University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Space and Telecommunications Law Program Faculty Publications

Law, College of

1-1-1997

FUTURE DEVELOPMENTS RELATING TO OUTER SPACE TREATIES

Frans von der Dunk
University of Nebraska - Lincoln, fvonderdunk2@unl.edu

Follow this and additional works at: http://digitalcommons.unl.edu/spacelaw

Part of the Air and Space Law Commons

von der Dunk, Frans, "FUTURE DEVELOPMENTS RELATING TO OUTER SPACE TREATIES" (1997). *Space and Telecommunications Law Program Faculty Publications.* Paper 48.
http://digitalcommons.unl.edu/spacelaw/48

This Article is brought to you for free and open access by the Law, College of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Space and Telecommunications Law Program Faculty Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

von der Dunk in Proceedings of the Fortieth Colloquium on the Law of Outer Space 449-453 (1997).
Copyright 1997, American Institute of Aeronautics and Astronautics. Used by permission.

IISL-ECSL Symposium Celebrating the 30th Anniversary of the Outer Space Treaty
Held on occasion of the thirty-sixth session of the Legal Subcommittee of COPUOS
Vienna International Centre, 1 April 1997

FUTURE DEVELOPMENTS RELATING TO OUTER SPACE TREATIES

by

F. von der Dunk
Co-Director, Institute of Air and Space Law of Leiden University

1. Introduction

When it comes to join in celebrating the thirtieth birthday of the Outer Space Treaty, and to take a look at the future of this 'Magna Charta' for outer space and the legal framework built upon it, this is not only a pleasure but a challenge as well. It obviously involves taking a look at present and future developments in the practice of space and space-related activities.

In my view, the most comprehensive development is the increasing involvement of private enterprise. Consequently, we would need to ask ourselves where and how this development relates to, and impacts upon, the present legal framework for outer space activities as provided by the Outer Space Treaty and the remainder of the *corpus juris spatialis internationalis*. Let me try to be modest however. I will not purport to deal with this issue comprehensively here and now, only discuss one element of it which I think is of crucial importance and at the same time very illustrative from the legal point of view.

2. The Outer Space Treaty, Private Enterprise and National Space Legislations

The Outer Space Treaty basically addresses states. It does itself establish only the framework for dealing with non-governmental activities, by means of the closely interrelated Articles VI, VII and VIII. In essence, this framework lays the burden of establishing legal rights and duties for private enterprise squarely upon the shoulders of states, which should establish national space legislations for that purpose.

The problem however is that a number of crucial definitions and interpretations of the structure thus realized have not been defined to any precise extent at the international level. Yet, they are of crucial importance for the ways in which national space legislations *vis-à-vis* private enterprise will actually take shape. In addition, *vice versa* national space legislations can have their own impact on the relevance, authority and clarity of international space law.

Already as of now, five states - the United States, Sweden, the United Kingdom, Russia and South Africa - have established a national body of space legislation in the true sense of the word, i.e. dealing with private involvement in space activities on the national level by providing for rights and duties for the entities concerned. In one case, actually there are currently three separate national regimes in force for the respective areas of space activities where private enterprise represents a major factor: satellite communications, launching and remote sensing. This makes seven regimes altogether.

All five national legal frameworks concerned, all seven regimes involved have their own things to say with regard to the various terms and concepts provided by the aforementioned three Articles of the Outer Space Treaty. For reasons of time, I will by way of example limit myself to only one crucial aspect of the scope of those national regulations, namely that of the categories of actors which are covered by them. To whom are the license obligations which form the core of the system of binding private entities to (international) space law made to apply?

Apart from the requirement under Article VI of the Outer Space Treaty to authorize and continuously supervise

"national activities in outer space" of non-governmental entities, also interesting in this regard is the role of Article VII of the Outer Space Treaty, as well as the Liability Convention. The international liability for damage of a state as established by these texts obviously provides a strong incentive to legislate on the national level *vis-à-vis* private entities (potentially) involved.

3. The United States: Communications Act of 1934

In respect of telecommunications in general, in the United States the Communications Act was enacted in 1934. The Federal Communications Commission (FCC) declared in 1970 that the Act was to be applied to space telecommunications as well. Section 301 provides for a licensing obligation for any person undertaking telecommunications activities "from [a] place in (...) the United States". Thus, the territorial jurisdiction of the United States is exercised.

Depending on the interpretation of "national activities" of Article VI of the Outer Space Treaty, however, potentially international responsibility of the United States for United States companies operating outside United States territory could also arise. Such responsibility would then not be covered by national measures. The United States, in other words, interprets the term "national activities" as solely meaning 'activities undertaking from the territory of' for the purpose of this law.

On the other hand, liability as far as regulated by the Liability Convention depends upon involvement in the launch of the communications satellite and not on its operations *per se*. Thus, any damage caused by such operations can incur United States liability only to the extent that the United States is a launching state. As a result, domestic consequences thereof also depend upon the national legislation relevant to private launch activities.

4. United States: Commercial Space Launch Act of 1984/1988

As to this second category of space activities, the Commercial Space Launch Act of 1984 is applicable, including the Amendments of 1988. The Act deals with the issue of application of the license obligations in Section 6(a). Firstly, the Act applies to all persons undertaking these activities within the United States. Secondly, it applies to United States citizens, here meaning individual citizens as well as juridical persons incorporated in the United States, undertaking these activities outside the United States. Thirdly, it applies in principle to non-United States-incorporated juridical persons under a controlling interest of any United States national or United States-incorporated juridical person. This applies, provided the entity undertakes the activities in question outside the United States as well as outside any other state's territory, unless by agreement jurisdiction and control over the activities has been handed over to another state.

Here, the United States has used its jurisdiction in a comprehensive manner. Both with respect to its nationals and with respect to its territory, legal control over the launching activities of private entities is exercised. Consequently, when it comes to launching activities to the extent they do fall under the scope of Article VI of the Outer Space Treaty, the United States considers "national activities" to encompass both 'activities by its nationals' and 'activities undertaken from its territory'.

5. United States: Remote Sensing Acts of 1984 and 1992

Regarding remote sensing finally, for the United States the 1984 Land Remote Sensing Commercialization Act and the 1992 Land Remote Sensing Policy Act which replaced it merit analysis. The 1984 Act under its Section 402 applied to any private person "who is subject to the jurisdiction and control of the United States" operating a remote sensing satellite system. This "jurisdiction and control" encompassed United States citizens, corporations and firms organized under United States law, and private entities "having substantial connections with the United States or

deriving substantial benefit from United States law". This seems to indicate that the United States, for purposes of remote sensing, considered "national activities in outer space" to comprise at least both 'activities of its nationals' and 'activities undertaken from its territory'.

The 1992 Act replacing the 1984 one applies to private persons "subject to the jurisdiction *or* control of the United States", according to Section 202(a). Private persons merely controlled by the United States, without falling under its jurisdiction as such, are now also falling under the applicable legal regime. As a consequence, a foreign company undertaking private remote sensing activities from outside United States territory, but nevertheless controlled by the United States, also requires a United States license. By such a license, the United States actually transforms the activities concerned into "national activities" as relevant under Article VI of the Outer Space Treaty - not on the basis of territory or nationality, but on the basis of the license as such. Hence, it would also assume international responsibility for them.

6. Sweden: Act on Space Activities of 1982

In accordance with Section 2, the Swedish Act on Space Activities of 1982 firstly applies to all space activities to the extent they are undertaken from Swedish soil. Secondly, it applies to all space activities undertaken by Swedish natural or juridical persons "anywhere else". This forms a concise formulation of all activities undertaken within the territorial jurisdiction respectively jurisdiction over nationals of Sweden. Sweden really in quite simple terms interprets "national activities" as meaning activities either undertaken from its territory or by its nationals.

Thereby, as a matter of fact the possibility of Sweden being held liable for damage caused by privately launched space objects from its territory is also taken care of. Amongst the four options for being labelled a launching state under Article VII of the Outer Space Treaty and the Liability Convention, the territorial criterion provides by far the most comprehensive and risky one, begging for national legislation. If on the other hand Sweden launches itself a space object with private entities involved, or procures a launch of such an object, or allows a governmental facility to be used for such a launch, it is actively and consciously engaged in the launching. Hence, it has other means such as contract clauses at its disposal in order to deal with its potential liability on the international level.

7. United Kingdom: Outer Space Act of 1986

The United Kingdom's 1986 Outer Space Act by virtue of Section 2 applies to "United Kingdom nationals, Scottish firms, and bodies incorporated under the law of any part of the United Kingdom". Under Section 1, this is applicable to the activities of those persons "whether carried on in the United Kingdom or elsewhere". As a consequence, the United Kingdom appears to interpret "national activities" as solely referring to 'activities of nationals'.

In view of this exclusive reliance on jurisdiction over nationals, activities undertaken by non-nationals from British soil do not fall within the scope of the Act. For launching activities, this might be a satisfactory solution, since no spaceport yet exists on British territory from which to undertake launching activities. Private space communication or remote sensing activities, however, might very well be conducted from British tracking-and-control centres; nevertheless, the United Kingdom did not choose to bring those under the ambit of the Outer Space Act. Will it be held responsible under Article VI of the Outer Space Treaty in applicable cases nevertheless?

8. Russian Federation: Law on Space Activities of 1993

With regard to the Russian Law on Space Activities of 1993, Article 1(1) provides that it applies to "space activities under the jurisdiction of the Russian Federation". This jurisdiction includes both territorial

and nationality-based jurisdiction, as becomes clear when reference is had to a number of other provisions - most clearly with respect to the licensing regime itself. The use of the term jurisdiction moreover is explicitly linked to the international responsibility of Russia.

Hence, although a number of additional provisions leave room for uncertainties or discretion of relevant authorities, in general the Russian interpretation of "national activities" seems to follow the Swedish one, with all consequences flowing from this with respect to international responsibility and international liability potentially incurred by the Russian Federation.

9. South Africa: Space Affairs Act of 1993

South Africa's 1993 Space Affairs Act asserts both the territorial jurisdiction and the jurisdiction over nationals of South Africa by means of its licensing system. The former however, under Section 11(1)(a) and (c), relates only to the activities of launching itself and - presumably - operating a launch facility. An absence in principle of, for instance, satellite communications or remote sensing activities undertaken by non-nationals from South African territory results. It can only be repaired by consequent use of a stop-gap clause provided by Section 11(1)(e), providing for discretion on the side of the government to include such activities.

The assertion of jurisdiction over nationals on the other hand is comprehensive under Section 11(1)(b) and (d)(i). Any juridical or natural person with South African nationality undertaking launch activities outside of South Africa automatically triggers the applicability of the Act. The same applies to any other space activities entailing obligations for South Africa under applicable international treaties - i.e. for instance satellite communications and satellite remote sensing. In view of the special application of these provisions to launching activities, it is clear that South Africa primarily undertook to cover its potential international liability. Article VI of the Outer Space Treaty, when solely related to satellite communications and remote sensing activities, is therefore interpreted by South Africa as applying in principle to those activities of its nationals only.

10. Conclusions

By way of conclusion, the ever increasing involvement of private enterprise in mankind's space endeavour has a direct legal component related to the future of the Outer Space Treaty and the whole *corpus juris spatialis internationalis*. States are held internationally responsible and/or liable, even in cases where private entities are the real and exclusive actors undertaking the activities at issue. States should, consequently, authorize and continuously supervise such space activities; and should, where applicable, exercise the jurisdiction and control they retain over objects launched into outer space for that purpose.

The previous presented a summary analysis of one of the most fundamental issues in this respect, reflecting one crucial term of Article VI of the Outer Space Treaty. Which activities constitute, for a particular state, the "national activities" for which it may be held internationally responsible? A closely related question, left unanswered here, would be which activities that state should exercise authorization and continuing supervision over as the "appropriate state"? Also, the discussion on how liability interferes with these notions has been left aside.

Nevertheless, already the present analysis should provide sufficient indication for the prevailing measure of divergence in the actual application of jurisdiction. This in turn results in divergent interpretations of "national activities", as it is used by Article VI of the Outer Space Treaty, at the national level.

Four of the seven regimes implicitly define "national activities" of a state as comprising both 'activities undertaken from its territory' and 'activities undertaken by its nationals'. This concerns the United States' Commercial Space Launch Act respectively the remote sensing regime, as well as the Russian Law and the Swedish Act on Space Activities. Only the last one mentioned,

however, does so in an unequivocal manner.

Furthermore, the South African Space Affairs Act makes a distinction between launching activities, where the aforementioned interpretation is applied, and satellite communications and remote sensing, where "national activities" are basically considered to be equivalent to 'activities undertaken by nationals'. This latter interpretation is more clearly and fundamentally upheld by the United Kingdom's Outer Space Act; whereas the United States Communications Act finally, equally clearly and fundamentally yet diametrically opposed, defines "national (satellite communications) activities" as 'activities undertaken from its territory'.

Finally, in view of ongoing discussions at the theoretical level, little doubt will exist that other fundamental terms and concepts of Articles VI, VII and VIII of the Outer Space Treaty relevant for the present topic have not been defined with sufficient precision on the international level either. Which geographical area is considered "outer space", as the responsibility of states under Article VI attaches to activities in that area? When does one become a state "procuring" the launch of a space object? Does a state become a launching state under Article VII of the Outer Space Treaty, and under the Liability Convention, if a private entity with its nationality, alternatively operating from its territory, launches or procures the launch of a space object? What is the relationship between the responsibility of Article VI and the liability of Article VII? What role plays the jurisdiction as operative under Article VIII with respect to these issues?

I feel the time has come to move beyond the discussions on the international level and to establish authoritative interpretations achieving worldwide acceptance. If not, states who find themselves confronted with the need - whether objective or subjective - to deal with private enterprise on the national level will take their own measures. By doing so, they provide their own interpretations, explicit or implied, with the obvious consequence that, on the international level, inconsistencies, gaps and overlaps will appear, with all due confusions and complications. There is an unequivocal interest in preventing national discretion to interpret and define the relevant terms and concepts from becoming the norm, and a matter of right almost by customary force.

In other words: it is my contention that the future of the international space law treaties for a substantial part lies in legislation related to space activities on the national level, as a consequence of the current place of private enterprise under international space law. Such a result of the juxtaposition of international law and national law should not so much be seen as a paradox. Rather, it should lead to a well-balanced and structured synthesis, of the thesis of the international interest in application of an essentially uniform legal regime to space and space activities, and the anti-thesis of the national need to deal in legal terms with private involvement therein, worthy of stimulation but requiring control of its potentially detrimental effects. The task which should therefore figure prominently on the international agenda is that of clarification of international space law concepts to facilitate more efficient regulation of private space activities on the national level.