



4DT Demonstration Project

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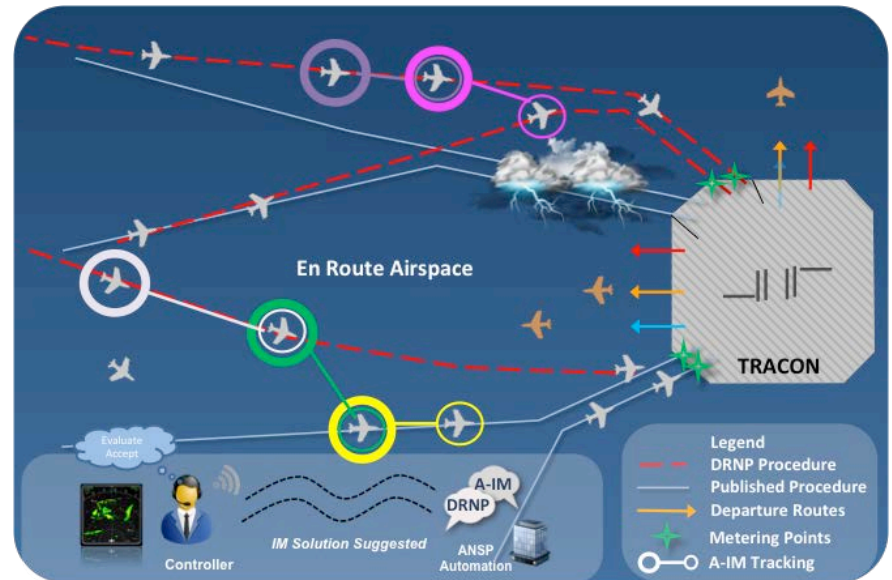
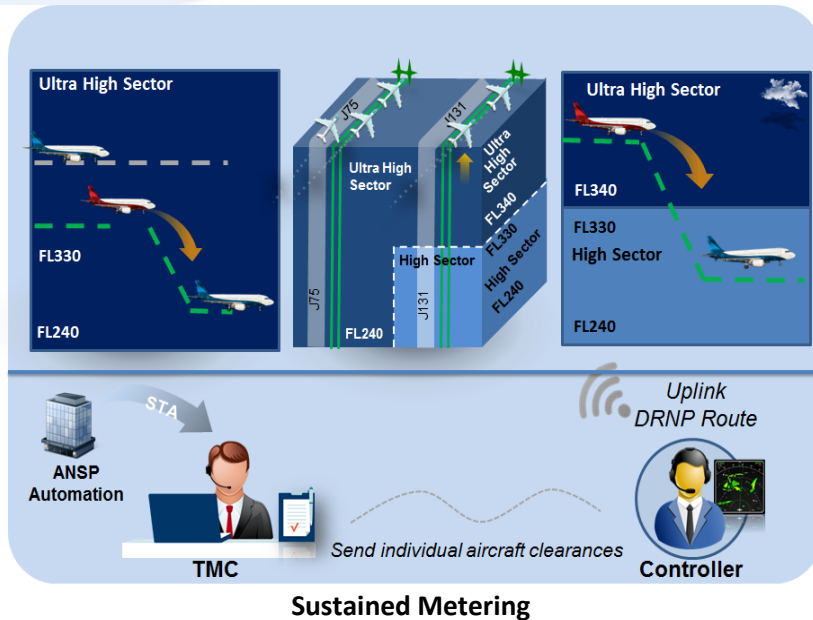


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4DT Project Overview

- Project Objective:
 - ✦ Demonstrate the feasibility and investigate the value of advanced TBO services enabled by ATN-baseline 2 (ATN-B2) technologies including: Dynamic-RNP, A-IM, and ATC Winds
- Expected Outcome:
 - ✦ The feasibility of these services will build industry confidence to drive equipage by demonstrating value

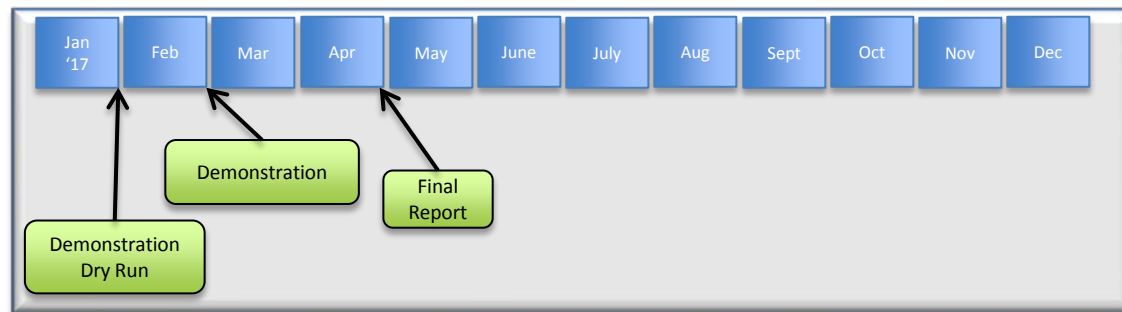
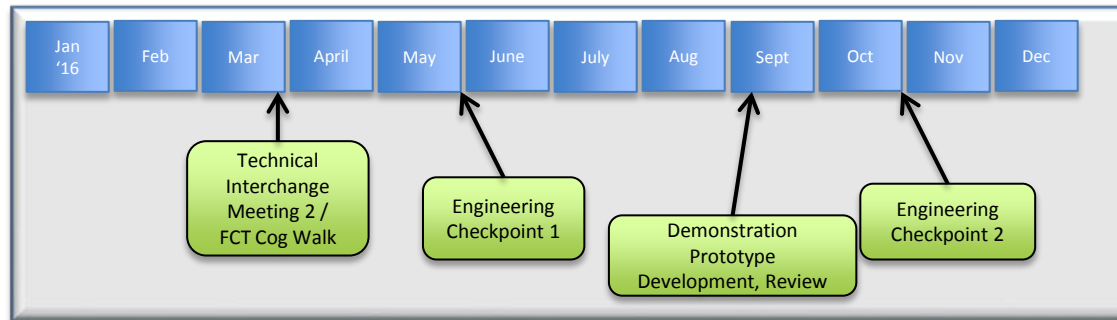
Operational Scenarios



En Route to Terminal Transition

Upcoming Events (2016 & 2017)

- System Architecture Development continued
- Prototype Development
- Demonstration



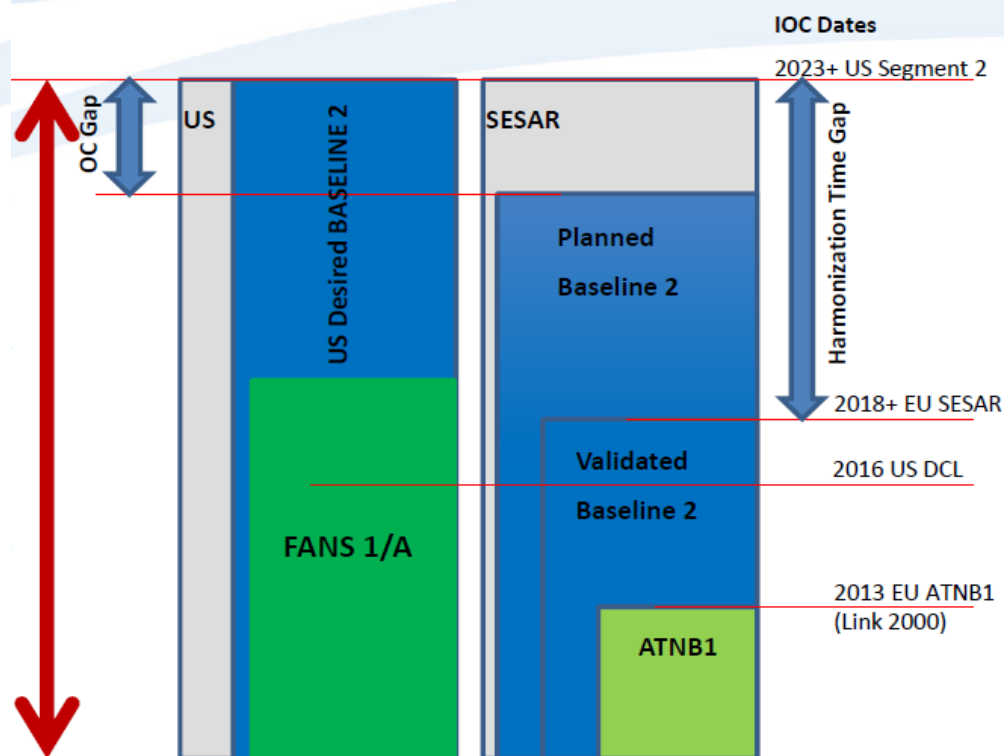
FY18 and Beyond

- Live flight trials
 - ✦ We will use the results of the demonstration to focus the research questions of the live flight trials.



BACKUP

US vs. EUR



Notes:

- 1 with ADS-C (Flight Path Intent)
- 2 with ATC winds
- 3 RNP by Leg Type; Variable Turns + ATC winds
- 4 Voice replacement only

Additional (US Desired) Baseline 2:

- 4 D Trajectory + Dynamic RNP² & ³
- Advanced Interval Mgt²
- ATC Winds

Planned Baseline 2

- Tower and Airborne Clearance
- Flight Information Services (NOTAM, VOLMET, Hazardous Weather, RVR)

Validated Baseline 2

- 4D Trajectory¹
- Interval Management Spacing⁴
- In Trail Management⁴
- Enhanced Clearance
- D- ATIS (text)
- D-Taxi clearance

FANS 1/A

- Partial 4D Trajectory
- Position Report
- Dep/Oceanic/En-Route Clearances
- Climb & Descent Procedure
- Position Reporting

ATN Baseline 1 (ATC COM)

- Information exchange/report
- En-Route Clearance Request/Delivery
- Communication Management
- Mic Check



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NextGEN