

ESA Clean Space Industry Days 2021

In-Orbit Servicing Spotlight:

Request for Information on In Orbit Servicing – Status and Next Steps

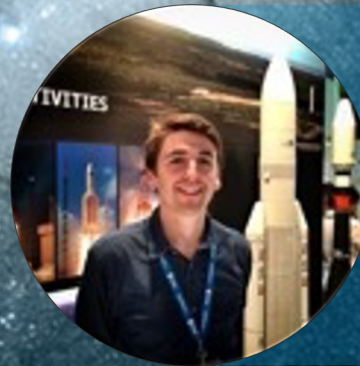


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RFI on In-Orbit Servicing (IOS) of a Spacecraft



ESA will present at the ESA Council meeting at Ministerial level a proposal to place contract(s) for In-Orbit Servicing (IOS) mission(s). To support this, an ESA wide WG prepared a Request for Information (RFI) in order to collect industrial ideas on the way forward on the topic of IOS.

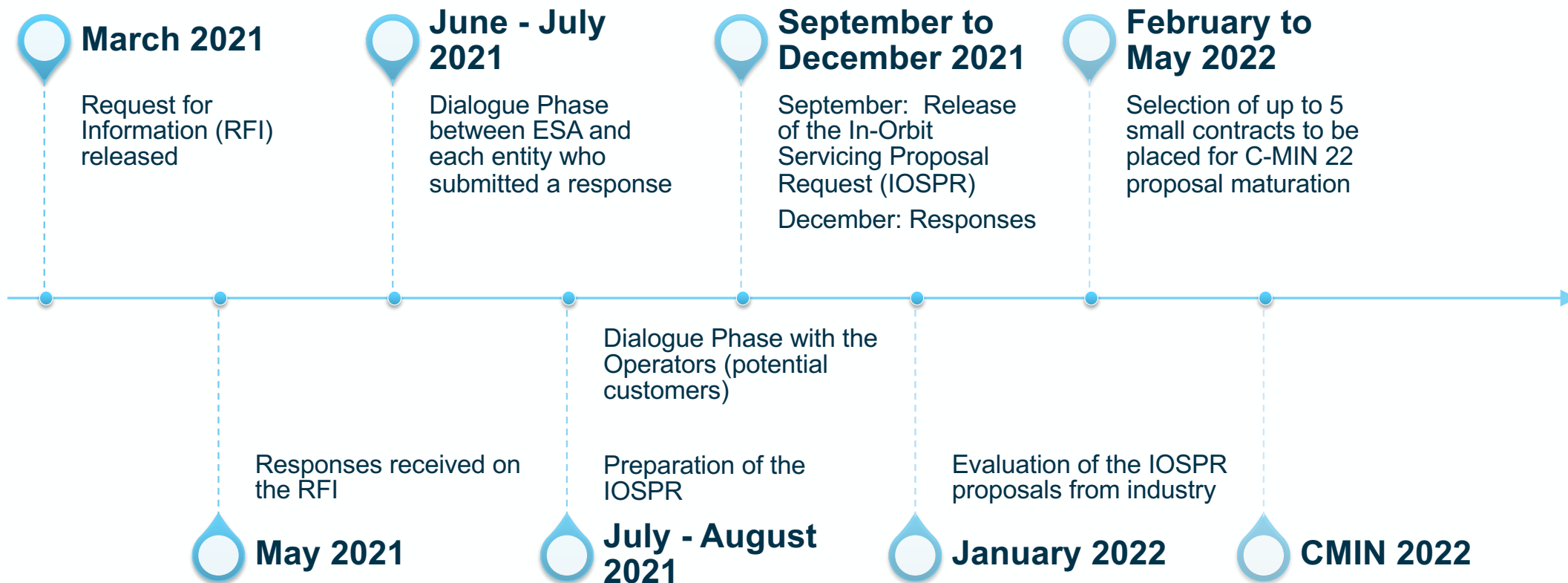


The Objectives of this Initiative are:

- To bring together a **service provider** and a **customer** for the servicing of a spacecraft by utilising one or a combination of in-orbit servicing capabilities
- To position the European space industry in a unique position to enter this market by implementing the above.



Programmatic

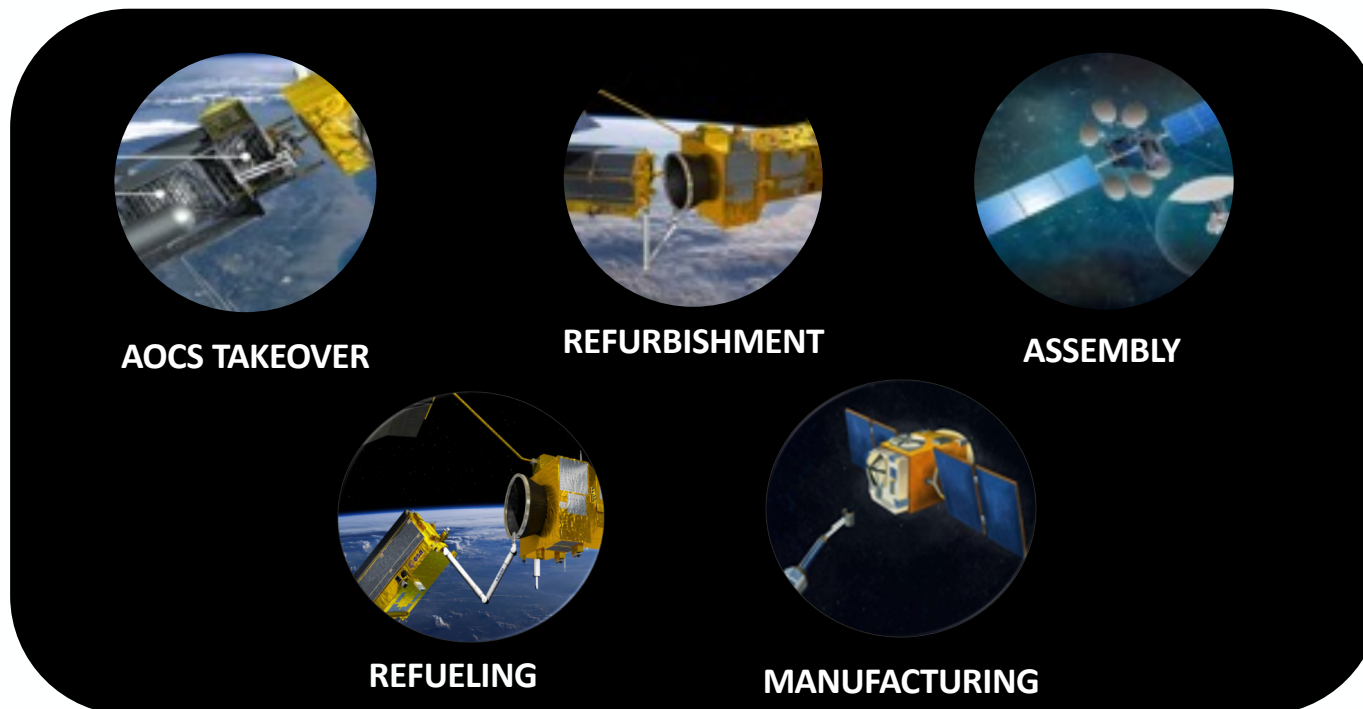


Request for Information (RFI) on IOS – March 2021



Purpose: assess status and initiate a dialogue to better shape the next steps

→ Industry was free to select the service type, but had to include at least one of the following:



RFI on IOS: Requirements



	Requirement
SR-01	Rendezvous and capture an operational in-orbit Customer Spacecraft(s).
SR-02	Perform in-orbit servicing of the Customer Spacecraft(s). Note: A Service shall improve or restore functionality of an operational satellite/vehicle through one, or a combination, of the In-Orbit Servicing Capabilities as defined.
SR-03	The Service shall comply to the space debris mitigation requirements stated in ISO-24113:2019.
SR-04	Provide a robust business model for in-orbit servicing activities beyond the initial mission.
SR-05	Procurement of the launch service for the initial mission in accordance with the ESA launch service procurement policy and payload allocation policy for ESA missions.



Summary of the RFI findings:

- Total number of Ideas submitted: 17
- The ideas were submitted from companies with different backgrounds e.g. Large Space Integrators through to start-ups
- A number of the Ideas submitted were well defined
- Some of the ideas were considered out of scope e.g. In-Orbit Demonstration missions
- The majority of the Ideas were to launch by the end of 2028
- There was a mix of IOS concepts/services for LEO/GEO
- A number of operators participated through support letters or other means



RFI Summary and Next Steps



An RFI has been issued to industry to request ideas about IOS with a customer identified



17 proposals were received and bilateral were held with each entity who submitted a response



A Virtual Information Day was held with Operators at the end of July which was attended by 5 major operators



ESA will issue the In-Orbit Servicing Proposal Request Maturation Phase in September 2021



Questions?

