

IAF SPACE OPERATIONS SYMPOSIUM (B6)  
Innovative Space Operations Concepts and Advanced Systems (2)

Author: Dr. Maria Antonietta Perino  
Thales Alenia Space Italia, Italy, mariaantonietta.perino@thalesaleniaspace.com

Mrs. Simona Ferraris  
Thales Alenia Space Italia, Italy, simona.ferraris@thalesaleniaspace.com

Mr. Mario Montagna  
Thales Alenia Space Italia, Italy, mario.montagna@thalesaleniaspace.com

Mr. Fabio Musso  
Thales Alenia Space Italia, Italy, fabio.musso@thalesaleniaspace.com

DEVELOPING AN IN-ORBIT SERVICING DEMO MISSION

**Abstract**

The development of In Orbit Servicing (IOS) capabilities will pave the way to a more sustainable exploitation of the space environment and the new emerging commercial space market.

The objective of the proposed IOS Demo Mission is to validate the enabling technologies needed to fulfil challenging operations for both prepared and unprepared satellites including approaching, inspection, rendezvous and docking, life extension, refueling, repairing, assembly, relocation and de-orbiting.

The goal is to enhance the national competitiveness and to build an Italian solution for In Orbit Services and the future serviced LEO/GEO satellites.

This project leverages on the existing national skills and experiences and involves the key players with the needed competences, maximizing the complementarity and the synergy between LSI companies with solid experience in complex space projects and new emerging space companies with a more agile approach to shape the future space ecosystems and foster Italian competitiveness into this global shifting paradigm that space economy is facing.