

SESAR Revolution and new users of the airspace

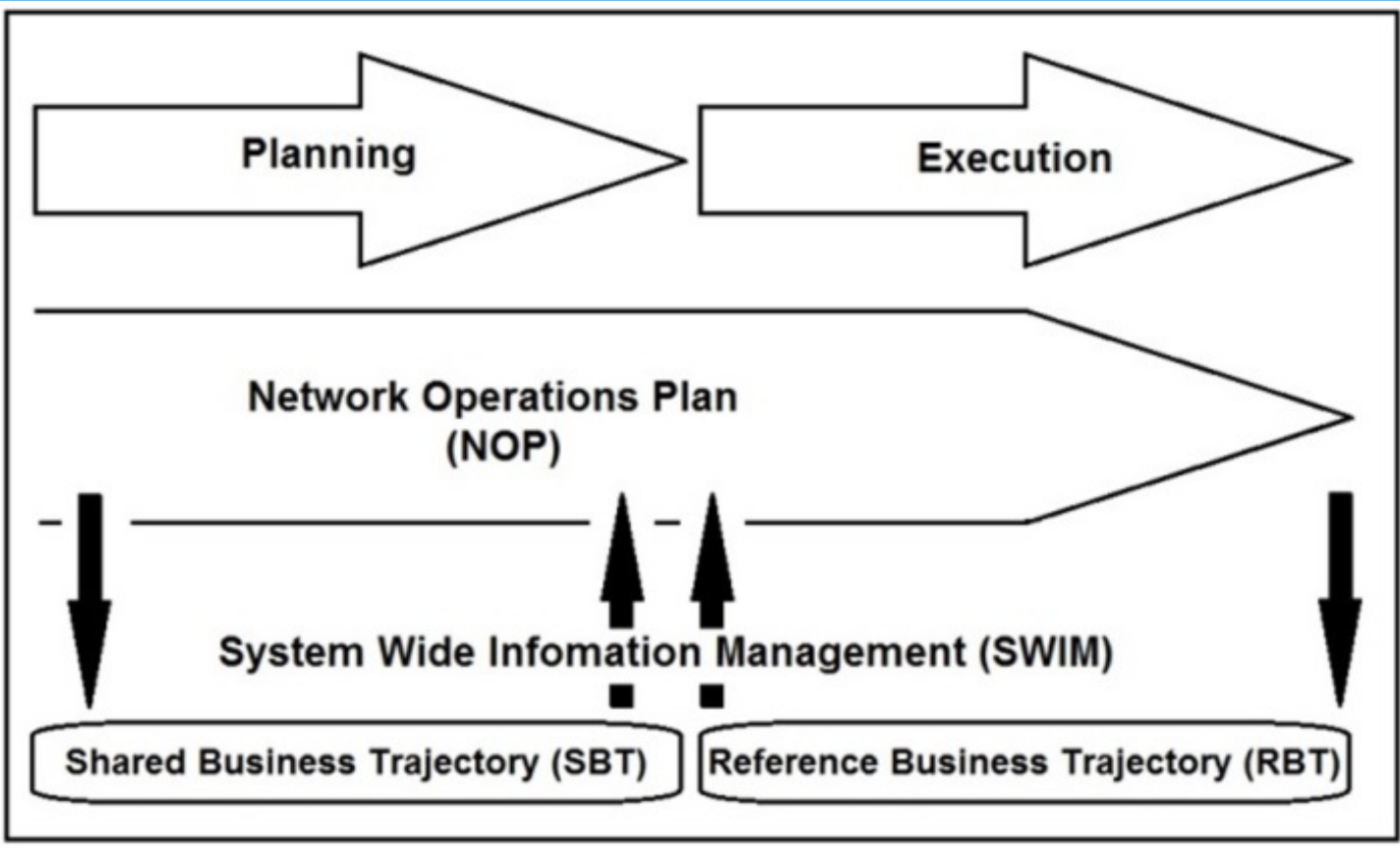
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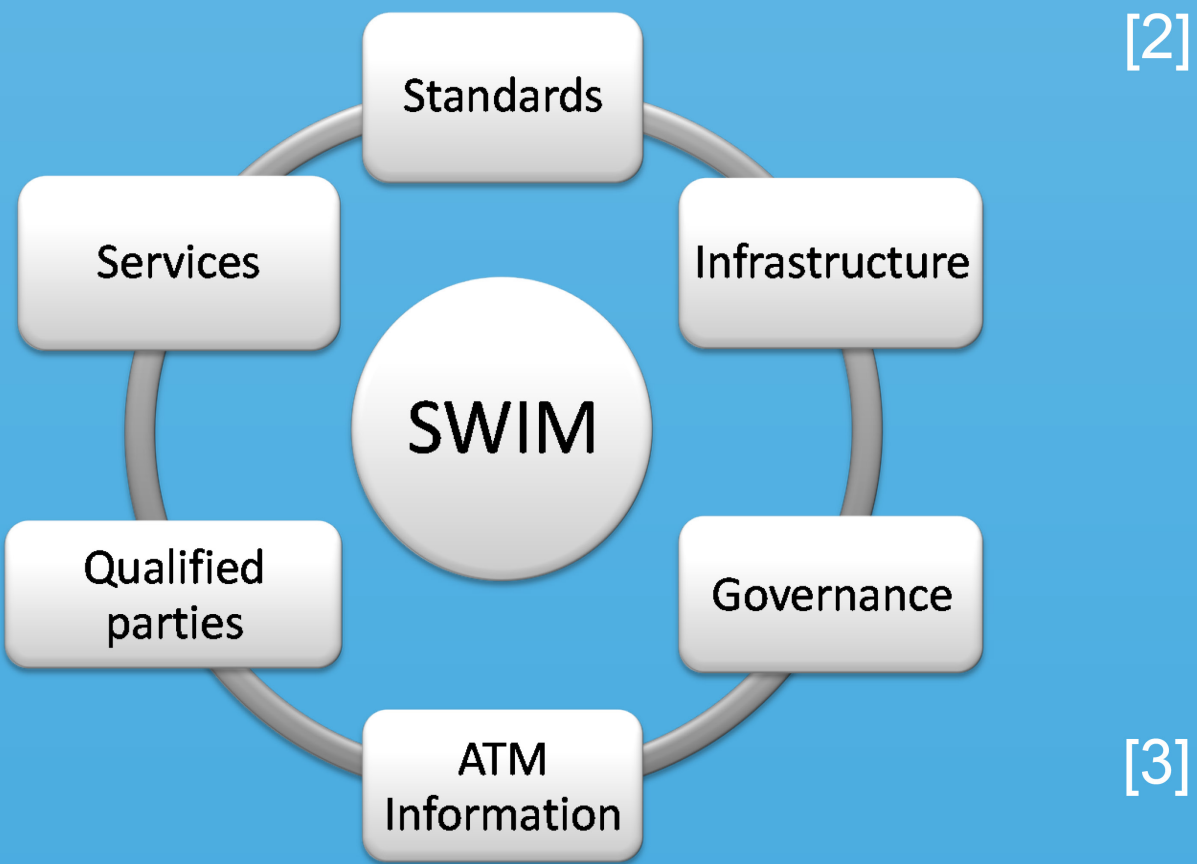
SESAR Requirements

Single European Sky ATM Research Programme SESAR

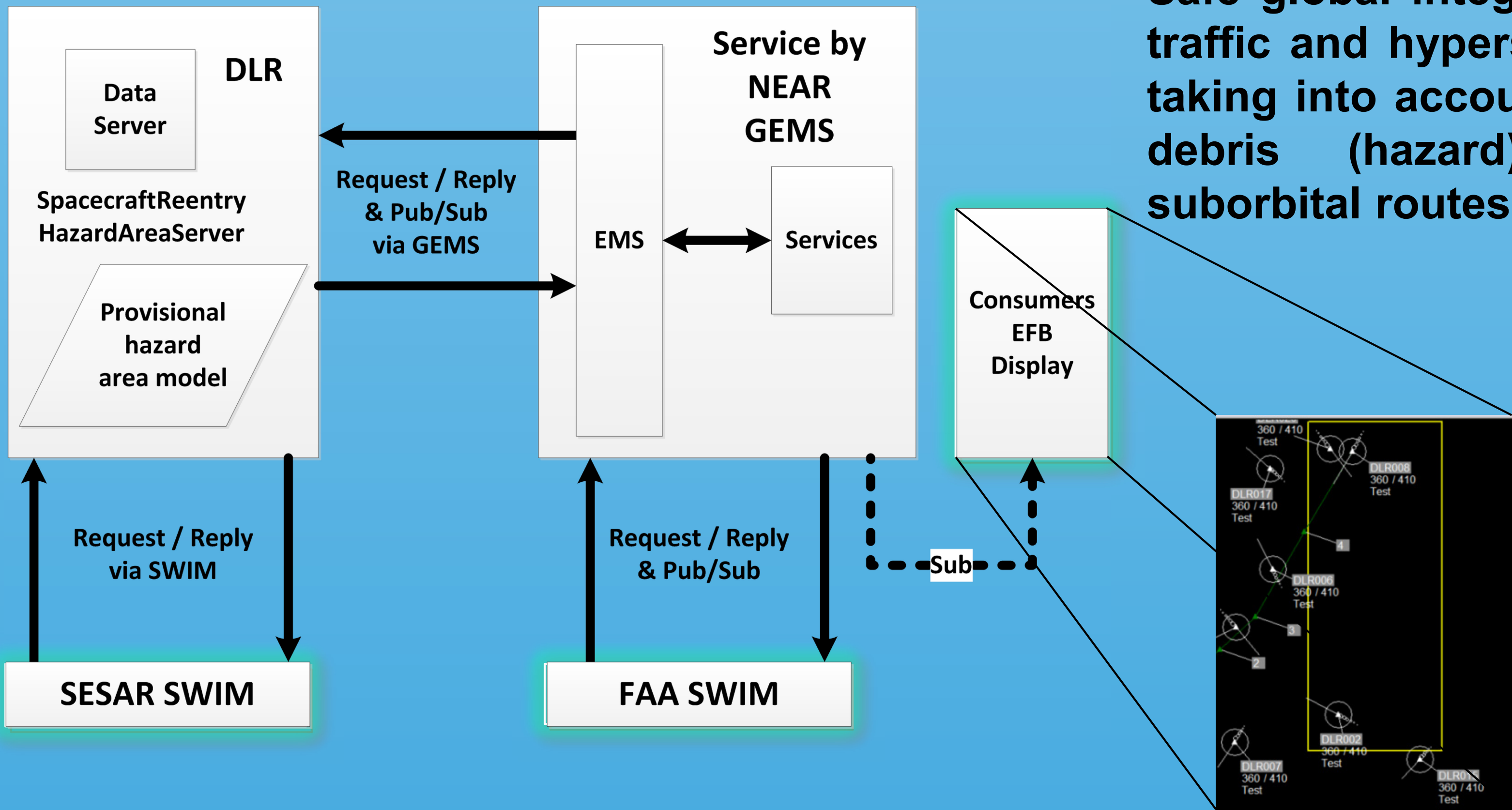
- Each flight operates a business trajectory from planning to execution (Trajectory Base Operation TBO)
→ Improved predictability of air traffic
- System Wide Information Management SWIM
 - "Intranet for ATM"
 - Pilots, Airport Operations Centers, Airline Operations Centers, Air Navigation Service Providers, Meteorology Service Providers, Military Operations Centers
 - Includes Controller-Pilot Data Link Communication (CPDLC)
 - SESAR SWIM concept requests all the future air traffic participants acting as communicating sub-systems!



[2]



SWIM SpacecraftReentryHazardAreaServer

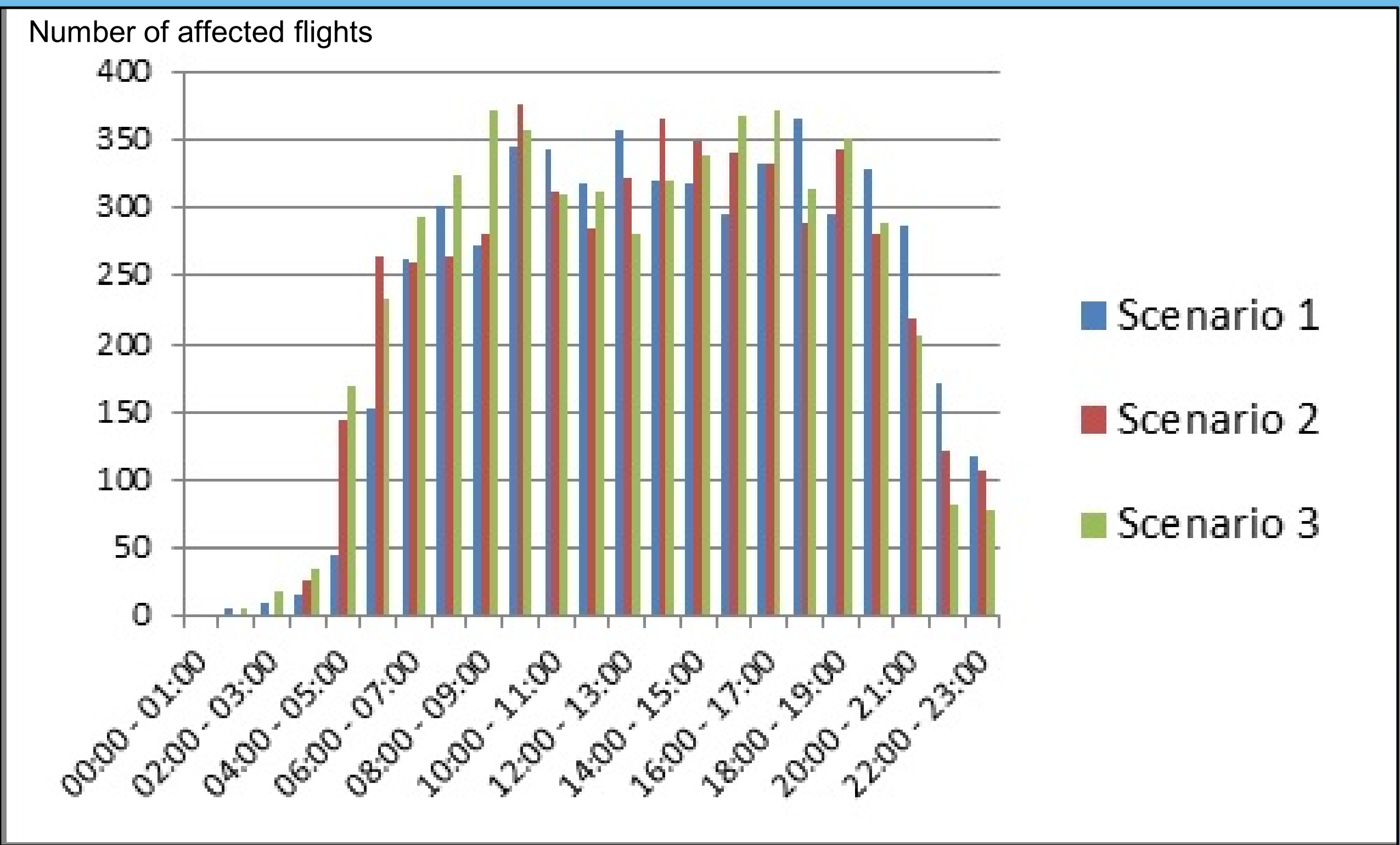


Safe global integration of space traffic and hypersonic flights by taking into account its changing debris (hazard) areas along suborbital routes!

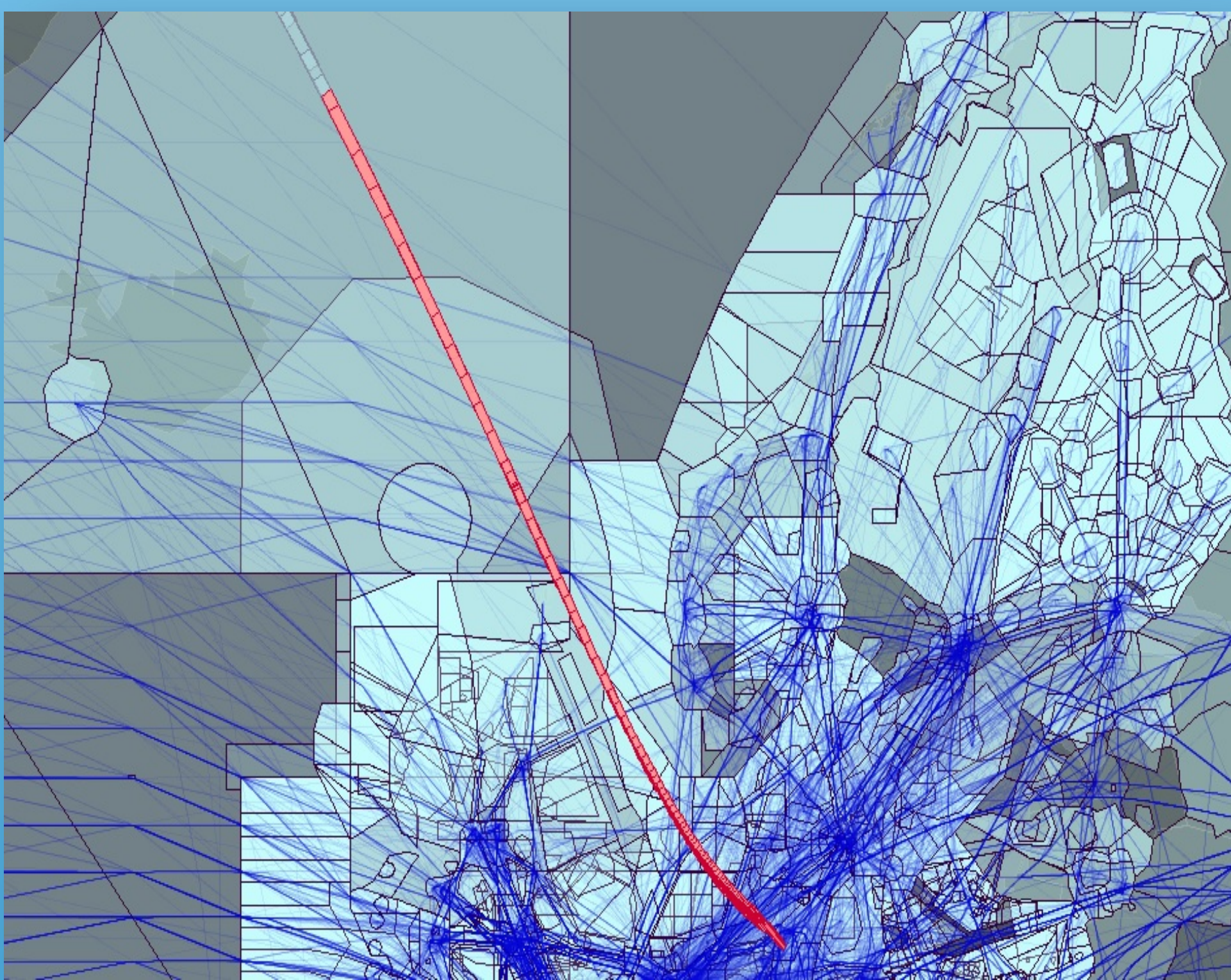


First Analysis Results – SpaceLiner Use Case

Simulation results



Entry count for three traffic scenarios during one rolling hour (historic traffic data based on Eurocontrol DDR2 database)



Trajectories in and around the HA



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