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Media Release

SWISSPORT WINS AWARD FOR DYNAMIC DELAY PREDICTION TOOL

Swissport International AG, together with its partner Finnair, has been awarded "Best Handler-Airline Innovation" by the industry's leading magazine Ground Handling International. The global leader of airport ground services and cargo handling was honored for a new machine-learning tool, which helps to dynamically predict aircraft delays at Finnair's hub in Helsinki-Vantaa.

The machine-learning algorithm, developed by the Finnish IT company Bluugo, enhances efficiency on the ground by detecting resource constraints long before an aircraft is airborne. For its prediction, the new software relies on a variety of factors that influence the punctuality of flights. In addition to weather data en-route or at the destination, it includes data from air traffic control and from airport operators. Aircraft rotation delays are also considered for subsequent flights.

After the initial calculation of an estimated arrival time (ETA), the algorithm regularly checks various parameters and adjusts ground resource planning accordingly. Currently, the system can predict the ETA for Finnair in Helsinki with an accuracy of six minutes. With each flight the algorithm learns for future calculations and becomes more precise. Considering delays of transfer passengers arriving to Helsinki, departure delays are also predicted for a more efficient resource allocation.

Thanks to the new solution, the Swissport Operations Control Center has an extended planning horizon and can more efficiently allocate staff and ground support equipment, like for example push-back tractors and high-loaders. This brings advantages, especially when faced with off-schedule flights. The ability to react earlier makes the entire service chain more reliable for its customers.

"We are delighted that, together with our partners at Helsinki Airport, we advanced this project from an idea to a live application in just a few months," says Florian Eggenschwiler, Head of Innovation at Swissport International AG. "This innovative tool will help us be an even more reliable airline partner".

In the coming months, further data streams are to be connected to the tool to further increase accuracy. Swissport plans to roll out the tool at various airports worldwide in 2019.

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