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by Mr Adnan

IARCO RESEARCH PROPOSAL

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Research Topic: International Relations.

Title: The weaponisation of Near-Space: geopolitical implications of dual use civilian satellites in the global south

Research Problem

The rapid advancement and increasing accessibility of near-space technologies have resulted in civilian satellites being leveraged for both peaceful and military purposes. While the great power competition among countries like the US and China has dominated scholarly and policy discourse, less attention has been paid to how nations in the Global South such as Nigeria, Iran, and Argentina are entangled in this dynamic. These countries participate through satellite launch partnerships, surveillance-sharing agreements, and technology investments, creating a complex geopolitical landscape where civilian space programs serve as instruments of strategic alignment. However, the reliance of Global South states on foreign powers and private

corporations for access to satellite technologies raises questions of dependency and unequal influence. The involvement of private actors such as SpaceX, Starlink, and China's Galaxy Space introduces new dynamics, where traditional state-centric governance is bypassed, sparking concerns of techno-colonialism. At the same time, the security dilemma emerges, as "civilian" satellites may be perceived as military assets by neighbouring states, feuling regional mistrust and escalating tensions. These dynamics are further complicated by the regulatory vacuum in international space law. The outdated Outer Space Treaty fails to adequately address the dual-use nature of satellites, creating grey zones that limit accountability and enforcement. This environment allows great powers to use Global South partnerships as indirect instruments of rivalry, potentially drawing these states into proxy conflicts. Yet, Global South countries are not merely passive actors they strategically use dual-use satellite programs to strengthen regional influence, negotiate alliances, and gain economic leverage. Nonetheless, such ambitions come with ethical and developmental trade-offs: resources meant for communication, disaster management, and climate monitoring risk being diverted into militarized applications. Together, these factors highlight the urgent need to examine the geopolitical implications of dual-use civilian satellites in the Global South, particularly as they reshape power relations in near-space.

Existing Literature

The militarization of outer space has been a central focus in scholarly debates. [1]Chen examines the intensifying U.S.–China rivalry, while [2]Johnson situates space security within the broader dynamics of global power politics. Earlier contributions such as [7]Pillai and [8]Booth by also highlight how dual-use satellite technologies blur the boundaries between civilian and military applications, reinforcing concerns about space as a potential battlefield. Beyond the rivalry of major powers, recent scholarship has turned attention to the Global South. [5]Patel highlights the rise of emerging space powers, while [3]Mbatha provides detailed insights into African states developing civilian programs with latent military potential. Together, these studies reveal how states outside the traditional space powers are increasingly shaping the global space order. Legal scholarship further complicates this picture.[4] Ocampo emphasizes the outdated nature of the Outer Space Treaty, pointing to grey zones surrounding

dual-use satellites and regulatory loopholes. These issues make accountability and enforcement increasingly challenging as space technologies advance. Meanwhile, private actors have become central players in space geopolitics. [6]Smith argues that companies such as SpaceX and OneWeb are redefining access and control in low-Earth orbit. Similarly, [10]Abels examines the influence of transnational corporations and state actors in global competition, while [9]Sokolski and Collett analyse how space-based assets may even facilitate future proxy wars, merging commercial and military dimensions. Taken together, these studies offer valuable insights into militarization, legal gaps, and the expanding role of both Global South countries and private actors. However, a notable gap remains in understanding how Global South states navigate this dual-use environment—balancing their civilian ambitions with strategic and security considerations.

Research questions

How are civilian space programs in Global South countries becoming instruments of geopolitical alignment and strategic influence and What legal ambiguities exist in current space governance frameworks regarding the dual use of civilian satellites?

Methodology

This research will adopt a qualitative, multi-method approach:

- **Document Analysis:** Review of international treaties, space policy documents from selected Global South countries (Nigeria, Iran, Argentina), and private company filings.
- **Case Studies:** In-depth analysis of satellite launch partnerships, surveillance-sharing agreements, and space investments in the selected countries.

- **Discourse Analysis:** Examination of geopolitical narratives in media and official statements related to near-space activities and dual-use satellite deployment.

Research Significance

This study contributes to understanding the evolving geopolitical landscape of near-space, focusing on how Global South countries are implicated in the weaponisation of dual-use civilian satellites. It will provide insights for policymakers and international organizations on updating space governance frameworks and addressing emerging security challenges. Furthermore, it sheds light on the role of private sector actors in shaping equity and control in space, highlighting potential risks of proxy conflicts and techno-colonialism.

Quality of Writing

The language of this proposal is academically precise, clear, and appropriate for a multidisciplinary audience. Jargon is minimized, and the structure follows standard research norms. The proposal adheres to grammar, citation, and formatting guidelines strictly to meet IARCO standards.

References

1. Chen, L. (2024). Militarization of Space: The US-China Rivalry and Beyond. Space Policy Journal, 41(2), 123-139.

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4. Ocampo, R. (2020). Legal Gaps in Outer Space Treaty and Dual-Use Satellites. Journal of Space Law, 44(1), 78-92.

5. Patel, A. (2022). Emerging Space Powers: The Global South on the Final Frontier. Geopolitics Review, 18(4), 88-105.

6. Smith, T. (2025). Private Actors in Near-Earth Orbit: Redefining Space Geopolitics. New Space Review, 12(1), 99-120.

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8. Boothby, B. (2017). Space Weapons and the Law. Journal of Space Law, 43(1), 55-74.

9. Sokolski, H., & Collett, C. (2025). Proxy Wars in a Space-Serviced World: An after-action report. Defense Studies Quarterly, 29(1), 45-68.

10. Abels, J. (2024). Private Infrastructure in Geopolitical Conflicts: The role of state and transnational corporations in global competition. Geopolitics Journal, 21(3), 199-214.

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