



Active ATM Performance Management

Rapporteur: Wim Post
(Co-Chairs: Mark Hansen /
Christoph Meier)

This presentation:



- I do not pretend to be able to summarise the essence of 10 papers in 20 minutes so that you would be fully informed.
- It should get at least some of you to read some of the papers presented in this track even if you did not attend the presentation.
- Adds a bit of context around the theme of ATM performance management.

Baltimore 2005



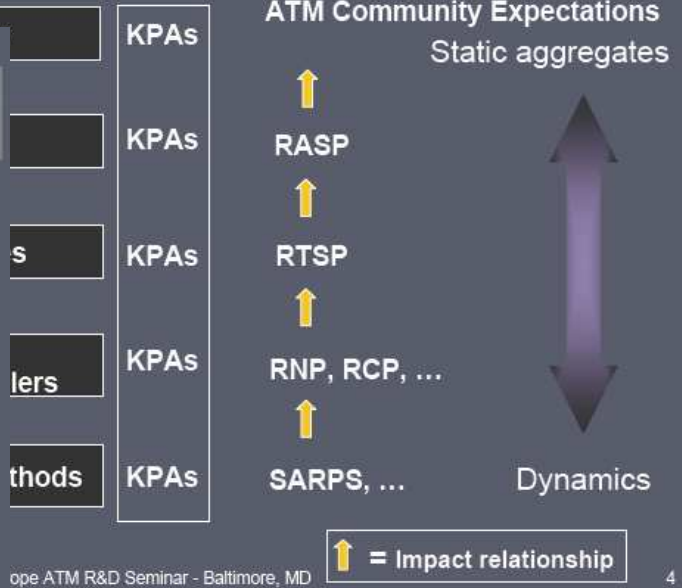
Layered Performance Management in ATM



Coverage of track papers



Level	1	2	3	4	5
KPA 01 Access and Equity					
KPA 02 Capacity		Red	Yellow	Red	
KPA 03 Cost Effectiveness	Red	Yellow			
KPA 04 Efficiency	Yellow	Red			
KPA 05 Environment	Yellow	Yellow			
KPA 06 Flexibility					
KPA 07 Global Interoperability					
KPA 08 ATM community Participation					
KPA 09 Predictability			Yellow		
KPA 10 Safety		Yellow		Yellow	
KPA 11 Security		Yellow			



open ATM R&D Seminar - Baltimore, MD

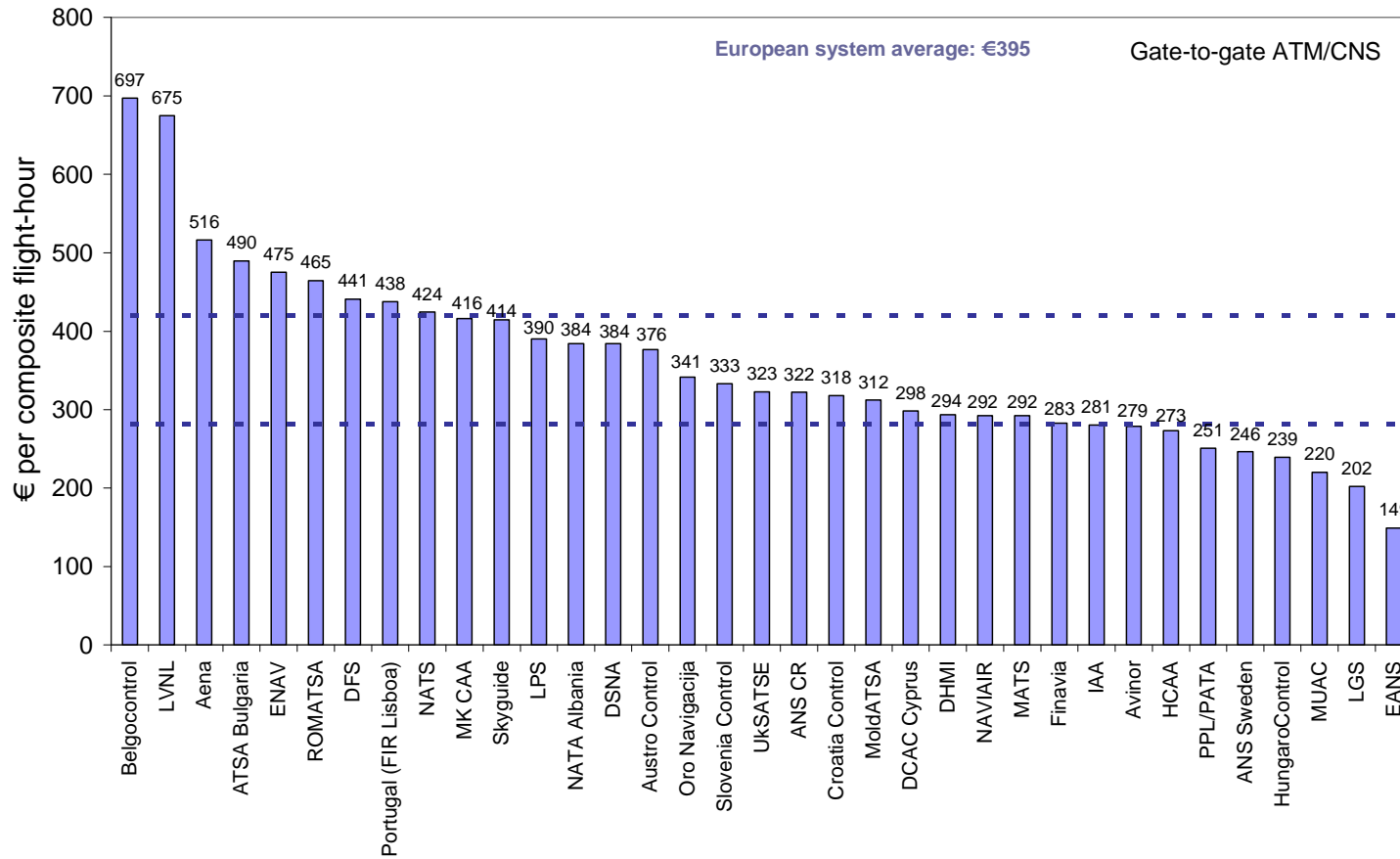
4

Active ATM Performance Management



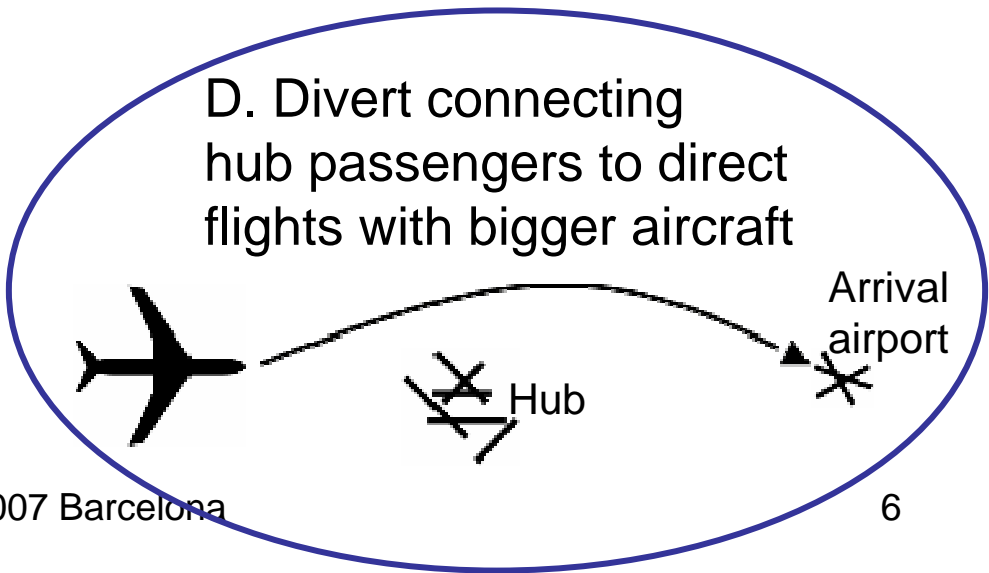
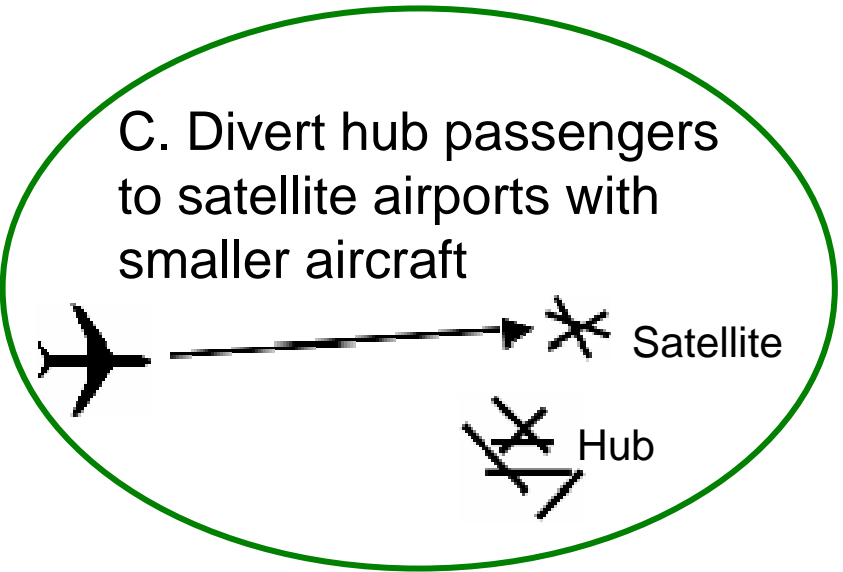
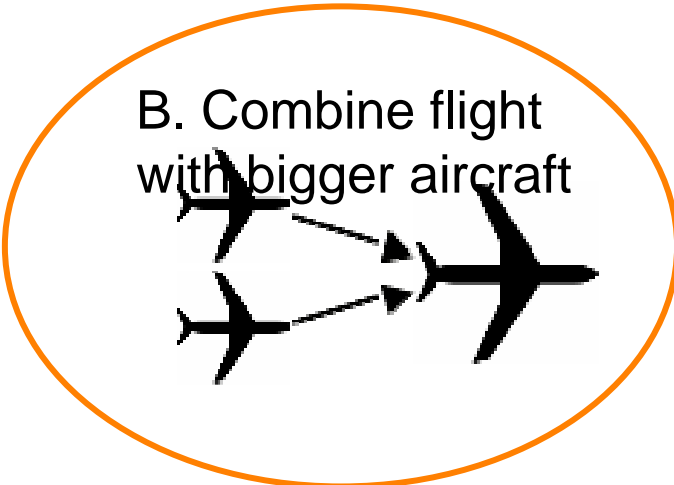
- **The call for papers:**
 - all elements of **performance driven process management** in the future ATM system respectively ATM business areas by means of **forecasting, monitoring, controlling** and **optimising** safety, efficiency, punctuality, cost effectiveness and environmental impacts of air transportation; assessment and mitigation of **uncertainties**; requirements and benefits of predictive versus reactive management of uncertainties; probabilistic and deterministic forecasting models and learning functions; uncertainty and **performance assimilated decision making**.
- What have you missed?

Paper 94: 5 Years ATM Cost Benchmarking

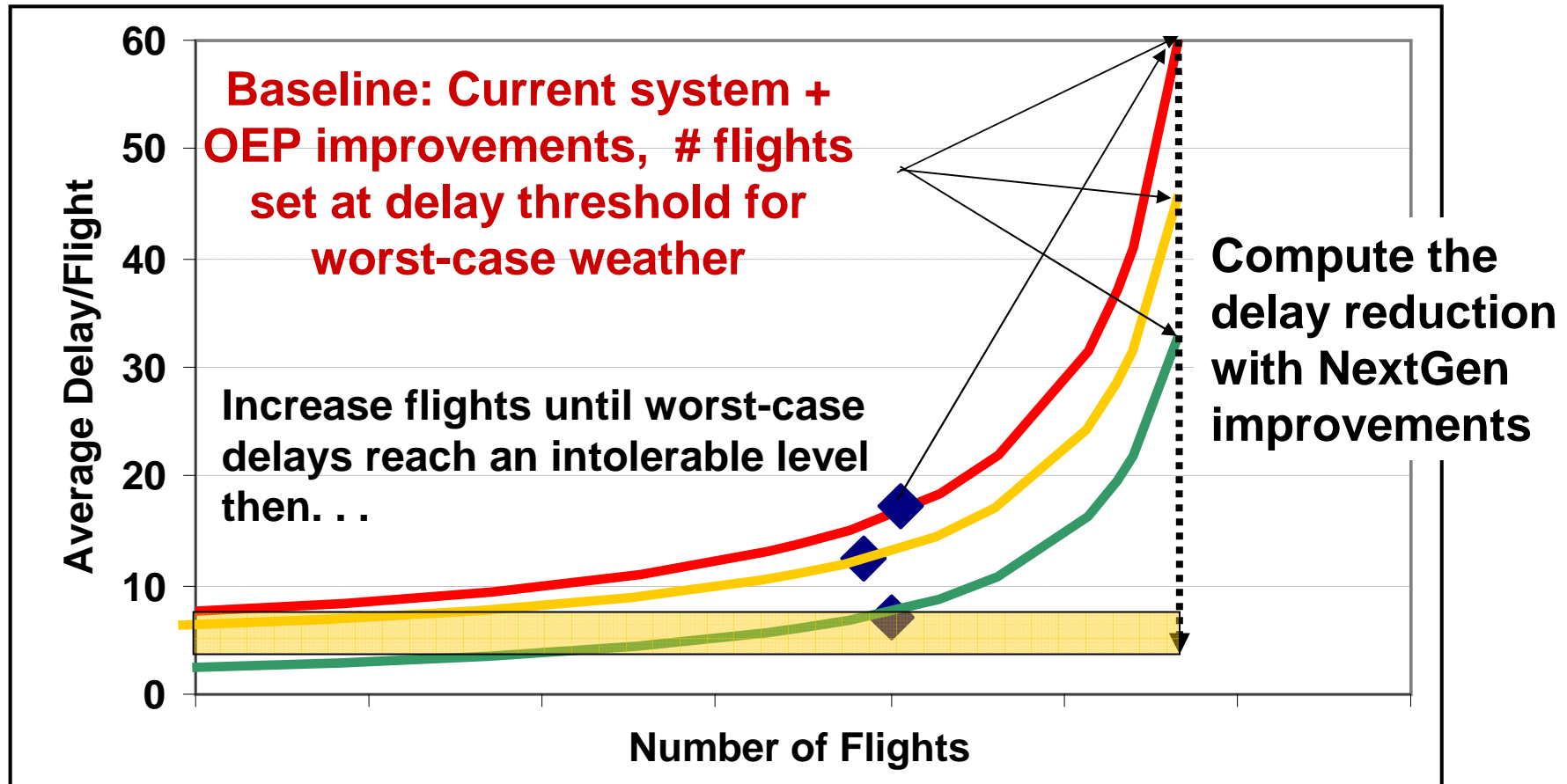


Factual indicator: cannot be interpreted as a measure of cost-inefficiency

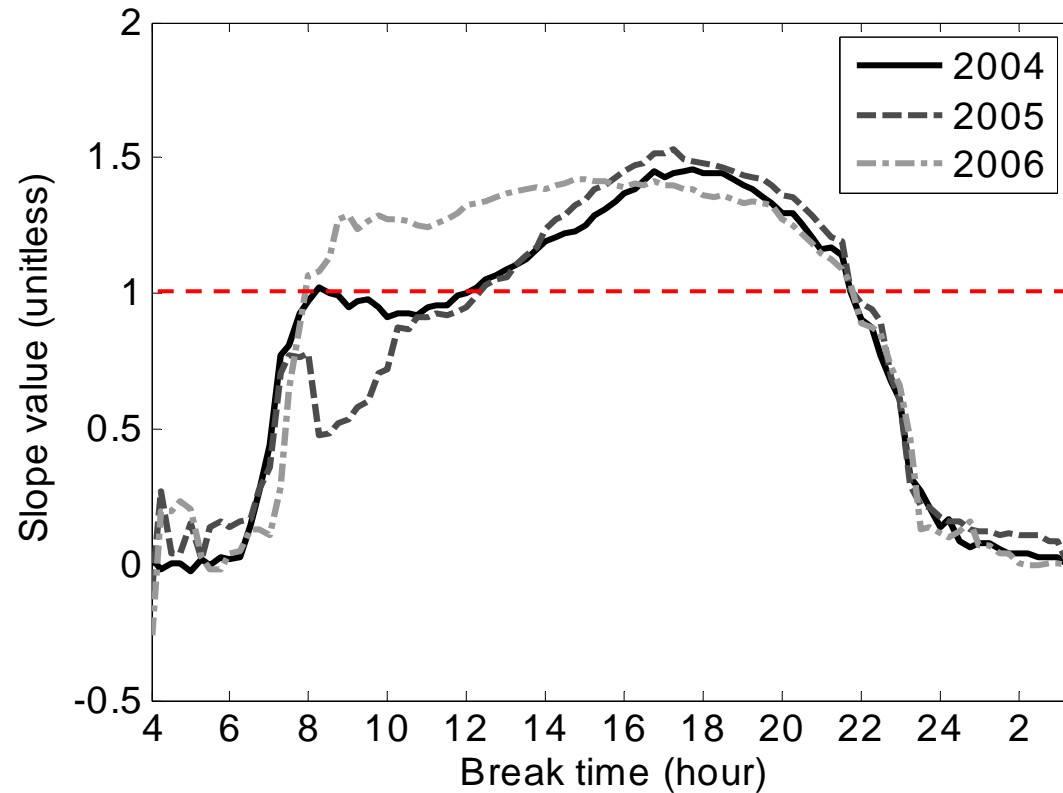
Paper 62:
Estimating capacity requirements ...



Paper 145: Evaluating NextGen performance

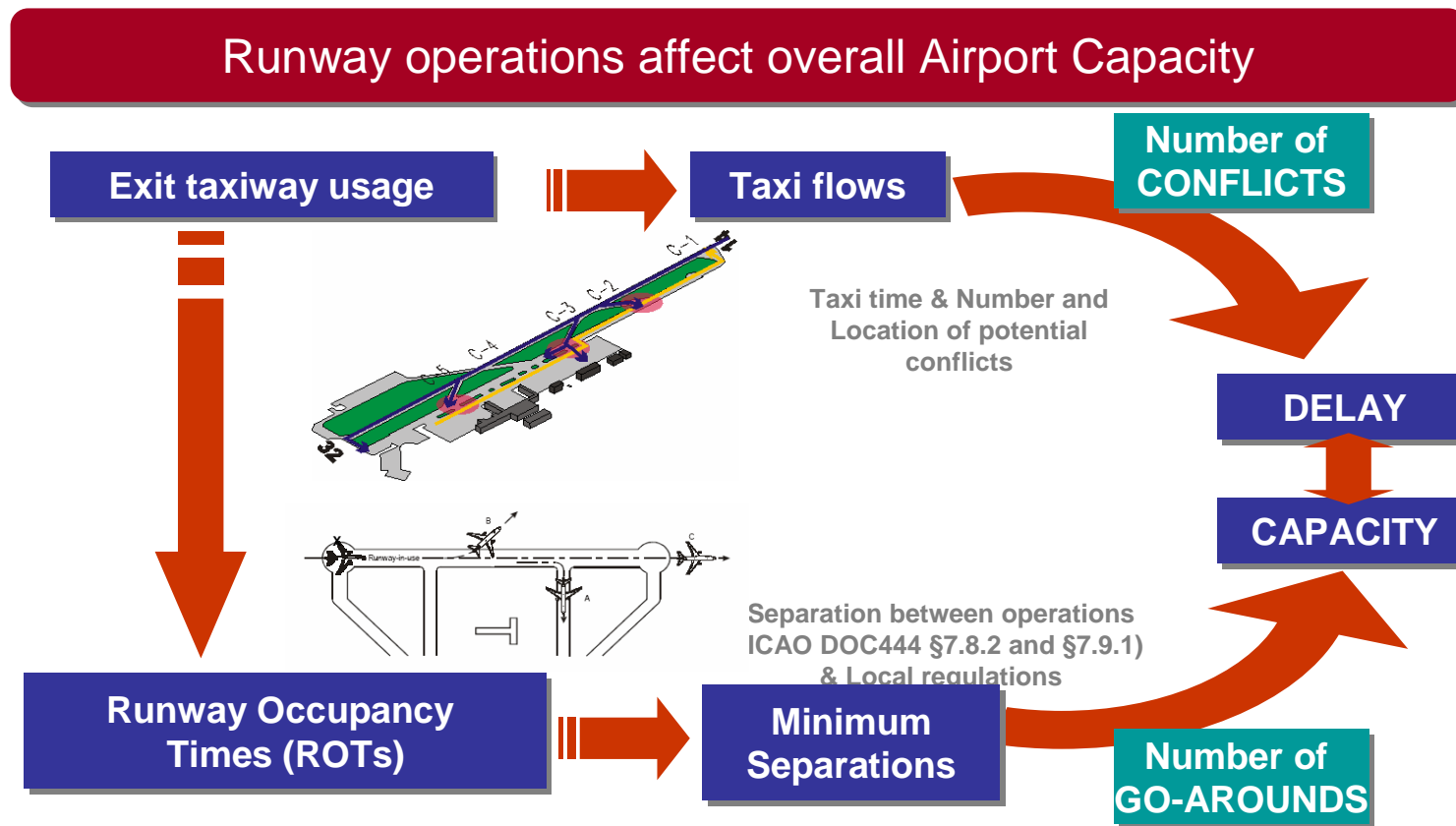


Paper 111: Delay Propagation – case studies

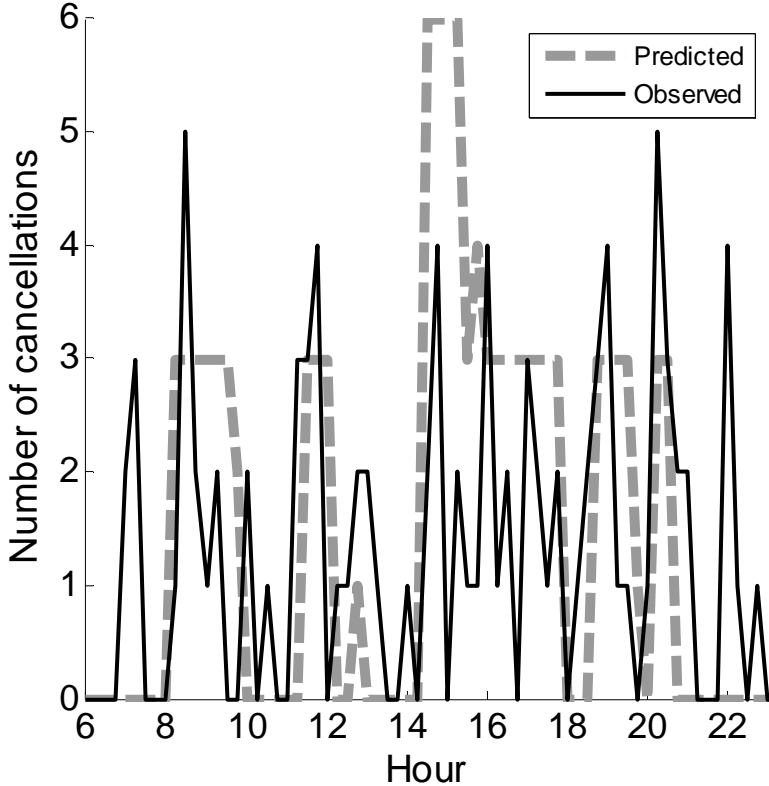


- Case Study: LaGuardia

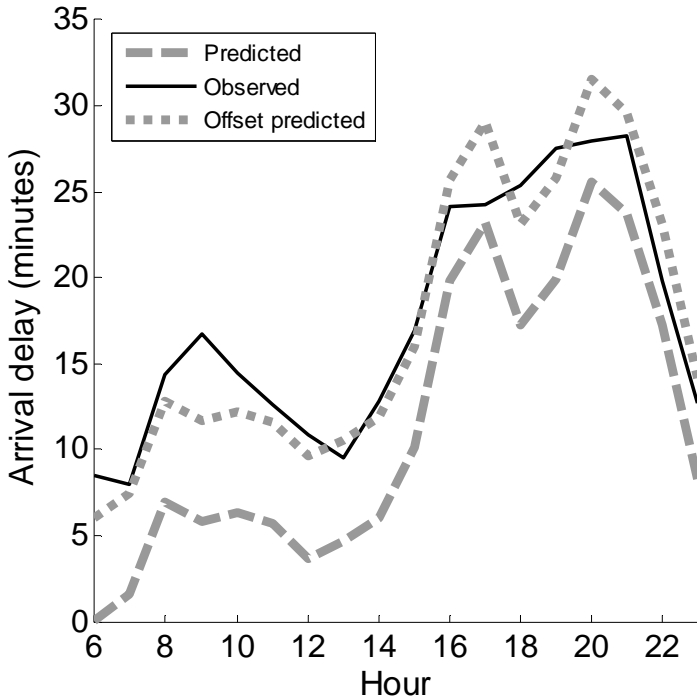
Paper 27: stochastic model to estimate ROTA



Paper 121:Calibrating aggregate Cancellation & Delay models

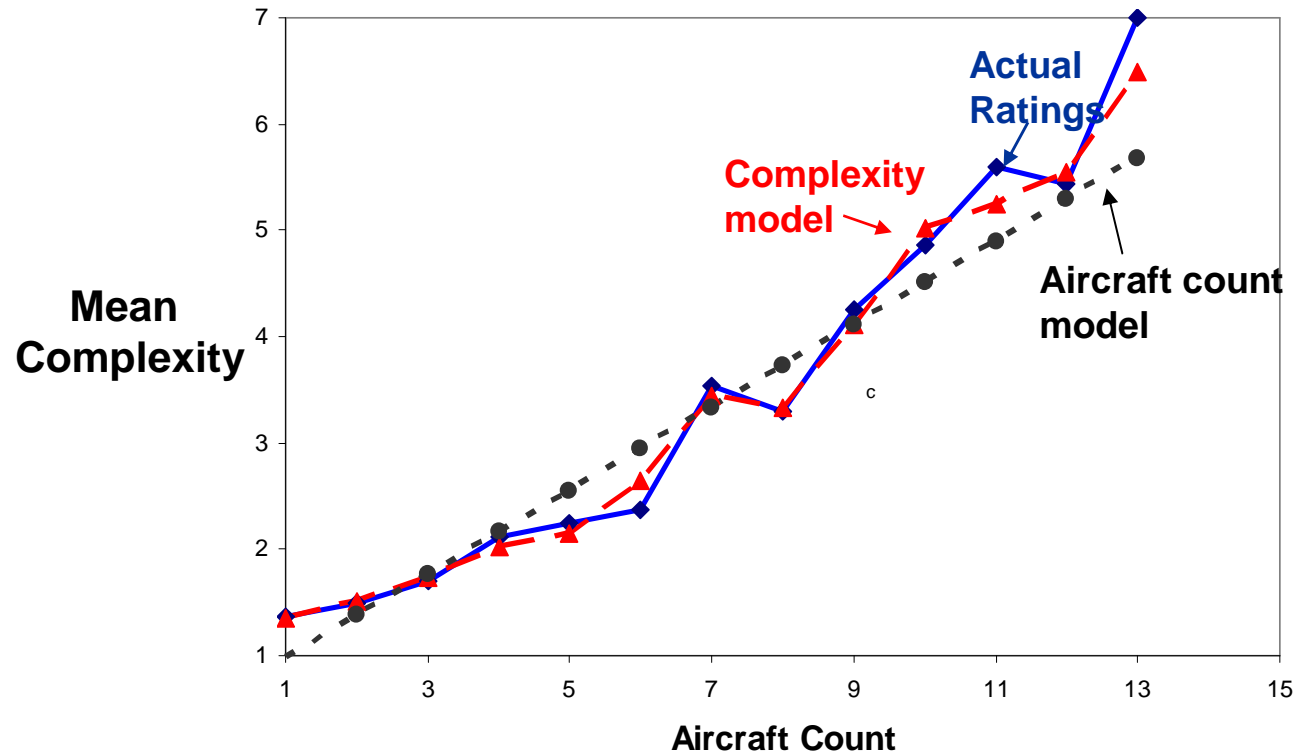


Sept. 15th, 2004, ATL



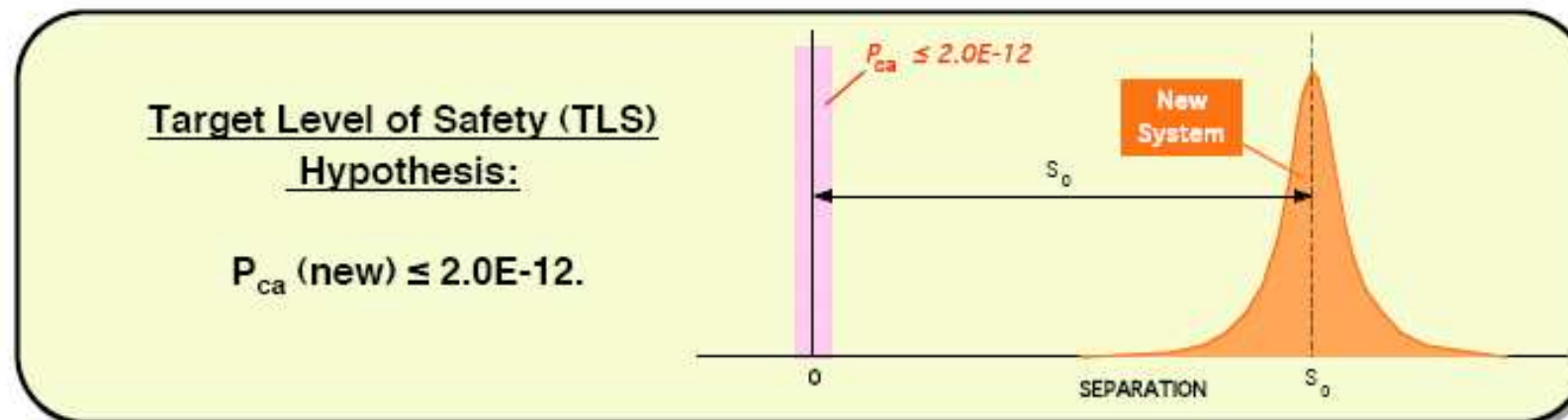
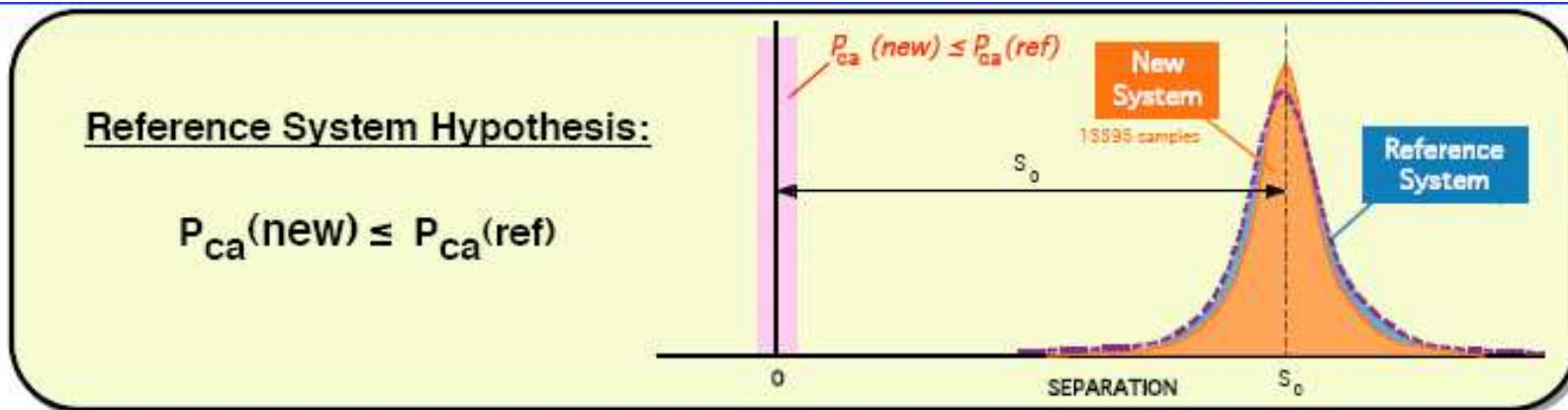
Feb. 2004, ATL

Paper 52: Airspace complexity measurement



Complexity model tracks actual complexity ratings better than aircraft count model

Paper 61: Validation of RSP Accuracy

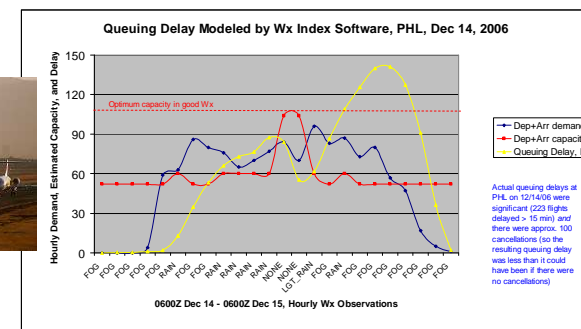
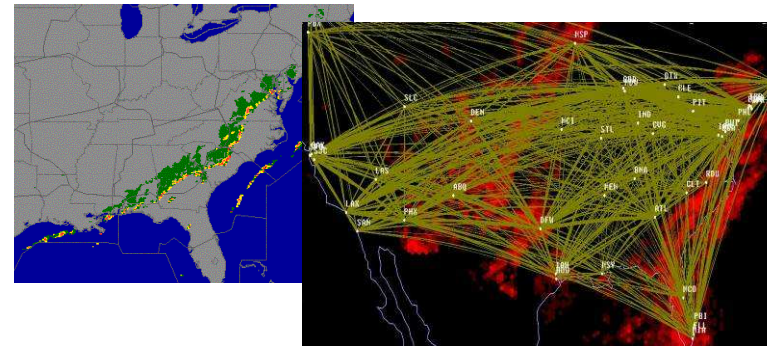


Paper 24: National Weather Index for NAS Performance Assessment

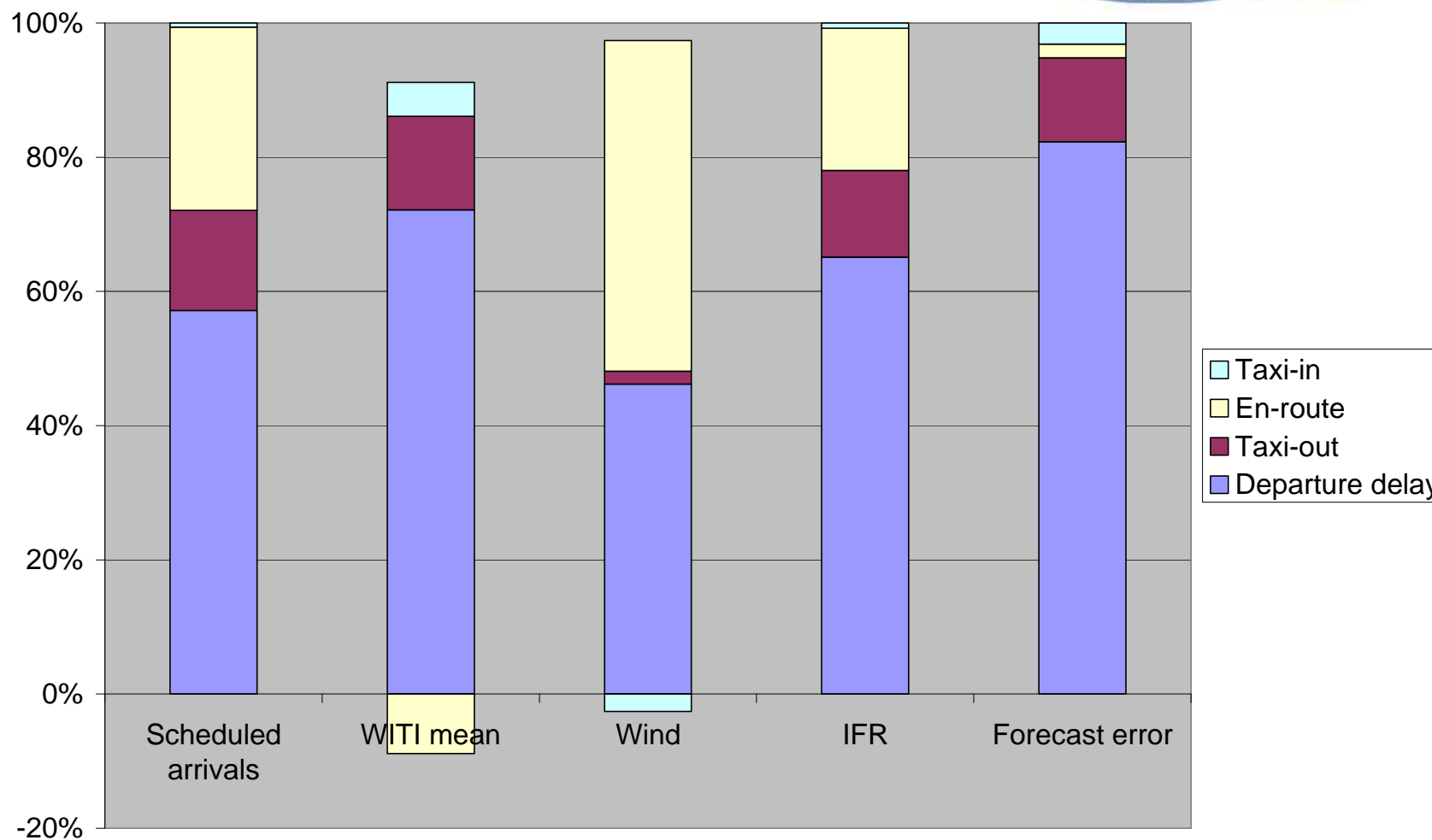


NWX is a weighted sum of three components:

- **En-route Component (E-WITI)** reflecting impact of convective weather on major airports e.g. OEP-35 airports
- **Terminal Component (T-WITI)** for same airports: local weather impact
- **Queuing Delay Component** for same airports reflecting excess traffic demand vs. capacity



Paper 163: Evaluating NAS performance by Wx Normalization



Performance Management Process

(Source: ICAO ATMRPP)

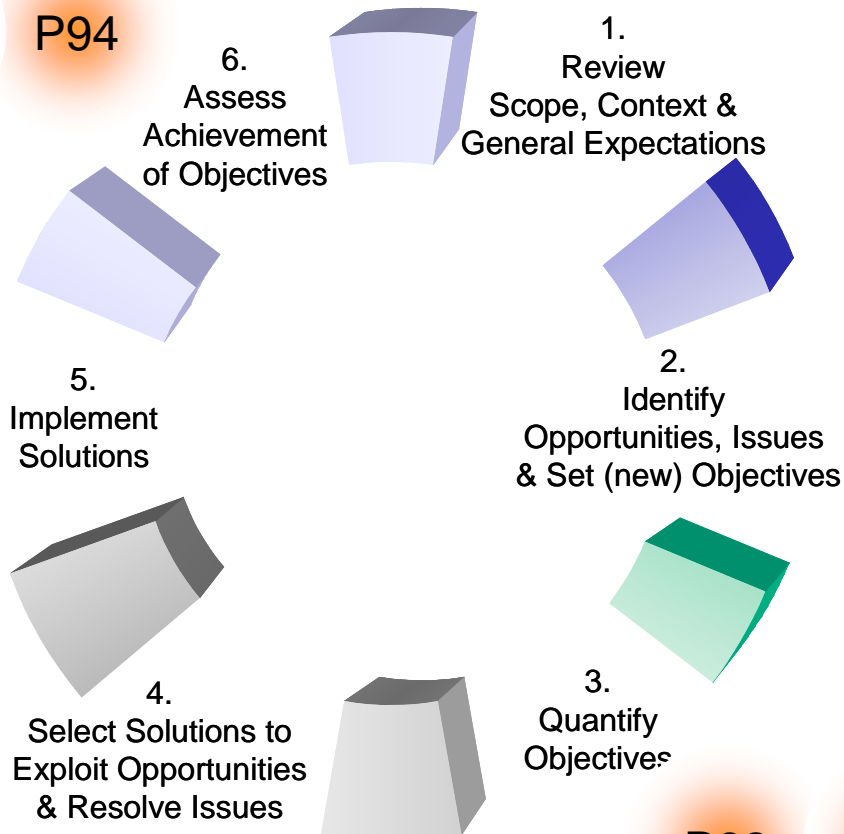


P163

P24

P121

P94



P111

P27

P52

P145

P62

P61



No Questions Please.

Ask the authors !