

Panel 5: ATM TECHNICAL AND OPERATIONAL HARMONISATION – ENABLING AIRSPACE SYSTEM CAPACITY TO SAFELY ACCOMMODATE AND INTEGRATE NEW ENTRANTS

***Moderator:** Brandon Roberts, Executive Director, Office of Rulemaking, Aviation Safety, FAA*

Panellists

Athanassios Tziolas, Head of ATM Department, EASA

Jeffrey Vincent, Executive Director, Unmanned Aircraft Systems Integration Office, FAA

Federico Javier Viejo Acosta, U-space & ATM SESAR Programme Director, Indra

Steve Jangelis, Aviation Safety Vice Chair, Air Line Pilots Association (ALPA), International

Michael Erb, Managing Director, AOPA Germany

Deviation Around Launch Paths

- Falcon Heavy Launch, February 6, 2018
- According to the FAA:
 - 563 flights were delayed.
 - 34,841 additional nautical miles (NM) flown.
 - An additional 62 NM were flown on average per flight.
 - 4,645 total minutes delayed.
 - There was an average eight-minute delay per flight.
 - 5,000 square NM impacted.
 - Orlando International Airport experienced 62 departure and 59 arrival delays



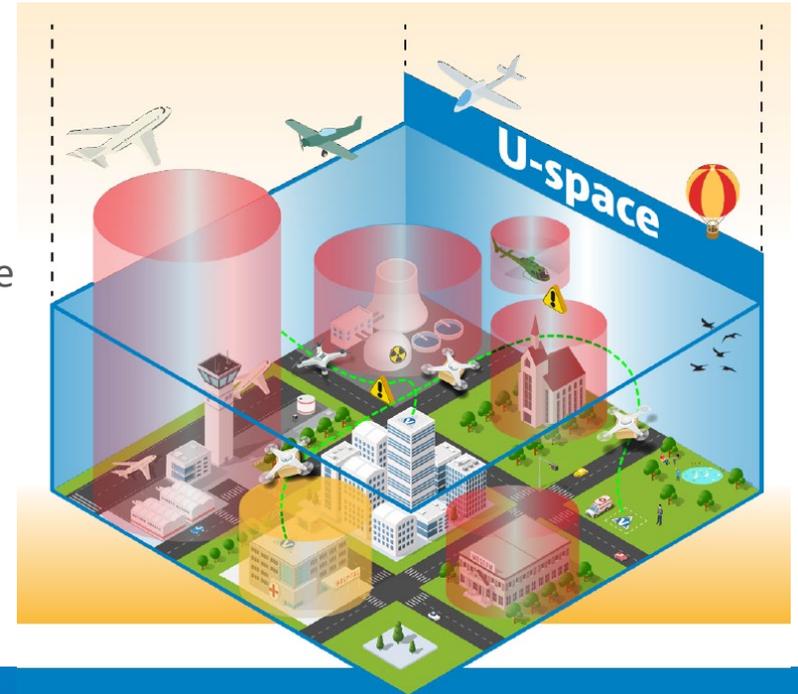
EASA vision for new entrants

U-Space Regulatory framework under which the EU MS may designate volumes of airspace (U-Space) in which drones will operate. Certified service providers (CIS & USSPs) will enable safe operations.

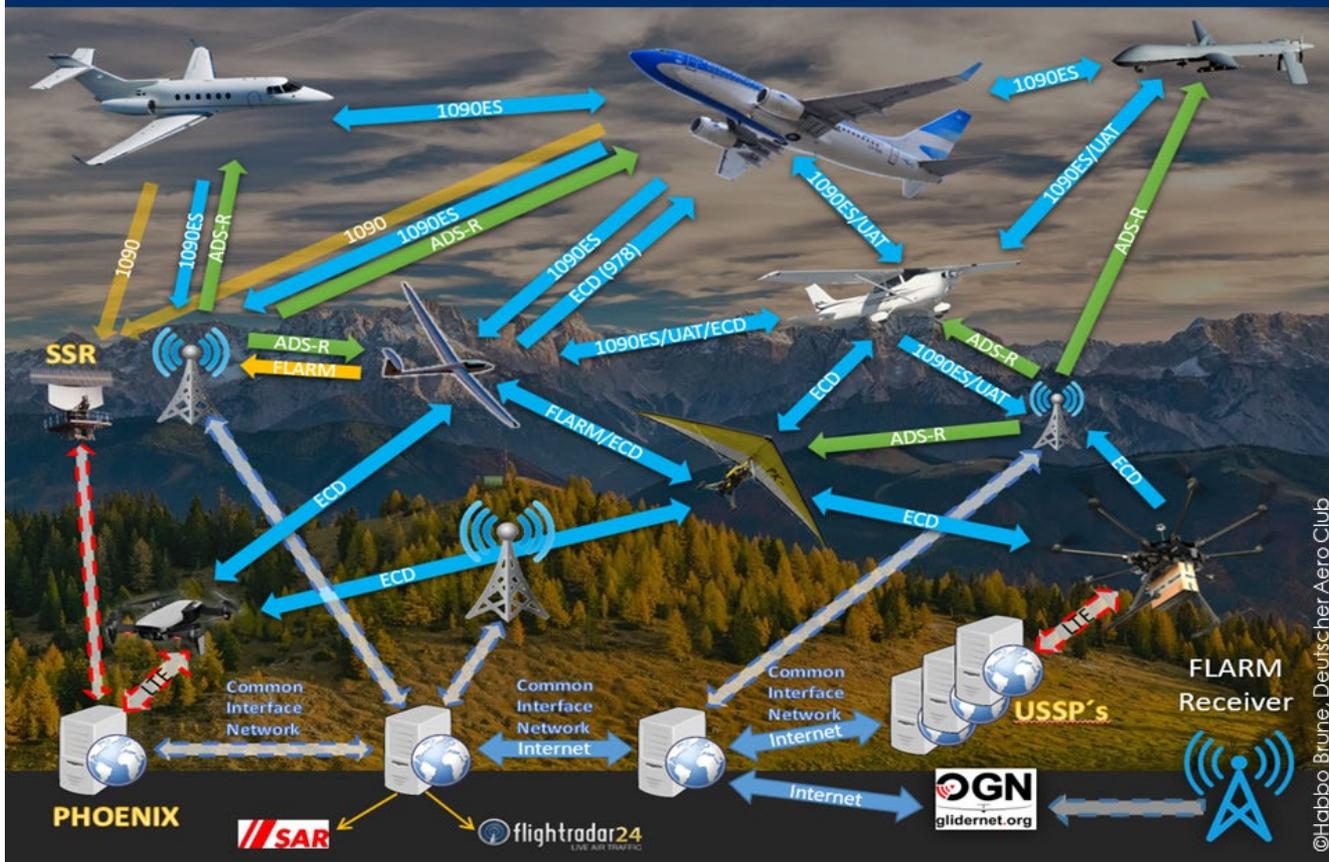
Limited integration with manned traffic. Used to gain experience.

SESAR Research on technological solutions that enable to increase the capacity and further developed the integration of unmanned traffic.

HAO include specific challenges during climbing and landing phases and at above FL600. current ATM/ANS system may not be adapted. Roadmap recommends a progressive approach.



ELECTRONIC COLLISION AVOIDANCE



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