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ACHIEVING THE LONG TERM SUSTAINABILITY OF SPACE ACTIVITIES: ARE WE MAKING
PROGRESS?

Abstract

Assuring the long term sustainability of space activities has become a major goal of spacefaring nations. The growth of new space systems in orbit and the continued creation of orbital debris represent a clear threat to the world's ability to maintain the ability to operate safely in Earth orbit. Yet, we increasingly depend on space systems to support everyday activities. Whether through the use of GPS for timing financial transactions and precision farming, weather satellites to support the daily weather forecasts, or Earth observations to respond to major natural disasters, the world depends deeply on space activities.

Each day, new applications developed using Earth orbiting satellites add to our dependence on space systems. Because of this dependence, spacefaring countries must find cost effective ways to reduce the growing risks of space activities and continue to use Earth orbit sustainably. Yet, because civil government, military and commercial interests operate in outer space, each with differing requirements, creating effective international agreements for reaching and maintaining sustainability will not be easy.

This paper reviews the risks to maintaining sustainable activities in Earth orbit and summarizes the efforts to date to reduce such risks through international agreements. It reviews progress on an International Code of Conduct for Outer Space Activities, originally proposed by the European Union and examines the results of the recent meetings of the Group of Governmental Experts convened to develop transparency and confidence building measures (TCBMs) in outer space. It also summarizes progress at COPUOS on developing a set of guidelines for States to follow in pursuing space activities sustainably.