

# Wrap-Up DIGITS Webinar Part 1



## Demonstration of Air Traffic Management Improvements generated by initial Trajectory Sharing



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Webinar 1<sup>st</sup> Dec 2020



founding members



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- ➔ The DIGITS project lasted over 4 years, comprised **19 partners** from key stakeholders and invested **34 M€** to prepare the deployment of Initial Trajectory Information Sharing in line with EU Implementation Regulations
- ➔ ATS-B2 **avionics** enabling EPP sharing was developed and certified, now available from Airbus through the FANS C product, in forward- and retro-fit
- ➔ By end 2020, **6 airlines** will have upgraded **91 aircraft**, trained **10 000 pilots** and produced **20 000 DIGITS flights** from which **1.4 million reports** will have been received under a representative variety of operational conditions
- ➔ For the DIGITS Demonstration Report about **16 000 DIGITS flights / 800 000 reports were analyzed** which contribute to
  - better understand the impact of airline operating practices on the downlinked data
  - fine tune the requirements for integration of EPP in ground system
  - bring the systems to full maturity and capture proposals for evolutions of standards

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- ➔ **4 ANSPs developed ground tools** which allowed to identify use cases and the benefit potentials of 4D trajectory information sharing
- ➔ **MUAC trained 24 ATCOs and went pre-operational** in July 2019, using basic versions of EPP display and trajectory discrepancy algorithm, applied on 11 000 DIGITS flights. Transition to full operations with all 300 ATCOs is planned for 2022
- ➔ **DFS, ENAV and NATS trialed more enhanced versions** of EPP applications in shadow mode, capturing valuable feedback from ATCOs wrt. HMI, situational awareness, safety, predictability etc.
- ➔ The technical results obtained in Solution 18-06a **using ADS-C data in ground Trajectory Predictions** provide enough confidence to continue with operational validations in future projects. Influence of ATC instructions remains to be studied further.

The benefit potential of 4D Trajectory Sharing could be evidenced:  
Increase of safety, ATCO's situational awareness and last but not least flight efficiency.

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**Technical Data Analysis:** valuable findings were obtained wrt. bandwidth usage, transmission times, compliance to standards and ground network & avionics issues  
DIGITS collected data can be shared for further analysis beyond this project.

**Complementary analysis** looked at numerous operational **real world factors influencing** the EPP reliability → DIGITS shares valuable findings

**DIGITS airlines:** have great merit in their pioneering role wrt. training implementation and avionics retrofit upgrades

**Airbus:** Research for the purpose of deployment and benefits for airline customers

**SJU:** Partnership is key, DIGITS is a piece in the 'European ATM Research vitrine'

10:00 Welcome 2<sup>nd</sup> Part host AIRBUS (Thierry Harquin)

10:05 Recap DIGITS Key Results – Day 1  
(Tom Maier - AIRBUS)

10:15 Next research and development steps under  
SESAR (David Lewin - NATS)

10:45 Airline Expectations & Needs  
(Pascal Colles – Air France)

11:05 SESAR DM - Airborne equipage plans & ground  
deployment aspects including update on  
mandate PCP/CP1 (Cristian Pradera – SESAR

DM)

11:25 Coffee break

11:35

## PANEL DISCUSSION

Moderator David Lewin (NATS)

- Benoit Fonck - SESAR JU Chief Development and Delivery
- Dan Wood - EasyJet, Training Captain and Fleet Manager
- Niels Lokman – MUAC COO
- Hugues de Beco - Airbus, Head of Multi-Program Projects & ATM Program

## Q&A session

12:30

Wrap-Up and Overall Conclusions

12:40

Open Day Webinar Closure & Adjourn  
(Tom Maier – AIRBUS)



- ➔ **Thanks to those who prepared this 1<sup>st</sup> part of the DIGITS Webinar**
  - especially Hendrik OBERHEID from DFS and Thierry HARQUIN from Airbus
  - Guillaume MOLINIER and his Q&A team for the questions handling
  - the communications and technical media support team from Airbus
  - all the presenters
  
- ➔ **All presentations will be published on the SJU web-site**
  - exact address will be communicated
  
- ➔ **Questions**, which could not be treated during the webinar will be answered post-event and also made available on the SJU web-site
  
- ➔ **DIGITS Demo Report** (800 pages) will be made public early 2021

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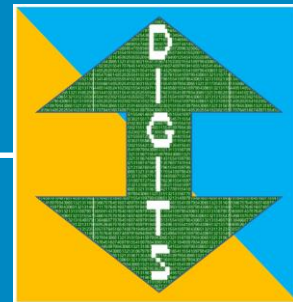
Airlines

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Thank you very much for your attention!

ANSPs

AIRTEL<sup>ATN</sup>

indra

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