



S2020 PJ28 - Integrated Airport Operations (VLD) Overview

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19. September 2019

Founding Members



The DemoDay



1 Welcome

2 Presentations

3 Demonstrations

4 Summary

Before we go into the details....



THANKS



PJ28 Overview

Founding Members



Background

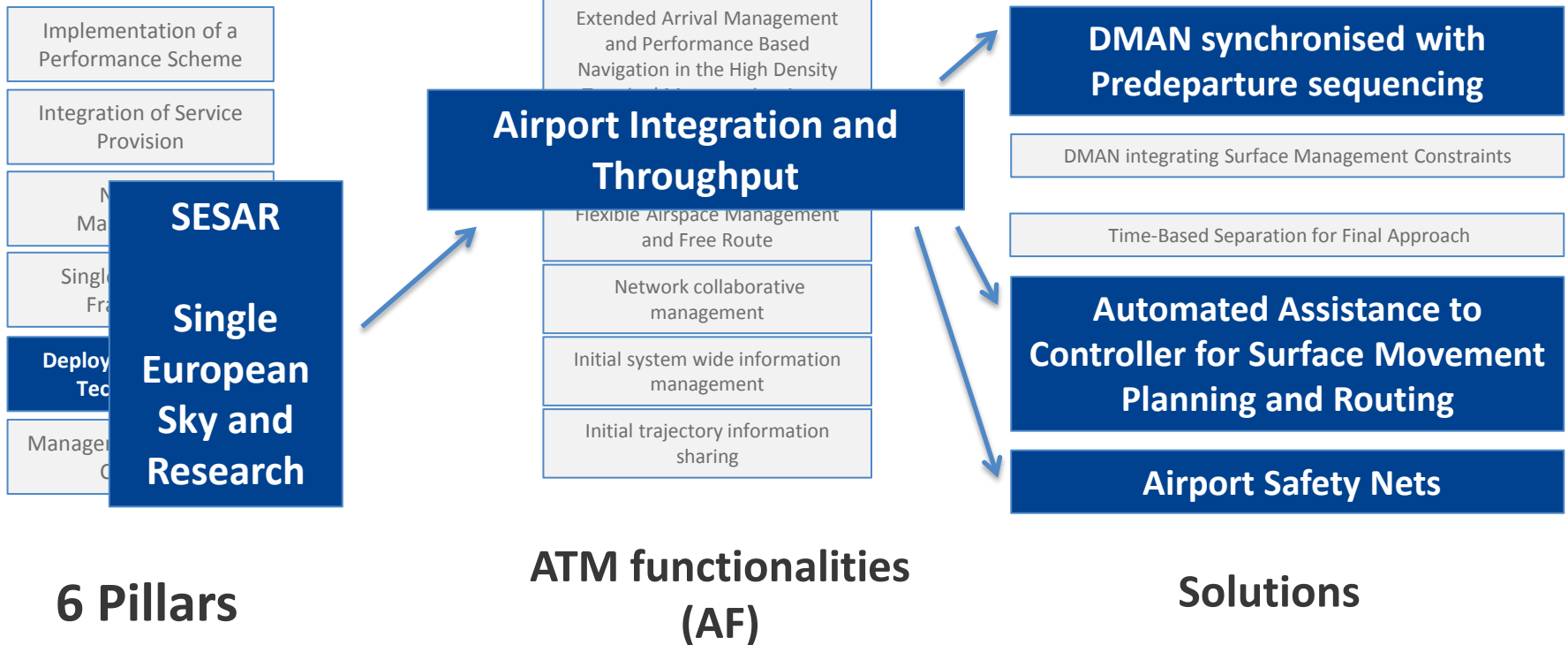


EU

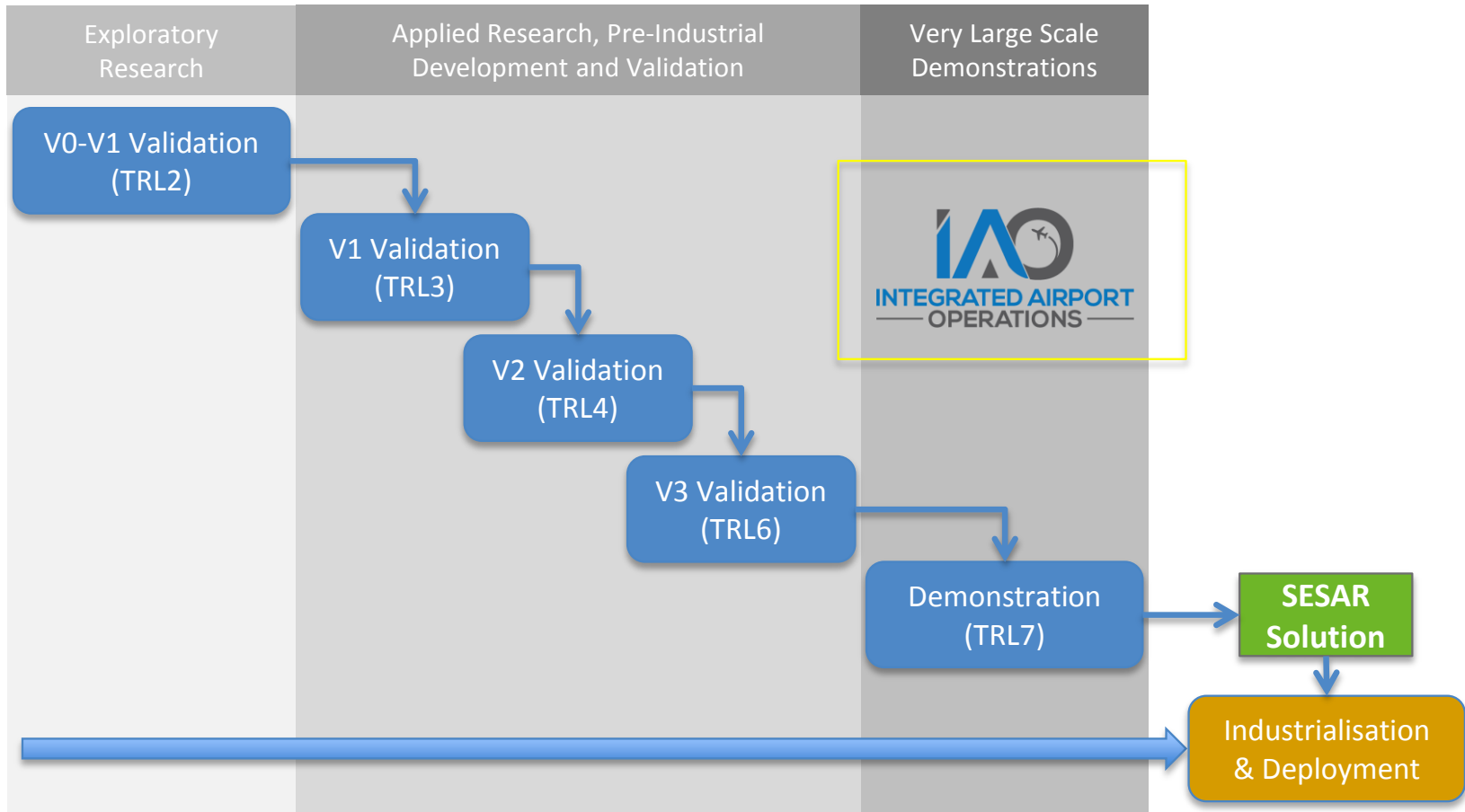
Single European Sky
(ATM System for Europe)

COMMISSION IMPLEMENTING REGULATION (EU)

No 716/2014 of 27 June 2014 on the establishment of the **Pilot Common Project** supporting the **implementation** of the European Air Traffic Management Master Plan



Position of the VLD



TRL7

System prototype demonstration in operational environment

Scope



*...plays an active role in the de-risking of the later deployment phase by demonstrating the operational and technical readiness of the **SESAR 1 solutions.***

Its aim is to show the benefits of Air Traffic Management (ATM) solutions developed in SESAR 1 in an operational environment and to ease their industrial deployment.

Goals



Technical Level

- Connect to operational systems
- Run the solutions with live data
- Adapt the systems to local procedures

Operational Level

- Operate the solutions in real life scenarios
- Get feedback from the controllers on usability

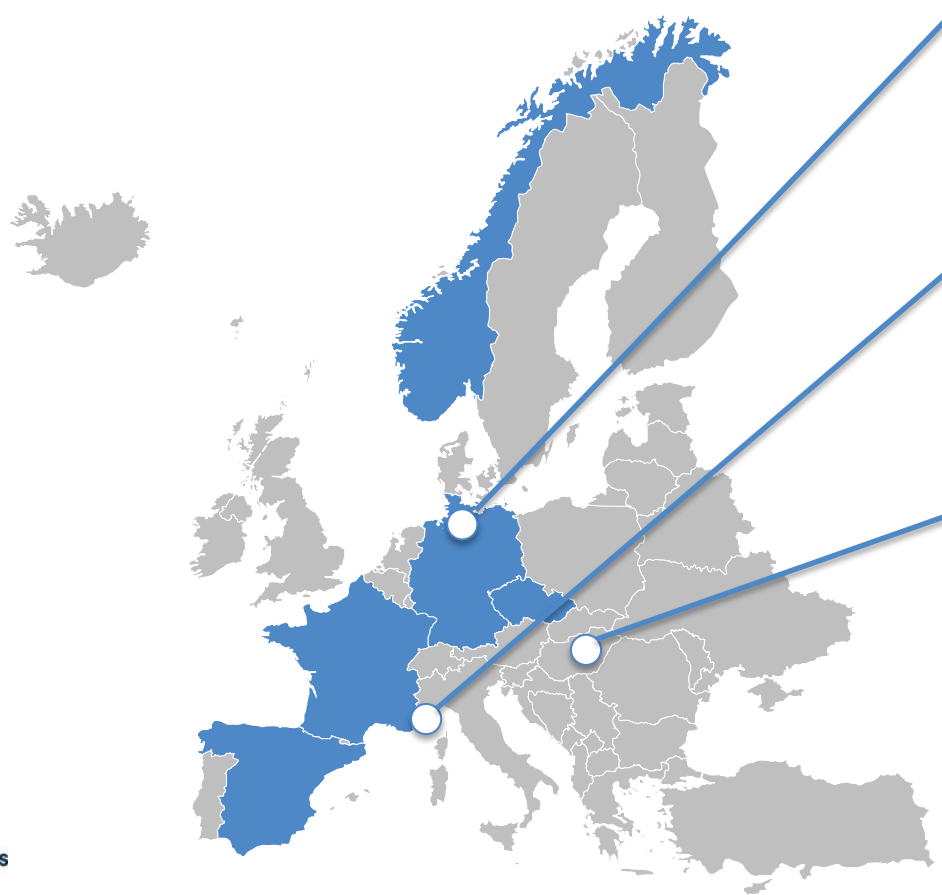
Project Partner / Testsites



Honeywell

indra

AIRBUS



Hamburg



Nice



Budapest



Onboard Traffic Alerts



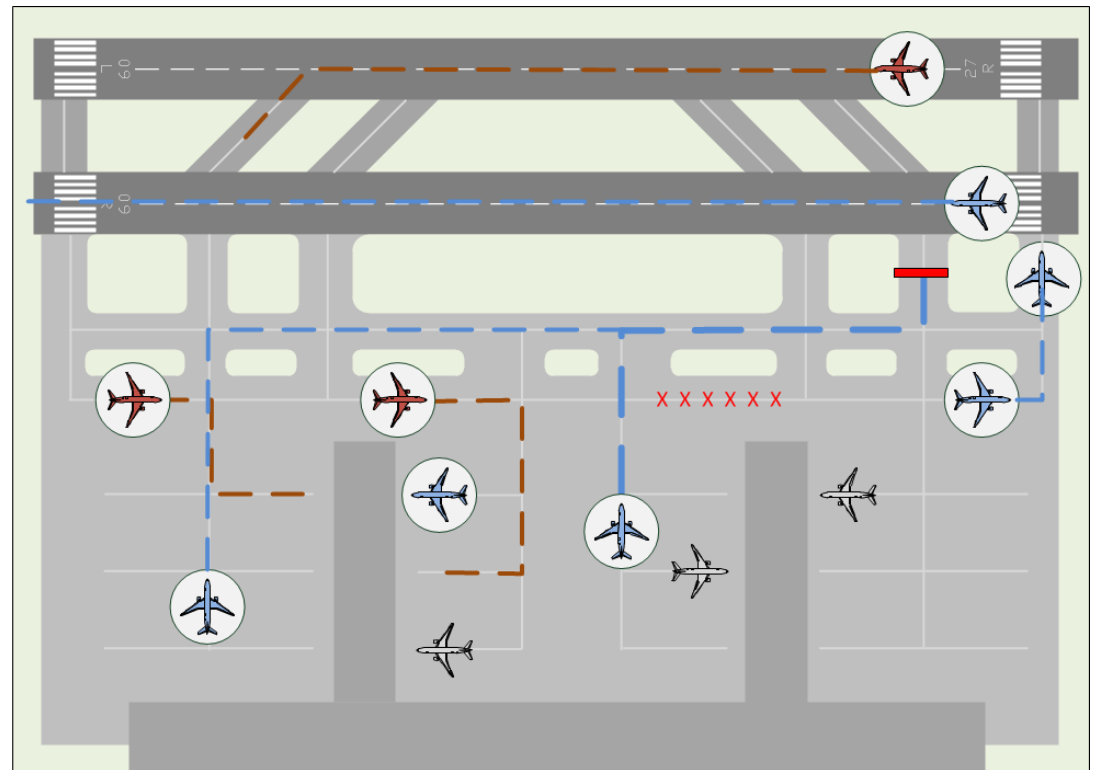
Automated Assistance to Controller for Surface Movement Planning and Routing

#22

- Improved predictability
- Enhanced safety
- Increased capacity
- Improved taxi times resulting in reduced fuel burn



- Generate routes for each aircraft
- Use flight plan data and actual traffic situation
- Route display and controller interaction
- Calculate taxi Times



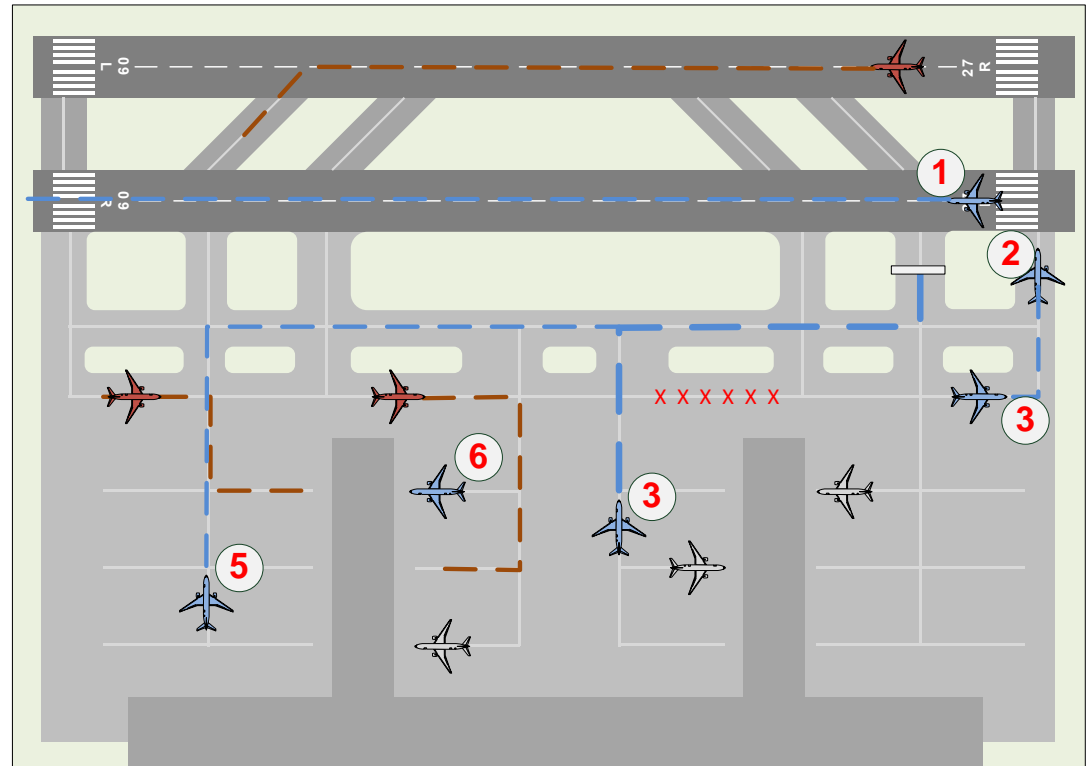
Pre-Departure Sequencing supported by Route Planning

#53

- Reduced waiting time at the runway holding point
- Increased accuracy of taxi time-out predication and hence take-off time predictability
- Provision of a more stable pre-departure sequence



- Optimize traffic flows to the runway
- Use calculated taxi times instead of static data
- Provide a more stable sequence at the runway



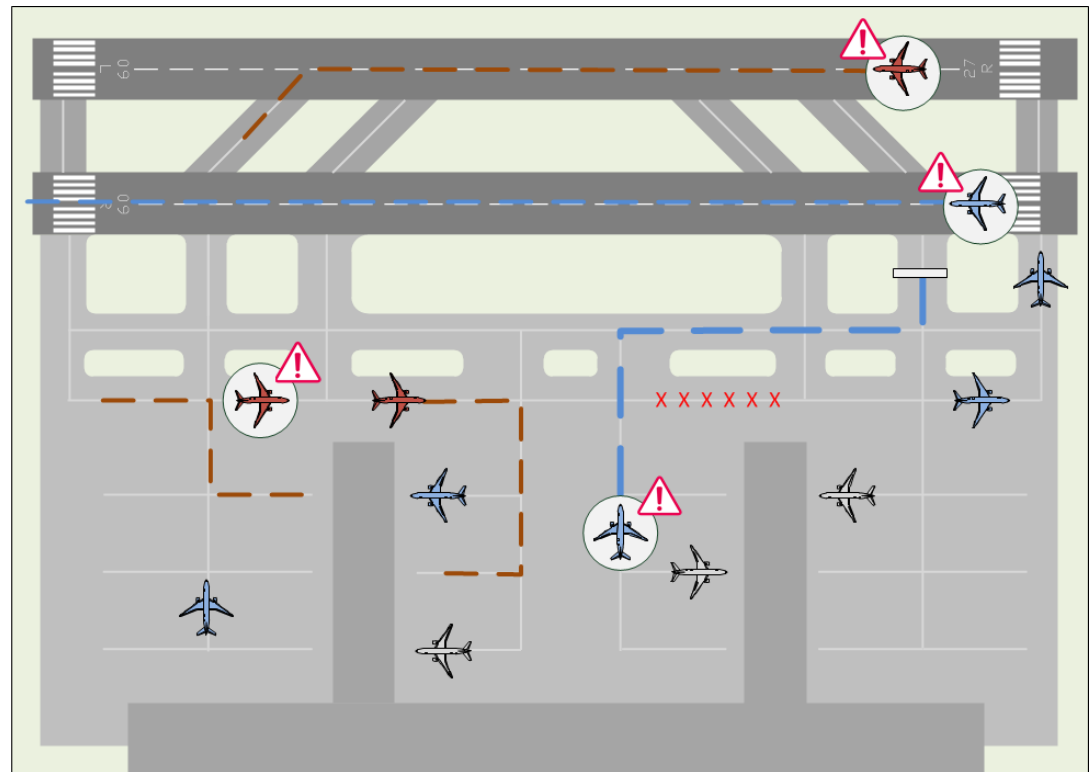
Airport Safety Nets for controllers: conformance monitoring alerts and detection of conflicting ATC clearances

#02

- Increased situational awareness
- Improved safety in airport operations



- Additional Safety Nets based on electronically available instructions
- Available routes are used for deviation detection
- Avoid conflicting clearances before issued



Where we are...



- Technical installations have been prepared at the test sites
- Exercises have been conducted in spring this year
- Evaluation and assessment is ongoing – Preparation of the DemoReport is under way
- Project will be closed February 2020

The day continues...



Presentations		12:30 - 14:15
	Nice	Christelle Pianetti (DSNA)
Break		
	Budapest	György Balogh (Indra Navia)
	Hamburg	Anne Papenfuß (DLR) Markus Brachner (SINTEF)
Demonstrations		14:15 – 16:45
Systems in ACC		Continuously
Contingency room		6 Groups – 25 min each
Summary		16:45 – 17:00