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Author: Ms. Laura Cummings United States

> Mr. Matteo Cappella Leaf Space S.p.A., Italy

## FLAGS OF CONVENIENCE IN SPACE: A PROSPECTIVE RACE TO THE BOTTOM IN SPACE SUSTAINABILITY?

## Abstract

Space is a sovereignty-free zone, similar to the high seas. In both space and on the seas, commercial operators must carry a flag; object nationality and applicable regulations are attached through the process of "flagging." In the 1900s, the high seas saw the development of an insidious practice – flags of convenience. Maritime operators realized that they could register vessels on foreign, open registries, thereby avoiding stricter labor and environmental regulations, fees, and other administrative burdens as compared to their national register.

Commercial space operators and regulators are beginning down a path of recreating flags of convenience for space objects. Under international law, two jurisdictional flags for operations can attach to a space object – one for space object registration, and the second from notification of spectrum use before the International Telecommunications Union (ITU). Both space object registration and frequency notification lie at the intersection of international and national law – a State must acquiesce to the commercial operator's association. Frequency notification is a pre-operational requirement: in countries without launch authorization processes, ITU filings and national spectrum authorization are a common threshold to launch permission. Juxtaposed, space object registration is a largely post-hoc practice, that occurs after a space object is launched.

Space object "flagging out" and the ills it heralds is most apparent in the application of space sustainability practices – practices just becoming international soft law. Some national regulators attach space sustainability conditions to spectrum access (e.g., the U.S. Federal Communications Commission). In other instances, space sustainability conditions might flow from the state of registry of the space object, typically through a regime for space activity authorization. The enforcement of space sustainability requirements is therefore conducted to different degrees across nations. Given that operators may seek spectrum access and space object registration from different States, this increases the possibility of "flagging out" to a less restrictive authorization regime, potentially resulting in a migration towards frameworks that tolerate the least (if at all) sustainable practices.

This paper will examine the two mechanisms whereby nationality is attached to a space object, and explore case studies where spectrum notification and national registration requirements produce disparate sustainability requirements. This paper will close by recommending that national regulators and the international community seek consensus on how space sustainability goals should be uniformly applied across the globe, in hopes that the ills of flags of convenience visited upon maritime do not appear in space.