

# United States–Russia Space Cooperation Post-Crimea Annexation US Agenda of Strategic Engagement

Muhammad Kamil Ghiffary Abdurrahman<sup>1</sup>

<sup>1</sup> Universitas Indonesia

\*Corresponding author. Email: [official.kamilghiffary@gmail.com](mailto:official.kamilghiffary@gmail.com)

## ABSTRACT

This paper discusses US policy regarding the decision to extend space cooperation agreements with Russia. The relationship between the United States and Russia was harmed and stretched by Russia's decision to annex Crimea, the Ukrainian peninsula. However, President Barack Obama actually had the final initiative to continue and extend space cooperation with Russia until 2024. In terms of the concept of defense diplomacy, the concept of strategic engagement was the most frequently used form of diplomacy internationally in the Obama administration. However, most previous studies examine initiatives to extend space cooperation from the perspective of national security and the development of international structures through cooperative institutions. By employing the concept of strategic engagement as an analytical framework, this paper seeks to apply the important variables contained in this concept in the form of international anti-space cooperation in the United States. The paper's main argument is that space cooperation relations initiated by the United States are based on the application of the concept of strategic engagement to achieve peace and strong cooperation, and are thus bounded by three main variables: (1) political agenda; (2) attribute of transparency; (3) interaction model. This paper also suggests that strategic engagement is an appropriate initiative or response by the United States to reduce tension between the two countries by continuing joint space cooperation.

**Keywords:** *International Space Station (ISS), United States, Russia, Strategic Engagement*

## 1. INTRODUCTION

Visualization and perception of space politics is a topic of discussion that can be described as a large empty vacuum that can be filled with various types of alternative conceptions that are available, which can map the interests of one actor with other actors in the international system (Sheehan, 2007). Aiming to fill this vacuum with notions such as those related to security and international politics, the United States initiated an agenda by forming an international space cooperation agreement called the International Space Station (ISS). The US initiative on the ISS was strengthened through a written document on US national political policy compiled by the US executive branch, which aimed at expanding international cooperation and strengthening stability in space (2015). Through this document, the United States aims to utilize space as an instrument of international cooperation, which is mutually beneficial in space activities; expand the potential that can be

exploited; develop the peaceful use of space; and increase the collection of information and collaboration in the distribution of information related to space.

The goal of the United States in pursuing peace through global cooperation, means the vision and perceptions of the United States may lead to national and regional security issues, thus resulting in a manifestation of US defense diplomacy. Larsen (2018) argues that the previous guess was expressed in a statement by the White House in 2010, in which the United States recognized the anarchy in the international system and saw the need for a form of international cooperation in space to mitigate that anarchy. Expressing the point of view of the United States, the Department of Defense and the director of national intelligence (2011) said that outer space is a roaming space that is starting to be interconnected with other roaming spaces, as the world begins to develop a dependence on it, which can result in irresponsible behavior that can produce severe consequences.

Apart from the theoretical application above, there are problems with Barack Obama's policy of extending its agreement on the ISS. Russia is one of the United States' partners in the ISS and has a track record of space cooperation with the United States since 1972 in the Apollo–Soyuz Test Project (Samuels, 2005). Cooperation between the two countries continued until the formation of the ISS in 1998. But before the extension of the ISS agreement in 2015 took place, Russia undertook a foreign policy that generated much debate, namely the decision to annex the Crimea, which resulted in a highly negative response from the international community. The United States, particularly the White House, saw this as an invalid decision and an invasion, and imposed sanctions against Russia until it decides to return the Crimean region to Ukraine (Galindo, 2019). Regarding the ISS, the United States also decided to terminate several space cooperation agreements with Russia, although surprisingly in the following year, Obama announced an extension of the cooperation agreement between NASA and Russia (Zezima, 2014). Cottey and Forster (2004) explained that, in addition to the issue of the annexation of the Crimea, Russia's relations with the United States were influenced by a very deep residual conflict caused by differences in geopolitical and ideological interests resulting from the Cold War, which lasted from 1946 to 1991.

Apart from the enigma resulting from the US decision to extend its space cooperation agreement with Russia, it is still quite difficult to identify academic studies that are based on a theoretical framework or assumptions about the United States that reflect a concept of defense diplomacy. Earlier studies were more focused on two important perspectives: (1) security strategy and (2) international cooperation.

The argument developed by previous academic studies on the US international cooperation initiative with Russia on the ISS can be summarized as follows. This initiative is inseparable from the dynamics of US power relations as an international unipolar force with Russia as a country that has a historic record of major conflict with the United States. Based on this perspective, the United States seeks to create an international regime of space politics by influencing arms control and transparency policies through the space agenda related to the ISS. Another conclusion is that the US initiative is a rebalancing policy aimed at maintaining its international power through its capabilities in space, followed by a positive balancing policy, by increasing the development of space technology and initiating a US agenda of the national securitization of space. We can claim that, by campaigning for this balancing policy, the United States sees Russia as an international actor posing a potentially high threat that is expected to be, now and in the future, capable of becoming a very real threat, especially in the space security dimension. Therefore, there is another conclusion that suggests that the United States must start

a defense diplomacy with Russia by intensifying international cooperation with that country, in a way that both states will be able to jointly build an international space politics regime so that it can manifest as a way of mitigating the anarchy of the international system.

Although an important concept can be drawn through these previous studies regarding the lens of analysis used, there are still very few prior studies that are comprehensive and focused on US initiatives to continue to carry out space cooperation with Russia as a strategic engagement agenda to increase the sense of trust between the two parties and to reduce conflicts both past and future. This concept is based on one fundamental assumption, namely the need to reduce the tension present between the two superpower actors—whether it is past, present, or future conflicts—to be able to reduce the presence of competitors in the future by using instruments that can be employed as a bridge of communication and to develop transparency between the two actors. If we look at the neoliberal paradigm, such cooperation may focus on a common interest regarding the nature of absolute gain through the use of efficient state capabilities resulting from transparency in the process of cooperation that occurs. In the end, this thinking is premised on the presence of interdependent relations between countries with good and optimistic relations due to the presence of institutions that operate to mitigate anarchy and provide transparency for the agenda of each country.

The topic discussed in this paper is the US strategic engagement agenda in space cooperation with Russia after the annexation of the Crimea. The formulation of the problem concerns why the US–Russia strategic engagement agenda has succeeded in space cooperation despite the strategic interests of the two states that are in conflict. To answer this question, this paper attempts to explain the concept of strategic engagement based on variables that influence the unit of analysis of the concept used. Thus, the aim of this study is to explore the concept of strategic engagement in US–Russia relations, to understand how it can succeed in creating cooperative relations despite strategic differences. The basic assumption of the present author is that a strategic engagement agenda can work and succeed well due to the need of the United States to maintain relations between the two countries that are stable, conducive, and far from conflict. In the process of analyzing variables, the author uses qualitative methods by collecting data through library research and information triangulation. This is done to facilitate the author in compiling, constructing the phenomena that are present, and writing about the findings or conclusions based on the concepts that have been used. In addition, the author uses the years 2012–2016 as the data period. This includes US foreign policy relating to space exploration and space cooperation, US–Russia strategic relations after the annexation of the Crimea, and international security and relations studies

focusing on similar issues. The method used for this research is qualitative, with periodical data and a literature review to help in the process of building the structures and the data collection process of the research.

### ***1.1. Strategic Engagement***

According to Cottey and Forster (2004), the concept of strategic engagement is an integration of the concept of US defense diplomacy that has been practiced toward Russia since the early 1970s. The old model of defense diplomacy is a form of real politics in diplomacy that has the function of strengthening a country and its allies that have the same interests and values, and at the same time intends to reduce the capabilities of the enemy. However, the end of the Cold War between the United States and the Soviet Union produced new values in this form of defense diplomacy. Cottey and Forster (2004) argue that there are two distinguishing features in carrying out new forms of defense diplomacy according to the old model: (1) modern defense policy is directed at encouraging cooperation; (2) the focus of policy attention is directed to the internal governance of the country concerned, which generally has different concepts and values from those in the West. Through this approach of the present forms of defense diplomacy or the new model mentioned above, Cottey and Forster (2004) argue that there must be a pattern of interaction present that addresses the interactions that involve an actor who has a historical record that is problematic enough to prevent potential problems from appearing and expanding into international issues. Cottey and Forster (2004) name this strategic engagement.

Cottey and Forster (2004) define strategic engagement as a concept related to defense diplomacy that expresses the idea that military forces and infrastructure related to defense have the potential to contribute to international security, and not only strive to prevent the outbreak of war and open conflict but also encourage the international system to be stable and cooperative. Cottey and Forster (2004) also add that the United States had an implicit aim of using this strategic engagement concept in its reapproach to Russia after the end of the Cold War, to prevent the revival of residual conflicts that had the potential to come back, and at the same time to plan a form of long-term cooperation between Russia and the West. According to Cottey and Forster (2004), there are a number of approaches to strategic engagement as a form of interest that can be engaged according to the applicable context, namely, military cooperation (1) as the main form of political communication; (2) as a form of transparency in relations; (3) as a bridge to equalize interests; (4) as a modifier of perception; (5) as an equalization of defense issues; (6) and defense assistance as a form of incentive.

Concerning these six approaches, first, regarding political communication, Cottey and Forster (2004) argue

that strategic engagement can function as a symbol of transparency or openness in pursuing a broader cooperation agenda on the next cooperation agenda. Second, strategic engagement provides openness about every intention and capability possessed by each member country involved in such cooperation. Third, strategic engagement has the ability to continue, improve, and reinforce the existence of shared interests—so that similarities emerge, especially in international security, allowing them to be followed up with the next cooperative relationship. Fourth, strategic engagement uses an implicit approach to direct the perception of peace and cooperative for nations with great power toward the West. Fifth, military cooperation supports specific security and defense issues. Sixth, strategic engagement provides defense or security assistance as a form of incentive.

Therefore, through the six brief variables provided by Cottey and Forster (2004) above, it can be summarized that there are three important components or variables that must be present in strategic engagement in a defense diplomacy: (1) political agenda; (2) transparency attribute; (3) presence of interactions.

The first variable of national interests has an important stage from the concept of strategic engagement. This is because the main form in the application of the concept, according to Cottey and Forster (2004), has the implicit purpose of functioning as an instrument to drive domestic political interests, both in the application of national interests and other objectives. The second component, the attribute of transparency, is defined as a norm, that is, an institution that is valid in protecting the practice of exchanging data, information, intentions, and the interests of each party voluntarily. The last component, interaction, requires an effort to present an interaction with the intended actor. According to the authors, interaction is an important and crucial variable in diplomacy, because differences in interests must be minimized so to facilitate the establishment of US defense diplomacy in the form of cooperation (Wright, 2010).

To analyze why strategic engagement is a concept that is central to the US initiative on extending the ties of space cooperation with Russia, the author uses a synthesis of important components regarding the concept of strategic engagement as a variable to be analyzed. The variables, which are the result of a synthesis of Cottey and Forster's (2004) and Wright's (2010) arguments on strategic engagement, are (1) political agenda or interests; (2) transparency attributes; and (3) forms of interaction.

## **2. SPACE COOPERATION AS BEST US APPROACH?**

In March 2014, Russia annexed the Crimea, which was previously part of the sovereign Ukraine. The United States and the European Union responded to this action

by imposing sanctions directly on Russia, with President Obama issuing a statement that Russia had violated the sovereignty of Ukraine and its integrated territories (Price, 2017). These sanctions focused on the financial and industrial aspects of Russia's arms sales, and banned Europe from providing long-term loans to banks in Russia. According to Andrew S. Weiss (2014), sanctions imposed by the United States on Russia would not affect Russia's stance on the issue. Weiss also added that the big question regarding Russia's annexation of the Crimea lay with the US and European governments as to how far their responses and actions would go—that is, whether the United States would take steps such as they had taken as in the cases of Iran and Syria, or would impose a Russian embargo on the economy and the international financial system—and was a decisive aspect of this step that was taken. In other words, Russia had taken the initiative and held a higher position than the United States regarding the annexation of the Crimea. This is consistent with Weiss's (2014) approach to the issue, which is that Putin had shown that Russia has an extraordinary ability to act appropriately—with a type of decision-making that shows a willingness to accept great risks.

By contributing to the historical record regarding the conflict between Russia and the United States, observers and academics have expressed their opinions and arguments regarding the project of US space cooperation with Russia on the ISS. As explained at the beginning of this paper, opinions on the issue are classified into two categories, namely security aspects and international cooperation. Subjectively speaking, the concept of strategic engagement, which is an integration of defense diplomacy, is a combination of these two aspects. Cottey and Forster (2004) propose an argument regarding this issue, that strategic engagement is an initiative of the United States and external actors based on the interests of national security and international stability, which can be achieved through planning such a design for international cooperation.

To analyze why the ISS as a strategic engagement agenda against Russia is a precise move by the United States, the author analyzes the variables within international cooperation with Russia so that this kind of cooperation can be categorized as a successful, well-managed, and an exact response to alleviate the tension between the two superpowers.

## **2.1. Political Agenda**

Concerning the political agenda of the United States behind the initiative of space cooperation with Russia, the author has classified the discussion into several categories. The US political agenda deals with the reality of the national interests of the United States (Roy, 2013) and perceptions about space security or space assurance (Rendleman, 2009).

Roy's study (2013), which quotes directly from the official White House website on the national space politics of the United States, shows a national aspiration on the part of the United States to continue, develop, and conceptualize a national space strategy, which serves as a guideline for being able to continuously articulate space policy making. This is due to the dimensions of space, which continue to narrow due to the addition of new aspects such as space commercialization, navigation and time mapping, and space transportation. The reality of the political interests of the United States in outer space is increasingly constrained by the increase in different actors, such as nonstate actors, shareholders, executive branches of government, congresses, and commercial entities, that may originate from outside the United States. The existence of these pressures has pushed the United States to design an outer space strategy that plays a comprehensive role in achieving its goals through international cooperation, without overlooking foreign policy and national security.

Roy (2013) has also discussed the kind of strategy that must be carried out by the United States in terms of the policies and external interests related to various parties. The committee from US Space Leadership provided recommendations to formulate a "national space strategy" to explain explicitly and focus on the goals and targets of the United States in international space politics. There is also a push by the Committee on the Rationale and Goals of the US Civil Space Program to enable the United States to produce important elements as the foundation of their space policy making. The National Security Space Independent Assessment Panel, an organization with a high status in the United States, said that the main foundation of the United States in the formation of their policies on space must start from a sense of leadership on the part of the United States in space. The Government Accountability Office also recommends that national space policy making must articulate the following concepts: concrete objectives, clear scope and methodology; problem definition and risk management; goals, objectives with lower priorities, activities, and performance measurements; resource, investment, and risk management issues; organizational roles, responsibilities, and coordination; and integration and implementation.

Moving on from Roy's (2013) study, which discusses the reality of the US domestic political impetus to immediately develop an outer space policy, the present author discusses the work of Rendleman (2009), who considers the main strategy of the United States in space. Rendleman uses the opinions of Samuel Black (2008) and Bruce W. MacDonald (2009) in his discussion of space security, which is conceived as space assurance. According to Black, the United States must create a space strategy that can be relied upon by the president of the United States, military forces, civil society, and all allies of the United States. Black expressed the view that the

policy must be proactive and comprehensive and reliable as a defense strategy. Without rejecting Black's opinion, MacDonald argues that the main goal of the United States is to make space a safe dimension, with a stable system and political dynamics, thus encouraging conflict prevention and raising aspects of the United States' confrontation with its competitors.

The results of the synthesis of the opinions of Black (2008) and MacDonald (2009) on how the United States must create a system in space are as follows. The United States must use important components, namely (1) security and deterrence; (2) global interactions; (3) situational awareness; and (4) responsive infrastructure. By employing these four elements to further its political interests in space cooperation, Rendlemen believes that the United States and its international cooperating partners will be able to continue their significant goals in space, in both the short and the long term.

## **2.2. Attribute of Transparency**

The transparency attribute is one of the main variables in the concept of strategic engagement, in accordance with Cottey and Forster's (2004) view that there must be a common interest achieved by reducing doubts about the intentions between collaborating actors. The categories that emerge from the transparency attribute are open discussion and the designing or establishing of common norms, thus partaking in the making of regulations or the designing of an institution that establishes space policy as a means of mitigating anarchy in a competitive relationship.

Analysis of the following variables is based on the Space Security Index 2014 (SSI), which discusses and reports on the security and sustainability of space cooperation. The SSI functions as a project to increase transparency regarding space activities and to provide comprehensive information and objective knowledge to support the national and international development of space.

The discussion on transparency in space cooperation by the SSI begins with an awareness of the lack of a normative framework capable of supporting outer space activities from the existing challenges, both from space and from international dynamics. In addition, the SSI also notes that maintaining space stability and security as required by international law and achieving transparent unilateral, bilateral, and multilateral relations, and normative developments regarding binding regulations is still quite a slow process. Therefore, the creation of a charter such as the Treaty on the Prevention of the Placement of Weapons in Outer Space, Threat or Use of Force against Outer Space Objects (PPWT), and the International Code of Conduct for Outer Space Activities represents the realization of politically binding norms. The design of space situational awareness (SSA), which

follows and detects objects in space, such as debris and satellites, whether active or not: observes space weather; and monitors spacecraft activities and similar activities also brings some transparency to international space cooperation. The SSI considers that SSA is capable of increasing the accuracy in assessing objects that are not identified as foreign attacks, technical errors, or space objects, so it can contribute to space stability by preventing misunderstandings and false accusations. In addition to SSA, the Space Surveillance Network (SSN) also provides a number of space actors in the form of situation surveillance capabilities that cover the entire world (Jaramillo, 2014). In addition, Jaramillo also noted that only the United States and Russia have the capability to use the SSN as a form of surveillance of space and world activity. The SSN works by giving early warning and monitoring the movement of objects. The ISS noted that in 2014, similar detection technologies were also possessed by China and India, while countries such as Canada, France, Germany, and Japan were still in the phase of developing these technologies with more specific functions.

In addition to the establishment of space norms through the creation of charters and technology, several other alternatives for bring about transparency in space activities can be achieved. The SSI explained that international cooperation is still the main key in space activities, especially in terms of increasing transparency between country programs with data-sharing features, especially regarding awareness about situations in space. In addition, the design and development of space planning also provides a significant aspect of transparency. The SSI indicates that the development of a country's national policy that follows the normative space system will produce a predictable state of space activity and conducive conditions among actors.

The United Nations has also contributed to the use of space in a way that is peaceful, transparent, and conducive by making several resolutions. One step it has taken is to pass Resolution (68) 29, which calls on all countries involved in space activities to contribute actively to the goal of peace, to use space to prevent conflicts from occurring, and to avoid behavior that conflicts with these goals. The SSI also noted the need to implement nonintervention norms in the form of transparency and to prevent activities that increase extraterrestrial waste through weapons testing.

Quoting from the writings of the Space Foundation (2008), the Draft International Code of Conduct for Outer Space Activities contains concepts aimed at forming space norms and procedures, namely, by designing (1) general goals and principles; (2) security and sustainability of space activities; (3) a mechanism of action; (4) organizational aspects of space; and (5) a mechanism of cooperation. In addition, in its preamble, the Code of Conduct for Outer Space Activities states

several regulations specifically addressing the obligation to ensure transparency in all types of space activity.

Based on a summary of certain parts of the preamble, especially regarding the obligation to ensure transparency in activities, the following can be concluded. Transparency has a linear relationship with different forms of international cooperation and space collaboration activities. In other words, all forms of activity by all actors involved must enable data sharing and openness aspects regarding the purpose of their operations. Not only the state as the main actor in space activities but also other entities such as nongovernment actors must be bound through the same space politics norms. All forms of transparency aim to convince all actors involved that multilateral cooperation in space activities always prioritizes safety, security, and sustainability, which can then manifest in subsequent periods as valid international law.

### ***2.3. Interaction Model***

The interaction model is a determinant variable of how communication forms exist between actors in a strategic engagement concept. This variable plays an important role in understanding the context of cooperation and the dimensions that work in it, because in Wright's (2010) opinion, one of the challenges in space cooperation is the significant influence of nonstate actors and private parties. In summary, the present author finds that there is a categorization of interaction models that can be analyzed using the concepts used, namely global interactions as modifiers of perception and the forming of shared interests, and forms of cooperation that take place.

Through the Treaty on the Prevention of the Placement of Weapons in Outer Space Charter and the Threat or Use of Force against Outer Space Objects, we can see the types of cooperative interaction and perception present behind space exploration (EU, 2014). More or less, the opening of the treaty is as follows. The first paragraph emphasizes that cooperative relations present in space cannot be separated from aspects of development and humanitarian interests, and the second paragraph stresses that the dimension of space does not approach weapons, whether in the form of weapons placement or by using space as a field of conflict confrontation. In the paragraphs that follow, it is emphasized that countries that are active actors in space activities must understand the importance of complying with multilateral agreements, principles, and international regulations governing space activities. Through the following explanation, we can see that the interaction present in international space cooperation in 2014 is a kind of cooperation that explicitly does not use weapons and military instruments in practice. This certainly conveys a strong image of space cooperation, and

suggests that cooperation takes a form that does not have aggressive or offensive intentions in practice.

### **3. CONCLUSION**

Strategic engagement is a defense diplomacy concept that emphasizes that main actors increase their defense capabilities by establishing cooperative ties with other actors who have a historical record as opponents or competitors of world hegemon. In analyzing strategic engagement variables such as the presence of political agendas, transparency attributes, and forms of interaction, the author found that these variables are also present in international space cooperation. In international space cooperation, as discussed in the sources of literature reviewed here, the political agenda of the United States shapes the outer space dimension as one that can be relied upon and used as an asset of the country; transparency comes with the creation of norms, treaties, international law, and supporting technology; and forms of interaction between actors in space activities lead to space cooperation that is far from aspects of weaponry and conflict. These findings indicate that important variables in strategic engagement are also present in international space cooperation, and it can be said that cooperation is a kind of defense diplomacy in the United States with a form of strategic engagement that uses space as a dimension for cooperation.

In conclusion, the United States has been able to use ongoing space cooperation with Russia as an element of strategic engagement to reduce the international conflict that came after Russia's annexation of the Crimea. Although the United States still has sanctions in place, the negative impact of these sanctions can be reduced through both countries cooperating together, full of transparency and perceptions that are far from conflict. This type of US initiative also has the potential to be an incentive for Russia in the form of subsequent cooperative relations and can indirectly play an important role in politics as a symbol of shared desire, mutual trust, and commitment to security. This is an appropriate response for the United States, bearing in mind that China is an international actor that has the capability of being a space equivalent to the United States.

The theoretical significance that can be found in the concept of strategic engagement is that to pursue stability and international security, strategic engagement can be implemented as one element in the process and implementation of a state's diplomacy agenda. This approach is believed to be the best move for a state with high capabilities that has had a bad record of poor relations with another state in previous periods. Although the concept is not intended to eradicate the bad record and history as a whole, it is believed that the application of the concept can be effective in reducing the poor relations between the two states. In addition, communication, transparency, and other variables can be

tailored to the current context so that the concept will provide far greater benefits, especially in the development of international cooperation. Therefore, strategic engagement can be manifested as a bridge to advancing global cooperation in achieving sustainable, peaceful, and transparent development.

## REFERENCES

- [1] 'DOD and director of national intelligence' (2011) National security space strategy, unclassified summary.
- [2] Anantamula, V. (2013). 'U.S initiative to place weapons in space: the catalyst for a space-based arms race with China and Russia', *Astropolitics: the International Journal of Space Politics & Policy*, pp. 132-155. <https://doi.org/10.1080/14777622.2013.842873>.
- [3] Black, S. (2008). 'Components of a space assurance strategy', *High Frontier*, 5(1), pp. 16-18.
- [4] Cottey, A. and Forster, A. (2004). 'Reshaping defence diplomacy: new roles for military cooperation and assistance'. *Adelphi Paper*, 363, pp. 1-85. Retrieved from [www.iiss.org](http://www.iiss.org).
- [5] Galindo, G. (2019). 'White House: US Does not recognize Russia's claim on Crimea. Retrieved from POLITICO'. Retrieved from <https://www.politico.eu/article/russia-claim-on-crimea-united-states-does-not-recognize/>, 19, p. 04).
- [6] Gallagher, N. (2010). 'Space governance and international cooperation'. *Astropolitics*, 8(2-3), pp. 256-279. <https://doi.org/10.1080/14777622.2010.524131.524131>.
- [7] Gallagher, N. (2013). 'International Cooperation and space governance strategy' *Space Strategy in the 21st Century: theory and Policy*, 52-76.
- [8] Harrison, T., Johnson, K. and Roberts, T. G. (2018). 'Space threat Assessment 2018 A report of the CSIS aerospace security project', 91361, pp. 1-44. <https://doi.org/10.13140/RG.2.2.26053>.
- [9] Hebert, K. D. (2014). 'Regulation of space weapons: ensuring stability and continued use of outer space', *Astropolitics*, 12(1), pp. 1-26. <https://doi.org/10.1080/14777622.2014.890487.890487>.
- [10] Hitchens, T. and Johnson-Freese, J. (2016) 'Toward a new national security space strategy: time for a strategic rebalancing'. Retrieved from <https://www.jstor.org/stable/resrep03665>. Atlantic Council Strategy Paper No. 5 (1-70).
- [11] United States of America. Washington, DC, June, 28. Executive branch of the President of United States of America
- [12] Holdren, J. P. and Bolden, C. 2014. 'January 8') Obama Administration Extends International Space Station until at least 2024. Retrieved from the White House President Barack Obama. Retrieved from <https://obamawhitehouse.archives.gov/blog/2014/01/08/obama-administration-extends-international-space-station-until-least-2024>.
- [13] Jaramillo, C. (2014). 'Space security Index 2014 1' Ontario: SPACESECURITYINDEX.ORG.
- [14] Kleinberg, H. (2007). 'On war in space'. *Astropolitics*, 5(1), pp. 1-27. <https://doi.org/10.1080/14777620701544600>.
- [15] Larsen, P. B. (2018). 'Outer space arms control: can the USA, Russia and China make this happen'. *Journal of Conflict and Security Law*, 23(1), pp. 137-159. <https://doi.org/10.1093/jcsl/krw026>.
- [16] Lopez, D. (2012). 'Predicting an arms race in space: problematic assumptions for space arms control'. *Astropolitics*, 10(1), pp. 49-67. <https://doi.org/10.1080/14777622.2012.647391>.
- [17] MacDonald, B. W. (2009). 'The impact of the changing nature of deterrence on space', *Space Deterrence, Space Doctrine, and U.S Security*, pp. 4-5.
- [18] Meyer, P. (2016). 'Dark forces awaken: the prospects for cooperative space security'. *Nonproliferation Review*, 23(3-4), pp. 495-503. <https://doi.org/10.1080/10736700.2016.1268750.1268750>.
- [19] Moltz, J. C. (2013). 'Space and strategy: From theory to policy' *Space Strategy in the 21st Century: theory and Policy*, 15-38.
- [20] Pasztor, A. 2015, April 16. 'Russia, U. S Will continue with International Space Station, NASA tells congress. Retrieved from *The Wall Street Journal*'. Retrieved from <https://www.wsj.com/articles/russia-u-s-will-continue-with-international-space-station-nasa-tells-congress-1429204722>.
- [21] Pavelec, S. M. (2012). 'The inevitability of the weaponization of space: technological constructivism Versus determinism'. *Astropolitics*, 10(1), pp. 39-48. <https://doi.org/10.1080/14777622.2012.647392.647392>.

- [22] Peoples, C. (2011). 'The securitization of outer space: challenges for arms control'. *Contemporary Security Policy*, 32(1), pp. 76-98. <https://doi.org/10.1080/13523260.2011.556846>.556846.
- [23] Price, G. 2017, October 17. 'How U.S. and Russian relations got so Bad: A timeline from 2014 to present. Retrieved from Newsweek'. Retrieved from <https://www.newsweek.com/russia-us-relations-timeline-658097>.
- [24] Rendleman, J. D. (2010). 'Strategy for space assurance Space Strategy in the 21st Century: theory and Policy', pp. 77-119.
- [25] Roy, R. I. (2013), 'Political challenges of space strategy', in E Sadeh (Ed.), *Space Strategy in the 21st century: Theory and Policy*, Abingdon: Routledge, pp. 39-51.
- [26] Samuels, R. J. (2005), *Encyclopedia of United States national security*. California: SAGE Publications.
- [27] Sheehan, M. (2007), *The international politics of space*. New York: Routledge.
- [28] Weiss, A. S. (2014). 'What annexation of Crimea means for U.S.-Russia relations. Retrieved from CARNEGIE'. Endowment for International Peace. Retrieved from <https://carnegieendowment.org/2014/03/18/what-annexation-of-crimea-means-for-u.s.-russia-relations-pub-55055>.
- [29] Wright, T. (2010). 'Strategic engagement's track Record'. *Washington Quarterly*. Center for Strategic and International Studies, 33(3), pp. 35-60. <https://doi.org/10.1080/0163660X.2010.493090>.
- [30] Zezima, K. (2014). 'Despite sanctions, Russia is getting a \$457.9M check from NASA. Retrieved from Washington Post'. Retrieved from [https://www.washingtonpost.com/news/post-politics/wp/2014/04/18/despite-sanctions-russia-is-getting-a-457-9m-check-from-nasa/?utm\\_term=.72bbb3d7acb2,04,p.18](https://www.washingtonpost.com/news/post-politics/wp/2014/04/18/despite-sanctions-russia-is-getting-a-457-9m-check-from-nasa/?utm_term=.72bbb3d7acb2,04,p.18).