry in accordance with the Convention,

Considering that universal accession to and acceptance, implementation and observance of the provisions of the Registration Convention:

(a) Lead to increased establishment of appropriate registries,

(b) Contribute to the development of procedures and mechanisms for the maintenance of appropriate registries and the provision of information to the Register of Objects Launched into Outer Space,

(c) Contribute to common procedures, at the national and international levels, for registering space objects with the Register,

(d) Contribute to uniformity with regard to the information to be furnished and recorded in the Register concerning space objects listed in the appropriate registries,

(e) Contribute to the receipt of and recording in the Register of additional information concerning space objects on the appropriate registries and information on objects that are no longer in Earth orbit,

¹¹ General Assembly resolution 2222 (XXII), annex.

¹² General Assembly resolution 3235 (XXIX), annex.

¹³ *Official Records of the General Assembly, Sixty-second Session, Supplement No. 20 (A/62/20)*.

¹⁴ A/AC.105/891, annex III, appendix.

Noting that changes in space activities since the Registration Convention entered into force include the continuous development of new technologies, an increase in the number of States carrying out space activities, an increase in international cooperation in the peaceful uses of outer space and an increase in activities carried out by non-governmental entities, as well as partnerships formed by non-governmental entities from more than one country,

Desirous of achieving the most complete registration of space objects,

Also desirous of enhancing adherence to the Registration Convention,

1. *Recommends*, with regard to adherence to the Registration Convention, that:

(a) States that have not yet ratified or acceded to the Registration Convention should become parties to that Convention and, until they become parties to the Convention, furnish information in accordance with General Assembly resolution 1721 B (XVI) of 20 December 1961;

(b) International intergovernmental organizations conducting space activities that have not yet declared their acceptance of the rights and obligations under the Registration Convention should do so in accordance with article VII of the Convention;

2. *Recommends*, with regard to the harmonization of practices, that:

(a) Consideration should be given to achieving uniformity in the type of information to be provided to the Secretary-General on the registration of space objects; such information could include, *inter alia*:

(i) The Committee on Space Research international designator, where appropriate;

(ii) Universal Time Coordinated as the time reference for the date of launch;

(iii) Kilometres, minutes and degrees as the standard units for basic orbital parameters;

(iv) Any useful information relating to the function of the space object in addition to the general function requested by the Registration Convention;

(b) Consideration should be given to the furnishing of additional appropriate information to the Secretary-General on the following areas:

(i) The geostationary orbit location, where appropriate;

(ii) Any change of status in operations (*inter alia*, when a space object is no longer functional);

(iii) The approximate date of decay or re-entry, if States are capable of verifying that information;

(iv) The date and physical conditions of moving a space object to a disposal orbit;

(v) Web links to official information on space objects;

(c) States conducting space activities and international intergovernmental organizations that have declared the acceptance of the rights and obligations under the Registration Convention should, when they have designated focal points for their appropriate registries, provide the Office for Outer Space Affairs of the Secretariat with the contact details of those focal points;

3. *Recommends*, in order to achieve the most complete registration of space objects, that:

(a) Due to the complexity of the responsibility structure in international intergovernmental organizations conducting space activities, a solution should be sought in cases where an international intergovernmental organization conducting space activities has not yet declared its acceptance of the rights and obligations under the Registration Convention, and a general backup solution for registration by international intergovernmental organizations conducting space activities is needed in cases where there is no consensus on registration among the States members of such organizations;

(b) The State from whose territory or facility a space object has been launched should, in the absence of prior agreement, contact States or international intergovernmental organizations that could qualify as "launching States" to jointly determine which State or entity should register the space object;

(c) In cases of joint launches of space objects, each space object should be registered separately and, without prejudice to the rights and obligations of States, space objects should be included, in accordance with international law, including the relevant United Nations treaties on outer space, in the appropriate registry of the State responsible for the operation of the space object under article VI of the Outer Space Treaty;

(d) States should encourage launch service providers under their jurisdiction to advise the owner and/or operator of the space object to address the appropriate States on the registration of that space object;

4. *Recommends* that, following the change in supervision of a space object in orbit:

(a) The State of registry, in cooperation with the appropriate State according to article VI of the Outer Space Treaty, could furnish to the Secretary-General additional information, such as:

- (i) The date of change in supervision;
- (ii) The identification of the new owner or operator;
- (iii) Any change of orbital position;
- (iv) Any change of function of the space object;

(b) If there is no State of registry, the appropriate State according to article VI of the Outer Space Treaty could furnish the above information to the Secretary-General;

5. *Requests* the Office for Outer Space Affairs:

(a) To make available to all States and international intergovernmental organizations a model registration form, reflecting the information to be provided to the Office for Outer Space Affairs, to assist them in their submission of registration information;

(b) To make public, through its website, the contact details of the focal points;

(c) To establish web links on its website to the appropriate registries that are available on the Internet;

6. *Recommends* that States and international intergovernmental organizations report to the Office for Outer Space Affairs on new developments relating to their practice in registering space objects.