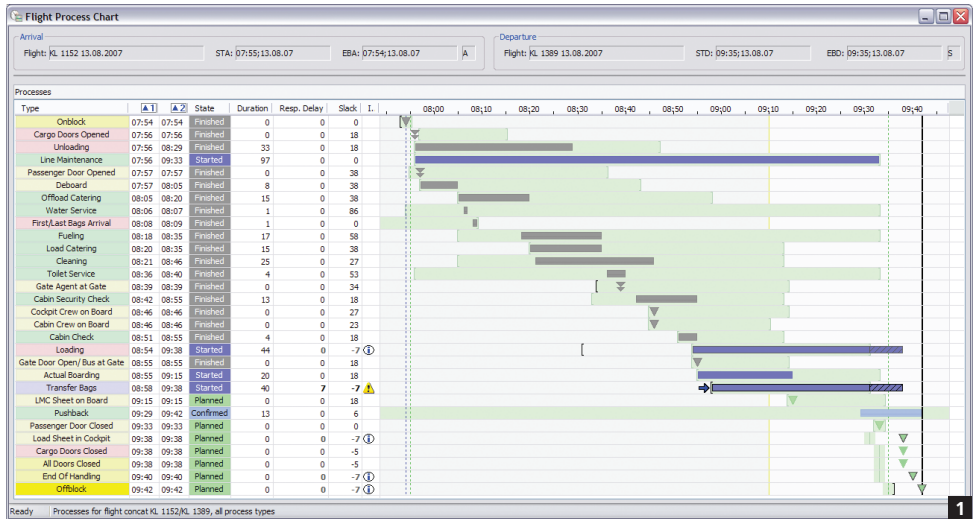



PROACTIVE HUB MANAGEMENT

KLM REALISED ITS CHALLENGING VISION OF AN OVERALL TRANSPARENT HUB OPERATION AT ITS SCHIPHOL AIRPORT HUBCONTROL CENTER



Despite all built-in buffers and safeguards, 15 to 30 percent of all European flights incur a delay of 15 minutes or more

 The many steps needed to plan and carry out commercial air transport on an industrial scale are staggering in their complexity and the number of individuals involved.

It is no wonder that countless causes can arise to delay a flight. In fact, despite all built-in buffers and safeguards, 15 to 30 percent of all European flights incur a delay of 15 minutes or more. Publicly available sources permit a reasonable and conservative monetary quantification of these delays. They cost each of the larger European airlines between Euro 100 million and Euro 170 million annually. The same models estimate about one fourth of this cost to be related to ground handling operations.

The efficiency of any operations center in the airline business is directly correlated to the skills and experience of its decision makers and, of course, to the quality and timeliness of the information available to them. The specialists chosen for these decision-making positions are usually a special

breed – experts in their fields, accustomed to consistently making on-the-spot decisions, calm under pressure and highly communicative. In their hubs they have seen it all. They recognise the specific circumstances under which the concerted work of perhaps several thousand airport employees is bound to become less efficient. Very frequently their problem is not having all relevant information available when they need to make a decision. Their work is forced to become a reaction to situational developments, rather than one of detailed foresight and tactical planning.

When KLM introduced its Hub Control Center at Amsterdam Schiphol Airport, it soon realised that it would need a comprehensive support system for its proactive hub-steering intentions. With KLM having shared a decade-long successful business relationship with Inform, both companies entered into a development partnership for a system that would, naturally, be called HubControl. KLM provided its turnaround process expertise. Inform applied its research and development skills to create a new product with a twofold aim – to fulfil KLM’s requirements and create a generic product. The rest was the story of a successful design project.

In the end the result was a system that monitors the concatenation of correlated handling tasks for turnaround flights as well as single arrivals and departures, identifies and shows the critical path and, in doing so, supplies all decision-support information needed by the Hub Control Center.

The system combines all relevant flight-time information and gives overall operational transparency including all handling processes. Potential and actual delays and their reasons are detected in advance, and delay durations are calculated automatically,

1. Late arrival of transfer bags and the subsequent concatenation of processes

thus providing realistic estimated times of departure. Alerts for predictable irregularities in the handling process warn the handling process manager, who may then contact the responsible parties on the spot to agree on a resolution, having in sight the impact that the various options would have on specific tasks, processes and overall timely operation.

Further information provided by the system includes boarding progress information, transfer information on passengers and luggage before they arrive, handling team information and the contents of all flight-related IATA telex messages.

“The greatest benefit of the HubControl system is the transparency that we gain. The Hub Control Center has a complete graphical overview of the processes now. We can work more proactively based on the alerts that signal future problems, and not reactively when the problems actually occur,” says Ferry van Huut, program manager at KLM.

HubControl is also the keystone for a solution that covers the whole planning horizon, starting from the aircraft arrival management, through the control of the turnaround, to the departure management.

Inform is a team of raised-in-industry ICT professionals that researches, develops and delivers cutting-edge software solutions to improve airport and ground handling logistics operations and provide consulting services. Inform’s flagship suite of products, GroundStar, is used by over 50 organisations in more than 200 airports worldwide to enhance control of ground operations, increase resource productivity, reduce operational costs and improve quality of service. Forming part of the GroundStar suite, HubControl was developed to become the focus of information condensation for any centralised steering unit in the airline industry. It builds a solid roof across the myriad of deployment tasks managed in real time by GroundStar systems, while being capable of integrating foreign systems and external information sources.

“Having built a set of systems to manage



resources in all areas of ground handling and provided them with the wireless communications tools needed to assure the proper distribution and collection of information, HubControl was a natural development to provide the necessary oversight to anticipate and resolve problems affecting the ground operation as a whole,” says Thomas Schmidt, director of Inform’s Airport Systems Division.

“It has been a very rewarding challenge to build this tool with the right subject matter expertise in our joint teams. We threw ideas at each other, filtered out the essentials and saw it developed and fine tuned to the full satisfaction of a highly skilled user group in a mission-critical environment,” says Gero Hoppe, project and HubControl product manager at Inform.

HubControl is also implemented, or in the process of implementation, by several other airports, airlines and ground handling operators around the world.

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