

“Repeat after me...”

More than 95% of mission-terminating collision risk in LEO comes from lethal nontrackable (LNT) debris created by explosions and collisions. This is true even if no collision avoidance precautions are taken in response to conjunctions between tracked objects.

1. We must avoid predictable collisions – this is **SSA/STM** (*necessary but not sufficient*).
2. We must minimize the creation of new debris – this is **Debris Mitigation** (*necessary but not sufficient*).
3. We must remove massive derelict objects currently in LEO as they are the most likely source of future LNT risk – this is **Debris Remediation** (*necessary but not sufficient*).
4. **Debris Mitigation + Debris Remediation = Space Environment Management (SEM)** – policymakers must enable the execution of SEM.

Lack of effort in any one of these three areas (SSA/STM, Debris Mitigation, and Debris Remediation) makes the other two both more urgent and more difficult.

The best approach is to pursue balanced efforts in all three areas simultaneously.