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ORIENTATION OF THE FRENCH SPACE OPERATION ACT IN THE FIELD OF SAFETY FOR LAUNCHERS SYSTEM OPERATIONS

Abstract

France adopted its national space Law, the French Space Operations Act (FSOA), in 2008. The three main objectives of this law are to 1/ ensure the implementation by France of its international commitments according to the UN Treaties on space law, 2/ ensure safety for persons, goods and environment during space operations and 3/ ensure the long term sustainability of activities in outer space. To that end, the FSOA has created an authorization regime for launch operations and operations consisting in controlling an orbital system in outer space. Since 2019, an intensive work for updating the FSOA is conducted by CNES and the minister in charge of Space, in linked with the French space ecosystem (launchers and satellites field) and also other national or international space regulations.

The paper will present the necessary updates and evolutions of the French Ground and Fight safety approach for Launch systems, in the context of the NewSpace. These evolutions aim to include launch concept with retrievable stages, on site landing of orbital module, autonomous and non-autonomous Flight Termination Systems etc. This work has an impact at FSOA level (French parliament) it's decree of application and finally 2 main documents for safety rules of launchers operations, which are the Technical Regulation (launcher part) and the REI (Reglementation et Exploitation des Installations) which contains the Safety Rules for Kourou Space port (French Guyana). The harmonisation effort with other national safety rules, including the emerging Spaceports in Europe will also be presented, since this may increase the flexibility of new launch's operators for Space access, including the micro-mini launchers projects.

The current work of CNES teams, involves General Inspection, Legal office, FSOA safety office of Space Transportation Directory, Flight and Ground safety offices in French Guyana spaceport and engineering support from both Space Transportation and Technical Directory of CNES