Legal Aspects linked to Space Debris: The French Space Operation Act and Its Technical Regulation

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Résumé

Since the launch of Sputnik-I in 1957, the amount of space debris in Earth's orbit has increased continuously. Historically, besides abandoned intact objects (spacecraft and orbital stages), the primary sources of space debris in Earth's orbit were (i) accidental and intentional break-ups which produced long-lasting debris and (ii) debris released intentionally during the operation of launch vehicle orbital stages and spacecraft. In the future, fragments generated by collisions are expected to become a significant source as well.

The fear that the future environment growth might be dominated by collisions, rather than by launches and explosions, was expressed already decades ago. In order to avoid such situation, several responses outlining mitigation procedures, including the Inter- Agency Space Debris Coordination Committee (IADC) space Debris Mitigation Guidelines, the United Nations Committee on the Peaceful Uses of Outer Space Mitigation Guidelines, the International Organization for Standardization Space Debris Mitigation Standards and a multitude of other national and international documents have been, and continue to be, developed to limit the expected growth of the debris population.

In France, the French Space Operations Act, which came into force in 2010, ensures that the technical risks associated with space activities are properly mitigated. The Act confers CNES a central support role in providing technical expertise to government on regulations governing space operations. In this respect, CNES is in charge of proposing and developing the technical methods to be recommended to cope with the law requirements. CNES also checks compliance prior to delivery of authorizations submitted to the minister in charge of space for approval.

On this presentation, an overview of the technical regulation on which the French Space Operation Act reposes will be given. Additionally, the verification process thanks to which a French operator is granted to launch will be also presented.

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