## SANCTIONS WITHOUT WEIGHT: HOW SANCTIONS AFFECT RUSSIA'S POWER IN SPACE?

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Annotation. This article examines the impact that sanctions have on Russia's actions in space. This work aims to consider the space cooperation between the United States of America, the European Union and Russia, outline the scope and types of imposed sanctions following the war in Ukraine and their (in)direct impact on Russia's space sector. As the West imposed sanctions on various goods necessary for development of the space industry and aims to break off partnership with Russia in the space industry, a shift in intergovernmental space relations is observed. Hence, Russia is forced to look for new ways to maintain its power.

Keywords: Space law, cooperation in space, sanctions on Russia, sanctions on Russia's space industry, Russia's role in space.

Anotacija. Šiame straipsnyje analizuojamas sankcijų poveikis Rusijos vaidmeniui kosmose. Šio darbo tikslas yra aptarti Jungtinių Amerikos Valstijų, Europos Sąjungos ir Rusijos bendradarbiavimą kosmose, apibrėžti sankcijų, įvestų dėl karo Ukrainoje, apimtį ir rūšis bei jų (ne)tiesioginį poveikį Rusijos kosmoso pramonei. Vakarams įvedus sankcijas įvairioms prekėms, būtinoms kosmoso pramonės plėtrai, taip pat siekiant nutraukti partnerystę su Rusija, yra matomas pokytis tarpvalstybiniuose kosmoso santykiuose. Todėl Rusijai tenka ieškoti naujų būdų, kaip išlaikyti savo galią.

**Pagrindiniai žodžiai:** Kosmoso teisė, bendradarbiavimas kosmose, sankcijos Rusijai, sankcijos Rusijos kosmoso pramonei, Rusijos vaidmuo kosmose.

### Introduction

Since the war in Ukraine, the United States of America ("US") and the European Union ("EU") (together hereinafter "West"), have imposed extensive sanctions on Russia and suspended cooperative projects. These restrictions have significantly impacted activities within Russia and affected its status in the international community. The West and Russia have historically maintained close ties in space exploration. However, a question is raised whether the war has influenced cooperation in space. Are Western sanctions limited to terrestrial matters, or do they also extend to relations in outer space?

The relevance and originality of the topic. Sanctions and their substantial impact on Russia's economic power have been a widely debated topic. As most analysis centres on the effect of sanctions on Russia's military capabilities, we expand the discussion to a broader implication of sanctions, particularly their effects on the space industry. In addition, space exploration has been on a rise. A growing number of countries are working to establish a presence in space by participating in international projects or launching spacecrafts individually. In light of current events, it is worth examining how the war in Ukraine and imposed sanctions are altering Russia's role in space.

This article aims to analyse the impact of sanctions imposed by the West on Russia's power in the space sector, considering the legal framework and challenges of implementing sanctions. The object of this article is the impact of sanctions on Russia's dominance in space.

The tasks of this article are: 1) to discuss the development of international space law and the principal regulations of space law; 2) to compare Russia's role and power in space before and after the start of war in Ukraine<sup>1</sup>; 3) to examine the legislation of sanctions, types and scope of sanctions adopted by the EU and the US regarding the space industry; 4) to analyse how sanctions affect Russia's space activities and the challenges of their implementation.

The research methods used in this article are linguistic, theoretical, historical, comparative, and logical. The linguistic method was used to analyse the content of legal acts, academic publications and other data from national and international institutions. The theoretical analysis method was used to determine the scope and types of sanctions and their legal framework. The historical method was used to analyse the development of space regulations and background of space cooperation between the West and Russia. The comparative method was used to compare sanctions imposed by the US and the EU. The logical method was used to evaluate the challenges of evading sanctions and to estimate the prospects of Russia's role in space.

For this article the start of the war in Ukraine is considered the annexation of Crimea in 2014.

Main sources of this article are international treaties governing the activity in space: Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies ("Outer Space Treaty"), Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space ("Rescue Agreement"), Convention on International Liability for Damage Caused by Space Objects ("Liability Convention"), Convention on Registration of Objects Launched into Outer Space ("Registration Convention"), the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies ("Moon Agreement"), Agreement Among the Government of Canada, Governments of Member States of The European Space Agency, the Government of Japan, the Government of the Russian Federation, and the Government of the United States of America ("ISS Intergovernmental Agreement"). In addition, regulations on sanctions, academic publications, significant data published by international and national organisations. As this topic is not widely covered, online articles were used as an essential source.

### 1. Space Law and Cooperation in Space Before the War

### 1.1. The Development of Space Law

The first attempts to reach and explore space were initiated during the Cold War, a period of intense geopolitical tension. The arms race turned into a race for technological and space dominance and, as a result, fundamentally changed the political landscape. It became essential for the world's great powers to define their authority beyond Earth.

Soviet attitude to space cooperation was described as an interest to "score propaganda points against the capitalist West" (Office of Technology Assessment, 1985). Initially, the Soviet Union remained secretive and held a concern for exchanging information. The Soviets imposed limitations on broadcasting data for space research projects with other countries. The primary reason for this was a lack of distinction between Soviet military and scientific activities, which resulted in a complete divergence from the views of other countries, including the West.

The official start of the space race was set in 1957 with the launch of the Soviet satellite Sputnik. This breakthrough was a significant downfall for the West. It was a warning sign of the Russian capacity for launching intercontinental ballistic missiles and its intention to explore the space environment, whose control could affect methods of maintaining peace and waging wars (Office of Technology Assessment, 1985). As the space race evolved, the question of space governance had to be discussed.

The United Nations ("UN") acknowledged the urgent need for governance and took on the role of resolving the complexity of this new legal field. In 1959, the UN established the Committee on the Peaceful Uses of Outer Space ("Committee"). The

Committee aimed to set out guidelines to ensure that no country alone would have the right to dominate in outer space (Pellegrino, Stang, 2016, p. 53). A treatification process of international space law had set off.

Between 1963 and 1979, the foundation of space law was concluded in 5 key agreements: the Outer Space Treaty, the Rescue Agreement, the Liability Convention, the Registration Convention, the Moon Agreement (Von Der Dunk, 2015, p. 39-41). These international treaties set out fundamental principles governing exploration and other activities in space. In short, the key principles are:

- space activities are for the benefit of all nations, and any country is free to explore orbit and beyond;
- 2) there is no claim for sovereignty in space, no nation can own space, the Moon or any other celestial body;
- 3) weapons of mass destruction are forbidden in orbit and beyond, as the Moon, planets and other celestial bodies can only be used for peaceful purposes;
- states are responsible for their activities in outer space, including private commercial endeavours, and must provide authorisation and supervision (Outer Space Treaty, 1967);
- parties commit to seek all possible actions to help and rescue astronauts in need, and return objects launched into outer space (Rescue Agreement, 1967);
- 6) the UN should always be made aware of any station positioned in outer space (Moon Agreement, 1979);
- 7) parties take full responsibility for any damage caused by their actions and space objects and agree to standard procedures for adjudicating damage claims (Liability Convention, 1972);
- 8) the UN Secretary-General shall maintain a register of all space objects (Registration Convention, 1974).

## 1.2. Russia's Activity in Space Before the War

While the Soviet Union took part in these international agreements, only in 1992, after the Soviet Union collapsed, Russia began working closely with the West in various fields, including the space industry. In 1993, international collaboration in space reached its high point, when Russia was invited to become a partner in the design, development, operation, and utilisation of the International Space Station ("ISS") (Logsdon, Millar, 2001, p. 2). This cooperation showed its success in 1998 when the ISS Intergovernmental Agreement was signed by five parties: the US, Canada, Japan, Russia and the European Space Agency ("ESA")<sup>2</sup>.

An intergovernmental non-EU institution space exploration organisation, consisted of 22 Member States, Canada as Long-Standing Cooperating State, 4 Associate Members: Latvia, Lithuania, Slovakia, Slovenia and 4 Cooperating States in Europe: Bulgaria, Croatia, Cyprus, Malta.

Although the ISS Intergovernmental Agreement established the principal rule that the parties retain jurisdiction and control over their elements and personnel (ISS Intergovernmental Agreement, 1998), in essence, the ISS was designed by default to guarantee the cooperation of the state members. Each state was made responsible for the operation of a specific feature of the ISS making partners dependent on one other. For instance, Russia is responsible for navigation, the US provides most of the electricity, and the ESA performs studies on Earth observation. Throughout the years of collaboration in the ISS, working with the ESA and National Aeronautics and Space Administration ("NASA"), Russia had certainly earned the name of a reliable partner. The possession of the Soyuz launcher, a rocket for transportation to and from the ISS, was a major benefit for Russia and its commercial market. For instance, due to Russia's space sector resurgence<sup>3</sup>, in 2014, the Russian Space Agency Roscosmos' ("Roscosmos") annual budget totalled EUR 4.2 billion. Thus, in 2012, the US retired its shuttle program and became completely reliant on the Soyuz. Ultimately, the Soyuz became the only way to reach the ISS, which meant that Russia acquired a "de facto leadership role" in space transportation (Moltz, 2019, p. 24).

Moreover, Roscosmos was strengthening its cooperation with the ESA by developing new space exploration projects. In 2013, an agreement was signed to work together on a project aimed at exploring and observing the possibilities of life on Mars. During that same year, Russia funded the scientific equipment that would be carried out into orbit for exploration (European Space Agency, 2013). Thus, Russia's cooperation in space did not stop with the first international space agreements and the creation of the ISS. Roscosmos continued to strengthen cooperation between countries through various intergovernmental projects.

## 2. Legal Regulation and Impact of Sanctions in the Context of the War in Ukraine

## 2.1. Legal Framework of Sanctions

Restrictive measures have become an integral part of modern-day politics and diplomacy. Hence, when the war in Ukraine broke out, Russia faced an extensive amount of countermeasures and other restrictions. To understand the challenges posed by sanctions against Russia in the space sector, it is important to begin with a brief overview of the legal framework for sanctions.

<sup>&</sup>lt;sup>3</sup> The 2000s were considered the year of Russia's great revival of the space industry. As the country discovered new sources of funding from oil and gas, the Russian government regarded the restoration of the space sector as one of the primary objectives on its political agenda. This was precisely because Russia's space greatness was one of the few industries still holding the country's old prestige.

Sanctions are a range of measures imposed on another state, organisation or individual in response to their illegal actions, breaches of procedure, or as a deterrent that certain practices will not be tolerated. From the perspective of the EU law, such measures are not punitive and are imposed for a change in policy or activity by the sanctioned subject. In abstract terms, economic and individual sanctions are the most relevant for Russia's activity in space.

Economic sanctions are international measures "viewed as either a war of attrition where both sides absorb costs until the sender abandons its demands, the target alters its policy, or both parties reach some negotiated settlement" (Bapat, Kwon, 2015, p. 133). Economic sanctions can take on various forms in the political arena, but the most widely used are: 1) the non-export of certain goods (e.g., restricting a country's resources, technologies, or supplies to be exported to a certain country); 2) restrictions on trade in a specific sector of a sanctioned country (e.g., production of semiconductors, refining technologies, manufacturing of aerospace components, etc.); and 3) a complete economic embargo, where no activities are carried out with the sanctioned country.

Individual sanctions are applied to individual political figures, both natural and legal persons, not focusing on the entire country or organisation. Individual sanctions, also known as targeted "smart" sanctions, were implemented in the late 1990s by the Security Council of the UN and provided an innovative approach to making sanctions legitimate, giving accountability a stronger role in the international arena by showing that decision-makers personally were not exempt from the impact their policies were causing (Wallesteen, Grusell, 2012, p. 208). Examples of such individual sanctions include freezing assets, imposing travel bans, and separating from financial systems.

Furthermore, a distinction can be made between the UN sanctions and unilateral or so-called "autonomous" sanctions (Asada, 2019, p. 3).

Under Article 39 of the Charter of the United Nations, the Security Council determines what measures shall be taken to maintain or restore international peace and security. Additionally, the basis for the legitimacy of international sanctions is established in Article 41, which states: "The Security Council may decide what measures not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures". The UN Security Council consists of 15 members, of which 5 are permanent members (China, France, the UK, the US and Russia) that have a veto right on the proposed measures, including sanctions. These sanctions may be imposed on both natural and legal persons who, by their actions or political activities, violate human rights and other recognized norms and principles of international law.

Russia's right to veto decisions caused a failure to apply such sanctions. For instance, in 2022, Russia exercised its veto right two times. On 25 February 2022, Russia and China vetoed a resolution for the immediate and unconditional reverse of Russia's deci-

sion regarding the status of Ukraine's Donetsk and Luhansk regions. After Russia held referendums to annex four regions of Ukraine, another resolution condemning referendums was vetoed too (the UN, 2023). As Russia maintains its position as a permanent member of the UN Security Council, no countermeasures against Russia can be executed by the UN Security Council. As for now, the likelihood of UN sanctions that would affect Russia's space sector is ruled out. Therefore, unilateral sanctions remain the only option for reducing space cooperation with Russia and its power.

Unilateral sanctions, contrary to the UN sanctions, do not require the UN Security Council mandate and may be imposed by a state or group of states individually according to national legal regulations. In essence, unilateral restrictive measures could be regarded as lawful only by regulatory requirements stated in the UN Act of Responsibility of States for Internationally Wrongful Acts.

From the EU perspective, the legal basis for implementing EU sanctions is established in Article 29 of the Treaty on European Union, which states: "The Council shall adopt decisions which shall define the approach of the Union to a particular matter of a geographical or thematic nature. Member States shall ensure that their national policies conform to the Union positions". Furthermore, the Commission is responsible for ensuring, through monitoring, that imposed sanctions are implemented and enforced correctly. Also, the EU may adopt sanctions, either as autonomous sanctions and (or) as a way to implement UN resolutions, in cases where non-EU countries or persons violate international law or do not abide by the rule of law or democratic principles (Publications Office of the European Union, 2023).

### 2.2. Sanctions in Practice

Although space is considered to be a place for no politics, current political conflicts cannot be ignored. In 2014, after the annexation of Crimea, most Western countries imposed coordinated sanctions and other geopolitical measures targeting Russia's economy. While in space a kind of unprecedented situation emerged – cooperation between the long-standing partners faced a crisis.

In 2014, the US introduced its first series of sanctions targeting individuals and entities responsible for violating Ukraine's sovereignty and territorial integrity. Sanctions were focused on blocking property usage and travel for individuals directly or indirectly contributing to the conflict, as well as prohibiting business, investment, or trade in occupied Crimea (Executive Order 13660, 2014).

Initially, the West was not willing to let go three decades worth of space collaboration. In 2014, NASA announced that they would continue to work together with Roscosmos to maintain safe and continuous operation (Associated Press, 2014). So, while the US condemned Russia's actions by adopting sanctions, the US Congress made an exception for the operation in the ISS.

However, shortly after, NASA started to deliberately reduce its dependence on Roscosmos technology. As a result, the US shifted its space matters to the private sector. In 2014, NASA selected Boeing and SpaceX to transport its space crews with the intention of ending the sole reliance on Russia and its Soyuz journeys by 2017 (NASA, 2014). As far as the ESA was concerned, there was no strong visible reaction to the Russian aggression and remained substantially neutral. In 2020, the ESA Director General Jan Wörner described the ISS as "a bridge over troubled water". (West, 2022).

After the full-scale invasion in 2022, the West took the role of implementing corresponding measures. Arguably the most consequential restriction was the ban on imports of certain Russian oils, liquefied natural gas and coal by the US (Statement of the White House, 2022). Sectoral restrictions were put on dual use goods and technology, including microelectronics, navigation and communication equipment, optics and other high-value tools, aerospace, metals and mining, engineering, construction, manufacturing, and transportation (U.S. Department of the Treasury, 2023).

These restrictions are closely connected to the space industry and affect space performance since both military and space fields rely on high-value goods and Western technology. There is a significant overlap between the goods and technologies used in space and military applications. Hence, restrictions on one affect the other. For example, satellites, primarily used for communication, navigation, and observation, are now being launched into space to carry and deploy weapons (Center for Strategic and International Studies, 2024). Therefore, the lack of resources to produce and maintain space equipment affects both military and civilian satellites. Such transformation in the use of space technology has raised concerns that commercial space systems may be treated similarly to military space systems in present and forthcoming conflicts. Indicating that even commercial satellites and space networks can be subject to imposed sanctions.

In terms of direct sanctions on the space industry, between 2014 and 2022, the West introduced sanctions restricting exports of items related to space cooperation and commercial launches (Congressional Research Service, 2022). The EU prohibited the sale, supply, transfer or export of goods or technology suited for the space industry, including jet fuel to any person or entity in Russia. In addition, the EU imposed limitations on its transit, repair, inspection, replacement, and modification, also prohibited any financial assistance related to it (Council Regulation (EU) No 269/2014, Article 3 c). The list of prohibited items included spacecrafts and their components, various oils, measurement devices, and other instruments necessary for the spacecrafts. These restrictions made it severely challenging for Russia to acquire Western materials essential for its space sector and maintain its existing resources.

In 2023, G7-Leaders implemented large-scale sanctions against Russian government entities, officials, and their families, as well as people operating in the sectors of technology, defence, and economy. Individual restrictions have also been placed

on Russian political figures and entities within the space industry. Assets of Russia's officials and entities were frozen and travel bans were imposed, including Dimitry Rogozin<sup>4</sup>, Sergey Vladimirovich Dronov<sup>5</sup>, JSC Rocket and Space Centre Avant Space LLC, JSC Russian Corporation of Rocket and Space Instrumentation and Information<sup>6</sup> (Council Regulation (EU) No 269/2014). The aforementioned individual sanctions highlight the importance of space in Russia's politics and indicate that the state of politically neutral outer space is coming to an end.

However, some exceptions in sanctioned actions kept profiting Russia's space industry. In 2018, the US imposed a ban on the export of goods with the exception of continuing exports related to space cooperation and commercial space launches. Thus, initially, the space industry was left relatively untouched. On the contrary, after the poisoning of Alexei Navalny, allowance for such exports was permitted only until September 2021 (Congressional Research Service, 2024). Similarly, the EU granted certain exclusions as well. The supply of dual use and other goods, along with any technical or financial assistance, contributing to Russia's military and technological development may be authorised if it is determined that:

- 1) prohibited actions are intended for intergovernmental cooperation in space programs (Council Regulation (EU) No 269/2014 Article 2 (4), 2a (4));
- 2) it is necessary to avoid collisions between satellites or prevent their unintended re-entry into the atmosphere (Council Regulation (EU) No 269/2014 Article 6 (6b)),
- 3) it is necessary in cases of medical, pharmaceutical, or humanitarian purposes (Council Regulation (EU) No 269/2014 Article 6 (6c)).

Imposing sanctions with certain allowances may seem reasonable in cases of emergencies. However, separating exceptions and evasion of sanctions becomes a bit challenging. While some goods are banned because of their military nature, the same goods may be considered admissible when used for space programmes. One way of bypassing sanctions is by acquiring goods and technology for alleged intergovernmental programmes, while these goods and technology are used for commercial or military purposes in space. Another method is to use third countries to re-export sanctioned goods.

The West addressed this issue by presenting anti-circumvention measures. The EU's 14th sanction package required EU operators selling military goods to implement due diligence mechanisms that recognise and evaluate the re-exportation of such goods to Russia (Council of the European Union, 2024). While the US addressed sanction evasion in third countries, including exports of dual use items from

Deputy Prime Minister for Defence and Space Industry and former head of Roscosmos.

The Commander of the Air Force and Deputy Commander-in-Chief of the Air and Space Forces.

<sup>6</sup> Part of Roscosmos.

China-based companies (Denisova, 2024). Thus, all property of the sanctioned persons in control of the US was blocked. Any entities that are directly or indirectly owned by one or more banned persons were banned as well, and non-US persons were prohibited from causing or conspiring to cause violation or evasions of sanctions (U.S. Department of the Treasury, 2023). The latter seems to be the new threat. While on paper regulations seem effective, not much has changed. As Russia finds new ways to bypass restrictions, the West will continue to struggle to put an end to cooperation with Russia.

# 3. Shift in Russia's Cooperation and New Prospects for Space Partnership

To minimize the damage, Russia made it a priority to look for new ways to establish its power and reduce its dependence on the West. In 2022, the head of Roscosmos announced Russia's plans to leave the ISS by 2024 and build its own independent space station (Cashman, Liebermann, 2023, p. 279). And while Russia did not keep its promises and extended its participation in the ISS until 2028 (Trevelyan, 2024), European countries terminated partnerships with Russia<sup>7</sup> (European Space Agency, 2022).

From a broader perspective, ISS partners were relieved that Russia maintained cooperation and continued to work by the narrative of an apolitical stance. The argument was made that the ISS was designed for cooperation for scientific research, space exploration, and technological testing, thus, partners should leave political matters on Earth. Although, the militarised nature of Roscosmos casts doubts on this view.

After Russia annexed Crimea in 2014, Russia restructured its space agency by strengthening governmental ownership and censorship of it. Russia's space sector was politicised by the appointment of nationalist Dmitry Rogozin as the head of Roscosmos (Vidal, Privalov, 2024, p. 3). As the international space community tried to continue diplomatically work with Roscosmos , Dmitry Rogozin only fuelled and provoked Russia's reputation through his public statements questioning the ability of the US astronauts to reach the ISS without the Soyuz rocket. His term of office between 2018 and 2022 acknowledged the transition from a crisis mode to a survival mode of the Russian space industry (Vidal, Privalov, 2024, p. 3). Therefore, other space partners were forced to take notice of the issue of Russia's collaboration and question the prospects for the future.

With the rise of private space companies and Russia's loss of revenue from the Soyuz rocket, the Russian government loses its impetus to continue to engage to-

ESA discontinued joint programmes exploring the Moon and Mars.

gether in space. Russia is no longer interested in cooperating with the West in space as it no longer benefits financially. Therefore, the last financial link to maintaining relations in space is slowly being lost.

With the West restrictions, Russia has no choice but to turn to the East to find like-minded allies. One of the major contenders is China for several reasons. Firstly, Russia needs to cover the shortfall in resources. In 2023, China was the closest partner in circumventing sanctions, supplying Russia with 90% of the high-priority goods banned by the West (Fornusek, 2024). Secondly, China remains committed to becoming a world-class space leader and it is estimated that the big breakthrough for China will happen by 2030 (Office of the Director on National Intelligence, 2024). Thirdly, both countries have expressed similar views on the regulatory issues of space law. For instance, Russia and China voted against a British-introduced UN Resolution in 2020 that sought to establish "rules of responsible behaviours" in outer space<sup>8</sup> (Vidal, Privalov, 2024, p. 5). Similarly, as on Earth, China and Russia are not willing to support an absolute definition of normative rules for cross-border relations and continue to fuel tensions.

With the global uncertainty in the political landscape, space may be a place for the US and the EU to strengthen their partnership. As both encounter similar challenges, working together on space missions and engaging in research initiatives could enhance space progress, strengthen diplomatic ties and the response to Russia's threats. While it is not clear who will dominate space in the future, and what kind of partnerships between space agencies will exist, one thing is clear: the war in Ukraine shifted Russia away from the West.

### Conclusions:

- The legal regulation of space is aimed at international cooperation of space exploration. Space law consists of principal provisions that are not explicitly detailed.
   Thus, in the future space law will need to amend the legal framework to meet the geopolitical challenges it faces today.
- Historically, Russia has relied on its partnership with the West in space. Since the
  war in Ukraine, relations with Russia in space have been in a state of crisis. While
  Western-Russian individual space programs have been suspended, activities on
  the ISS are still ongoing.
- 3. Unilateral economic and individual sanctions are currently among the most effective tools used by the West. They cover a wide range of sectors, including those that directly target the space. Even in the absence of direct sanctions, broader sanctions indirectly restrict Russia's ability to further develop and maintain its

Resolution was still passed with 164 countries in favour.

- space industry. At the same time, exemptions and circumvention continue to pose a threat to the effectiveness of sanctions.
- 4. Russia's power in space is undergoing a noticeable shift. While Russia maintains its status as one of the leading members in space politics, the loss of partnership from the West has caused Russia to seek new allies and increase its space militarisation, making it a new threat for the future.

### List of references

### Legal acts:

International legal acts:

- Charter of the United Nations (1945) Available at: https://treaties.un.org/doc/publication/ctc/uncharter.pdf
- Agreement Among the Government of Canada, Governments of Member States of the European Space Agency, the Government of Japan, the Government of the Russian Federation, and the Government of the United States of America Concerning Cooperation on the Civil International Space Station (1998). Available at: https://www.nasa.gov/mission\_pages/station/structure/elements/nasa\_esa\_agreement.html
- 3. Responsibility of States for Internationally Wrongful Acts (2001). Available at: https://legal.un.org/ilc/texts/instruments/english/draft\_articles/9\_6\_2001.pdf
- Resolution 2222 (XXI). Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (1967). Available at: https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/out-erspacetreaty.html
- Resolution 2345 (XXII). Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1967). Available at: https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/rescueagreement.html
- Resolution 34/68. Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (1979). Available at: https://www.unoosa.org/oosa/en/ourwork/spacel-aw/treaties/moon-agreement.html
- Resolution 2777 (XXVI). Convention on International Liability for Damage Caused by Space Objects (1972). Available at: https://www.unoosa.org/oosa/en/ourwork/spacel-aw/treaties/liability-convention.html
- 8. Resolution 3235 (XXIX). Convention on Registration of Objects Launched into Outer Space (1974). Available at: https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/registration-convention.html

EU legal acts:

- 1. Treaty on the European Union (1992). Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A11992M%2FTXT [Accessed 29 December 2024].
- 2. Council Regulation (EU) No 269/2014 of 17 March 2014 concerning restrictive measures in respect of actions undermining or threatening the territorial integrity, sover-

eignty and independence of Ukraine (2014). Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02014R0269-20240914 [Accessed 29 December 2024].

### Foreign legal acts:

Executive Order 13660. Blocking Property of Certain Persons Contributing to the Situation in Ukraine (2014). 79 FR 13493. Available at: https://www.federalregister.gov/documents/2014/03/10/2014-05323/blocking-property-of-certain-persons-contributing-to-the-situation-in-ukraine [Accessed 29 December 2024].

#### Academic literature:

- Asada, M. (2019). Economic Sanctions in International Law and Practice [online], Routledge. Available at: https://doi.org/10.4324/9780429052989 [Accessed 29 December 2024].
- Bapat, N.A. and Kwon, B.R. (2015). When Are Sanctions Effective? A Bargaining and Enforcement Framework. International Organization, 69(1), p. 132-133 [online]. Available at: https://www.jstor.org/stable/43283293 [Accessed 29 December 2024].
- Biersteker, T.J. et al. (2018). UN targeted sanctions datasets (1991–2013). Journal of Peace Research, 55(3), p. 407-408 [online]. Available at: https://www.jstor.org/stable/48595892 [Accessed 29 December 2024].
- 4. Cashman, L. and Liebermann, S. (2023). Space Diplomacy and the International Space Station. European Review of International Studies, 10(3), p. 277-281 [online]. Available at: https://www.jstor.org/stable/27297344 [Accessed 29 December 2024].
- Logsdon, J.M. and Millar, J.R. (2001). US-Russian cooperation in human spaceflight: assessing the impacts. Space Policy, p. 2 [online]. Available at: https://doi.org/10.1016/ S0265-9646(01)00021-2 [Accessed 29 December 2024].
- Moltz, J.C. (2019). The Changing Dynamics of Twenty-First-Century Space Power. Journal of Strategic Security (2019), 12(1), p. 23-24 [online]. Available at: https://www.jstor.org/stable/26623076 [Accessed 29 December 2024].
- Pellegrino, M., Stang, G. (2016). Space security for Europe [online]. Available at: https://csps.aerospace.org/sites/default/files/2021-08/Space%20Security%20for%20Europe%20Jul16.pdf [Accessed 29 December 2024].
- 8. Vidal, F. and Privalov, R. (2023). *Russia in Outer Space: A Shrinking Space Power in the Era of Global Change. Space Policy*, p. 2-7 [online]. Available at: https://doi.org/10.1016/j. spacepol.2023.101579 [Accessed 29 December 2024].
- 9. Von Der Dunk, F. (2015). *Handbook of Space Law* [online], Edward Elgar Publishing. Available at: https://books.google.lt/books?hl=en&lr=&id=5v6LBgAAQBAJ&oi=f-nd&pg=PR1&dq=space+law&ots=xLlwU\_BgAx&sig=3DGNUmF4RnWTq3IHjl1D-kFzen80&redir\_esc=y#v=onepage&q=space%20law&f=false [Accessed 29 December 2024].
- Wallensteen, P. and Grusell, H. (2012). Targeting the Right Targets? The UN Use of Individual Sanctions. Global Governance, 18(2), p. 207-212 [online]. Available at: https://www.jstor.org/stable/23269950 [Accessed 29 December 2024].

### Other sources:

- European Space Agency Website. ExoMars: ESA and Roscosmos set for Mars missions
  [online] (modified 2013-03-14) Available at: https://www.esa.int/Science\_Exploration/
  Space\_Science/ExoMars\_ESA\_and\_Roscosmos\_set\_for\_Mars\_missions [Accessed 29
  December 2024].
- 2. European Space Agency Website. *Redirecting ESA programmes in response to geopolitical crisis* [online] (modified 2022-04-13). Available at: https://www.esa.int/Newsroom/Press\_Releases/Redirecting\_ESA\_programmes\_in\_response\_to\_geopolitical\_crisis [Accessed 29 December 2024].
- EUR-Lex Website. General Framework for EU Sanctions [online] (modified 2023-05-05) Available at: https://eur-lex.europa.eu/EN/legal-content/summary/general-framework-for-eu-sanctions.html [Accessed 29 December 2024].
- 4. EUR-Lex Website. *Sanctions* [online] (modified 2021-10-013) Available at: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=legissum:sanctions [Accessed 29 December 2024].
- 5. Princeton.edu. *U.S.-Soviet Cooperation in Space (1985)* [online] Available at: https://www.princeton.edu/~ota/disk2/1985/8533/8533.PDF [Accessed 29 December 2024].
- United Nations. With Invasion of Ukraine, Security Council's 2022 Efforts to Maintain International Peace, Stability Mired by Widening Rifts between Veto-Wielding Members [online] (modified 2023-01-12) Available at: https://press.un.org/en/2023/sc15172.doc. htm [Accessed 29 December 2024].
- NASA. NASA Chooses American Companies to Transport U.S. Astronauts to International Space Station [online] (modified 2014-09-16). Available at: https://www.nasa.gov/news-release/nasa-chooses-american-companies-to-transport-u-s-astronauts-to-international-space-station/ [Accessed 29 December 2024].
- 8. The White House. FACT SHEET: *United States Bans Imports of Russian Oil, Liquefied Natural Gas, and Coal* [online] (modified 2022-03-08). Available at: https://www.white-house.gov/briefing-room/statements-releases/2022/03/08/fact-sheet-united-states-bans-imports-of-russian-oil-liquefied-natural-gas-and-coal/ [Accessed 29 December 2024].
- U.S. Department of the Treasury. With Over 300 Sanctions, U.S. Targets Russia's Circumvention and Evasion, Military-Industrial Supply Chains, and Future Energy Revenues [online] (modified 2023-05-19). Available at: https://home.treasury.gov/news/press-releases/jy1494 [Accessed 29 December 2024].
- 10. Center for Strategic and International Studies. *Is There a Path to Counter Russia's Space Weapons?* [online] (modified 2024-06-28). Available at: https://www.csis.org/analysis/there-path-counter-russias-space-weapons [Accessed 29 December 2024].
- 11. Congressional Research Service. U.S. Sanctions on Russia [online] (modified 2022-01-18). Available at: https://sgp.fas.org/crs/row/R45415.pdf [Accessed 29 December 2024].
- Congressional Research Service. U.S. Sanctions on Russia: Legal Authorities and Related Actions [online] (modified 2024-04-26). Available at: https://crsreports.congress.gov/ product/pdf/R/R48052 [Accessed 29 December 2024].

- 13. Council of the European Union. Russia's war of aggression against Ukraine: comprehensive EU's 14th package of sanctions cracks down on circumvention and adopts energy measures [online] (modified 2024-06-24). Available at: https://www.consilium.europa.eu/en/press/press-releases/2024/06/24/russia-s-war-of-aggression-against-ukraine-comprehensive-eu-s-14th-package-of-sanctions-cracks-down-on-circumvention-and-adopts-energy-measures/ [Accessed 29 December 2024].
- 14. Office of the Director of National Intelligence. *Annual Threat Assessment of the U.S. Intelligence Community* [online] (modified 2024-02-05). Available at: https://www.dni.gov/files/ODNI/documents/assessments/ATA-2024-Unclassified-Report.pdf [Accessed 29 December 2024].
- Denisova, K. (2024) US sanctions Russia, Chinese companies for war effort support [online] (modified 2024-05-01). Available at: https://kyivindependent.com/us-sanctions-russia-chinese-companies-for-war-effort-support/ [Accessed 29 December 2024].
- Fornusek, M. (2024). While Xi tours Europe, China feeds Russia's war machine [online] (modified 2024-05-10). Available at: https://kyivindependent.com/china-russia-dual-use-goods/ [Accessed 29 December 2024].
- The Guardian (2014). Nasa cuts ties with Russia over Ukraine crisis, except for space station. [online] (modified 2014-04-03) Available at: https://www.theguardian.com/science/2014/apr/03/nasa-cuts-ties-russia-ukraine-space-station [Accessed 29 December 2024].
- Reuters (2024). Russia plans to create the core of a new space station by 2030. [online] (modified 2024-07-02) Available at: https://www.reuters.com/technology/space/russia-plans-create-core-new-space-station-by-2030-2024-07-02/ [Accessed: 30 December 2024].
- West, J. (2022). After the ISS: Why Cooperation in Space Remains Essential. Ploughshares Website [online]. Available at: https://www.ploughshares.ca/publications/after-the-iss-why-cooperation-in-space-remains-essential [Accessed 29 December 2024].

## SANCTIONS WITHOUT WEIGHT: HOW SANCTIONS AFFECT RUSSIA'S POWER IN SPACE? SUMMARY

The work examines the impact of international sanctions on Russia's position in outer space. It analyses the development of space law and the main international treaties governing legal relations between states in outer space. The work also provides an overview of the Russian-Western partnership in space prior to and after the start of the war in Ukraine. The work focuses on the legal regulation of international sanctions and how economic and technological restrictions affect Russia's space sector. Finally, Russia's response to Western sanctions, its intention to withdraw from the International Space Station, the militarisation of the space sector and the search for new partners, are discussed.

## SANKCIJOS NETURINČIOS SVORIO: KAIP SANKCIJOS VEIKIA RUSIJOS PADĖTĮ KOSMOSE? SANTRAUKA

Darbe nagrinėjamas tarptautinių sankcijų poveikis Rusijos padėčiai kosmose. Analizuojama kosmoso teisės raida ir pagrindinės tarptautinės sutartys, reglamentuojančios valstybių teisinius santykius kosminėje erdvėje. Darbe taip pat apžvelgiama Rusijos ir Vakarų partnerystė kosmose iki ir po karo Ukrainoje pradžios. Daugiausia dėmesio darbe skiriama tarptautinių sankcijų teisiniam reguliavimui ir tam, kaip ekonominiai ir technologiniai apribojimai veikia Rusijos kosmoso sektorių. Galiausiai aptariamas Rusijos atsakas į Vakarų sankcijas, ketinimas pasitraukti iš Tarptautinės kosminės stoties, kosmoso sektoriaus militarizacija ir naujų partnerių paieška.