Motivation

- Commercialization of Space Transportation
  - More launch/reentry activities and sites
  - Needed minimum segregation of airspaces in time & size (efficient, economic joint ops)
  - **Goal**: Seamless, efficient, and safe integration of air traffic and spaceflight

Challenges

- Launch & Reentry Operations
  - Restricted Airspace for launch/reentry window
  - Airspace in risk of falling debris
  - Airspace Capacity

Approach

- Launch & Reentry Operations
  - Restricted Airspace for launch/reentry window
  - Airspace in risk of falling debris

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### ATM integration concept using a SWIM based Reentry Hazard Area Service 2015

SESAR SWIM Master Class contribution in cooperation with Embry-Riddle Aeronautical University

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### Remote Tower

**Outlook**

- Development of a Spacecraft Emergency Information Provider prototype for SWIM integration
- Flight planning/execution testing through simulation
- Flight testing in a human-in-the-loop ATM simulation
- Integration of Spaceflight Operations into ATM