

Integrated TMA, Airport and Runway Operations

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SESAR 2020 SHOWCASE

Integrated ATM Operations by VLDs

- Very Large Demonstrations (VLDs)
- Main aim to
 - Demonstrate SESAR Solutions in close-to-operational environments
 - Bridge gap between Industrial Research (IR) and actual Deployment
 - Increase Maturity & Technical Readiness Level to TRL7
 - Provide a *fast track* to operational demonstration



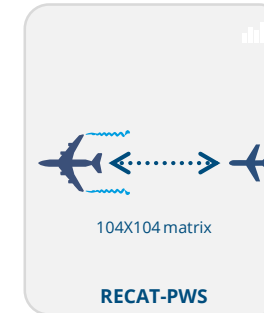
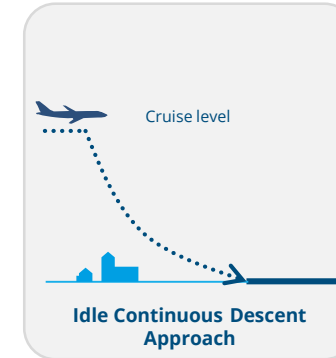
VLD Project Examples

- Safely Optimised Runway Throughput (SORT) project
 - Optimised Wake Separation Minima for Arrivals
 - Improve throughput and minimise delays
- Integrated TMA, Airport and Runway Operations (ITARO) project
 - Enhance Arrival and Approach Operations time-based
 - Enhance Departure Operations for non-wake separations
- Demonstrate that mature SESAR solutions are ready to transition to industrialisation and deployment
- Provide support to Regulatory Activities required for deployment



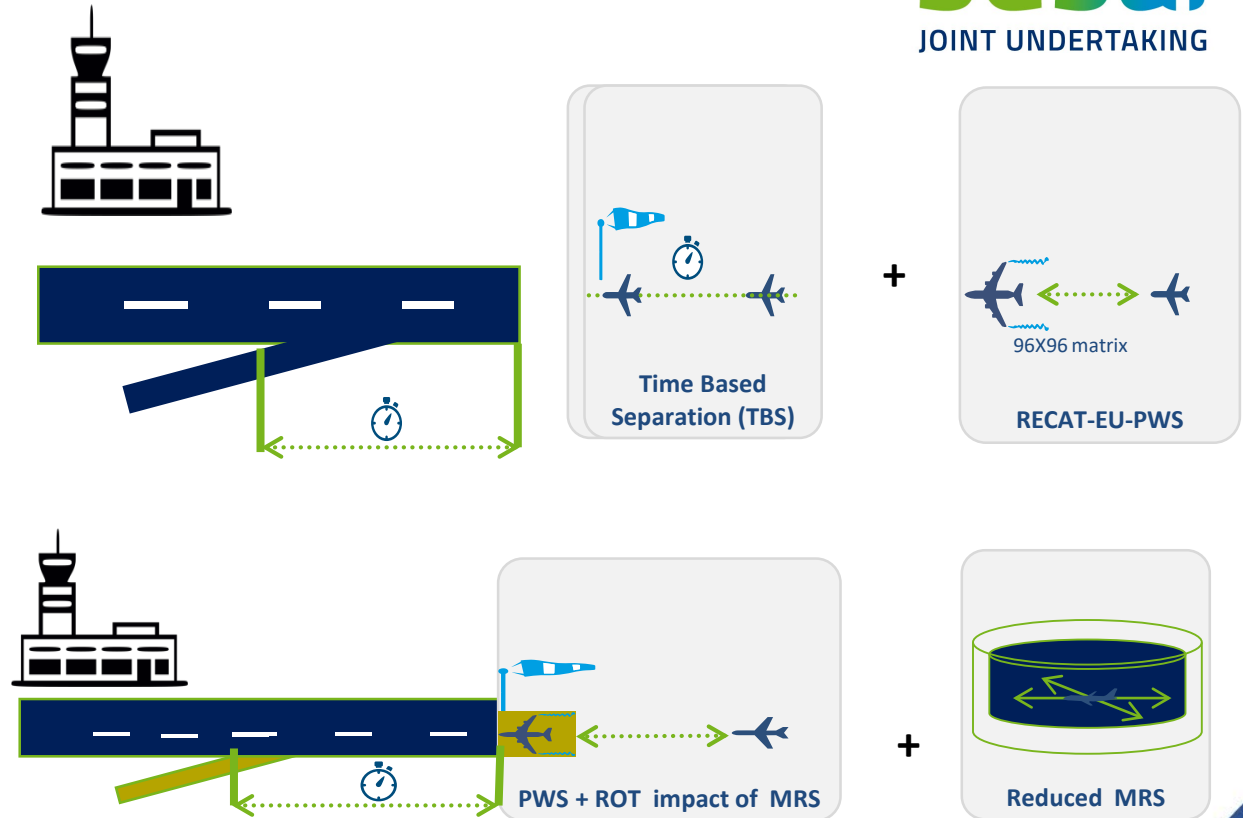
NLR Showcase

- Addresses (in ITARO) Greening of flight operations
- Retaining high-capacity at airports
- Combining Operational Improvements from SESAR Solutions
 - Required Navigation Performance (RNP)-approaches
 - Continuous Descent Operations (CDOs)
 - Interval Management (IM)
 - Reduced Separation Minima, like PairWise Separation (PWS)
- Investigated elements are also part of the Dutch Airspace Redesign Program
- More info presented by Mr. Nico de Gelder NLR - (AT-One)



NATS Showcase

- Shows (from SORT & ITARO) latest developments in:
 - Time Based Separation (Pairwise TBS)
 - Minimum Radar Separation (MRS)
 - Runway Occupancy Time (ROT)
 - Departure Separation
 - Arrival Streaming
- Additional incremental benefits on capacity and environment
- Next presenter, Mr. Adrian Clark (NATS) will detail this further



More info desired?

- Visit the project websites

- [ITARO](#)
- [SORT](#)

- Follow us on linkedIn:



- Read our Open Access Government (OAG) Publications:

- [Lowering environmental impact: Combining SESAR solutions in an operational environment](#)
- [Integrating SESAR Solutions in an operational Environment to foster the Green Deal](#)

- Or, look into our Video outings (on YouTube)!



Meet us at the NLR (AT-One) Booth E19



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