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## **National Legislation Regulating Space Activity**

**Annotacion.** In the article the existing and potential legal sources of the private international outer space law both on international, and on national levels are analyzed. There is emphasized that adoption of these international legal acts can be considered as important incentive for further formation of the private international outer space law. Then the author considers a relevant national legislation (for example, China and France), first of all, as the most applicable source of the private international outer space law at the present stage. In addition, the bills and the new laws of those states are examined where there has not been or or was absent until recently the necessary legal base (e.g., Germany).

**Key words:** international outer space law, private international outer space law, commercial space activities, national legislation.

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# Kosmisko darbību regulējoši nacionālie normatīvie akti

**Anotācija.** Rakstā tiek analizēti eksistējošie un potenciālie starptautisko kosmosa privāttiesību tiesību avoti kā starptarptautiskā, tā nacionālā līmenī. Tiek uzsvērts, ka šādu starptautisku tiesību aktu pieņemšana var tikt uzskatīta par svarīgu stimulu tālākai starptautisko kosmosa privāttiesību veidošanai. Rakstā autors izskata arī atbilstošu nacionālo likumdošanu (piemēram, Ķīnas un Francijas), galvenokārt, kā visbiežāk piemērojamo tiesību avotu starptautisko kosmosa privāttiesību mūsdienu attīstības posmā. Tāpat rakstā ir apskatīti to valstu likumu projekti un jauni likumi, kurās pagaidām nav vai līdz nesenam laikam nebija nepieciešamās tiesiskās bāzes vispār (piemērām, Vācija).

**Atslēgas vārdi:** starptautiskās kosmosa tiesības, starptautiskās kosmosa privāttiesības, kosmosa komercdarbība, nacionālā likumdošana.

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# Национальное законодательство, регулирующее космическую деятельность

**Аннотация.** В статье проанализированы существующие и потенциальные правовые источники международного космического частного права, как на международном, так и на национальном уровнях. Подчеркивается, что принятие этих международно-правовых актов можно рассматривать в качестве важного стимула для дальнейшего формирования международного космического частного права. После этого автор рассматривает соответствующее национальное законодательство (например, Китая и Франции), прежде всего, в качестве наиболее применимого на современном этапе источника международного космического частного права. Кроме того, рассмотрены законопроекты и новые законы тех государств, в которых пока нет или не было до недавнего времени необходимой правовой базы (например, Германия).

**Ключевые слова:** международное космическое право, международное космическое частное право, коммерческая космическая деятельность, национальное законодательство.

The statement of the problem. It is known that the beginning of implementation by the mankind of space activity served as the prerequisite of acceptance of fundamental Treaties on space in the 1960-70th under the auspices of the UN, and these treaties laid the foundation for the international outer space law. For more than two decades these acts made the only basis of activity of the states in space. And as the states were the only subjects of space activity during this period, the need for national regulation of the respective sphere was practically nonexistent. If there was a certain national regulation, it was on a very limited scale and only in relation to detailed requirements of international law.

Only the USA was fully present in this general scheme, as the first national act which legislatively settled national space activity of this country – National Aeronautics and Space Act of 1958 [1], was signed by the U.S. President on July 29, 1958, i.e. even before formation of the international outer space law.

According to Article VI of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (further – the Outer Space Treaty) [2], the states bear international responsibility for all national space activity even if it is carried out by private companies and natural persons. And such activity has to be carried out with the permission and under continuous supervision of a relevant State Party of the Outer Space Treaty. Therefore in practice the states adopt internal acts for regulation of commercial space activity which acts generally regulate questions of licensing, insurance and export control in the field.

The Outer Space Treaty which came into force on October 10, 1967 fixed and developed all provisions to the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space [3] unanimously accepted by the General Assembly of the United Nations (further – GA of the UN) on December 13, 1963.

**Topicality and objective of the article.** The problem of the present research is extremely topical both for the European Union in general, and for Latvia, in particular. In the last decades the tendencies of legal regulation in the sphere of space activity changed significantly. The space activity of natural and legal entities demanded a national regulation. In this article the relevant

national legislation is considered, first of all, as the most applicable source of the international outer space private law at the present stage.

The analysis of recent legislations and publications. At the initiative of Russia in 1999 the secretariat of the UN started cataloguing all national legislations regulating space activity. At the 47th LSC COPUOS session «a general exchange of information on national legislations concerning research and use of space in peaceful purposes» was accomplished within Item IX of the agenda. LSC noted that a number of national standards and legal acts cover the following questions: «national jurisdiction concerning regulation of space activity of governmental and non-governmental organizations; procedures of delivery of permissions and licenses for implementation of national space activity; civil responsibility; procedures of compensation of damage; insurance, intellectual property rights; distribution of data of remote sensing; registration of the objects started in space, and creation of national registers; requirements for safety in relation to implementation of space activity, in particular to the organization of starts; and the standard and legal framework established for the National Space Agencies or other national authorities authorized to carry out space activity and to exercise supervision of it».

LSC noted also that in some states the internal normative legal acts concerning the prevention of a contamination of space and protection of the Earth's environment in connection with space activity are enacted.

The author of this article has seen it as expedient to consider projects and new laws of those states in which the necessary legal base was absent or underdeveloped until now.

Thus, in Germany the launch of the satellite Terrasar-H (the satellite for all-weather and roundthe-clock radar supervision with high resolution) in 2007 and the plan of creation of satellite group RapideEye (multispectral optical supervision within frequent flight of satellites) allow Germany to come to the forefront of Europe in the satellite remote sensing of the Earth. This tendency will be fixed by launching TANDEM-H and ENMAR satellites. Germany made a choice for a special legislation dedicated to fundamental questions and their communication with space activity, in particular, in the field of remote sensing [4, 10-22]. It is obvious that such development of legislation may be of interest also to Latvia.

Germany adheres to the practice of registrering space objects in the annex to the national register of aircrafts (Luftfahrtrolle). The federal law, which established general conditions for information and communication services and adopted on July 22, 1997 Informations-und Kommunikationsdiense-Gesetz (IbKDG) [5], provides the list of responsibilities imposed on Germany in connection with its participation in realization of the established ITU of rights to use frequencies and orbital positions.

On December 1, 2007 Gesetz zum Schutz vor Gefährdung der Sicherheit der Bundesrepublik Deutschland durch das Verbreiten von Erdfernerkundungsdaten (Satellitendatensich erheitsgesetz - SatDSiG) [6] came into force, in which questions of delivery of necessary permissions and licenses for operation of satellite systems of remote sensing and distribution of the data obtained with their help were considered. SatDSiG was developed taking into account the international responsibility lying on Germany according to Article VI of the Outer Space Treaty. The provisions SatDSiG are based on the fact that Germany as the state of registration keeps jurisdiction and control over registered space objects according to Article VIII of the Outer Space Treaty [2]. The main concept of SatDSiG consists in definition of the use of space systems for remote sensing of the Earth at «the high level» and in establishment of accurate and clear procedure of distribution of data of remote sensing of Earth.

Military and prospecting satellite systems of remote sensing of the Earth are excluded from the scope of SatDSiG.

It should be noted that among the majority of member states of the European Space Agency (ESA) there is not a single one with the national legislation regulating space activity. As that, such is absent also in Latvia. On the other hand it should be noted that for the last 60 years there was an enormous development in the European space policy: starting from the development of space activity at the national level in the countries of Western, Northern and Eastern Europe to the formation of the European organization of special competence in the area of research and use of

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space – ESA, which holds a leading position in the world now [7, 281–286].

The space policy of the EU is one of its major global goals. It is known that on May 22, 2007 ESA Council accepted Resolution on the European Space Policy (ESA/C/CXCIV/Res.1 (Final)). Within this direction of cooperation innovative technologies, and also strategy and programs of space research are developed. The main objective of the European space strategy is to develop modern space systems according to the needs of users [8, 2–4], as it is confirmed in the analysis of bilateral contracts of cooperation between ESA and the respective member country of the EU, in particular, between ESA and Latvia [9, 2–3; 10, 16].

The states, where relevant legislations were adopted (Belgium, Norway, Sweden, Great Britain [11, 486–488], France [12, 1–18]), generally have the following questions regulated therein: licensing of space activity, registration of space objects and obligatory insurance of responsibility before the third parties. The existence of national space legislation is not an obligatory condition for participation in ESA, but, certainly, would be very useful in the execution of international obligations by the states.

French Space Operations Act (SOA) [13], accepted by the Senate of France on May 22, 2008, states that one of the main goals of national technical regulations is protection of people, property, public health and natural environment. Observance of the corresponding Technical Regulations is obligatory since December 10, 2010 for the space activity of the French operators and for the space activity which is carried out from the territory of France. Experts note that safety requirements of space activity, and governing regulating procedures in this regard, are based on the best national and international documents and practice. Here, in particular, the questions of «space debris» (this problem has already been in the focus of attention) [14, 22-48]), and planetary protection in general are included. The first Technical Regulations version published in March, 2011 is dedicated to unmanned space systems [15, 209-212].

The question of development of the national legislation regulating space activity has been discussed recently in China, India [11, 481–483],

Japan, Indonesia and Iran, and in many other states.

In China, legislation regulating space activity can be divided into civil and military. In the field of civil legislation the China National Space Administration (CNSA) and the Ministry of Foreign Affairs of China adopted Provisions and procedures for registration of space objects, which came into force on February 8, 2001. Regulations on licensing civil space projects, which came into force on December 21, 2002 was the first departmental act which established rules of licensing of starts of non military space facilities in space from the territory of PRC. Regulations on management of civil research projects concerning national defensive science and industry came into effect on August 18, 2002.

Besides that, regulations were developed on damage liability, caused by space objects, on management of commercialization of space activity, and on the international cooperation in space [16, 18–37; 11, 479–481]. The military legislation consists, in turn, of the acts regulating export of arms and rocket technologies.

In general it should be noted that the legislation of PRC in the field of regulation of space activity is not full and is limited to bylaws.

Experts note that the legal support of space activity and its innovative development in China has not been given sufficient attention: the sole official document in the considered sphere was China's Space Activities White Paper [17], containing the list of achievements for the current year. From the side of CNSA there was another document: China's Space Activities in 2006 [18]. However, now space activity in China continues to develop dynamically. Step by step China approaches new aspects and develops new tendencies in the space activity, especially in the direction of its commercialization [19, 78–79].

In the development of future Chinese space legislation the following moments deserve a special attention: finding a balance between national interests and the international obligations; commercialization of space activity; international cooperation; and the need for establishment of new ways or reforming the existing systems [20, 4–7].

In 2001 China declared the interest in the access to the International Space Station (ISS)

project. However, any significant progress in participation of China in this project has not been observed until recently. Yet according to Chinese experts, this is due to political and economic reasons, but not legal or even technical or technological reasons. They are convinced that participation of China will provide a sustainable development of ISS. Anyway, now Chinese lawyers are occupied with consideration of potential legal problems connected with inclusion of China in the ISS project and develop proposals for future joint standard and legal base concerning the ISS [21, 155–174].

A special attention should be given to the question of coordination of national and international outer space law. At the 47th LSC COPUOS session an opinion was expressed that although the development of national legislation is essential for managing space activity, in relation to international outer space law it can have only a supplementing character. According to the delegation which expressed this point of view, the adequate regulation of space activity requires further development of international outer space law.

Naturally, national acts have to be in full accordance with the international obligations of a state. Accepting the international obligation, the states are obliged to provide their actual performance in all the territory by all bodies and persons under their jurisdiction [22, 9]. Thus, it is impossible to underestimate the importance of adoption of a national legislation for regulation of space activity, including in Latvia. On the other hand, it should be noted that because astronautics has a global character and is directly infringing on interests of the whole world community, the interstate contracts should not be signed at the non-governmental level. In this sphere, as Russian researcher V. M. Postyshev precisely noticed, there is qualitatively new level of interaction of interstate contracts and national law [23, 37].

**Main conclusions and proposals.** In the light of tendencies of commercialization and globalization of space activity more and more attention is paid to the value of a relevant national legislation, and also to the questions of its unification and adaptation to the international legal base. A model law containing the guidelines and basic provisions for regulation of national space activity for the

purpose of stimulation of adoption of necessary regulations in the certain states is currently in the process of development.

The main objective of the European space strategy is to develop modern space systems according to the needs of users. This is confirmed by the analysis of bilateral contracts on cooperation between ESA and the respective member country of the EU, in particular, between ESA and Latvia. It should be noted that in the majority of member states of ESA there is no national legislation regulating space activity. As such, it is absent also in Latvia. The existence of such legislation isn't obligatory for participation in ESA, but, certainly, it would be very useful in the execution of the international obligations by the states.

It should be noted that there is a tendency of parallel development of commercial space activity and of the corresponding legal base for its regulation. In practice there are situations when a legal entity which became the owner of a space object can face a problem in the state where this object is registered (or incorporated), for example, in Latvia, but where there are no norms for certification of this space object. As a result the development of necessary precepts of law begins with the fact that, on the one hand, it is adverse from the point of view of a temporary factor, but on the other hand it helps «in practice» consider specifics of commercial space activity. The position of Latvia can be considered within this particular tendency.

Germany made a choice for a special legislation dedicated to fundamental questions and their communication with space activity, in particular, in the field of remote sensing. It is demonstrated that such development of legislation may be interesting also to Latvia.

The analysis of joint programs of research and use of space and modern space projects, such as the ISS and others, allows the author to draw a conclusion that in the national legislation, as well as twenty years ago the questions of licensing need more reflection. The conditions of the issue of licenses in different countries vary and are practically not regulated by international law. These provisions will need to be considered at the level of implementation of the corresponding codification work in Latvia.

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