

WATERLOO CATHOLIC DISTRICT SCHOOL BOARD

MODEL UNITED NATIONS



GENERAL ASSEMBLY

COMMERCIALIZATION OF SPACE

FEBRUARY 17, 2026

The time period from 1957 to 1969 marked the golden era of space exploration. The Soviet Union led the way with the launching of the first satellite into space, Sputnik, followed by being the first country to send a man into orbit, the first to send a woman into orbit and the first to complete a space walk. The United States, which lagged behind in virtually every first in space, won the eventual grand prize with a manned landing on the moon. This period of time also marked a period of intense competition between the Soviet Union and the United States with each country pushing each other to greater and greater advancements in space exploration. The time period was one of great economic investment by the governments of both countries but eventually the costs of space exploration became too exorbitant and both countries, because of economic restraint, began a period of some level of collaboration including the building of the International Space Station (this also included the European Space Agency, Japan and Canada) and becoming involved in joint missions into space. Other countries are now beginning to make a move into space exploration including, among others, China, Japan, the United Kingdom, India and Israel. However as costs continued to escalate and with countries (particularly the United States) cutting back on expenditures, a vacuum for space exploration was created that is currently being filled by commercial enterprises including Space X and Blue Origin. With more and more commercial interests come new advancements and new challenges. The new age of space exploration means that the traditional goals of space exploration have also given way to new ways of thinking about what travel into space looks like. **And while the United States will launch a lunar expedition early in February, 2026 without the assistance of SpaceX, it is expected that SpaceX will be involved in further Artemis missions in the future, including the establishment of a lunar station.**

Recent developments in the space industry include the launching of commercial satellites which are becoming both smaller and cheaper, the growing concern of space debris and the risk of damage due to the collision of space debris including incidents with the International Space Station in 2021 and the Chinese Tian Gong space station, the launching into space of celebrity “astronauts” including William Shatner and Katy Perry and finally, the naming of Jared Isaacman, a billionaire and commercial astronaut as head of the National Aeronautic Space Administration (NASA) despite never having worked for NASA or any other government agency **which represents a blurring of government and commercial interests.** There has even been talk about turning the moon into a nighttime lighted billboard. All of these developments are the result of the movement toward the uninhibited commercialization of space. While commercial interests have certainly accelerated certain “space projects” they have also helped raise some critical considerations.

The key issues caused by the commercialization of space include **orbital overcrowding and space debris, a lack of adequate governance and regulation, significant environmental impacts, potential geopolitical conflict and the exacerbation of global inequalities.**

The concerns over the commercialization of space can fall into four broad categories, each with their own concerns: environmental and orbital issues, atmospheric pollution, governance and geopolitical issues, and ethical and social issues.

A. Environmental and Orbital Issues

- **Space Debris:** With more and more objects floating in space the more likely there will be space debris, especially as older objects become inoperational. Collisions with space debris can cause significant damage to operational satellites and spacecraft. It can also lead to the so-called "Kessler Syndrome," a chain reaction of collisions that destroy a number of objects at the same time. Currently there are about 7,700 active satellites and 36,500 pieces of debris in space. It is estimated that Starlink itself could put tens of thousands more satellites into orbit over the next decade.
- **Orbital Crowding:** The number of objects flying in low-Earth orbit (LEO) could heighten the risk of interference with services that have become essential to humans including GPS, and weather alert systems). Satellites making up about 75% of the emerging "new space economy. With more and cheaper satellites being developed, orbital overcrowding becomes a real concern.

B. Atmospheric Pollution: The increase in rocket traffic would lead to pollutants (black soot) being deposited in the upper atmosphere which could have significant impacts on climate change. The significant increase in rocket launches for commercial purposes, including space tourism, is raising concerns about the environmental footprint.

C. Governance and Geopolitical Issues

- **Regulatory Gaps:** The laws regulating space activity is outdated and as such property rights such as lunar or asteroid mining are not clear. Space traffic management is also in question. The possible mining of the moon, for example, is a question that raises the question of who has regulatory powers (country or corporation).
- **Geopolitical Tensions:** Without updated laws regulating space exploration, competition between countries and even between companies could lead to increased tensions including the militarization of space and the development and use of anti-satellite weapons.
- **Monopolization and Equity:** With space development currently dominated by a few corporations, global access to space will likely continue to be limited. The development of space for scientific research and applications on earth could be dominated by a few key firms and powerful nations. Currently non-state actors (commercial enterprises) make up 70% of space activities. One key area for development will be the provision of internet services through satellite delivery. Certainly, Elon Musk is developing near monopolization of individual access to satellites through Starlink. **With this near monopolization, Musk has become involved in geo-political tensions. On one hand, he has extended the use of Starlink to assist in the current protests in Iran but on the other hand, he suspended the use of Starlink in Ukraine in 2025 as the Ukrainians were preparing to deploy drones to attack Russian targets.**

D. Ethical and Social Issues

- **Safety and Risk:** Space exploration remains a high risk venture and the increasing nature of missions in space, especially space tourism raises real safety concerns, particularly with untrained or undertrained "astronauts" like Katy Perry. The 2023 Titan submarine implosion is of comparable note for space exploration.

- **Exacerbation of Inequalities:** Because of the high cost related to commercial space activity, it is likely that on the wealthiest of nations and individuals will benefit. As of 2021, the investment into space by state and non-state actors grew to \$469 billion.⁶ Revenues are expected to reach \$1 trillion by 2040.

As noted, the United Nations has adopted a number of resolutions with regards to space but many of these are out of date, especially considering the massive movement toward commercialization. Included are the following:

A/RES/72/78

2017

Declaration on the fiftieth anniversary of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies

A/RES/68/74

2013

Recommendations on national legislation relevant to the peaceful exploration and use of outer space

A/RES/62/101

2007

Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects

A/RES/59/115

2004

Application of the concept of the "launching State"

A/RES/55/122

2000

International Cooperation in the Peaceful Uses of Outer Space

RES 1721 (XVI)

1961

International Co-operation in the Peaceful Uses of Outer Space

ST/SPACE/49

2010

Space Debris Mitigations Guidelines of the Committee on the Peaceful Uses of Outer Space

A/AC.105/934

2009

Safety Framework for Nuclear Power Source Applications in Outer Space

As well, the United Nations General Assembly adopted 6 resolutions in 2023 related to outer space:

1. Resolution 78/19: Prevention of an arms race in outer space
2. Resolution 78/20: Reducing space threats through norms, rules and principles of responsible behaviour
3. Resolution 78/21: No first placement of weapons in outer space
4. Resolution 78/52: Transparency and confidence-building measures in outer space
5. Resolution 78/72: International cooperation in the peaceful use of outer space
6. Resolution 78/238: Further practical measures for the prevent of an arms race in outer space

However, there no specific resolutions that deal with the commercialization of space. There are a number of non-binding resolutions including the 1967 Outer Space Treaty which outlines some key principles including:

- Outer space is for the benefit and interest of all countries and is not subject to national appropriation.
- Space activities require authorization and continuing supervision by the appropriate State Party, which bears international responsibility for those activities.
- States must avoid harmful contamination and conduct activities with due regard to the interests of other states.

And the Moon Agreement of 1979. This agreement states:

that the Moon and its natural resources are the "common heritage of mankind" and requires an international regime to govern resource exploitation once it becomes feasible.

Unfortunately, this agreement is not recognized by the United States, Russia or China.

The Secretary-General did issue a brief that was designed to "to address emerging risks to outer space security, safety and sustainability," As part of that brief, the Secretary-General called "for the development of rules to promote the sustainability of outer space, specifically including rules for space traffic management, space debris removal, and space resource activities." The brief went on to identify five key areas of concern in an emerging space economy:

- (a) disruptions of another space operator's activities;
- (b) threats to space infrastructure and human space travelers;
- (c) use and sale of human-made space objects, resources, and intellectual property derived from space activities;
- (d) responsibility for damages caused in space or on Earth by space objects; and
- (e) sharing and exploiting data in a secure and equitable manner.

At this point, the brief is just a starting point for future consideration.

Key issues for debate:

1. Does a specific resolution concerning the commercialization of space need to be drafted?
2. Do specific issues of liability for commercial enterprises, especially concerning damage due to collisions due to space debris, need to be drafted?
3. Do specific training protocols for commercial space travel need to be drafted?
4. Should a regulatory international agency be created to monitor space travel and satellite deployment?
5. Should a regulatory international agency be created to deal with the exploration, mining and other commercial uses for stellar bodies, including the moon, asteroids and comets be created?

Questions for your country:

1. Does your country have a space program and, if so, what is its role?
2. Are there any companies that operate within your country, which are involved in space exploration?
3. Does your country help finance private corporations with regard to space exploration?
4. How dependent is your country on services delivered from space?

Resources:

Articles:

Space Commercialization - Policy Horizons Canada

Jul 17, 2024 — A handful of dominant firms may become the gatekeepers to space for some nations as well as other businesses. Improved...

Policy Horizons Canada. 2024-07-18.

<https://horizons.service.canada.ca/en/2024/07/18/space-commercialization/index.shtml>

Is the commercialization of space a risk too far?

Jan 11, 2022 — Space is getting more crowded and more commercialized.

The World Economic Forum. <https://www.weforum.org/stories/2022/01/what-are-risks-commercial-exploitation-space/>

The commercialisation of outer space - Norton Rose Fulbright

The commercialisation of outer space: Key activities and trends. regulatory ...

Norton Rose Fulbright. [https://www.nortonrosefulbright.com/en-](https://www.nortonrosefulbright.com/en-ca/knowledge/publications/102a426e/the-commercialisation-of-outer-space#section3)

[ca/knowledge/publications/102a426e/the-commercialisation-of-outer-space#section3](https://www.nortonrosefulbright.com/en-ca/knowledge/publications/102a426e/the-commercialisation-of-outer-space#section3)

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Our Common Agenda, Policy Brief 7. For All Humanity, the Future of Outer Space Governance. May 2023.

https://www.unoosa.org/res/oosadoc/data/documents/2023/a77/a77crp_1add_6_0_html/our-common-agenda-policy-brief-outer-space-en.pdf

UN Documents

A/RES/72/78

2017

Declaration on the fiftieth anniversary of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies

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Resolution 78/52: Transparency and confidence-building measures in outer space

Resolution 78/72: International cooperation in the peaceful use of outer space

Resolution 78/238: Further practical measures for the prevention of an arms race in outer space