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# CHALLENGES TO THE SECURITY OF SPACE INFRASTRUCTURE: TRANSATLANTIC PERSPECTIVES

**Abstract**

Space assets have become critical assets for modern economies and societies playing a key role in the effort of governments to tackle national and global economic, societal and environmental challenges. However, each segment of the space infrastructure – the access to space segment, the down- und uplinks, the space segment, and the ground segment - is vulnerable to a range of security issues and experts consensually called the attention of governments and space businesses to the fact that space is increasingly vulnerable, posing an intensifying challenge to guarantee a safe, secure and sustainable environment to deploy, operate and exploit space assets. Rising challenges to space infrastructure security are numerous and include: passive and active man-made hazards (i.e. space debris or ASAT technology), and natural hazards (i.e. Near Earth Objects and space weather). This deteriorating situation has already been acknowledged by the European Union which made "ensuring the protection and resilience of critical European space infrastructure" a flagship objective of its space strategy. In this frame, the Union states its intention to continue its effort to develop European space security capabilities and promote international cooperation in the field looking toward the United States as a key partner. In this context, ESPI is undertaking, in close collaboration with the George Washington University Space Policy Institute, a study on "Challenges to the Security of Space Infrastructure – Transatlantic Perspectives". The study aims to: • Provide a comprehensive overview of challenges to space infrastructures security in view of endorsing a shared assessment of these challenges • Analyse comparatively American and European approaches to space security looking into: o Strategic rationale and key priorities and objectives o Approach to the issue at political, legal, economic and programmatic levels • Examine past and current transatlantic cooperation frameworks in space security and scrutinize the main drivers and obstacles for cooperation • Identify key areas of potential future transatlantic partnerships in the field of space security and assess their feasibility • Investigate and propose options for short- to long-term partnership development The paper will present the key conclusions of this study.