

SPACE SUSTAINABILITY: APPLICABLE RULES AT INTERNATIONAL LEVEL

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Abstract: Among the toughest challenges we are facing today is the question of Space Operations Sustainability in near-medium term future. The so-called New-Space has led to a drastic increase in new activities, both on the satellites side, with the expected launch of some 30,000 new ones, or even more, by 2030, and on launchers side with the current development of some hundred new systems foreseen in the coming years all over the world.

It is compulsory to be cautious not to kill the chicken with golden eggs and to regulate correctly the future activities at international level.

The rules applicable in orbit are well known, even if badly complied to, being developed since 1995, expressed in the IADC and UNCOPUOS Guidelines, the ISO standards, and National regulations, among which the French Space Law is undoubtedly the most advance at international level.

But the impact of such rules on the ground operations and facilities is less obvious and is worth analyzing, comparing the current and future practices in the light of space sustainability.

The paper aims at presenting the impacts of such regulations on the ground operations and installations, comparing the applicable or foreseen technical regulations, identifying the differences among the countries leading to potential concurrence distortion.

Some ways of harmonization and improvement among every launch operators in the world may be suggested, potentially leading to future evolutions of the reference texts.