



AOP25 — De-icing management tool

The objective is addressing a de-icing management tool to be used on airports with an Airport Collaborative Decision Making (A-CDM) implementation, during de-icing conditions.

It aims at improving the predictability of aircraft de-icing operations by increasing the accuracy of information related to when the procedure is going to take place, how long it will take and when the aircraft will be ready to taxi for departure, which is currently calculated at best by predetermined estimates. The concept envisages that de-icing operations are no longer characterised by the A-CDM as 'adverse conditions', i.e. a state that is in need of collaborative recovery procedures, but rather a part of normal operations in the winter period. The de-icing process can therefore become predictable under certain weather conditions and treated as a regular procedure in normal operations.

The implementation of the objective allows for the scheduling and monitoring of de-icing operations by addressing two key functions:

- The first of which is to accurately estimate the duration of the de-icing and/or anti-icing procedures for a given airframe. This elapsed time is dependent on three parameters: the aircraft type, the prevailing weather conditions at the airport during the aircraft's visit and the number of de-icing rigs used for the application of de-icing and anti-icing fluids.
- The second function is to calculate a de-icing sequence that optimises available resources and allocates them to slots in a timeline while taking into account the constraining variables that limit how the problem can be optimised. For on-stand and after-push operations de-icing rigs are assigned to these slots, while remote de-icing considers the track availability at the designated location, i.e. the de-icing pad.

NOTE FOR MILITARY AUTHORITIES: It is the responsibility of each military authority to review this Objective IN ITS ENTIRETY and address each of the SLoAs that the military authority considers RELEVANT for itself. This has to be done on top and above of the review of "MIL" SLoAs which identify actions EXCLUSIVE to military authorities.

Edition	2022
Stakeholders	Air Navigation Service Provider / Airport Operator
Type	SESAR
Scope	Local/Airport
Status	Active

Context

Related Elements



Applicability Area(s) and Timescales

Applicability Area: (Subject to local need)

Timescales	From	By	Applicable to
IOC used for Analytics functioning only - not for implementation planning	01-07-2022	-	
FOC used for Analytics functioning only - not for implementation planning	-	31-12-2030	

Links to ATM Master Plan Level 2

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Links to SESAR Solutions

Code	Title	Program	Related Elements
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No record found

Links to PCP ATM Sub-Functionalities

Code	Title	Related Elements
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No record found

 ICAO Block Modules: No associated data

References

Applicable legislation

None

Applicable ICAO Annexes and other references

None

Deployment Programme 2022

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Operating Environments

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Expected Performance Benefits

Safety	-
Capacity	Better use of existing airport capacity.
Operational efficiency	Increased predictability and flexibility of airport operations (integration of airport operations with the network).
Cost efficiency	-
Environment	More efficient airport operations.
Security	-

Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
ASP01	Adapt the A-CDM platform to exchange information with the de-icing management tool			
ASP02	Implement procedures for the use by ATC of the enhanced A-CDM information			
ASP03	Safety assessment			
ASP04	Training			
ASP05	Operational use			
APO01	Implement a de-icing management tool			
APO02	Implement procedures for the use of the de-icing management tool			
APO03	Safety assessment			
APO04	Training			
APO05	Operational use			

Supporting Material

Title	Related SLoAs
SJU - SESAR Solution 116: Data Pack for De-icing management tool https://www.sesarju.eu/index.php/sesar-solutions/de-icing-management-tool	APO01, APO02, APO03, APO04, APO05, ASP01, ASP02, ASP03, ASP04, ASP05

Consultation & Approval

Working Arrangement in charge	Airport Operations Team (AOT)
Outline description approved in	-
Latest objective review at expert level	-
Commitment Decision Body	Provisional Council (PC)
Objective approved/endorsed in	-
Latest change to objective approved/endorsed in	-