

PROJECT

## PJ31 DIGITS

### Initial Trajectory Information Sharing

**Funding:** European (Horizon 2020)

**Duration:** Sep 2016 - Dec 2020

**Status:** Complete

**Total project cost:** €27,802,830

**EU contribution:** €18,955,106



**Call for proposal:** H2020-SESAR-2015-2

[CORDIS RCN : 205935](#)

#### Objectives:

DIGITS will contribute to reinforce the “Enabling Aviation infrastructure” key feature of SESAR 2020 by demonstrating the ATM benefits that can be realized through the use of downlinked 4D trajectory data in ground systems.

The project proposes, in a close to operational environment and in fully representative operational conditions, a set of tightly coordinated development and demonstration actions of key airborne and ground stakeholders in Europe.

The airborne industry will develop up to certification the worldwide first airborne unit capable of downlinking ADS-C data according to ATN Baseline 2 standard in compliance with PCP AF#6 (Initial Trajectory Information Sharing).

The ANSPs and ground industry will build up pre-operational system platforms capable of receiving and processing ADS-C data including the Extended Projected Profile (EPP). These platforms will e.g. display the shared trajectory data to controllers on their working positions and integrate it in the Flight data Processing systems for the enhancement of the ground Trajectory Prediction.

DIGITS plans to have revenue flights becoming available gradually as from mid 2018. These commercial flights will downlink ADS-C data to be processed in ATM ground systems of four participating ANSPs, covering together a substantial part of European airspace and air traffic under a variety of operational conditions.

Demonstrations will be done in a shadow mode system set-up, supported by further offline analysis and post-processing. Project partners will make significant efforts to assess together with operational experts the benefits of initial trajectory sharing, its system impacts, potential human performance impacts and opportunities for further ATM performance improvements.

DIGITS will bridge the gap between the early validation of the Trajectory Based Operations concept achieved in SESAR 1, also known as “initial 4D”, with successful flight trials in 2012 and 2014, and the deployment of PCP AF#6.

#### Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

#### Lead Organisation:

**Airbus**

**Address:**

2 ROND POINT EMILE DEWOITINE  
31700 BLAGNAC  
France

**Organisation Website:**

<http://www.airbus.com>

**EU Contribution:** €5,118,657

**Partner Organisations:**

**Austro Control Osterreichische Gesellschaft Fur Zivilluftfahrt Mbh**

**Address:**

WAGRAMER STRASSE 19  
1220 WIEN  
Austria

**EU Contribution:** €0

**Saab Ab**

**Address:**

Broederna Ugglas Gata  
58188 LINKOEPING  
Sweden

**Organisation Website:**

<http://www.saab.com>

**EU Contribution:** €0

**Stiftelsen Sintef**

**Address:**

Strindveien  
7034 Trondheim  
Norway

**Organisation Website:**

<http://www.sintef.no>

**EU Contribution:** €0

**Enav**

**Address:**

VIA SALARIA, 16  
138 ROME  
Italy

**Organisation Website:**

<http://www.enav.it>

**EU Contribution:** €423,538

**Honeywell Aerospace**

**Address:**

4 AVENUE SAINT GRANIER  
31300 TOULOUSE  
France

**EU Contribution:** €1,401,536

**Eurocontrol - European Organisation For The Safety Of Air Navigation****Address:**

Rue De La Fusée 96  
1130 Bruxelles  
Belgium

**EU Contribution:** €403,094

**Croatia Control, Croatian Air Navigation Services Ltd****Address:**

RUDOLFA FIZIRA 2  
10410 VELIKA GORICA  
Croatia

**EU Contribution:** €0

**Thales Avs France Sas****Address:**

75-77 Avenue Marcel Dassault  
33700 Merignac  
France

**EU Contribution:** €2,132,767

**Indra****Address:**

Avenida de Bruselas, 35  
Alcobendas Madrid  
Spain

**Organisation Website:**

<http://www.indra.es>

**EU Contribution:** €818,985

**Nats (En Route) Plc****Address:**

5th Floor South, Brettenham House, Lancaster Place  
LONDON  
WC2E 7EN  
United Kingdom

**Organisation Website:**

<http://www.nats.co.uk>

**EU Contribution:** €390,298

**Udaras Eitliochta Na Heireann The Irish Aviation Authority****Address:**

D'OLIER STREET 11-12 THE TIMES BUILDING  
D02 T449  
DUBLIN  
Ireland

**EU Contribution:** €0

**Leonardo - Societa Per Azioni****Address:**

Piazza Monte Grappa 4  
195 Roma  
Italy

**EU Contribution:** €304,682

**Naviair****Address:**

NAVIAIR ALLE 1  
2770 KASTRUP  
Denmark

**EU Contribution:** €46,841

**Luftfartsverket****Address:**

HOSPITALSGATAN 30  
602 27 NORRKOPING  
Sweden

**Organisation Website:**

<http://www.lfv.se>

**EU Contribution:** €62,384

**Dfs Deutsche Flugsicherung GmbH****Address:**

Am DFS-Campus 10  
63225 LANGEN  
Germany

**Organisation Website:**

<http://www.dfs.de>

**EU Contribution:** €277,261

**Airtel Atn Limited****Address:**

The Forum, Glashule Road 29  
N/A  
Glashule  
Ireland

**Organisation Website:**

<http://www.airtel-atn.com>

**EU Contribution:** €170,515

**Technologies:**

Aircraft operations and safety  
Trajectory Based Flight Operations

**Development phase:** Demonstration/prototyping/Pilot Production

**STRIA Roadmaps:** Network and traffic management systems

**Transport mode:** Air transport

**Transport sectors:** Passenger transport, Freight transport

**Transport policies:** Other specified

**Geo-spatial type:** Other