

Decision Support System for Airline Operation Control Hub Centre (DiSpAtCH)

Initial research results and developed framework

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Abstract— If the global air traffic increases again over the next years, it will lead to additional stress on airports, air traffic controllers, and airlines. From an airline perspective, Operation Control Centre (OCC) must prepare them to handle not only more aircraft but also to solve operational disruptions in a much more complex environment than today. Based on research on Artificial Intelligence, Machine Learning, and the state of the art in Airline Operation Control Centre Research, a framework for a decision support tool (DST) is developed. The proposed DST (DiSpAtCH) aims to reduce the time, which is needed to find a feasible solution for a specific disruption situation. Furthermore, the feedback of the DST should increase the situational awareness of the current disruption situation and help the people in charge during the disruption management process within an OCC.