



Collaborative Decision Making at Amsterdam Airport

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Weather has a large impact on operational management at Amsterdam Airport Schiphol. Because of the complicated runway system, accurate wind information is crucial. Also visibility and cloud base play an important role in case conditions are met that affect the airport capacity.

Two years ago KNMI decided to launch a weather dependent deployment of a dedicated forecaster morning shift at the airport. Every evening around 8 p.m. an air-traffic controller and one of our forecasters decide whether meteorological assistance will be needed during the inbound peak the next morning. If so, a forecaster provides the Air Traffic Control (ATC) supervisor with details on the local weather phenomena in the nowcasting range and short-term forecasting range. From 5 a.m. in the morning our forecaster is at his desk just next to the ATC supervisor. Face to face contact between forecaster and ATC supervisor ensures quick and fruitful communication. In the very short range, our forecaster helps the ATC Supervisor to translate probabilities where possible into deterministic statements, or he helps him to make the smartest steps on regulation of inbound traffic, considering the existing uncertainties. Every tiny change in point of view of the forecaster is discussed immediately with the ATC supervisor. In this way, the operational management is optimised and the airport capacity is maximized. In several cases hundreds of 'delay-minutes' could be cancelled as a result of the forecasters' actions, avoiding substantial costs for airlines.

Later in the morning, a video conference is set up where forecaster, ATC supervisor, airport authorities and KLM-AirFrance airline company meet. The forecaster gives the latest details on the forecast local weather events, pinpointing at decision thresholds of his audience. The other partners translate the forecast details to their own decisions, while discussing risks and uncertainties with the forecaster. This collaborative deci-

sion making is very satisfactory for all parties. State of the art nowcasting is used in a very effective way at Amsterdam Airport.

In this talk I will discuss the effects of this cooperation and I will give a few examples.