## THE TERM "LAUNCHING STATE" IN INTERNATIONAL SPACE LAW

Prof. Dr. Karl-Heinz Böckstiegel\*
Director of
the Institute of Air and Space Law,
Cologne University

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#### A. Introduction

Within the recommendable initiative of the International Institute of Space Law to start an internationally coordinated research effort by an IISL Committee on Definitial Issues to clarify major terms of international space law, the term "launching state" is not only of academic interest, but also of high practical relevance.

This is particularly so because the term "launching state", together with the term "appropriate state", is relevant as an indicator of state responsibility and state liability, both with regard to space activities of states and with regard to space activities of private enterprises. Other relevant issues have been raised by Stephen Gorove<sup>1</sup>.

As these terms are being used here, it should be noted that the terms "responsibility" and "liability" are used often, but not consistently in instruments of public international law.

\* Holder of the Chair for International Business Law, Cologne University; Chairman, Space Law Committee of the International Law Association; Member of the Board of Directors of the International Institute of Space Law; President of the London Court of International Arbitration (LCIA); Panel Chairman, United Nations Compensation Commission.

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Within the framework of this paper, this difficulty cannot be dealt with, but reference may at least be made to respective work of the International Law Commission of the United Nations where two separate drafts are being elaborated, one for rules on state responsibility and one for the rules on international liability<sup>2</sup>. As far as the space treaties are concerned, we also find that distinction, as Article VI of the Outer Space Treaty (OST) deals with responsibility and Article VII OST with liability. Furthermore, as is well known, for liability we have a specific instrument in space law, namely the Convention on International Liability for Damage Caused by Space Objects, or short the Liability Convention (LC).

### B. Use of the Term in Codifications

An express definition of the term "launching state" is provided by Article I (a) of the Registration Convention (RC) and by the identical wording in the Liability Convention which in Article I (c) says:

"The term "launching state" means:

- i) A State which launches or procures the launching of a space object;
- ii) A State from whose territory or facility a space object is launched:

Article VII OST, which is of course the earlier instrument of public international law, did not yet have such an express definition. But it provides virtually the same four criteria: "launches", "procures", "territory", and "facility". This Article VII OST is still relevant as providing for international liability for damage by a space object or its component parts regarding those states that have only ratified the Outer Space Treaty, but not the Liability Convention.

### C. Interpretation of the Term

In spite of the fact that we have a seemingly

clear express definition of the term "launching state", both in the Registration Convention and in the Liability Convention, some difficulties of interpretation have occurred in this context, though many of the early questions raised<sup>3</sup> have been answered by now.

In view of the four different criteria the fulfillment of one of which is sufficient to make a state a "launching" state, it is obvious that there may be several launching states regarding one space object. The easiest combination is probably that one state launches from the territory of another state by which both states would be "launching" states. But in theory, even more than four "launching" states may be involved with regard to one space object if one state launches from the facility of another state which is on the territory of yet another state and if several states are considered to "procure" the launching. Several launching states shall be jointly and severally liable for any damage caused (Article V LC).

Both from the wording and from the intentions of Article VII OST and Article I (c) LC there can be no doubt that the liability provisions are applicable both for launchings by states and state institutions as well as by non-governmental institutions, especially private enterprises, because at least one of the four criteria will also be fulfilled in the latter case<sup>4</sup>.

In view of the four criteria mentioned in the express definition of "launching state", for purposes of definition, it is obviously relevant to clarify these four criteria further.

### C(1). A State Which "Launches"

This is the first among the four criteria which qualify and put the burden of liability on a state as a "launching" state. The term "launching" includes attempted launching as Article I (b) LC expressly clarifies so that not all "suborbital" flights can be excluded from the definition of space activity as Gál suggests<sup>5</sup>. To distinguish attempted launching from pre-launch arrangements and preparation of launch, Stephen Gorove<sup>6</sup>, borrowing criteria from criminal law, suggests the following guidelines: attempted acts must be intended; they cannot be absolutely impossible of commission; they must involve "perpetration" or "execution", rather than mere "preparation"; they have to come close to success; the means used must be adequate. Doyle<sup>7</sup> has provided a very useful description of some 49 "launch services". Many of these clearly qualify as participation in the "launching" itself, some others as at least "procuring" the launch, but also some clearly do not fulfill either one of these criteria such as certain remote ground support services or risk management and insurance services.

## C(2). A State Which..."Procures" the Launching

This is the second criteria which makes a state a "launching" state. This term has raised some discussions in the past and will, no doubt, lead to future discussions in view of the rising complexity of cooperation in the launching of space objects. On one hand it may be considered sufficiently clear that supplying some small minor components to the payload or the launching of another state or the sale of a satellite to another state is not sufficient to qualify as a "procurement". And on the other hand it may be considered sufficiently clear as well that if a state has a satellite or other payload and asks another state to launch it, the first state indeed has "procured" the launching. But in the margin between these clear situations many questions arise.

Some years ago when a private company registered and with a main seat in Germany, OTRAG, assembled rockets abroad and launched them from privately built launch facilities in Zaire and Libya, some raised the question whether this situation was sufficient to consider Germany as "procuring" the launching, though the German government had no interest in and in fact discouraged the activities of that private company. However, most authors seem to favour the view that a state at least has to be somehow actively involved by requesting, initiating or at least promoting the launching of a particular space object in order to consider him as having "procured" the launching. In view of the four different criteria expressly mentioned as constituting a "launching state" which contrary to Article IX OST - do not refer to the nationality of private persons or companies, it does not seem possible to nevertheless consider the link of nationality as such a sufficient criteria to make that state of nationality of the private enterprise also a "launching" state8. For the same reason it seems difficult to share the view that a private enterprise providing a space object for launch by a foreign state would cause the state of the nationality of that enterprise to be considered a launching state<sup>9</sup>.

## C(3). A State "From Whose Territory" Is Launched

This is the third criteria which can make a state a "launching" state. Here, no major problems should arise, because what is referred to can only be the territory of the state including its territorial waters under the general rules of public international law.

If a launching is effected from the high seas, obviously no national territory is involved and therefore this criteria cannot apply.

If a launching is effected from an airplane while in the national air space of a state, this air space could be considered as part of the "territory" of that state, as the state maintains sovereignty, jurisdiction and control over its air space under international and material air law.

# C(4). A State "From Whose...Facility" Is Launched

This fourth criteria provides, irrespective of to which state the territory belongs from which the launching is effected, that a state is also a "launching" state if the launching is effected from its "facility". Most of the time, the territory and the facility will belong to the same state. But there is no reason why one state could not build its own launching facility on the territory of another state which would then make both of them "launching" states.

Furthermore, if, what is technically feasible and has been considered in practice, a launching is effected from a ship in the high seas, though there is no national territory involved, the ship must be considered as a "facility" and the state to which the ship will be nationally attributed under the general rules of public international law must be considered as a "launching" state.

Similarly, if the projects for spaceplanes will be realized in the future and if a launching is effected from an airplane in flight, several considerations are possible: One might consider the start of the airplane already as the beginning of the launch so that the state from whose territory this start was effected is a "launching" state. One might also argue that the actual launching of the space object is only started from the airplane and that this airplane is a "facility" which makes the state a "launching" state where this airplane is registered. Finally, as mentioned above, one might argue that, at least if the airplane is still in some national air space when the "second stage" is launched into space, since air space must be considered as part of the "territory" of a state, that state must be considered as a "launching" state even if the airplane neither started from an airport on its territory nor is registered in that state.

### D. Conclusion

In conclusion, one may therefore state that on one hand the express definitions of the term "launching state" both in the Registration Convention and in the Liability Convention are binding and sufficient guidance in most cases, but on the other hand, there remain some open questions which have to be answered by way of interpretation.

### **Footnotes**

- Gorove, Stephen, Developments in Space Law: Issues and Policies, ..., p. 184 seq.
- Since there is no room here to refer to the several reports by several rapporteurs of the ILC over the years, reference is made to the recent article by Horbach, The confusion about state responsibility and international liability, Leiden Journal of International Law, Vol. 4 (1991), p. 47 seq.
- 3. Heller, International Lawyer, Vol. 7 (1972), p. 900 seq.
- Malanczuk, in: Böckstiegel, Handbuch des Weltraumrechts 1991, p. 783. This view seems to be shared by Bin Cheng, in: Jasentuliyana/Lee, Manual of Space Law, Vol. I (1979), p. 103.
- IISL 15th Colloquium Vienna 1972, Proceedings, p. 106.
- 6. Gorove, IISL 24th Colloquium Rome 1981, Proceedings, p. 118.
- 7. IISL 30th Colloquium Brighton 1987,

Proceedings, p. 203 seq.

- 8. Gorove, IISL 24th Colloqium Rome 1981, Proceedings, p. 120. However, in his comments to the first version of this paper within the IISL Committee on Definitional Issues, Stephen Gorove adds that the international responsibility of a state under Art. VI for national activites carried out by non-governmental entities should be kept in mind.
- 9. Nesgos, IISL 27th Colloquium Lausanne 1984, Proceedings p. 102.