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The Registration Convention Thirty Years On Professor Dr. Maureen Williams Chair - ILA Space Law Committee (HQ, London) National Council for Scientific and Technical Research (Conicet, Argentina)

Part I

The subject is gradually gaining momentum as a result of the growing involvement of private entities and developing countries in space activities. This is particularly so in the field of remote sensing as a good number of these countries have become, nowadays, both "sensed" and "sensing" states. The underlying question may, therefore, be stated as follows: is it advisable to introduce amendments to the text of the 1975 Convention on the Registration of Objects launched into Outer Space? Or, alternatively, should it be kept in its present reading and the gaps covered with some kind of separate international instrument, such as a UNGA Resolution? The political climate in the international arena seems to be indicating the latter course of action.

The Registration Convention became effective in 1976 but has not done too well since. It has, indeed, gone downhill in light of the figures provided by a recent Copuos document on Registration Statistics for 1957-2004¹. Over the last thirty years, streamlined by impressive technological advances, it appears unrealistic not to include further requirements for the registration of space objects on the international level. Just as important is the need to achieve a reasonable degree of uniformity for national registries.

In recent times some national administrative regulations, both in industrialised and developing countries, are becoming rather strict on this point. In fact, the position of developing countries, which day by day become further involved in space activities, is that the conditions laid out in Article IV of the 1975 Convention do not meet the necessary requisites to establish the link between damage caused by a space object to persons or property, or to the environment, and the space object involved.

This question is surfacing with increased frequency in many circles.. It was brought up a few times on the occasion of the UN/Brazil Workshop on Space Law (21-25 November 2004, ST/SPACE/28-OOSA) -where the shortcomings of this Convention were addressed by participants- and further pursued in June 2005 in Cologne during the International Symposium on Project 2001 Plus. In Argentina a Research Project is underway in the framework of the National Council for Scientific Research (Conicet / University of Buenos Aires)² in consultation with the national space agency of this country (CONAE), with special reference to registration issues.

On the international front, the Space Law Committee of the International Law Association, in its Report for the 72nd Conference (Toronto 2006), includes an analysis of the matter

which shows that the links between remote sensing, national space legislation and registration issues get stronger by the day.

On the governmental level a special Working Group on the topic began its task in 2005 in the framework of the Legal Subcommittee of Copuos, presently under the chairmanship of Kai-Uwe Schrogl, and submitted its first report in April 2006³.

These and other equally topical questions relating, for example, to the somewhat dated requirement of a modest "five-state-ratification" for space treaties to enter into force should be further explored.

Part II

At this point in time it is reasonable to assume that, following the adoption of the Moon Agreement in 1979, the "United Nations Space Treaties era" is over, at least for the immediate future. Only Principles -intended to serve as guidelines - have been adopted by the UN since. However, some of these Principles, such as the UN Principles on Remote Sensing (1986), are reflecting to a great extent the general practice of states in today's world context⁴.

At the most one may think of outlining some kind of binding separate protocol to give a more precise meaning to the requirements laid down for the registration of space objects in the 1975 Registration Convention, and adding more details to be provided in connection with the space object. This course of action appears ideal from an entirely theoretical and legal point of view.

Yet, at this stage, experience shows that the "five-state-ratification formula", a number which sufficed for a space treaty to be effective, is now outdated. It has led, more often than not, to contradiction resulting from the interpretation of treaties which –even though in force- have gained only a timid support from the international community. The Registration Convention and the Moon Agreement are glaring examples thereof.

Even though UNGA Resolutions -for clarifying purposes, in this case- appear a more realistic course of action in the present political context for the updating of the Space Treaties, should we happen to go back to the treaty-adoption days, new mechanisms should be devised for the entry into force of international space treaties. Briefly, a proper equilibrium should be sought between, on the one hand, the advantages of having binding rules on a topic which is strongly influenced by technological advancement and, on the other, the necessity of getting the greater possible support from the international community concerning new binding rules.

Part III

The changing scenarios of state practice in the field of remote sensing are a clear illustration thereof. Day by day, stricter requirements become essential for the registration of space objects both at the national and international levels. This is indeed the way opinion is moving today in most circles, both private and governmental. For these reasons, the ideas suggested by the UN Working Group on Registration appear sensible and should be supported. To the new requirements suggested by that Group, namely:

- Information relevant to mass of the space object.
- Information concerning the owner and operator of the space object.
- Information concerning a change of owner or state of registry.
- Information concerning the use of nuclear power sources on board.
- Information concerning the presence of astronauts on board.
- Information in the case of the non-functioning of a space object.
- Date of decay of the space object based on GMT/UTC.
- Information concerning a military satellite provided this does not affect strategic information.
- Date of entry into a national registry.
- Designation of the national authority for registration.
- Any change of the mission or of the fundamental parameters of the orbits shall also be furnished to the UN Secretary-General,

the following addition is hereby suggested:

- Details on measures adopted concerning the protection of the environment from the activity of the space object in question.

It is currently known that the use of Earth Observation Satellites (EOS) and its many implications is permanently growing, predominantly in a private context⁵. This situation prompts support for doctrines holding, on the grounds of Article VI of the 1967 Space Treaty, that states are under the *obligation*⁶ to authorise and supervise the activities of non-state actors carrying out activities in outer space. In like manner, a time limit should be established for states parties to register state objects given the lenient provision of the Registration Convention in this regard. At the

moment anything between 24-72 hours appears reasonable.

As observed at the outset, in the present international scenes a number of sensed states have become sensing states as well. This situation is likely to ease the provision proclaimed in Principle XII of the UN Principles on Remote Sensing on the highly controversial "right of access", on the part of sensed states, to information obtained about their territory.

Research carried out in recent times and different regions is revealing that, in general, state practice is consistent with most of the UN Principles, whether by devise or, simply, by coincidence. Yet, it is also true that some of the Principles are in need of interpretation in this dynamic international context⁷.

Voices were raised in many a forum pointing to the need of adjustment of certain articles of the Registration Convention⁸, the strength of which is in decline in spite of the recent ratifications of Italy and Brazil⁹. This claim for further precision comes from both industrialised and developing countries and is aiming at having more official details for every object launched into outer space.

Both in industrialised and developing countries the use of Earth Observation Satellites is constantly growing and, as observed initially, entails a need for new law to be created on the international level.

As far as national registries are concerned, every effort should be made to preserve a reasonable uniformity which, in this field, should

focus on specific requirements, inter alia:

- In case of joint launches, the text of the relevant agreements.
- Details relating to insurance.
- Details on measures adopted relating to the protection of the environment from the activity of the space object in question¹⁰.

This, in turn, calls for national space legislation within the states parties to the Registration Convention. In some cases, interesting specific provisions may be found on the administrative level. A few examples, taken at random, will follow as illustration thereof.

The Report of the ILA Space Law Committee to the Toronto Conference (2006) addressed this question in the context of a questionnaire circulated to members in early 2005. In Sweden, for example, the Swedish National Space Board is entrusted with the authorisation and supervision of space activities and the keeping of the national registry for space objects. The national requisites for the registration of space objects are similarly entrusted to this body where Sweden is acting as launching state pursuant to the Registration Convention. Likewise, in the USA there exists a national registry and national space legislation on registration. In the Czech Republic a national registry was established on the administrative level in the framework of the Institute of Atmospheric Physics, Academy of Sciences. This country, as a party to the Registration Convention, has recorded the launching of all its space objects –as well as its predecessor, Czechoslovakia- with the Secretary-General of the UN. France, so far, does not have a national registry. On this point Kerrest points out the importance of drawing a clear line

between registration and licensing, the latter being a much wider concept than the former. For instance, under Article I of the Registration Convention, a state may be liable as a launching state and still not be the state of registration. Moreover, in his view, insurance topics should be linked to licensing procedures and not to registration¹¹.

Brazil - as noted earlier - has recently become a party to the Registration Convention. So far this country has no domestic law on registration but, in the new circumstances, this should follow shortly. As to the national registry, the Brazilian Space Agency would appear the most likely body to be in charge thereof¹². The United Kingdom has set up a national registry of space objects of which this country is the launching state pursuant to the terms of the Registration Convention. The UK Outer Space Act (1986), in section 7, provides that the government shall maintain a register of space objects containing "the details it deems necessary for compliance with its international obligations". Furthermore, the UK has set up a Supplementary Registry of Space Objects in respect of which the UK has granted a license under the 1986 Act. Good examples thereof are the Inmarsat satellites which had not been licensed by the British government prior to the transfer, in 1999, to a UK private company. This procedure is also applicable in cases of transfer of ownership in orbit. In Argentina the registry is maintained by the national space agency (CONAE) which operates within the framework of the Ministry for Foreign Affairs. Registration is mandatory and entails the responsibility of this country, which has jurisdiction and control over the space objects registered with CONAE. There are a large number of mandatory details to be provided for entries in this registry which go far

beyond those laid down by the Registration Convention, as follows:

1. In case of joint launches with other countries, the full text of the pertinent agreements.
2. The name of the space object.
3. The date and place of launching, date envisaged for recovery or loss of contact or disintegration of the space object and date of termination of the mission or lifespan of the space object.
4. Basic orbital parameters.
5. General functions established for the object.
6. Name and address of the proprietors and/or operators of the space object.
7. Companies responsible for its construction.
8. Insurance modalities.
10. Location and characteristics of telemetry, command and control station of the satellite.
11. Frequency and power of transmission of the space station on board.
12. Details relating to the mass of the space object.
13. Lifespan.
14. Measures concerning contamination.
15. Date of registration.

Part IV

A first general conclusion is, therefore, that the changing scenario of state practice in the field of remote sensing, and its ever-growing implications, call for stricter requirements in the registration of space objects both on the international and national fronts. The conditions laid down in the 1975 Registration Convention are today insufficient to determine the link between damage caused by a space object to persons or property, or to the environment, and the space object in question. Concerning national registries, a reasonable uniformity

should be maintained by the states parties to the Registration Convention.

A second general conclusion is that, if and when the era of binding space law instruments is back, the "five-state-ratification" formula should be revised with a view to adopting mechanisms more consistent with the present time.

Part V

Hereunder, some specific conclusions on the topic.

1. In line with the first general conclusion, the changes and additions suggested in this paper should be made by means of a UNGA Resolution or separate international instrument keeping the text of the 1975 UN Registration Convention intact.
2. On the national level it is suggested that more specific requirements be introduced for the registration of space objects, including further details than those proposed to supplement the provisions laid down by the UN Registration Convention.
3. To this end, national space legislation should be enacted by the states parties which, pursuant to Article VI of the 1967 Space Treaty, are under the obligation of authorising and supervising space activities within their jurisdiction or control.
4. On both fronts -international and domestic- it is essential that details should be provided on the measures adopted to avoid contamination resulting from the operation of the space object.
5. In the present international context it is imperative to establish a clear time-limit -in the region of 24-72 hours following the launch- for the registration of space objects. This is, of course, without prejudice to certain cases, such as GEO satellites, some of which may take many months to reach final orbital position -particularly

when using electric propulsion- and, therefore, final details will not be certain for some time. This also applies to space objects purchased in orbit.

6. Once again - and both on the international and domestic fronts - international cooperation plays a major role in the pursuance of the objectives outlined.

Notes

¹ Doc. A/AC.105/C.2/2005/CRP.10, 14 April 2005, 44th Session of the LSC.

² "Proyecto PIP/Conicet 5718" (2005-2006), Consejo Nacional de Investigaciones Cientificas y Tecnicas, Conicet/Universidad de Buenos Aires, Argentina, conducted by the present author.

³ Doc. A/AC.105/871.

⁴ See, in this respect, the Report of the Space Law Committee of the International Law Association (ILA) to its 72nd Conference (Toronto, June 2006), on the ILA website: www.ila-hq.org. The reports submitted to this Conference, working sessions and resolutions adopted will be published shortly, in book format, in London.

⁵ This is nowadays not so much the case in the USA. See Toronto ILA Report 2006, note 2 *supra*.

⁶ Italics added by the present author.

⁷ See the ILA Toronto Report, note 4 *supra*.

⁸ See, *inter alia*, the proceedings of the UN/Brazil Workshop on "Disseminating and Developing International and National Space Law: the Latin and Caribbean Perspective (Rio de Janeiro, 21-25 November 2004, published in 2005 by the Office for Outer Space Affairs, Vienna, ST/SPACE28, the Cologne Symposium which marked the end of Project 2001 Plus (8-10 June 2005, published by Carl Heymanns Verlag, Berlin, in 2005)) and the Report of the ILA Space Law Committee to the Toronto Conference 2006.

⁹ Italy became a party to the Registration Convention on 8 December 2005 and Brazil on 20 February 2006.

¹⁰ Requirements of the kind have been adopted, *inter alia*, by Argentina and the United Kingdom for the registration of space object in their national registries.

¹¹ See answers to the Questionnaire circulated by the Chair and Rapporteur of the ILA Space Law Committee to members, *inter alia*, Hedman (Sweden), Gabrynowicz (USA), Kopal (Czech Republic) and Kerrest (France), *op. cit.* in note 4 *supra*.

¹² *Ibid.* Answers from Monserrat Filho (Brazil), Sagar (UK) and, on the Argentine national system, comments from the present author.

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