



MINISTÈRE DES ARMÉES

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Space: The French defence innovation agency notifies to U-Space a demonstration of actions in low Earth orbit for the French Space Command.

- **Entrusted to the Toulouse-based start-up U-Space, this experiment will be conducted in partnership with MBDA. The aim is to use two nano-satellites in low Earth orbit to validate Low Earth Orbit (LEO) operational scenarios.**
- **Known as "TOUTATIS*", this first demonstration will provide a complete chain of knowledge and reactions in the face of attempted space interference.**
- **This notification is part of the implementation of the Defence Space Strategy (2019) and the 2024-2030 Military Programming Law in addition to the experiments planned in geostationary orbit with the YODA satellites.**
- **TOUTATIS is the first stage in the defence strategy for low-Earth orbit, which is part of the overall ARES operation led by the French armament directorate (DGA).**

The defence space strategy has established space as a new area of conflict. In order to complement the existing action capabilities of French armed forces, a new "action in space" function has been entrusted to the French air and space army, and implemented by the French Space Command. Its aim is to deter and, where necessary, protect and defend our interests in space.

TOUTATIS complies with international law, including the right to self-defence, in line with France's commitment to a peaceful and responsible use of outer space.

Confirmed as a priority in the 2024-2030 military programming law, this ambition is reflected in the development of large-scale demonstrators, including two low Earth orbit satellites.

This first demonstration will implement a complete knowledge and reaction chain in low Earth orbit (LEO), using technologies developed through open innovation in the space sector.

Two satellites will be built:

- The "Low Earth Orbit Action" Satellite (SPLINTER) will have a high manoeuvring capability and a set of sub-systems providing autonomous approach and action.
- The "spotter" satellite (LISA1) will have enhanced observation capabilities for space surveillance from orbit.

They will carry out opposition or cooperation scenarios to verify the performance of the low orbit action satellite and the space surveillance capabilities of the spotter satellite.

The project will capitalise on the synergies offered by the start-up U-Space, which is developing high-performance nanosatellites, and the European group MBDA, which is providing its expertise in the field of military effects and engagements for the protection of satellites.

TOUTATIS is part of the French Defence Innovation Agency's "New Space" open innovation theme, which supports the French "New Space" dynamic.

Since 2021 several demonstrators have been launched under the responsibility of the French Defence Innovation Agency: KERAUNOS (optical communications) and HYP4U (hyperspectral imaging).

*TOUTATIS: In-Orbit Test of Action Techniques against Attempted Spatial Interference