



Space Transparency and End of Life Efforts

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IRIDIUM & RESPONSIBLE BEHAVIORS IN SPACE

- In 2009, an abandoned, uncontrolled satellite crashed into one of Iridium's active communication satellites. ([The Cloud](#))
- This event served as a wake-up call for the industry to improve information-sharing on the orbit of satellites and debris. Thanks to greater industry collaboration, today satellites are able to orbit more safely than ever, with new practices to prevent future collisions. ([The Silver Lining](#))
- Iridium maintains close & constant communication with appropriate entities within commercial, civil and government organizations. This includes information sharing & transparency on position, maneuvers and deorbit efforts. ([The Process](#))
- Enhanced mitigation & maneuvering abilities, sharing of best practices coupled with procedures to de-orbit satellites at their end-of-life are real world examples used to help prevent additional debris from congesting space. ([The Results](#))

GOOD STEWARDSHIP IN SPACE IS A NECESSITY

As a leader in the satellite communications industry and operator of the world's preeminent Low-Earth Orbit (LEO) satellite constellation, Iridium is committed to sustaining space for the future and serving as the leading example of what it means to be a responsible steward of space.

Be Responsible, Act Responsibly

Each owner/operator must be responsible for their space assets and remain cognizant of the shared space we all must utilize

Contribute, Challenge, Learn

The industry of SSA has grown along with the increased utilization of space. Space 2.0 will require additional knowledge of the operations teams. Resources are there – use them

People, Policy, & Procedures

SSA isn't easy and it isn't (necessarily) hard

Share

Know your neighbors and be transparent

Deorbit & Demise

Plan for end-of-life disposal of space assets

THE RACE TO SPACE NEEDS TO INCLUDE THE RESPONSIBILITY TO DEORBIT

Iridium Deorbit Program

Early in the Iridium® NEXT replacement program, Iridium determined that space sustainability was dependent upon safely executing a deorbit program including:

Satellite Capability

Operations

Cooperation

By the Numbers

More than **33,000 kg** of debris removed from space

Only **19** days median time from passivation to re-entry!

Replaced with **75** second-generation satellites, conducting the largest space-based technology refresh in history

LESSONS LEARNED

“ We are committed to using space for our operations and then leaving it as we found it by properly deorbiting and disposing of our constellation as we replace it. ”

 iridium®

The current 25-year EOL disposal requirement is clearly achievable.

Being transparent in regards to intention and execution helps ensure safety of all space assets.

Satellite end-of-life disposal should start in the vehicle design phase, and a deorbit program must be defined.