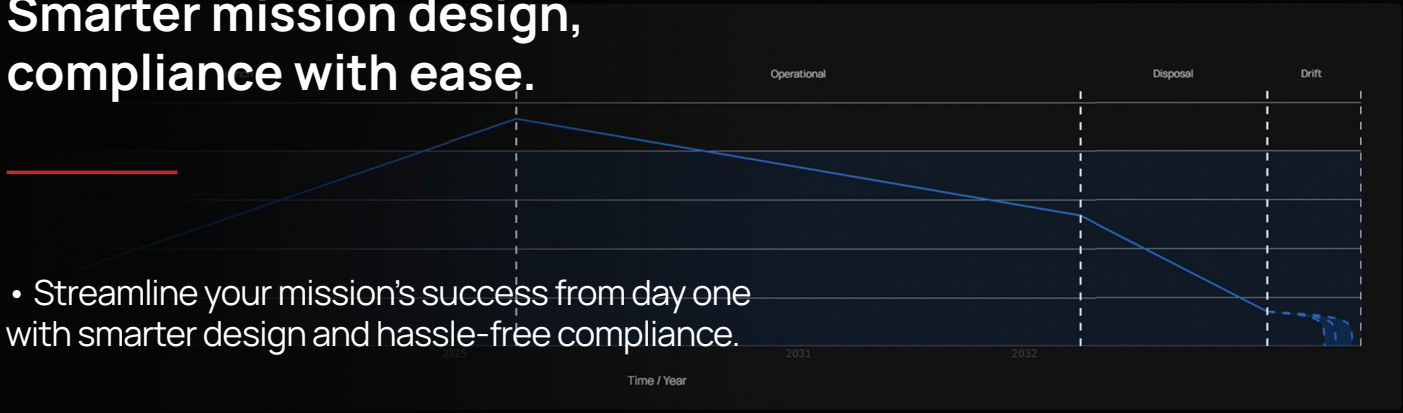
SOTERIA

Optimize your mission, remain compliant.

OKAPI:Soteria

As space operations grow increasingly complex, strategic mission design is more essential than ever. Early integration of operational needs and compliance with space debris regulations is critical, yet can be a demanding, time-consuming task.

Smarter mission design, compliance with ease.



- Streamline your mission's success from day one with smarter design and hassle-free compliance.

- Get detailed insights into the space debris environment and its related risks on your mission.

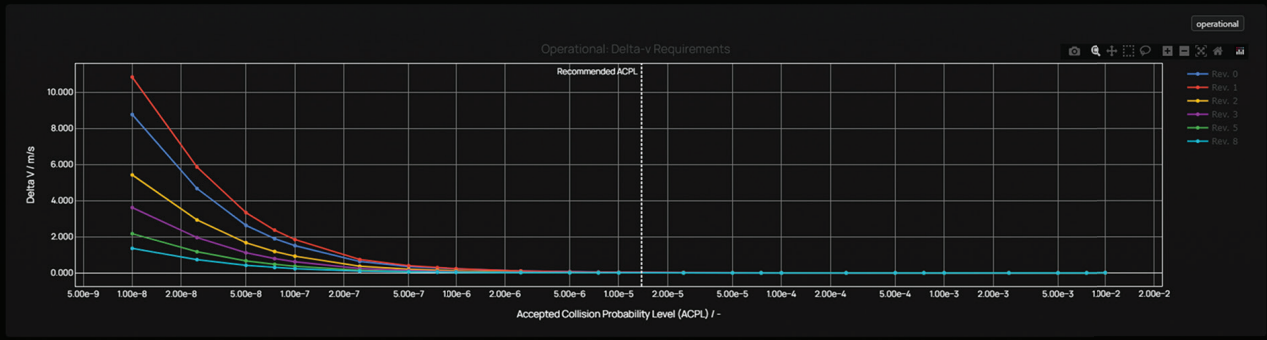
- Ensure compliance with all relevant debris mitigation standards (ESSB-ST-U-007 / ISO 24113:2023, ODMSP, IADC, JAXA, CNES, etc).

Conjunction Assessment

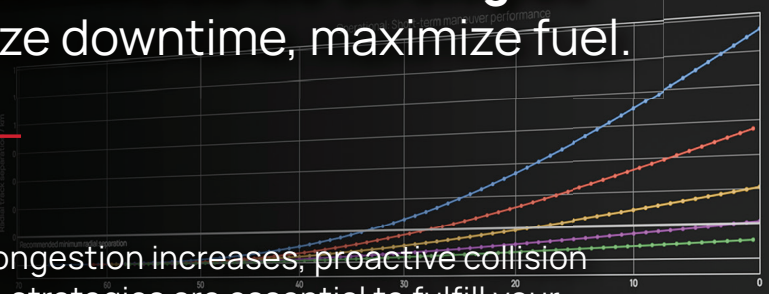
Extend your mission's lifetime and enhance operational efficiency.
Risk mitigation operations in LEO are projected to increase **by a factor of 8.**

Soteria enables precise calculations of the required propellant needed to **reduce the collision risk by 99%**, ultimately **extending the mission's lifetime** and enhancing operational **efficiency**.

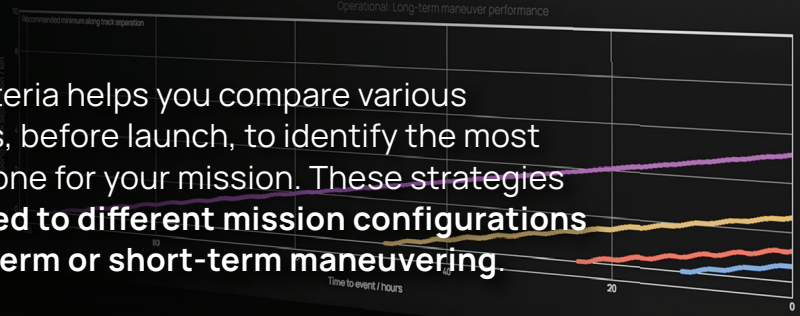
By assessing potential conjunctions at every phase of the lifecycle, from launch to de-orbit, you gain a **clear understanding** of the mission's orbital environment, ensuring a **thorough risk evaluation** and **streamlined resource deployment**.



Collision Avoidance Strategies - Minimize downtime, maximize fuel.



As orbit congestion increases, proactive collision avoidance strategies are essential to fulfill your business goals and keep your mission stable.



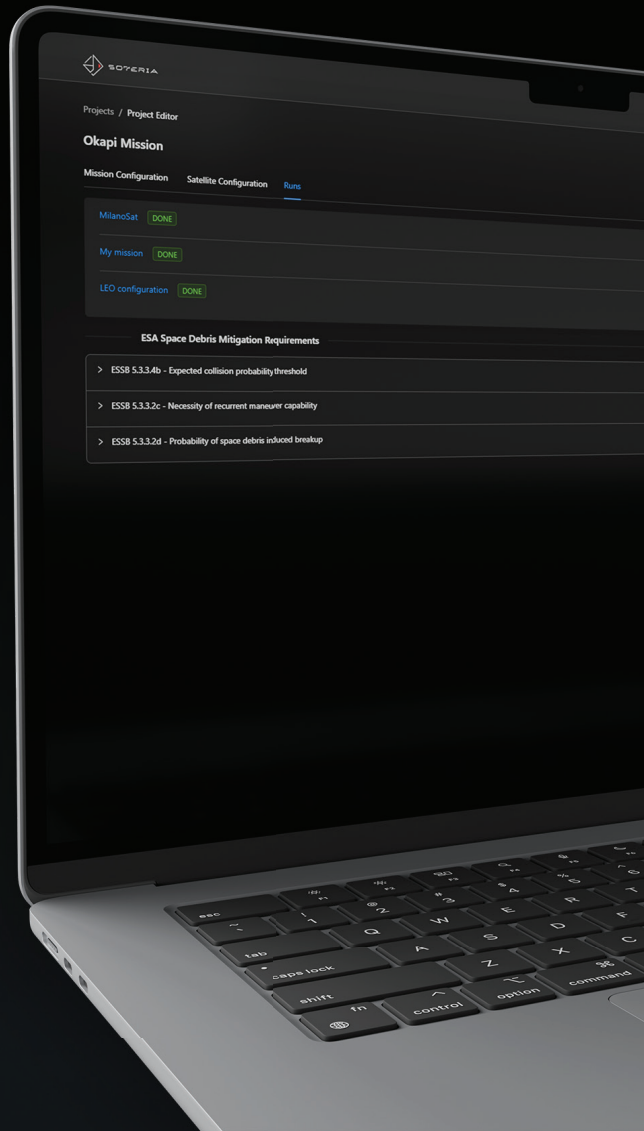
OKAPI:Soteria helps you compare various strategies, before launch, to identify the most effective one for your mission. These strategies are **tailored to different mission configurations for long-term or short-term maneuvering**.

De-orbit & Re-orbit strategies

The need for **effective de-orbit and re-orbit** strategies has become more critical as regulations evolve to prevent the creation of additional space debris.

OKAPI:Soteria helps you define the best strategies to ensure your space assets don't remain in orbit indefinitely.

Whether in LEO or GEO, Soteria helps you develop a **comprehensive disposal strategy** by considering solar and geomagnetic influences, to compare different de-orbit or re-orbit options, optimizing fuel up to **80%**.



Full optimization and compliance coverage

Satellite failure impact analysis: to ensure your satellite doesn't become a liability to its own constellation or the space environment.

Debris impact analysis: to assess the number of impacts with the millions of un-trackable debris your satellite will face in orbit.

Light pollution analysis: to assess the mission's visible magnitude and fulfill ESA's Dark and Quiet skies provisions.

For more info, visit **www.okapiorbits.space** • Contact us at **contact@okapiorbits.com**
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