

Horizon 2020 research priorities

SESAR 2020 Exploratory Research Call for Proposals Information Day 4th May 2015

Keir Fitch

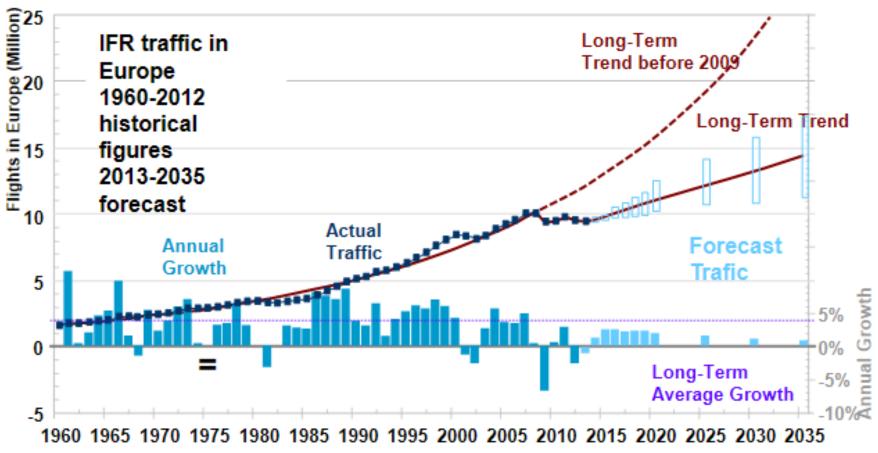
Head of Unit Research and Innovative Transport Systems DG MOVE



Challenges in aviation

- Sustained increase in air traffic
- Larger airports
- Growing network congestion
- Environmental issues, i.e. noise
- Better integration of aviation with other modes
 - → Need for smarter solutions at service, operational and technology level





Source: EUROCONTROL STATFOR



Flightpath 2050: Europe's vision for aviation

5 challenges:

- 1. Meeting
 Societal and
 Market Needs
- 2. Leadership
- 3. Environment & Energy
- 4. Safety & Security
- 5. Research & Education

ATM research: provide innovative means to

- → Improve air mobility / intermodality
 - door-to-door within 4 hours
- → 12% CO2 target reduction
 - max arrival time delay of 1 minute
- → Air transport capacity
 - air traffic management system handling 25 ml flights a year
- → Enable new concept of air operations
 - air vehicles of the future, new systems



ATM in Air Transport: The European R & I Response

H2020 Transport Challenge: "SMART, GREEN and INTEGRATED TRANSPORT"

Resource efficient, climate- and environmentally friendly, safe and seamless



Innovative Greener Air Vehicles

Clean Sky



Transport System

H2020 Workprogramme



Seamless and integrated ATM

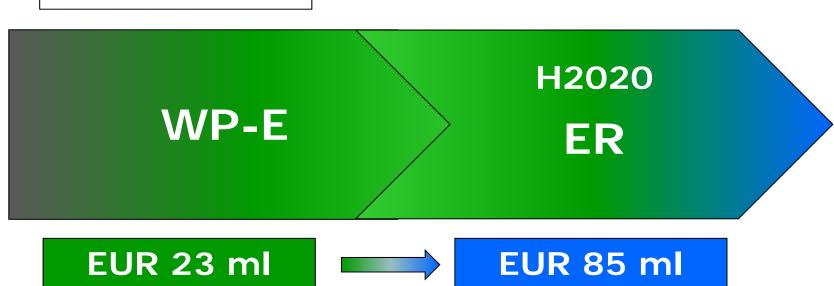
SESAR

SESAR ER



Keeping innovative ideas flowing

FP7





SESAR Exploratory Research

- Explore new ides
- Support SESAR deployment on time
- Foster innovators



EC in the SESAR ER

- Support the identification and harmonization of R&I needs relevant to ATM in the aviation industry
- Consider as appropriate the ACARE Flightpath
 2050 Strategic Research Agenda
- Ensure consistency with H2020 work programme and H2020 transport challenge goals
- Feed SESAR JU with FP7 outputs



Aviation Package

- Commission's 2015 Work Programme, "A New Start"
- To identify the challenges facing the EU's aviation sector and measures which can bolster its competitiveness
- To be adopted by the EC by the end of 2015
- Public consultation until 10 June 2015 http://ec.europa.eu/transport/modes/air/consultations/2015aviation-package_en.htm