Research Report

Leiden Model United Nations 2017
~ fresh ideas, new solutions ~

Forum: *The General Assembly Fourth Committee*
Issue: *Responsible exploitation of outer space by private parties*

Position: *Chair*

Introduction

This year the Outer Space Treaty celebrated its 50th birthday. For 50 years this treaty has laid the groundwork upon which space law has been built, and never once in those 50 years has it been broken. Partially this is due to the fact that access to outer space is limited to very few nations, and these nations have only just begun to exploit the infinitely vast expanse of outer space. As the Human Race progresses, however, the exploitation of outer space on a greater scale shall become inevitable. This includes exploitation by private parties, which up to now have been near to neglected in the drafting of space law. It is therefore important that we set out principles for the responsible exploitation of outer space by private parties pre-emptively, to solve this issue before it truly becomes one.

Definition of Key Terms

Exploitation
The act of making use of and benefiting from resources

Outer Space
The physical universe immediately outside of earth's atmosphere

Celestial Body
A natural material object located outside of earth's atmosphere, for instance the moon or an asteroid

Private Party
A company or organization belonging to a particular person or persons, as opposed to he government. The National Aeronautics and Space Administration (NASA) is therefore not a private party because its administrator is nominated by the President of the United States and the survival or discontinuation of projects can depend directly on the will of the President.
The European Space Agency (ESA) is also not a private party since it is run and funded by a coalition of governments.

General Overview

Activities in outer space have to be for the benefit of all human kind. This is even stated in the first article of the Outer Space Treaty. Our current treaties on outer space are mostly focussed on the exploration of space by states, but what happens when corporations run by a board of directors bound to represent the best interests of their shareholders start exploiting space? It will not be as easy to ensure that their actions will be for the benefit of all human kind.

The exploitation of outer space can take many forms, from selling of plots on the moon to the appropriation of asteroids. Right now the most realistic and most funded exploitation of outer space comes in the form of mining minerals and collecting of water from asteroids in the asteroid belt or other celestial bodies. There are currently four companies working on realising this, all registered in the USA. Another important USA company is Explorations Technology Corp., or SpaceX, whose mission is to enable life for people on other planets. SpaceX is owned by famous entrepreneur Elon Musk, and as the fastest growing provider of launch services its interest could easily shift to the exploitation of outer space. The aims of these private parties are something to be taken into consideration when solving the issue of responsible exploitation of outer space.

Article VI of the Outer Space Treaty states that states shall bear responsibility for national activities in outer space undertaken by both governmental and non-governmental entities. In other words, states are responsible for the actions of companies registered to them. The article further reads that states must authorise and supervise non-governmental entities (NGEs), also referred to as private parties, undertaking activities in outer space. Some Nations, like the USA, do indeed have the appropriate legislation in place for authorisation and supervision of NGEs, but others have very little or no legislation at all on this subject. The way this legislation is constructed is also of importance. States would need to ensure that they have appropriate access to regulated outer space activities by NGEs. On the other hand this influence should not extend too far since it is also important not to hinder investment.

Another question we need to ask ourselves is to what extent exploitation of outer space should be legal in order for it to be responsible. In accordance with Article II of the Outer Space Treaty areas of space can be appropriated by neither states nor NGEs, therefore it should be impossible for private parties to exploit outer space resources since they cannot lay claim to things within it. NGEs are however allowed to extract samples for scientific research under Article V of the Moon Agreement and collect minerals under the supervision of an international mediator, so there is not a clear border between what can and cannot be exploited. States can therefore interpret space laws like these rather loosely; an example of this was Luxembourg's introduction of legal framework protecting companies seeking to exploit resources found in space in July 2017. Under this new legislation Luxembourg recognizes that space resources are capable of being owned by private parties and promises to protect private parties seeking to exploit recourses found in outer space. Anticipating the development of a very profitable industry the country hopes to give itself a global lead in the field of outer space exploitation.

Major Parties Involved

United Nations Office for Outer Space Affairs (UNOOSA)
UNOOSA serves as the secretariat for the General Assembly. UNOOSA is responsible for promoting international cooperation in the peaceful uses of outer space. It is important to the international community due to its responsibility of preparing and distributing reports in the field of international space law.

Luxembourg
Luxembourg is a leading state in the field of legal and regulatory space legislation. It is the first ever state to offer protection to privately owned companies hoping to appropriate resources from outer space and the first ever to impose the appropriate legislation.

USA
The United States are home to a number of companies interested in the exploitation of outer space and can expect more of these companies to appear once spaceflight becomes more commercial. It is therefore important that the USA is seen as an important party in talks since their space legislation for private parties might very well dictate the future of outer space exploitation.

China
China is developing very rapidly into one of the major players in the field of spaceflight. President Xi Jinping has promised to triple spending on space science over the next few years, which is making China a very attractive place for companies wishing to exploit outer space. It is for this reason that the Chinese opinions on this issue should be taking very seriously, since their space legislation for private parties will very likely have great impact on outer space exploitation.

Timeline of Events

October 10, 1967	Outer Space Treaty goes into effect
July 11, 1984	Moon Agreement goes into effect
July 17, 2017	Luxembourg introduces legislation protecting private companies seeking to exploit resources outer space

Previous Attempts to solve the issue

Many treaties have been written on the subject of outer space exploitation, however as technology and science progresses, and private companies come closer to the exploitation of outer space many of them become outdated. Today the most appropriate solution for clear space laws seems to be national space legislation. There are currently 22 countries with space legislation and so far this seems to be the only attempt to solve the issue.

Possible Solutions

So far NGEs have only sprung up in nations with appropriate national space law, however in the future this might be different. Treaties on space law are mostly focussed on states rather than private parties, which means that as of yet there are no clear guidelines towards supervision and transparency for private parties. A set of principles to which states should adhere when setting up legal and regulatory framework constituting their national space law could be a way of encouraging more states to set out clear space laws.

Another solution that has been suggested is the extending of the UN Convention on the Laws of the Sea to outer space. This solution raises a lot of questions, like: is it fair to extend sovereignty to the space above a nation's territory under Article 2?

Something that should also be considered when drafting a resolution to this issue is to what extent exploitation of outer space should be allowed. As proven with Luxembourg when no clear laws are in place states will take initiative to draft these themselves without proper consultation of the international community, and sometimes without consideration of effects on other states. Seeing as exploitation of outer space seems inevitable it might be better to allow it to some extent, rather than to ban any appropriation in outer space and force states and NGEs to look for loopholes.

Useful documents

Outer Space Treaty:
http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/outerspacetreaty.html

Moon Agreement:
http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/moon-agreement.html

List of National Space Laws:
http://www.unoosa.org/oosa/en/ourwork/spacelaw/nationalspacelaw/index.html

Appendix/Appendices

http://www.unoosa.org/oosa/en/aboutus/roles-responsibilities.html
http://www.unoosa.org/documents/pdf/spacelaw/activities/2014/pres02E.pdf
http://www.unoosa.org/pdf/gares/ARES_62_101E.pdf
http://www.unoosa.org/pdf/pres/lsc2009/pres-04.pdf
http://www.unoosa.org/pdf/gares/ARES_34_68E.pdf
http://www.spacex.com/about
http://www.spacelaw.olemiss.edu/events/pdfs/2008/galloway-masson-zwaan-presentation-2008.pdf
https://www.iop.org/publications/iop/2009/file_44075.pdf
http://www.esa.int/About_Us/Welcome_to_ESA/What_is_ESA
https://books.google.nl/books?id=E9I8V43PqGQC&pg=PA191&lpg=PA191&dq=how+can+space+be+exploited+if+it+cannot+be+appropriated&source=bl&ots=_sh1Lbbu6b&sig=QTLw6B6pEc7zQPJg2zYhYZ8Ymxc&hl=en&sa=X&ved=0ahUKEwjE0YO1073WAhVOUlAKHbDpCy0Q6AEIKzAB#v=onepage&q=how%20can%20space%20be%20exploited%20if%20it%20cannot%20be%20appropriated&f=false
https://en.wikipedia.org/wiki/NASA#Staff_and_leadership
https://en.wikipedia.org/wiki/Space_law#National_law
https://www.forbes.com/sites/davidschrieberg1/2017/07/17/luxembourg-becomes-europes-first-country-to-protect-companies-exploiting-space/#577e373f4f58
https://www.verdict.co.uk/private-companies-changing-space-industry/