

Mini Simulation

# Who Owns Space?

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### Overview

Space <u>governance</u> is a complex issue that has become increasingly important as more countries and private companies launch missions. With outer space growing increasingly crowded, the United States needs to weigh the benefits and risks of recognizing space as a shared global commons.

Students will understand that as space exploration advances and involves more countries and private enterprises, new challenges arise for governing space exploration and managing a growing number of sometimes diverging interests.

### The Situation

Since the first spaceflight in the 1950s, policymakers have debated how outer space should be governed. Now, growing numbers of countries and private enterprises are launching missions into space. As a result, the issue of space policy has taken on new importance. Governments and, increasingly, private companies have sought to harness the potential of outer space. Most immediately, that includes creating and expanding satellite networks to provide services such as Global Positioning System (GPS) navigation and internet connectivity. As space exploration continues to advance, many spacefarers envision mining valuable resources from celestial bodies such as the moon or asteroids. Such mining could have tremendous consequences. It could unlock trillions of dollars in new wealth. It could enable scientific breakthroughs in the study of outer space. It could even facilitate the construction of permanent facilities on the moon that could pave the way for deeper space exploration. The prospect of vast economic and scientific opportunity has fueled growing interest in space exploration. However, observers have also warned that without careful management, space exploration risks causing overcrowding. It also risks opening the door for new competition or conflict over space. Policymakers considering space governance therefore need to consider a vital question: Who owns outer space?

The debate over space governance centers on how policymakers define outer space. Some argue that space should be governed as a "global commons," meaning that all countries are entitled to share it. That would mean no one country or enterprise can claim ownership of objects in space. Most of all, any use of space or the resources within space would need to be internationally negotiated. That is how the world's governments treat Earth's oceans and atmosphere, as well as Antarctica.

Proponents of recognizing space as a global commons argue that space should be a domain of peaceful cooperation and needs to be internationally governed. Without careful management, they claim, near-Earth orbit <u>could become</u> <u>overcrowded</u> with satellites and debris. That could prevent new missions from launching safely. Competition for orbital space, natural resources, or territory on celestial objects could further become a source of international tension: competing missions could risk colliding, for instance. At the worst, competition over outer space could even spark international conflicts. Those clashes could pave the way for countries to position weapons in space, such as missile systems or anti-satellite weapons.

Other policymakers and private enterprises worry that designating space as a global commons could destroy the growing momentum of space exploration. They say it could block spacefarers and the broader public from accessing space's economic and scientific potential. Especially as commercial space operations are still in their infancy, some policymakers and lobbyists argue that such policies could discourage innovation. They worry that

investment could slow without the profit motive of being able to claim resources. In such an environment, they argue, new technologies for space travel or satellite services could be slow to develop. They warn that more advanced space operations—such as the mining of resources or the establishment of permanent outposts on celestial bodies—could fail to materialize.

Treating space as a global commons could also have limited benefit unless all spacefaring countries abided by that designation. Without any framework to cooperatively manage space, enforce agreements, and resolve disputes, countries could easily take advantage of poor governance, even while rhetorically supporting a global commons framework.

Several treaties exist to set standards of conduct in space—most notably the <u>Outer Space Treaty of 1967</u>, which establishes that space exploration is "the province of all mankind." However, countries disagree about whether space is a global commons. Some prominent spacefaring powers, including China and the <u>European Union</u>, recognize it as such; the United States, on the other hand, does not. However, the United States has nonetheless pursued peaceful cooperation in space through diplomatic agreements such as the <u>Artemis Accords</u>. Those agreements set standards for international cooperation on lunar missions. Still, as space exploration expands and grows increasingly international, U.S. policymakers could come under growing pressure to reconsider their position on space governance.

## **Decision Point**

Space exploration has entered a new era. In 2023 alone, a <u>record-breaking 223 space launches</u> occurred worldwide. Among those launches have been new uncrewed lunar missions by China, India, Japan, and Russia. Commercial activity has also drastically expanded in space. Increasing numbers of private companies are launching satellites, conducting space tourism operations, and testing new launch systems for future missions. With outer space growing increasingly crowded, the question of space <u>governance</u> has grown more pressing. The president has convened a meeting of the National Security Council (NSC) to consider the U.S. position on outer space. Specifically, the president has tasked the NSC with recommending whether the United States should recognize space as a shared global commons. NSC members will need to weigh the benefits of encouraging cooperation and managing new arenas of competition or conflict on the one hand. On the other hand is the risk of diminishing private interest in space in the present, sacrificing economic opportunities, and even compromising future space exploration.

#### NSC members should consider the following policy options:

- *Walk back the original position and recognize space as a global commons.* This could boost international cooperation. It could lead to new governing agreements on outer space and close the door on new and potentially harmful areas of geopolitical competition and conflict. However, it could also diminish private interest in space among U.S. companies in the present. It could sacrifice future economic opportunities and even compromise further space exploration. If other countries do not uphold similar standards to the United States, they could gain a critical advantage in space activities.
- *Refrain from recognizing space as a global commons but commit to negotiating other <u>bilateral</u> and/or <u>multilateral</u> <i>treaties to govern space.* This option could lead to treaties managing some of the most pressing issues. They could manage space debris and orbital crowding, while leaving other issues such as resource extraction open for private interests. If successful, that could preserve some level of cooperation and help manage potential tensions. However, it also risks frustrating allies and adversaries alike. Furthermore, the United States could find itself at a disadvantage if other governments opt to take a leading role on space policy.
- *Maintain the position that space is not a global commons*. This would leave outer space as a domain for private enterprises including new satellite systems and resource extraction. In short, it would enable governments and businesses to explore and profit from outer space. The decision could incentivize greater participation in space exploration by private enterprises seeking profits down the line. However, it could also prompt new modes of competition and conflict in the future, and harm cooperation with other spacefaring countries and organizations in the present.

Photo: NASA astronaut works on the International Space Station on February 21, 2015. Source: NASA/Reuters <u>The Artemis Accords and the Next Generation of Outer Space Governance</u> Council on Foreign Relations <u>Space Is a Great Commons. It's Time to Treat it as Such</u>Carnegie Endowment for International Peace <u>How Space Exploration Is Fueling the Fourth Industrial Revolution</u> Brookings Institution