



CalsMUN 2019
Future Technology

Research Report

Forum: COPUOS

Issue: The rights applying to outer space concerning private companies and state

Chairs: Björn Overbeek and Thijs de Ruijter



Personal Introduction

Björn Overbeek

Hi,

My name is Björn, I'm 17 years old and live in Nieuwegein, in the Netherlands. I will be your main chair at CalsMUN 2019. I have been participating in MUNs for almost 3 years now, and in this time I have participated in 10 MUNs. I have very little experience in chairing, but since this MUN is at my own school I saw an opportunity to expand my experience.

I am currently in year 6 of VWO, and I spend a lot of time on school. When I am not doing anything related to school, and this is not very often, I like to lay back and watch some Netflix, meet up with my friends or sleep a little extra because I know days will be coming where I do not get that opportunity. I also do Judo twice a week and work at a supermarket.



I look forward to seeing you all in January at the conference!

With kind regards,

Björn

Thijs de Ruijter

Dear delegates,

My name is Thijs de Ruijter, I am sixteen years old and I will be your co-chair at CALSMUN. Participating in MUNs is something I truly love and so far I have participated in MUNs thrice. This will be my first time as a chair and I am really looking forward to it. COPUOS sparked my interest since I am really interested in outer space, outer space warfare in particular (probably like the rest of you Star Trek and Star Wars nerds out there). I know that with Björn and myself as chairs, and you as delegates, our committee will shine like the stars!

When I am not at school or sleeping I can usually be found behind my piano. I play in a band called "*The Dame*" (check us out, we're cool) and I am really passionate about music. I am really looking forward to meeting you and we will make this CALSMUN rock!



Most sincerely,
Thijs



Introduction

People have been interested in outer space and space travel for centuries, but now that technology, is advancing faster than ever, rules need to be made in order to prevent future issues. There was a time when only the government had the money and time to experiment with outer space and space travel, but since then times have changed. Private companies also started showing interest in space travel and started doing research themselves. It even came to the point where the government is now working together with private companies on space travel. If technology keeps moving forward and the number of private companies experimenting with space travel grows, clearer rules need to be set on this issue to prevent major issues in the future. The current solution is several treaties, drafted and negotiated in the COPUOS, which are the basis for space law. These treaties however are getting outdated because of the advance in technology and need to be updated.

Definition of Key Terms

(Outer) space

Outer space, defined by Google's dictionary, is the physical universe beyond earth's atmosphere. The place where outer space usually starts in treaties is 100 kilometres above earth's sea level.

Space law

Space law is the section of the law regarding space-related activities. These laws are based upon the several treaties that have been made concerning outer space.

Outer Space Treaty

This treaty is seen as the most important and influential treaty when it comes to outer space. The treaty was opened for signature in the US, the UK, and in the Soviet Union in 1967, and as of today has been signed by 107 countries. The most important points of this treaty are:

Space is free for all nations to explore, and sovereign claims cannot be made. Space activities must be for the benefit of all nations and humans.

Nuclear weapons and other weapons of mass destruction are not allowed in Earth orbit, on celestial bodies or in other outer-space locations. (In other words, peace is the only acceptable use of outer-space locations).



Individual nations (states) are responsible for any damage their space objects cause. Individual nations are also responsible for all governmental and nongovernmental activities conducted by their citizens. These states must also "avoid harmful contamination" due to space activities.

General Overview

It has not been long since the USA and Russia started their "space race" in 1957. Since then a lot of things have changed. Space travel is more advanced and our knowledge concerning outer space has grown tremendously. There is even a private company, SpaceX, that is doing their own research and is working together with the government on space travel. There are also several private commercial companies that are doing research on, and are advertising with space travel for people without specialised astronaut training. Another "space race" has begun, and this time it's not about winning pride of having invented it first, but winning customers. If we want make the this new race a fair and safe race, we need to adapt the rules to fit the new race.

The first problem with the current space law concerns the amount of slots for geosynchronous satellites. These slots are positioned above earth just the right distance so that the satellite and the earth have the same rotation speed. This is allows them to stay in approximately the same position above earth for several years with very minimal fuel usage. There are only a limited amount of these slots but there is a very high demand for them since they are so useful. The International Telecommunication Union regulates these spots but the space law does not allow claiming of anything in outer space. This is one of the issues that needs to be solved.

The second issue we are facing is the lack of specification in one of the clauses in the Outer Space Treaty. It says that space and celestial bodies cannot be claimed by other nations, but it does not specify anything about private companies. The law must be specified so everyone can keep using outer space, and no-one will enjoy all of it.

The third concern is the U.S. passed the SPACE Act in 2015. This act basically allows U.S citizens to exploit asteroids and other outer space resources, but not the land on which it sits. This could violate the Outer Space Treaty, since the treaty does not allow claiming of things from space and the SPACE act does.



The fourth matter is the possibility of restricted space access because of space debris. There is about half a million dead objects floating in Earth orbit. If nations and private companies make the amount of debris grow, they will obstruct space research and ruin this exiting journey for everyone. There is no law against creating debris in outer space, but seeing the amounts of trouble it can cause this law is necessary.

The fifth and last issue is protection of space passengers. When more and more commercial companies start flying people into space, there must be ground rules these companies have to follow in order to insure safety of the population. They will have to inspect all sorts of things, like the spacecraft itself and the launch site, but also the people themselves.

If these problems can be solved we, as inhabitants of earth, are ready to proceed in a safe and exiting space program. Until then we might want to hold back because the laws might be lacking behind the science.

Major Parties Involved

Organisations

NASA

The National Aeronautics and Space Administration (NASA) is in charge of U.S. science and technology that has to do with airplanes or space. NASA's goal is to research and explore outer space in a safe and peaceful way.

ESA

The European Space Agency (ESA) is Europe's NASA. NASA and the ESA work together a lot and have a bunch of joint projects.

SpaceX

SpaceX is a private American company founded by Elon Musk with the goal of reducing space transportation cost. This is also (one of) the most important company working together with NASA, having flown 14 resupply missions to ISS getting awarded a further development contract in 2011 by NASA.



UNOOSA

The United Nations Office for Outer Space Affairs (UNOOSA) is a part of the UN secretariat. The task of this office is to implement the decisions that the GA and COPUOS committees in the UN make. It also has to assist developing countries in using space technology for development.

Countries

United States

The US has been ahead in the development of commercial space travel, houses most private space travel companies, and thus is one of the most important countries.

MEDC's

Most, if not all MEDC's are interested in space travel and will eventually invest in research on outer space. For that to happen safely it is necessary that they agree to the treaty that will prevent any further difficulties regarding space travel.

LEDC's probably do not share this interest in outer space, but it's in everyone's best interest if they sign the treatie(s), in case they develop and start researching outer space too.

Timeline of Key Events

Date	Description of Event
<i>27 January 1967</i>	The Outer Space Treaty was signed
<i>3 December 1968</i>	The Rescue Agreement came into force
<i>1 September 1972</i>	The Space Liability Convention entered into force
<i>15 September 1976</i>	The Registration Convention was declared effective
<i>11 July 1984</i>	The Moon Treaty was entered into force

Previous Attempts to Resolve the Issue

All the previous attempts to solve the issue are listed above in the timeline of key events. These are all the five treaties that have been negotiated and drafted by COPUOS.



Possible Solutions

There are 2 possible solutions to this problem. The first one is creating a new treaty that every state agrees with. This treaty will have to solve all the problems above and has to be accepted by all countries. The second option is to change the current treaties so that they solve all the problems, and make that the countries that have not already signed them sign them.

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