SORT

Safely Optimised Runway Throughput

Partners

AT-One, austro CONTROL, COOPANS (REAL COOPERATION, REAL RESULTS), nlr, DLR, EUROCONTROL, LFV, Heathrow (Making every journey better), NATS, leidos, NATMIG, SINTEF, skyguide, Swedavia Airports, SEAC, Zurich Airport

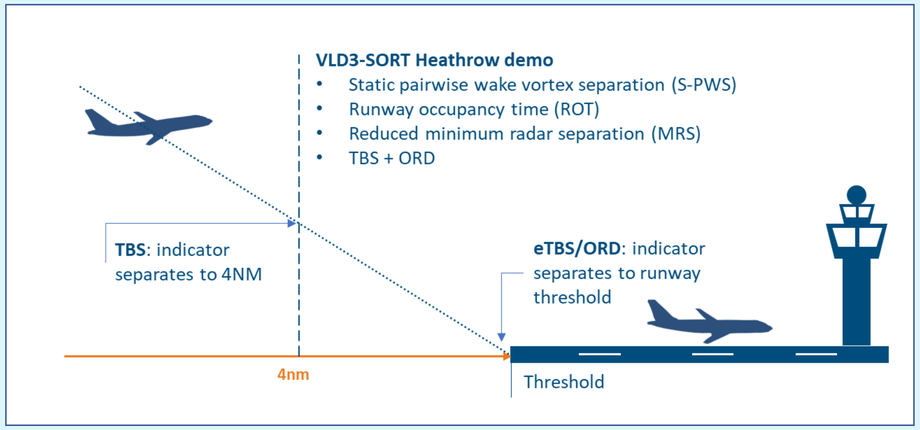
Operational Need

The expected rapid growth in air traffic (post Covid-19) 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**.

What is SORT

SORT is a **very-large demonstrator (VLD)** project which will demonstrate seven solutions delivered under the SESAR Joint Undertaking **SESAR2020-Wave2** program to bridge the gap towards pre-industrialisation.

A Real-Time Simulation (RTS) demonstration of real hardware and software, integrating several SESAR solutions as part of the overall Time Based Separation (**TBS**) concept at **Heathrow Airport.**

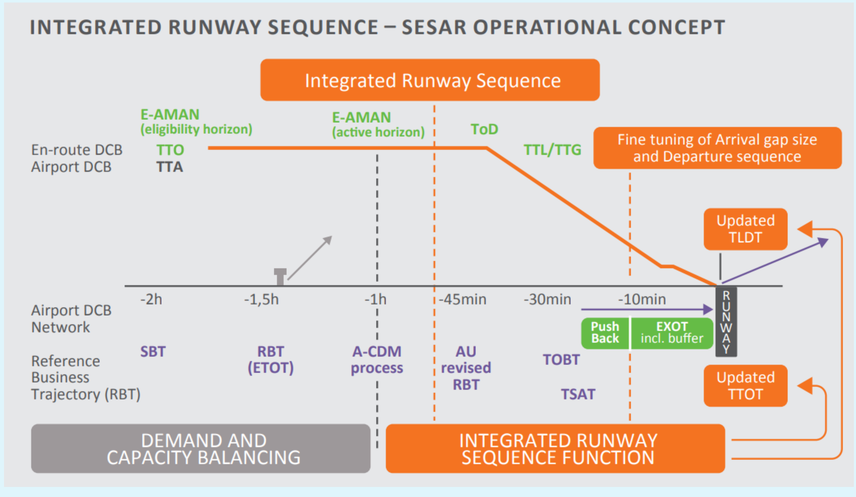


The integrated solutions are:

a) Optimised Runway Delivery (**ORD**, PJ.02-01-01)
b) Aircraft type-specific Static Pairwise Wake Separation (**S-PWS**, PJ.02-01-04)
c) Reduced Minimum Radar Separation (**MRS/RSP**, PJ.02-03)
d) Reduced spacing based on local Runway Occupancy Time characterisation (**ROT,** PJ.02-08-03).

DEMO Exercises

Pre-industrialisation of wake vortex decay enhancing devices (**plate lines**, PJ.02-01-07) is demonstrated at **Vienna Airport**, showcasing increased **safety levels** and aircraft **separation reduction** potential.



Benefits of an integrated runway sequence function (**IRSF** , PJ.02-08-01 and PJ.02-08-02) will demonstrate optimised integration of arrival and departure flights at **Stockholm Arlanda Airport** in shadow mode.

https://www.linkedin.com/company/sesar2020-vld3-wave-2-sort

SESAR JOINT UNDERTAKING

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