

Technical maintenance as well as replacement of fast-wearing subsystems

A servicer spacecraft - (satellite or probe), operated by a service provider, reaches the customer's telecommunications satellite and then docks to it by means of a mechanical docking device. On board of the servicer spacecraft there is a robotic arm and replacement subsystems to be replaced. The servicer's robotic arm performs replacement of old subsystems with new ones. The service probe returns to its orbit or to other activities.



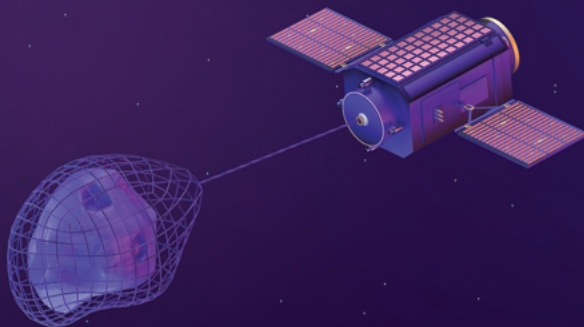
Upgrade / Transfer to a higher orbit

The satellite is launched into a temporary orbit. Service provider uses the tug satellite to connect to the customer's satellite. The tug carries the satellite to a preset orbit (GEO), and then returns to its orbit or to other activities.



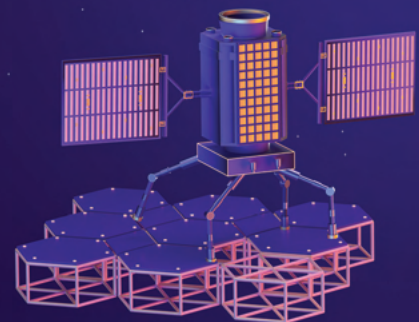
Life Extension and Deorbitation

The operator is the owner of the satellite equipped with a docking interface. A Service satellite operated by a service provider approaches and docks to the subject satellite. The servicer provides a station (support) to subject satellite being serviced for agreed additional period of use. Finally, the subject satellite is being deorbited. Servicer is used again for different subject satellite.



Deployment of new satellite modules by the on-board robot

A service probe belonging to a service provider with a robot on board, reaches another space object and assembles all the very large components of the satellite: solar panels, telecommunications antennas, heat sinks, which are built in a modular mode. After completing the mission, the service probe returns to the parking orbit for subsequent servicing activities.



P O L S A

