

UNOOSA and ICAO

Topic 1: The Environment and Space Activity

Russian Federation

It is well known throughout the scientific community that space travel can be quite taxing on the environment. However, most countries agree that this is a price to pay in order to explore our universe. Currently, major corporations and space faring countries are attempting to make space travel less wasteful, especially launches, as this is when the most amount of fuel is burned.¹ Focusing on the issue of resource conservation and greener methods can also help eliminate problems such as resource distribution and costs. Another major concern is the presence and significance of debris orbiting celestial bodies, especially Earth. While this debris does not pose a threat to people on Earth, it does endanger satellites and ships launching and returning to Earth².

Currently, many countries have partnership programs or collaborative space programs where smaller countries work either through larger countries such as the United States, or work with other smaller countries like in the UNASUR space program, which allows Latin American countries to work cohesively to complete missions such as satellite launches. Smaller countries participating in these programs are usually only present for one of two reasons; either they do not have enough highly trained workers, or they do not have enough access to reasonably priced resources. Russia also expresses concerns with countries monitoring the non-state actors wishing to conduct space faring activities within their respective countries, as a failure to properly monitor this could result in catastrophe.

Russia encourages countries that are willing to engage in partnership to establish them with other willing countries, as well as currently harboring all launches in collaboration with NASA and other federal space agencies. Russia believes that peaceful cooperation is the best way to go about exploring the infinite frontier at mankind's fingertips. Russia also has concerns with the environmental aspect of space travel. Russia plans to establish greener methods of space transportation such as kinetic launch systems, which are magnetized rails, expanding as long as 50-100 km that, using a monorail type technology, can propel spaceships to almost one third of escape velocity, drastically reducing emissions of various chemicals, one being black carbon soot.³ This kinetic launch system helps spaceships completely avoid the most consumptions period in space travel, take off. Instead of having to accelerate from a stop to escape velocity (11km/sec), which can save up to 50% of the entire fuel used in the entire voyage. Russia also plans to organize an international organization that will monitor satellites in space. All countries that contribute will be granted access to all data received by the program, which will focus on specifics of which satellites are currently in space and their purpose. This organization's main purpose is to detect threatening satellites, whether they be dormant or intended for malicious use. Addressing laws determining who or what can participate in space faring operations, Russia believes that all countries should monitor non-state actors within their borders and should deem whether or not it is acceptable and legal, as to not infringe on any national sovereignty. However, Russia encourages any countries being requested to assist with other countries helping to monitor non-state actors in other countries should lend their full assistance.

¹ <http://www.businessinsider.com/spacex-carbon-fiber-fuel-tank-ocean-ship-test-2016-10>

² http://www.nasa.gov/mission_pages/station/news/orbital_debris.html

³ <http://www.aerospace.org/crosslinkmag/summer2011/rocket-soot-emissions-and-climate-change/>

One of the greatest dilemmas in the expansion of human intervention in space is the risk of a new space arms race, as well as all of the dangers and safety concerns that would follow. Russia, as well as most other countries accept that a competitive atmosphere is always present when talking about space exploration. Another main concern is the protection and implication of international humanitarian law in space⁴. International humanitarian law is used to protect innocent and uninvolved civilians in conflicts between countries and also used to prevent the use of any extremely malicious technologies that would be intended to hurt more people than necessary, including chemical and biological weapons and nuclear warheads.

Currently, many space treaties already inhibit the use of weapons in space. However, many feel that most if not all of these treaties are either outdated or fail to address loopholes present. One of the main concerns brought up by Russia include the failure of the treaties to address any corporations or other third party intervention in space. Under current international treaties⁵, any and all non-state actors are exempt from any legal penalties, which Russia, along with most other countries see as a threat. Russia is also concerned with the lack of communication and collaboration between countries. To combat all of this, Russia seeks an all-encompassing agreement that addresses weapons in space and humanitarian law.

To address the legal aspects of international humanitarian law and preventing an arms race, Russia plans to create a treaty that enforces both of these. Russia plans to completely ban the placement of weapons in outer space⁶. Russia also believes that not allowing weapons in space will eliminate concerns surrounding IHL threats. The treaty will allow all signatories to continue to collaborate and work with other signatories but will encourage signatories to avoid collaboration with countries against it. Russia also encourages countries to sanction countries that fail to follow the rules in this treaty, as they are only created to ensure safety to all countries and people. Russia considers endangerment from reckless military powers is a violation of human rights and should be penalized with these sanctions. Russia also expresses concerns for countries such as United States that refused to ratify the 'No First Placement' treaty. This treaty was created by Russia and proposed to the United States and China. Russia wishes to expand on this treaty as well as other major treaties such as the Outer space treaty of 1967 to get as many countries in agreeance for the greatest degree of collaboration to occur. Russia also stresses to other major countries that they should work together with any other country in any way possible to increase chemistry and keep space as a peaceful environment. To address the imbalance of space programs, Russia believes that federal governments should be completely responsible for allocating time, money, and resources into either establishing a national or a partnership space program. Russia also advises countries that are struggling with domestic issues to refrain from distracting investment of time and money to lower precedents.

⁴ <http://www.ijrcenter.org/international-humanitarian-law/>

⁵ <http://www.space.com/33440-space-law.html>

⁶ <http://www.nti.org/learn/treaties-and-regimes/proposed-prevention-arms-race-space-paros-treaty/>

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Topic 3: Space Commercialization

Russian Federation

Commercialization sees the same concerns in both interplanetary and international travel. Costs and security make countries and companies alike hesitant to attempt to commercialize space travel. Many countries believe that passengers should go through the same amount of security checks as current airport security, but others believe there should be specific international requirements for the safety of everyone involved. Space programs also worry about the cost of travel and maintenance also, which only further halts efforts for commercialization.

Many countries have extremely thorough, frequent checks when traveling with planes, especially Russia. Many organizations, such as the EU⁷, are attempting to expand their security systems to mirror Russia's. The depth of Russia's security might surprise many people. The authorities in Russian airports inspect everything inside and out, including planes, facilities, passengers, staff, and even pilots, and also conducts searches of all bags entering and leaving all major airports in the country.⁸ Russia fears that if countries try to reduce the costs of establishing this infrastructure too low, then these facilities and the concept in general will lack reliability and safety, which could end in tragedy. Also, Russia believes that countries should regulate federal and companies operating within them.

Russia plans to secure any commercialized space operations as the country already does with air travel. Russia also encourages other countries to model their security systems, as the EU is already doing. Russia also encourages developed countries to help developing countries to assist in security concerns for space launch and airports. Russia also encourages countries to allocate a significant percentage of their budget to securing facilities as securing all ships and planes for any faulty equipment. In regards to third party intervention, Russia believes that countries should thoroughly monitor these non-state actors within their respective countries to ensure that proper control remains in the hands of the government. Russia also stresses collaboration between countries to research and develop cleaner, cheaper, and easier ways to expand access of space travel. One of these cleaner and cheaper methods is using radioisotopic thermo-nuclear generators to power the passenger space planes, as they can be reused and cheaply produced.⁹ Russia also advises countries to share any and all helpful technologies that can bring space commercialization closer to a reality, as well as diverting these endeavors away from monopolization and towards cooperation.

⁷ <https://sputniknews.com/.../201603231036814973-eu-brussels-airport-security-russia/>

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http://www.slate.com/articles/news_and_politics/hey_wait_a_minute/2005/02/a_dangerous_loophole_in_airport_security.html

⁹ <http://www.nuclearconnect.org/know-nuclear/applications/space>