

Customer Responses to Menti Questions

How often should the objects be observed to update their position and orbit ?

At least once per orbit, daily in cislunar corridor.

How wide should the observation cones be on the L4/L5 concept?

Please check the reference paper but ~60 by 6 degrees.

How often should the system update the ground-based operators?

Whenever there is a predicted conjunction or a special event (such as a fragmentation) detected.

Do we have control on the instrument design ?

Yes, but we encourage to start with already available "off the shelf" solutions and existing instruments.

How do you define and quantify coverage/detectability/dynamics

Coverage/detectability metrics are also tied to time. I.e. A solution might provide 100% coverage or detectability over 7 days but only 50% coverage or detectability over 1 day.

What is a 'sustainable system'?

Focus lies on post-mission disposal strategy in cislunar space. The proposed mission must not limit future cislunar and SSA missions.

What is the 'minimum cost'? Is there a range for the budget?

~250 MCHF as a starting estimate.

How far from the Earth and the Moon is "cislunar space" ? To avoid the Earth and the Moon blinding the satellite

Cislunar space covers the region between GEO and the orbit of the Moon

Cost and time constraints, specifically minimum mission operation time

The mission must last at least 10 years. SSA operations will continue on for the foreseeable future, replacements for the SSA mission need not be budgeted for here, but if optimizations can be made...

Should the orbit shift in the 2:1 resonance concept be powered or passive?

From our understanding, this is a passive orbit. The precession is inherent to this 2:1 stable resonant orbit.

To what extent should it be able to integrate with existing systems?

We can assume that we get support from ground-based telescopes whenever the targets are observable from Earth.