

PROJECT 2001: RECOMMENDATIONS OF THE
WORKING GROUP ON NATIONAL SPACE LEGISLATION

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ABSTRACT

Art. VI Outer Space Treaty (OST '67)¹ requires State Parties to authorise and continuously supervise space activities of non-governmental entities. Because of Art. VII OST '67 and the Liability Convention (LC '72)² State Parties bear financial risks even if damages are not directly caused by them. Both evoke the fundamental necessity to establish national space legislation if non-governmental entities conduct space activities.

Such national space legislation - considering not only these two articles but the whole body of international space law - should consist of a core of five "building blocks": (1) the authorisation and (2) the supervision of space activities, (3) the registration of space objects, (4) indemnification regulation and (5) additional regulation.

On the basis of these "building blocks", further discussion on this matter may take place i.a. within the Legal Subcommittee of UNCOPUOS or within the ESA International Relations Committee, but it is also suggested that States harmonise existing space laws and space laws currently being prepared according to these "building blocks".

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CONTEXT

The "Recommendations" emerge from studies and analysis of the Working Group on National Space Legislation within the framework of the research project "Project 2001 - Legal Framework for the Commercial Use of Outer Space". Co-ordinated by the authors of this paper, experts representing academic institutions, ministries, agencies and industries from all over the world discussed whether and how the growing amount of space activities conducted by non-governmental entities may be regulated in accordance with international law and industrial needs. The main forum was a Workshop which took place at the DLR premises in Munich-Oberpfaffenhofen in December 2000.

As the main achievement of this Workshop a set of "building blocks" were elaborated in order to highlight a core of regulation which should be considered both while elaborating a national space law and while harmonising existing (and drafted) space laws.

RECOMMENDATIONS

I. General Recommendations

The studies and analysis of the Working Group lead to the following recommendations:

1. *With the advent of private space activities, States are recommended to enact national space legislation, not only to fulfil their*

obligations stemming from the Outer Space Treaties – in particular Art. VI (2) OST '67 – but also to protect their financial risk when being held liable for private activities as the “Launching State”.

Art. VI (2) OST '67 claims for authorisation and continuing supervision of non-governmental space activities in order to ensure, that those will be conducted in conformity with the standards applying for state activities resulting from the Outer Space Treaties.³ Thus, State Parties to the Treaty have assumed the obligation vis-à-vis other State Parties to provide adequate regulations if national activities will be conducted and such a State is the “appropriate State”⁴ according to Art. VI OST '67. In addition to the implementation of that international obligation into national law State Parties to the Outer Space Treaties may also reduce the financial risk to get liable as a “Launching State” without direct involvement in a space activity causing a damage by a space object (Art. VII OST '67 and the LC '72).⁵ Therefore preventive safety regulations with regard to any liability risk are necessary (e.g. within the authorisation and supervision system). If nevertheless a damage occurs, an adequate indemnification regulation may provide the liable “Launching State” with a possibility to take recourse against such an actor who caused directly that damage.

2. *The minimum content of such a national space legislation comprises the authorisation and supervision of space activities with regard to the principles set up by the OST '67 as well as with regard to safety aspects, the setting up of a national registry for space objects and an indemnification regulation.*

The minimum content results from the above mentioned Art. VI, VII OST '67 and Art. II (1) Registration Convention (RegC '75)⁶. The latter requires State Parties to that Treaty to establish a national registry of space objects.⁷ For more details confer below (II).

3. *Additional to these regulation other issues can be treated. The most useful and appropriate ones are that the State can set up a compulsory insurance for third party liability claims and an absolute liability corresponding to the system of the Outer Space Treaties. Other issues, as for*

example financial security issues or intellectual property right matters in contrast should better be harmonised on an international level before implementing them in a national space legislation.

The main purpose of compulsory insurance requirements is to protect potential victims of a damage caused by a space object.⁸ But it also protects States' potential indemnification claims (financial risk) and the solvency of the private actor for other projects.⁹ Closely linked to the insurance matter are liability related issues. While implementing an absolute liability for damages caused by space objects adequate to the system established by the LC '72, States have to limit this liability to a fixed sum (because of a proportional charge of space industry); this again leads to a greater insurability of space activities. Other additional regulation – as specified below (II.) – may complete national space legislation; here the question arises, whether or not they need a specific treatment in a space legislation. All these additional regulation are for to promote space industry by providing a stable, assessable and clear legal environment with regard to the competitiveness of the industry (e.g. by limiting the indemnification and / or the third party liability regulation).

4. *Most of the provisions of national space legislation need harmonisation on the international level, so especially the limitation of the States indemnification and insurance conditions in order to provide fair competition and to avoid a “licence-shopping” by the space industry comparable to the “flag of convenience” syndrome in maritime services.*

Because of the growing internationalisation of space industries, harmonisation of national space legislation is an important factor. Even while establishing conditions or non-conditions for granting an authorisation to conduct space activities, States can attract space industry; the same applies to procedural aspects (duration of an authorisation process, examinations, fees). Also the insurance premiums and the amount covered have to be highlighted here. All other additional regulation as mentioned above (3.) have to be established with regard to the harmonisation aspect.

II. Particular Recommendation: Suggestion for "Building Blocks" for national space laws

The studies and analysis lead to a core of five "Building Blocks" of which all national space laws should be composed.

1. Authorisation of space activities

- interpretation of space activities
- application to activities with regard to territory and persons (legal/natural)
- observation of principles (e.g. contamination etc.)
- sharing the financial risk of liability between government and non-governmental actors
- observation of the obligation concerning co-operation and mutual assistance

2. Supervision of space activities

- via periodical information either done by the owner of an authorisation or collected by the public authority concerning the terms of the authorisation
- via sanctions in case of non-observance of the terms of the authorisation
- via revocation or suspension of the authorisation in the case of non-observance of its terms

3. Registration of space objects

- application/interpretation of the notion of space object
- setting up a national registry
- determination of the supervisory authority
- content: the five pieces of information as required by Art. IV (2) of the Registration Convention, additional information like the mass of the space object or others, a safety assessment in the case, that a nuclear power source is involved
- registration of objects which have re-entered the earth atmosphere
- possibility of changes of the registered information
- access to the registry

4. Indemnification regulation

- implementation of a right of recourse if the (launching) State has paid indemnification to another State under Art. VII OST and the Liability Convention, even if the damage has been caused solely by a non-governmental entity

- limited to a certain fixed sum, to the insured sum or time limitation, beyond that the State can guarantee its payment, possibly State support also for all claims

5. Additional regulation (all points mentioned linked to the problem of "fair competition")

- regulation of the insurance and liability related issues
- patent law and other intellectual property issues, export control regulation
- financial security; but because of the ongoing UNIDROIT discussion on interests in space property varying regulations should not be implemented on the national level at the moment
- transport law
- environmental law
- dispute settlement

III. Impact of these Recommendations and the perspective of national space legislation

The "Building Blocks" as stated above have been presented at the 2001 session of the UNCOUOS Legal Subcommittee during the meeting of the Working Group on the "Review of the Concept of the Launching State" by the representative of ILA, Professor Böckstiegel. When this Working Group will draw its conclusion in 2002, it will possibly draft, i.a., a recommendation on possible elements that should and could be included in national space legislation and licensing regimes. The "Building Blocks" will be taken into consideration for this.

Also at the session of the ESA International Relations Committee on 2 May 2001 the ESA Executive proposed to discuss the "Building Blocks" in this forum.

By this means, the recommendations of the Working Group on National Space Legislation and in particular the "Building Blocks" may be the basis for further discussion in order to establish national space legislations taking into account the international obligations of the State Parties to the Outer Space Treaties as well as the industry's interests in a clear and stable framework promoting its activities.

Moreover the recommendations and in particular the "Building Blocks" could be an orientation for all – existing and drafted – space legislation as well as for international

harmonisation and could serve the purpose of avoiding “licence-shopping” in the future.

¹ Treaty on Principles Governing the Activities of States in the Exploration and Uses of Outer Space, including the Moon and other Celestial Bodies, GA Res. 2222 (XXI).

² Convention on International Liability for Damages Caused by Space Objects, Res. 2777(XXVI).

³ *Bin Cheng*, Revisited: International responsibility, national activities and the “appropriate State”, in: *Journal of Space Law* 1998, pages 7(13); *Hanneke Louisa van Traa-Engelman*, Commercial utilization of Outer Space – law and practice, Dordrecht 1993, pages 59 et seq.; *Vladlen S. Vereshchetin*, Space activities of “nongovernmental entities”: Issues of international and domestic laws, in: *IISL Proceedings of the 26th colloquium on the law of outer space 1983*, pages 261(262).

⁴ Some interpretations of the notion of „appropriate State“ are given by *Horst Bittlinger*, Private Space Activities, in: *IISL Proceedings of the 30th colloquium on the law of outer space 1987*, pages 191(193); *Karl-Heinz Böckstiegel*, Transporte in den Weltraum, in: *German Journal of Air and Space Law (ZLW) 1976*, Seiten 285(290); *Michel Bourély*, Rules of international law, in: *IISL Proceedings of the 29th colloquium on the law of outer space 1986*, pages 157(159 f.); *Stephen Gorove*, Liability in space law, in: *Annals of Air and Space Law (AASL) 1983 (Vol. VIII)*, pages 373(377); *Stephan Hobe*, Die rechtlichen Rahmenbedingungen der wirtschaftlichen Nutzung des Weltraums, Berlin 1992, Seite 158; *Valérie Kayser*, An achievement of domestic space law, in: *Annals of Air and Space Law (AASL) 1991*, pages 341 et seq.; *Armel Kerrest*, Remarks on the responsibility and liability, in: *IISL Proceedings of the 40th colloquium on the law of outer space 1997*, pages 134(139); *Hanneke van Traa-Engelman*, Problems of State responsibility in international space law, in: *IISL Proceedings of the 26th colloquium on the law of outer space 1983*, pages 139(141); *Frans G. von der Dunk*, Private enterprise and public interest, page 297; *Henri A. Wassenbergh*, Public law aspects of private space activities, in: *IISL Proceedings of the 38th colloquium on the law of outer space 1995*, pages 246(246f.).

⁵ The interpretation of the notion of “Launching State“ and the liability resulting thereof is treated by *Böckstiegel*, supra note 4, Seiten 285(293f.); *Edward A. Frankle/ Jason E. Steptoe*, Legal considerations affecting commercial space launch, in: *IISL proceedings of the 42nd colloquium on the law of outer space 1999*, pages 297(306); *Armel*

Kerrest, Remarks on the notion of launching State, in: *IISL Proceedings of the 42nd colloquium on the law of outer space 1999*, pages 308(315); *William B. Wirin*, Practical implications of launching State, in: *IISL Proceedings of the 36th colloquium on the law of outer space 1994*, pages 109(113).

⁶ Convention on Registration of Objects Launched into Outer Space, Res. 3235(XXIX).

⁷ The establishment of a national registry is treated by *Horst Bittlinger*, Das europäische Weltraumprojekt COLUMBUS, in: *German Journal of Air and Space Law (ZLW) 1986*, Seiten 8(11 ff.); *Bin Cheng*, Studies in International Space Law, pages 217 – 219; *Luboš Perek*, Strengthening the Registration Convention, in: *IISL Proceedings of the 28th colloquium on the law of outer space 1985*, pages 187(189); *Andrew J. Young*, A decennial review of the registration convention, in: *Annals of Air and Space Law (AASL) 1986 (Vol. XI)*, pages 287(298).

⁸ For spacecraft insurance in general refer to *Richard Gimblett*, Space insurance into the next millennium, in: *Gabriel Lafferranderie / Daphne Crowther (ed.)*, Outlook on a Space Law over the next 30 years, pages 163 et seq.; *Jean-Louis Magdelénat*, Spacecraft insurance, in: *Annals of Air and Space Law (AASL) 1982*, pages 363(369 et seq.); *Rod D. Margo*, Aviation Insurance, 3rd edition, London 1999, Chapter 21.

⁹ And thus have to be part of national space legislation: *Magdelénat*, confer supra note 8, pages 363(368); *Elmar Wins*, Weltraumhaftung im Völkerrecht, Berlin 2000, Seiten 216 ff., 228 f.