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# First General Assembly

Tackling the threat of communications and imaging satellites to international security



**MODEL UNITED NATIONS**  
THE INTERNATIONAL SCHOOL OF THE HAGUE

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<b>Forum</b>	GA1
<b>Issue:</b>	Tackling the threat of communications and imaging satellites to international security
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## Introduction

By the 9th of July there are approximately 4.987 satellites currently orbiting the earth, many of which are used for imaging and communications. This allows governments to watch and supervise the movements of citizens, government officials, and even the movement and actions of military units. As issues regarding space and satellites proliferate, governments are moving towards safeguarding the rights of their citizens and the privacy of their nation, this is even seen to the length of creating a sixth branch of the US military, namely “U.S. Space Force”. When aiming to ensure international security and privacy for all nations from communications and imaging satellites we must first look at the threats which arise from such satellites, and who is responsible for these satellites.

Satellites are of prime importance to many nations, specifically the US and Russia who both use satellites to view the actions of one another and protect troops within a variety of regions. China has also begun using satellites to monitor its citizens as well as other countries of importance. However, despite the general benefits of satellites to one's country hence the motivation for their construction, satellites are also a bear on international security, and the privacy of governments and individuals. With many western nations obeying to the “Universal Declaration of Human Rights” many of the actions performed by satellites are not in direct violation of this set of human rights. Which allows nations to watch over their citizens, and the citizens of other countries 24/7 without any backlash.

The limitations and benefits of satellites are therefore questionable and allow for abuse by any nation who deems it necessary, an issue for all nations, and a threatening issue for international security around the globe.



## Definition of Key Terms

### Communication Satellites

An artificial satellite which provides a medium for the relaying and amplifying of various radio signals, to create a channel between a source transmitter and a receiver in a variety of regions around the Earth

### Imaging Satellite

An Imaging satellite effectively allows for nations or independent holders to take a variety of images of different places, many of which orbit the earth and are used to watch nations, and the actions of citizens

### International Security

Or often known as Global security defines the measures taken by nations or international organizations to ensure global safety for all.

### Cyber Security

Is the protection of internet-connected systems to ensure that there is no outside intersected or effects on data or the use of the system as a whole. It refers to the use of hardware, software or other means to protect such systems and ensure privacy.

## General Overview

International Security is of great importance to all, whether you are a citizen, or an NGO, without International Security many of us may lack basic necessities and human rights. Communication and imaging Satellites are beneficial to a variety of nations, ever since the cold war, where nations such as the USA and Russia watched the movements of each other to ensure the safety of their pilots who would generally fly over the nations to gain intelligence over each other's activities. Since then however, the use of satellites for imaging and communication has evolved dramatically, with approximately 5 satellites orbiting the earth, almost anyone can be watched if required. This poses a threat to the privacy of citizens, and a greater threat to international security.



These satellites can be used to deceive nations and overpower them through military intelligence, as these satellites have become essential to the security of the most influential nations of our time, and therefore can have astronomical effects.

### **Cybersecurity threats on satellites**

As previously stated, many nations require the security provided by satellites for their conscience as well as their daily requirements. A threat on these satellites could result in a variety of military and political actions, it would render governments extremely unaware of the actions taken by one another, and if data provided by these satellites was manipulated, could lead to a war. Therefore, many nations and NGOs are becoming more aware of the security of their satellites, and taking precautions to ensure that they are not negatively interfered with by other nations, and independent organizations.

#### ***Potential Cyber interactions with satellites***

As nations utilize satellites, and companies such as SpaceX plan to implement 42,000 satellites over the next decade, the security of these satellites are necessary, however currently there is a lack of cybersecurity standard for commercial international satellites, and even government owned satellites can be hacked, and interfered with. Hackers would be able to listen to all transmissions relaying through communication satellites and would be able to watch high government officials on their every move, giving advantages to terrorist organizations, or other dangerous groups. The use for commercial satellites could deny citizens of internet, privacy, and general safety, and therefore must be safeguarded to an extreme level. The protection of these satellites is required if nations are to keep peace and ensure effective use of their benefits.

#### ***Potential shutdowns of satellites***

As previously acknowledged, for an organization/group to monitor these satellites without supervision, is extremely dangerous, and could lead to a variety of issues. Therefore given the issue that a group was to take control of one of these satellites, and shut it down completely, governments could be left in the dark regarding international intelligence, or even supervision over their own country, and organizations utilizing satellites could also have issues, as they would fail to provide their products and services to customers, which as we move forward in the future, could have devastating effects. Therefore, nations must ensure that commercial satellite security is monitored, and above that government satellite security is held at a standard of unreachable by cybersecurity attackers.



## Misuse of Satellites by Organizations

Over the past few years we have witnessed the use of platforms such as Facebook to monitor the online activities of users, and provide a base to affect electoral practices, and other important matters. By using complex algorithms organizations have been able to manipulate and sell/rent data for their own benefit. With actions such as the GDPR (General Data Protection Regulation) moving to halt these organizations before it moves too far. However, despite the dramatic issues we have seen arise from organizations utilizing their own software to watch what users like, comment, or just look at, the use of satellites is even more dangerous. Organizations would be able to watch groups of individuals on their everyday errands, calculating when they visit the supermarket, what, and when they buy things, even how long they stay at home. This would provide organizations with the ability to absolutely destroy the privacy of individuals and disregard the GDPR in an attempt to move to their previous ways. Therefore, these organizations must be monitored to such an extent to ensure they are not disregarding basic privacy, and to ensure that they are following a set of basic principles which allow for privacy of individuals, and this must be pushed forwards in all nations to ensure a universal understanding.

## Misuse of Satellites by Governments

Many nations have different thoughts upon the use of satellites to watch their own citizens, with more liberal, democratic, and western countries deeming it somewhat inhumane. Whereas countries such as China prefer to watch their citizens, and could use satellites to track their phone calls, and radio signals, as well as watch their every move. This creates an ethical dilemma between nations and may lead to more debate around the subject of satellites as a whole, which is of major importance. However, if this is not to be fixed or discussed, then nations will be able to use satellites as they want, and won't be limited to anything specific. This is a small note but something of importance which requires much thought and debate from a variety of stakeholders.

## Major Parties Involved and Their Views

### U.S.A

The USA to this date owns more satellites than any other country or other party involved. The USA has a government agency namely NASA, which is the leading progressor in space activities, and the USA also funds hundreds of billions into its military each year including its sixth body being its "Space Force".



**Russia**

Russia being the USAs counterpart in space development, and international intelligence, was one of the first countries to use satellites to watch other nations, and ever since has constructed more satellites than any other country (Excluding the USA). Russia also relies heavily on its satellites, and is of extreme importance when it comes to discussing the usage of satellites, and basic standards/principles which must be followed.

**Space X**

Space X is looking to create thousands of satellites within the following years for commercial purposes, and ofcourse for its own uses, being one of the biggest and fastest advancing space related companies in the world. Therefore Space X is also an important organization when it comes to discussing satellites.

**Timeline of Events**

You can include a small paragraph to explain the timeline. Otherwise you should follow the format specified below:

<b>Date</b>	<b>Description of event</b>
Oct. 4, 1957	Sputnik was launched as the first satellite, which sparked NASA to improve their efforts
Jan. 31, 1958	US "Explorer 1" launched, rotating around the earth once every 114 days
Dec. 3, 1963	UN constructs and releases the "Declaration of Legal Principles Governing the Activities of States in the Explo- ration and Use of Outer Space"
1947 – 1991	Satellites are used on both sides to help throughout the war, providing unreachable intelligence to either side.
July 10, 1962	First commercial satellite launched successfully "Telstar"
April. 24, 1970	China launches its first satellite "Dongfanghong I"
July 14, 2009	Made history by being the first private company to launch, orbit, and recover a spacecraft





## UN involvement, Relevant Resolutions, Treaties and Events

The UN's most important piece of work surrounding the involvement of nations regarding space exploration, and space related conflicts is limited to:

- The Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space

ST/SPACE/11

Found at: [https://www.unoosa.org/pdf/publications/st\\_space\\_11rev2E.pdf](https://www.unoosa.org/pdf/publications/st_space_11rev2E.pdf)

## Possible Solutions

There are a variety of ways to solve these issues, many of which have never been fully attempted. The UN has not tackled this issue on a multilateral basis, and therefore full intervention has not been possible. However it is somewhat understood that to find a feasible solution, we must facilitate all nations working together, to ensure that no government, or organization based within a nation's borders are threatening the wellbeing of society, and the wellbeing of a country. The issue of satellites on international security ensures that the security of all nations is taken into consideration, therefore a resolution must include clauses which take into account all nations policies and views.

One way in which this issue could be solved would be passing an internationally agreed resolution which creates a set of principles that all nations must employ, which does not destroy the purpose of commercial and government satellites, but limits their usage to beneficial gains for society as a whole. A resolution like such however would only aim to solve the side of the issue which relates to misuse, and would not prevent cybercrime upon the satellites and therefore if a resolution was to be created like such, it would either need a counterpart or it would require illustrative writing which aims to solve such an issue of cyber warfare, and prevention of hackers. This resolution would need to be fully agreed upon especially by the P5, as the general assembly lacks the ability to force countries to comply with regulations it sets, and therefore the resolution must include no bias.

Another way in which this issue could be solved would be the creation of another entity governed by the UN with the purpose of stopping the interference of other countries/groups on national security satellites, or commercially owned satellites. This team would also be responsible however for watching over governments and organizations to ensure that they



are not abusing human rights and are not restricting/denying privacy to the general public of the nation in question, or any other nation. However, a situation like this would need to ensure it is not directly or indirectly restricting a nation's sovereignty, as this would go against the UN convention, and would not be accepted by any nation within the UN. All delegates would need to arrive at a consensus to create this focus group/team and setting the regulations and direction for this team would also need to be discussed to ensure that the group monitors effectively.

Other solutions to this presented issue may vary depending on the thoughts and opinions of delegates, but the ones presented above are solutions which can be globally accepted if improved and elaborate upon to ensure complete compliance from all nations. However, if delegations feel that complete international compliance and agreement is not necessary, delegates may opt to go from more effective, and national policy orientated resolutions. These resolutions may aim to push national motives upon other nations while finding a solution to the general issue at hand. An example of this could be the United Kingdom, a leftist country which fully motivates privacy, and the European convention of human rights, attempts to have China change its policies toward privacy of its citizens, by banning the use of technological devices to track the location of general citizens unless in specific circumstances. The word technological devices both includes satellites, and the ones discussed at hand, but also facial recognition devices or software which attempts to track individuals. China could also create a resolution which aims to push its national policies, and ideologies, but sometimes when this is done, the issue is left behind, and national issues rise more than recommended.

We suggest that delegates work together to push the issues at hand, and ensure international security, while conforming to the policies and ideas of their respective nations. Generally, when delegates become too oriented around their national policies, they set aside the issue, which is both counterproductive, and dangerous to debate and to solve the issue at hand.

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