

IAF SYMPOSIUM ON SECURITY, STABILITY AND SUSTAINABILITY OF SPACE ACTIVITIES  
(E9)

## Norms and Standards for Safe and Responsible Behaviour in Space (3)

Author: Mr. Omar Pimentel Marte  
Stanford University, United States

A NEW RUBICON: THE CATCH-22 FOR THE U.S. GOVERNMENT IN PROTECTING PRIVATE  
ORBITAL ASSETS**Abstract**

The expanding commercial space industry and the increasing reliance by governments for their satellite technology and intelligence-gathering capabilities have raised concerns about the safety and responsibility of space operations. This practice has proved invaluable for real-time decision-making, situational awareness on the battlefield, and increased resiliency of distributed space-based capabilities. Now, and most prominently, commercial space-based assets are playing a critical role in the ongoing conflict in Ukraine. This conflict, coupled with the meteoric proliferation of private assets as launch costs have precipitated, has started to challenge traditional assumptions that delineated the separation of military and civil capabilities in orbit. The distinction between military and civil capabilities in orbit has faded to be barely noticeable by adversaries, thus inching them toward becoming potential strategic targets.

Governments around the world now face a catch-22 situation of balancing their need and support for private enterprise with the responsibility of protecting national security interests. With the growing number and diversity of space actors and systems, including large constellations of satellites and new kinds of space activities, there is an urgent need to establish clear and widely accepted norms and standards for safe and responsible behavior in space. As it stands, it seems ever the more likely that private actors could be caught in the middle of the first rapidly escalating space-based conflict.

Against this backdrop, this paper examines the complex relationship between private enterprise and military interests in space and the potential risks and challenges that will continue to arise from the proliferation of commercial space-based dual-use assets. The ongoing conflict in Ukraine has highlighted the critical role that these assets play in modern warfare and has challenged traditional assumptions about the term “dual use” and separation of military and civil capabilities in orbit.

The paper also explores the history of satellite imagery and the effect of past policies on the safety and security of space operations. Through this analysis, the paper seeks to contribute to the ongoing dialogue on the norms and standards for safe and responsible behavior in space, and to identify opportunities for collaboration and coordination among government and industry stakeholders.