Classification of Existing Airport Operations Models Based on Queuing Constraints and Levels of Abstraction

Queue Constraints

- Micro views
- Meso views
- Macro views

Abstraction Level

- Check-In
- Baggage Security check
- Baggage Handling
- Boarding Pass Control
- Rest Room (WC)
- Longue
- Shop Area
- Passenger Movement in Departure Hall
- Market Share Analysis
- Terrorist Attack

Emergency Control

- Arrival Hall
- Custom
- Circulation-Corridor
- Ancillary Services
- Human Behaviour
- Passenger Movement in Departure Hall
- Future Terminal Capacity Demand
- Ground Transportation Services
- Maintenance Scheduling

New Airport Operations Chart model Using Different World Views

Queue Constraints

- Micro views
- Meso views
- Macro views

Abstraction Level

- Agent Based Simulation
- Discrete Event Simulation
- System Dynamic Simulation
- Mathematical Models

- Equipment Technical Support
- Market Share Analysis
- Terrorist Attack
- Emergency Control

- Airport Facilities Maintenance Scheduling
- Airline Marketing Strategy
- Ground Transportation Services
- Future Terminal Capacity Demand

- Aircraft Departure Process
Figure 6: Screenshot for Simulation Model run

Figure 7: Base Scenario Output View
Figure 8: Scenario 1 Output View

Figure 9: Scenario 2 Output View