Segment 3 – Flight Operation Weather Impacts

Airline Data Access
Issues: Impact
Information

Presented to: FPAW

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Core ATM-Weather Integration Concept

- 1. With guidance from user community, translate weather into ATM impacts
- 2. Working inside user community teams, make the ATM impacts part of the DST logic

Weather Impacts

A new kind of weather-related information

- Not the state of the atmosphere, but resulting user decision parameters
- E.G. not a line of thunderstorms, but a reduction in NAS capacity

Conceptual Flow

State of the Atmosphere

Examples:

- Convective wx forecast
- Turbulent EDR (Eddy Dissipation Rate)

From: weather systems
Ownership: wx
community with
requirements from
users

<u>Located</u>: 4D Weather Data Cube

Translated Impact Parameters

Examples:

- CWAM (Convective Weather Avoidance Model)
- EDR index to aircraft type, weight, speed

From: Appendix B
Ownership: wx
community with user
guidance

<u>Located</u>: multi-use in network service; unique in user systems

Decision Rules

Examples:

- Acceptable severity level
- SFO (San Francisco Airport) parallel approach

From: user community, with support from Appendix B

Ownership: Users, with support from weather community

Located: multi-use service; unique in user systems

Decision System

Examples:

- TFMS (Traffic Flow Management System)
- TBFM (Time-Based Flow Management)

From: users, and cataloged in Appendix

Ownership: users

Located: user systems



Impacts to be made available

- Network enabled
- In real time
- Not directive for airline decisions
- To be basis of ANSP decisions



Questions?