

Are you prepared for the future? Analyze and plan your airport facilities on strategic, tactical and operational level.

AIRPORT MARKET

The airport solutions are based on the simulation tools Enterprise Dynamics® and Pedestrian Dynamics® and offer modules for passenger simulation, baggage simulation, gate capacity simulation and logistics simulation. The modules can be used separately or in combination.

Challenges of airport simulation are for example traffic peaks and randomness related to

- Passengers (arrival time, check-in mode, baggage factor, no shows)
- Baggage (handling times, equipment failure, operator availability, no read & lost bags)
- Aircrafts (flight schedules, punctuality, weather conditions, transfer ratio)

The airport solutions are successfully used by:

- Capacity Managers (short term and long term capacity versus flows)
- Logistics and System Engineers (process and control changes)
- Engineers, Architects, Airport Planners and Consultants (designing new infrastructure)
- Operational managers

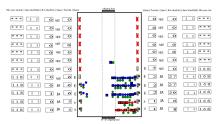
AIRPORT SOLUTIONS

The airport solutions of INCONTROL offer simulation & capacity management solutions of choice for all airport processes, such as:

- Landside (parking management, public transport)
- Airside (plane allocation, ground handling)
- Terminal (passengers, baggage handling)
- Cargo (warehousing, distribution, un-/loading)



Visualization in 2D and 3D



Check in strategy



Simulation model of baggage handling system



Pedestrian flow on an airport

BENEFITS

Simulation can help airports to answer extensive strategic, tactical and operational questions, such as:

Strategic guestions

- Do I have sufficient capacity in the next 5 years?
- Is the design of new infrastructure valid?
- What happens if we shorten connection times in the schedules?

Tactical questions

- How can I improve my capacity utilization?
- How good are my planning rules?
- Is my back up procedure working properly?
- Sensitivity analysis for new flight schedules

Operational questions

- How many employees do I need between 10:00 12:00 in "Hall 2"?
- What can I do to bypass a partial system breakdown?
- How can I train my employees without disturbing my operation?

EXPERIENCE INCONTROL

INCONTROL has developed simulation models to assess the effects of alternative planning strategies of checkin counter capacity at Amsterdam Airport Schiphol. Using these models, INCONTROL advised the airport on a number of planning strategies that minimize waiting times and use the available check—in counter capacity in an efficient way.

INCONTROL modeled a current and future situation for the terminals and analyzed pedestrian flows of Brisbane Airport. The models give valuable insights in the passenger flows throughout the terminal buildings. They enable the user to analyze bottlenecks, identify potential improvements and to perform what—if analysis and thus support the decision making process on operational, tactical or strategic level.

The project experience and knowledge of the INCONTROL developers and engineers are used for the ongoing development of the software. Together with the network of INCONTROL, which will be used optimally at all times and made available for every customer, INCONTROL offers state—of—the—art simulation solutions.