

Building a Sustainable Space Economy with In-Orbit Servicing

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Abstract. Only few Spacecraft are designed for maintenance and are limited to typically Hubble Telescope or International Space Station. Building a sustainable space activity requires Space Assets to be serviced to enable longer life-span, repairing or repurposing. The current satellites in operations have not been designed for this, however, since 2020, non-prepared In-Orbit Services have been demonstrated in GEO. They are based on two critical technologies: Rendez-Vous & Docking. In order to make a step change in a sustainable In-Orbit Servicing market, the challenge is to develop cost effective systems, more autonomous and relying on few sensors.

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