



Background Paper

Committee: United Nations Office for Outer Space Affairs (UNOOSA)

Topic A: International Collaboration on Space Technologies: Sharing technology and knowledge among nations to promote equitable access to space.

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Outer space has become a vital arena in international relations, influencing both global cooperation and competition. While space has traditionally been used for scientific discovery, communication, and treaty verification, it also poses risks of militarization. To safeguard the peaceful use of space, international cooperation is essential, with equitable access to space technologies being a key focus of global diplomacy. This paper emphasizes the importance of collaboration among nations to share space technologies and knowledge, ensuring that all countries, especially developing ones, benefit from space advancements.

The peaceful exploration of outer space has long been a priority for the global community. The International Space Station (ISS) is a prime example of successful collaboration between nations. Initiated by NASA in 1984 and developed with Canada, Japan, Europe, and later Russia, the ISS illustrates the potential of shared efforts in space exploration. By combining resources, expertise, and costs, participating countries have achieved significant scientific breakthroughs, proving that cooperation accelerates progress and benefits all. This collaboration has also highlighted the potential for space technologies to address global challenges, such as climate change and natural disaster management, through satellite technology.

International collaboration in space technology offers many advantages. By working together, nations can leverage shared expertise and resources, avoid duplication of efforts, and reduce costs. This approach leads to faster progress and successful outcomes, as demonstrated in

global initiatives like the fight against COVID-19. The development and distribution of vaccines are examples of how cooperation can accelerate progress for the common good. Also, space technologies have more applications beyond space exploration. Satellites, for example, are vital tools for environmental monitoring, disaster management, and improving food security. By sharing these technologies, countries can address some of the most pressing global challenges more effectively.

A significant challenge facing the global community is ensuring that space technologies are accessible to all, particularly developing nations. Historically, space exploration has been dominated by a few powerful countries, but efforts are now underway to democratize access to space. Programs such as UNOOSA's "Access to Space for All" aim to provide opportunities for emerging spacefaring nations to participate in space activities and build their own space capabilities.

Through joint missions, capacity-building initiatives, and technology transfer, developed countries can support the efforts of developing nations, ensuring that they too can benefit from the transformative potential of space technologies. Additionally, space cooperation enhances global transparency and reduces the risk of misunderstandings, as countries share satellite data and other resources for several purposes. This trust-building aspect of space collaboration is essential for maintaining peace and stability in international relations.

As space exploration continues to evolve, the success of initiatives like the ISS demonstrates the power of cooperation to advance scientific knowledge and address global challenges. By expanding access to space technologies for developing countries and continuing to promote peaceful uses of outer space, the international community can ensure that space remains a shared resource for the betterment of humanity.

Works Cited:

- Abbey, George W.S. "International Cooperation & Space Exploration." *Baker Institute*, 1 March 2021, www.bakerinstitute.org/research/international-cooperation-and-continuing-exploration-space. Accessed 22 Oct. 2024.
- Di Pippo, Simonetta. "Space Technology and the Implementation of the 2030 Agenda." *United Nations*, 21 Dec. 2018, www.un.org/en/chronicle/article/space-technology-and-implementation-2030-agenda. Accessed 22 Oct. 2024.
- Knipfer, Cody. "International Cooperation and Competition in Space (Part 1)." *The Space Review*, 20 Nov. 2017, thespacereview.com/article/3376/1. Accessed 22 Oct. 2024.
- NASA. "International Space Station." *NASA*, 23 May 2023, www.nasa.gov/reference/international-space-station/. Accessed 22 Oct. 2024.
- United Nations. "Outer Space Must Be a Place for Peace and Cooperation, Not an Arms Race, Speakers Affirm, as Fourth Committee Takes up Space Matters." *United Nations*, 24 Oct. 2023, press.un.org/en/2023/gaspd788.doc.htm. Accessed 22 Oct. 2024.