

PROJECT

VLD3-W2 SORT

Safely Optimized Runway Throughput

Funding: European (Horizon 2020)

Duration: Apr 2020 - Dec 2022

Status: Ongoing

Total project cost: €7,019,757

EU contribution: €4,500,000



Call for proposal: H2020-SESAR-2019-1

[CORDIS RCN : 230063](#)

Objectives:

The expected rapid growth in air traffic will lead to an increasing number of capacity constrained airports. Therefore airports have to improve significantly the runway and airport throughput while maintaining or increasing runway safety levels. In SESAR 2020 WAVE-1 this was mainly addressed by PJ02 with the four solutions:

- PJ.02-01: Wake turbulence separation optimisation
- PJ.02-02: Enhanced arrival procedures
- PJ.02-03: Minimum Pair Separations based on required surveillance performance
- PJ.02-08: Traffic optimisation on single and multiple runway airports

This VLD covers four solutions:

The use of aircraft type-specific pairwise separation will be used at Heathrow Airport, focusing on the runway occupancy time part of the overall TBS concept. At Vienna, the use of a wake decay enhancing device is intended to be demonstrated. There will be a demonstration at Zurich Airport of a concept known as ROCAT, which enables a reduction in the surveillance separation minimum for in-trail pairs on final approach, including a revised runway occupancy time aircraft classification. The benefits of an integrated AMAN-DMAN runway sequencer will be demonstrated at Stockholm Arlanda in shadow mode.

Together these demonstrations will collect evidence of the concept(s) within the overall time-based separation concept. As such the proposed large scale demo VLD3-W2 SORT closes the gap between the actual concept development and the deployment (or pre-industrialization) phases by demonstrating the operational and technical readiness. And by doing so de-risking the later deployment phases of these four solutions, either in real life trials and/or shadow modes trials at major European airports, this will ensure trust in the SESAR results.

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)

Other programmes: SESAR-IR-VLD-WAVE2-16-2019 VLD.03 W2 Improving runway throughput in one airport

Lead Organisation:

Stichting Nationaal Lucht En-Ruimtevaartlaboratorium

Address:

Anthony Fokkerweg 2
1059CM AMSTERDAM

Netherlands

Organisation Website:

<http://www.nlr.nl>

EU Contribution: €703,763

Partner Organisations:

Airbus

Address:

2 ROND POINT EMILE DEWOITINE
31700 BLAGNAC
France

Organisation Website:

<http://www.airbus.com>

EU Contribution: €80,000

Austro Control Osterreichische Gesellschaft Fur Zivilluftfahrt Mbh

Address:

WAGRAMER STRASSE 19
1220 WIEN
Austria

EU Contribution: €315,000

Saab Aktiebolag

Address:

..
581 88 LINKOPING
Sweden

Organisation Website:

<http://www.saabgroup.com>

Flughafen Zuerich Ag -Unique

Address:

Flughafen Kloten
8058 ZURICH-AIRPORT
Switzerland

Swedavia Ab

Address:

SWEDAVIA
190 45 STOCKHOLM ARLANDA
Sweden

Organisation Website:

<http://www.swedavia.se>

EU Contribution: €45,000

Skyguide - Swiss Air Navigation Services Ltd

Address:

Route de pré-bois 15-17
CH-1215 Geneva
Switzerland

Organisation Website:
<http://www.skyguide.ch>

Flughafen Munchen Gmbh

Address:
NORDALLEE 25
85326 MUNCHEN
Germany

Eurocontrol - European Organisation For The Safety Of Air Navigation

Address:
Rue De La Fusée 96
1130 Bruxelles
Belgium

Croatia Control, Croatian Air Navigation Services Ltd

Address:
RUDOLFA FIZIRA 2
10410 VELIKA GORICA
Croatia

Sintef

Address:
Strindveien 4
7034 TRONDHEIM
Norway

Organisation Website:
<http://www.sintef.no>

EU Contribution: €800,000

Aeroports De Paris Sa

Address:
1 RUE DE FRANCE
93290 TREMBLAY-EN-FRANCE
France

Organisation Website:
<http://www.aeroportsdeparis.fr>

Deutsches Zentrum Fr Luft Und Raumfahrt E.v

Address:
Linder Hoehe
51147 KOELN
Germany

Organisation Website:
<http://www.dlr.de>

EU Contribution: €918,736

Avinor As**Address:**

DRONNING EUFEMIAS GATE 6
2061 OSLO
Norway

Heathrow Airport Limited**Address:**

NELSON ROAD THE COMPASS CENTRE HOUNSLOW
LONDON
TW6 2GW
United Kingdom

Organisation Website:

<http://www.heathrowairport.com>

EU Contribution: €150,000

Nats**Address:**

4000 Parkway, whiteley 4000
Fareham, Hampshire
PO157FL
United Kingdom

Organisation Website:

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

EU Contribution: €997,500

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

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

Naviair**Address:**

NAVIAIR ALLE 1
2770 KASTRUP
Denmark

Luftfartsverket**Address:**

HOSPITALSGATAN 30
602 27 NORRKOPING
Sweden

Organisation Website:

<http://www.lfv.se>

EU Contribution: €490,000

Airtel Atn Limited**Address:**

2 HARBOUR SQUARE CROFTON ROAD
A96D6R0
DUN LOAGHAIRE DUBLIN
Ireland

Organisation Website:

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

Schiphol Nederland B.v.**Address:**

Evert Van De Beekstraat 202
1118CP Luchthaven Schiphol
Netherlands

Technologies:

Safety systems
Wake management

Development phase: Demonstration/prototyping/Pilot Production

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
Societal/Economic issues,

Transport policies: Safety/Security

Geo-spatial type: Other