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Policy, Legal, Institutional and Economic Aspects of Space Debris Detection, Mitigation and Removal
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ON THE POSSIBLE RETURN OF KEEP-OUT ZONES IN SPACE & REVISITING THE SPACE
INSURANCE BUSINESS MODEL

Abstract

Keep-out zones (or exclusion zones) have long been a contentious issue in space law, as a proposed way for traditional stakeholders, namely government entities and the military, to maintain exclusive rights to the immediate airspace / orbital space surrounding their various space assets stationed in orbit. A hot-topic issue during the 1980s in the context of the Cold War, keep-out zones reemerge today as an increasingly pressing concern for both government and non-government entities, as non-traditional market entrants vie for greater access to space, raising new challenges with regard to not only space traffic management (STM), but also to intellectual property, data privacy, third-party liability, or on-orbit insurance. With the number of satellites and, more crucially, small-satellite micro-constellations, poised to exponentially increase the number of orbited space assets in the coming years, and with the orbital environment remaining a finite resource both in terms of radio-frequency spectrum allocation and orbital slot availability, a marginal level of scholarship in space law and insurance law has started to resurface the concept of keep-out zones. Firmly rooted in maritime law, the concept of keep-out zones ushers in the possibility of claiming exclusive rights of airspace / orbital space usage and sanctuary zones, even where such uses may enter in potential conflict with the Outer Space Treaty. One salient consequence of keep-out zones resurfacing in the context of commercial space is reflected in the field of space insurance, with the potential of redefining the legal landscape for this niche industry, as keep-out zones could be the deciding factor in how insurable interest, indemnity claims handling and liability due diligence with regard to space assets will be determined and adjudicated in the near future. This paper will examine the concept of keep-out zones from its historical angle, tracing it to maritime and military law, in order to unpack its potential and projected legal uses, applications and implications in the current context of the New Space economy and artificial intelligence-driven technology. Particular emphasis is placed on satellite insurance coverage schemes and negotiation dynamics between operators and underwriters, and how keep-out zones might potentially reshape the space industry's entire landscape, by providing a legal and technical means of testing the resilience of orbited space assets.