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SPACE GOVERNANCE OF EARTH'S ORBITS: ANALYSIS OF THE LONG-TERM  
SUSTAINABILITY GUIDELINES AND OTHER NON-BINDING MECHANISMS IN SPACE

**Abstract**

The Working Group on the Long-Term Sustainability (LTS) of Outer Space recently promulgated the 21 Long-Term Sustainability Guidelines (LTSG) and is already making way toward an action plan for LTS 2.0. This paper will consider what can be added to the 21 LTSG in order to further enhance the safe, secure, and sustainable use of outer space. Through the lenses of law, policy, and political science, this discussion will consider how these guidelines will rationally be utilized with orbital space activity with consideration for Space Situational Awareness (SSA) and Space Traffic Management (STM).

It will be argued that the space community is now in a new epoch of space governance with non-binding international law and national legislation being the principle mechanisms by which space governance is developing. This paper will advocate for a more holistic approach of how guidelines, standards, and best practices should operate in tandem in order to promote knowledge-sharing and ensure an orderly approach to space operations.

This paper aims to not only analyse the importance of the 21 LTSG for the space governance of Earth's orbits but it also aims to showcase how these 21 guidelines can work together with other non-binding agreements such as the Space Debris Mitigation Guidelines (SDMG), International Organization for Standardization (ISO) standards, and other non-governmental groupings such as the Space Safety Coalition.

In order to promote good and sustainable governance of the Earth's orbits, this paper argues that the aforementioned mixed method approach to governance is the logical way to ensure acceptance by all members of the space community. This means using the LTSG in conjunction with extant international space law and other non-binding mechanisms. It will be argued that embracing the consensus around the Outer Space Treaties combined with the relative flexibility of non-binding agreements and augmenting the existing LTSG will provide 'futureproofing' for both technological innovation and geopolitical upheaval.