

AIRPORTRESOURCE MANAGER DE-ICING MODULE

IMPROVES PREDICTABILITY BY BETTER MANAGING DE-ICING RESOURCES

Typically, airports deal with adverse conditions with first-come, first-served processes. But in airports that work close to their maximum capacity, the impact on many of their stakeholders can be huge as well as costly. By ameliorating predictability, SITA can help airports to improve management of their de-icing process and make better decisions.

ISSUES

Limited de-icing resources

If de-icing resources are limited, the optimized use of such resources is fundamental to reducing overall delays.

No advance visibility on delays

Airlines have to decide whether to cancel or maintain a flight, based on delays and their impact on aircraft transfers and turnaround. This proves even more difficult if the airlines have no advance visibility on airport delays overall.

Re-de-icing

When the time interval between completion of de-icing and take-off exceeds a specific threshold, the aircraft needs re-de-icing.

SITA SOLUTION

The de-icing module, which is a feature of AirportResource Manager, is a proven application that has a:

- Forecast view which provides real time visibility of the required de-icing capacity which in turn helps airports to cope with the demand and the expected delays in case of over-demand.
- Planning view which enables airports to manage both on-pad and on-stand de-icing resources, thus giving the operators indications on how to positively impact overall performance.
- Full integration with the departure manager (DMAN) and pre-departure sequencer (PDS) modules help airlines avoid unnecessary waiting times at the de-icing pads/stands and in front of the runways, thus eliminating the risk of re-de-icing.

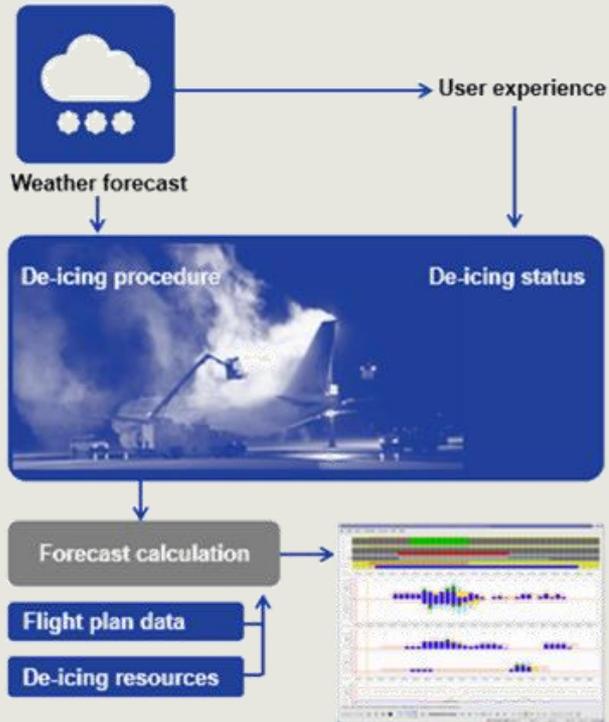
BENEFITS

- Allows airports to make best use of de-icing resources
- Enables optimum recovery during adverse conditions
- Increases predictability in adverse conditions
- Helps to reduce fuel consumption
- Reduces the need for re-de-icing
- Enables the airport to engage in collaborative decision-making (A-CDM) certification (step 4: adverse conditions management)

20M EUR saved

by Zürich Airport in one winter season thanks to the use of SITA's de-icing module

HOW DOES IT WORK?



- Real time information
- Increased predictability
- Integration with third parties
- Part of the AMS portfolio

SOLUTION COMPONENTS

The de-icing module is a feature of the Airport Management Solution (AMS) portfolio and it leverages SITA's airport operational database (AirportCentral) framework to manage the flight data, integrate with third party systems and provide KPI measurements in real time.

Impact prediction on resources

The system can integrate weather forecast information to include the predicted impact of weather conditions on de-icing and other airport operations.

Planning

The planning section of the de-icing module allows airports to manage on-pad and on-stand de-icing resources by assigning the de-icing modality to one location or another, based on the resources available and with the objective of improving the overall performance.

Forecast view

Visibility of the impact of de-icing processes on overall delays and the airport's performance.

Decision support

Helps to identify which flights should be considered, with a view to optimizing de-icing resources.

CASE STUDY

SITA's de-icing module is the first operational de-icing application available on the market. The application does not just enable monitoring of the airport's de-icing resources and activities, it also facilitates pre-tactical and tactical planning as well as situational awareness. This results in huge fuel savings, due to reduced taxi times, improved utilization of the de-icing pads, and increased awareness and management of upcoming delay situations.

During Zürich's coldest winter in 2012/13, the use of SITA's de-icing application resulted in a 50% higher throughput on the de-icing pads, despite higher precipitation and longer de-icing times; the outcome was only a marginal decrease in airlines' on-time performance. Hundreds of flights left Zürich (ZRH) Airport on time, and there were no cancelled flights, due to the improvements delivered by SITA's de-icing application.

Based on public information and experience at ZRH Airport, the use of the application during 2012/13 alone generated savings to airlines and ground handlers in excess of fifteen to twenty million Euro.

For more information please contact us at info@sita.aero

SITA

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