



Optimised Runway and Airport Capacity

PARTNERS



This project has received funding from the SESAR Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement 731781



Real time simulation in Stockholm-Arlanda environment performed by LFV (COOPANS).



Watch a film about the project.



Utgåva 1.0 2019.11.28



Integrated Runway Sequence Function

Traffic Optimisation on Single
and Multiple Runway Airports



Optimised integration of Arrival and Departure flights on single and multiple runways resulting in a more efficient planning and environmentally friendly airport with optimised capacity.

Reduced queuing time at runway hold and in the air, provide savings with lower fuel consumption and leads to lower carbon dioxide emissions.

For multiple runways the Integrated Runway Sequence Function provide options for balancing of Arrival/Departure flights between the runways before Arrival flights top of decent. This will ensure maximised throughput of Arrival and Departure flights at the airport.

Enhanced early planning and optimised management of Arrival/Departure flights provide reduced cost for Airspace Users, optimised capacity for Airport Operator and improved predictability.

Integrated Runway Sequence

- Optimising Arrival and Departure Sequence
- Balancing of flights between runways
- Reduced environmental impact
- Optimised Capacity

Traffic Optimisation on Single and Multiple Runway Airports

STAKEHOLDER BENEFITS

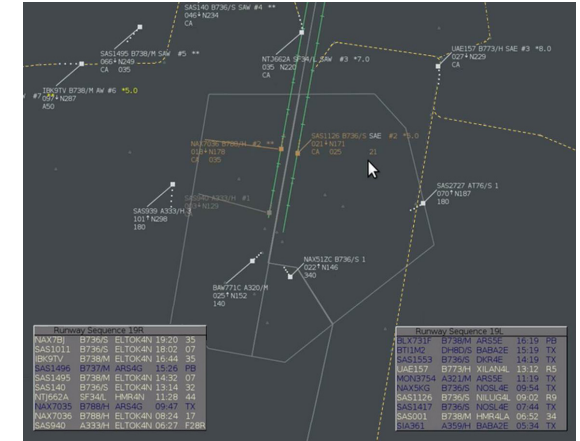
- Improved predictability for ATC
- Optimised capacity for Airport Operator
- Reduced cost for Airspace Users

ENVIRONMENTAL BENEFITS

- Reduced queueing
- Lower fuel consumption
- Lower carbon dioxide emissions

This SESAR concept is validated at a number of European airports; Stockholm, Rome, Geneva and Barcelona.

Integrated Runway Sequence Function ensure quality in information exchange and increased collaboration between ATC, Airport operator and Airspace users.



Real time simulation in Stockholm-Arlanda environment performed by LfV (COOPANS). Integrated Runway Sequence for optimisation and balancing of arrivals and departures on single and parallel runways.

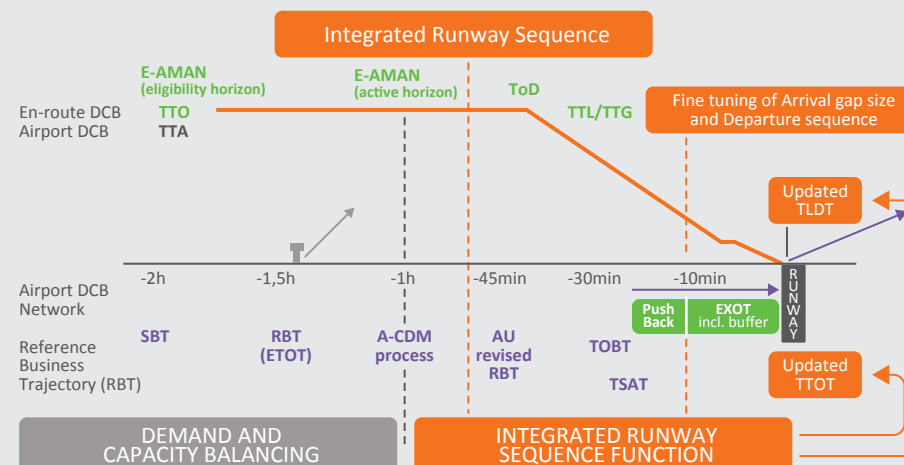
06:41	• SAS025	B738/S	HMRALA	TL06:41
06:40	• NAX803	B736/S	ARS5E	TS06:26 +1
06:39	• SAS002	A321/M	NOS4L	TL06:39
06:38	• IBK071	B738/M	DKR4E	TS06:25 0
06:37				
06:36	• SAS128	B736/S	NOS4L	TL06:36
06:35				
06:34	• SAS4220	AT76/S	NOS4L	TL06:34
06:33	• SAS1129	B736/S	NOS4E	TS06:20 0
06:32				

INTEGRATED RUNWAY SEQUENCE IN DMAN

Arrival SAS025 replanned to runway 19L.

Departure NAX803 replanned to runway 19L.

INTEGRATED RUNWAY SEQUENCE – SESAR OPERATIONAL CONCEPT



The Integrated Runway Sequence is planned before Arrival flights top of decent and linked with Airport CDM procedures for departures.

Fine tuning of Arrival and Departure target times is provided to ensure efficient runway throughput.