

Airline Dispatcher's Federation

Collaborative Decision Making Presentation

Mark Libby, FAA CDM Lead

October 20, 2008



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What is CDM?

- **Collaborative Decision Making (CDM) is a joint government/industry initiative to improve the Air Traffic Management (ATM) system through increased information exchange among all National Airspace System (NAS) stakeholders**
- **Hosted by the Airline Transport Association (ATA)**
- **The success of CDM is directly related to the participation and commitment of all participating NAS stakeholders, including the FAA**

Why was CDM Created?

- To establish a goal-oriented forum between government and industry for the development of solutions to problems within Air Traffic Management (ATM)
- To facilitate increased information exchange between all ATM stakeholders for more effective decision making
- To establish an effective communications path among all ATM stakeholders for increased system safety and efficiency

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CDM Recent Achievements

- CDM Web Site (recently update)
- FEA/FCA Procedure, 2004
- Popup Management, GAAP, EDCT Change Tool, 2005
- Assisted in DRVSM Implementation, 2005
- Airspace Flow Program (AFP), 2006
- Playbook/CDR Improvements, 2006
- Adaptive Compression, 2007
- eSTMP Reservation/Confirmation CAPTCHA System, 2007
- ASDI Feed Conversion to XML, 2008
- Integrated Collaborative Rerouting (ICR), 2008
- Collaborative Training Efforts and Guidelines (continuous)
- Revised CDM Leadership, Strategy and Guide, 2009
- Newsletter (recently revived, issued monthly)

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CDM MOU (Membership) Benefits

- A clear step toward greater collaboration and information exchange
- Access to the CDM “network” of participants (Sub Teams)
- Access to ATM tools used by Traffic Managers to make real-time traffic management decisions:
 - Flight Schedule Monitor (FSM)
 - Flight Schedule Analyzer (FSA)
 - Operational Post Evaluation Tools
 - Route Management Tool (RMT and ROG)
 - Common Constraint Situation Display (CCSD)
 - Collaborative Convective Forecast Product (CCFP)
 - Access to the Diversion Recovery Tool
 - Access to the TCA Webpage

CDM General Session

- Held bi-annually; Next session April 21-23, 2009
- New Format; Breakout Sessions, Panel Discussions



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Quarterly CDM Strategy Sessions



• *“Holding this Strategy Session has allowed the airlines and ATC the opportunity to exchange dialogue in regards to air traffic management challenges both sides face. It brings CDM back to its grass roots by energizing opportunities to improve collaboration between the two factions.”*

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Purpose of Sessions

- Energize the debate on how best to improve the performance of the NAS through:
- Positive ATC & Customer interaction and problem solving
- Consistent use of best practices
- Maximizing the use of capabilities that exist in current automation tools
- Development of new approaches or procedures that can be implemented within 0-6 months



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Energize Communication

- Consistency between facilities
- Improve communication between ATC and Customer
- Understand different perspectives and impact on daily operation
- Robust best practices (Procedures and Tools)
- Identify new automation and procedural needs



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September Participants:

FAA:

ATCSCC ZOB ZID
ZKC ZFW ZTL ZDV
ZME

Customers:

NBAA AAL DAL
JBU NWA SWA
UAL UPS ARINC

MITRE/CAASD

VOLPE METRON



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What is Going Back to the CDM Sub-Teams from the Strategy Session:

- Further research on Transcon re-routing; PLN, RMD, RQD
- Improvements to Playbooks, including Center to Center type plays, CDRs, inclusion of RNAV
- Explore use of AFP's to monitor and control volume during mid-continent full line weather events
- Investigate combining improved CCFP with other forecast tools to better assess weather coverage and risk potential
- Use of FL400 and above during Reroutes and AFP's



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CDM Subgroups

- **Flow Evaluation Team (FET)**
- **Future Concept Team (FCT)**
- **Weather Evaluation Team (WET)**
- **Ground Delay Program Evaluation (GDPE)**
- **Airport CDM Team (ACT)**
- **Fuel Advisory Team (FAT)**
- **Training Team**
- **e-STMP**

Flow Evaluation Team

- Expand and Improve the Integrated Collaborative Rerouting Process
- Explore new uses for AFPs; AFP Overlays
- Development of Route Segment Coded Departure Routes
- CDM Strategy Session Follow up Items



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Future Concept Team

- Developing System Enhancements for Versatile Electronic Negotiation (SEVEN)
- FCT Weather Integration Team (FCT-WIT)
- TMA integration
- Surface data integration



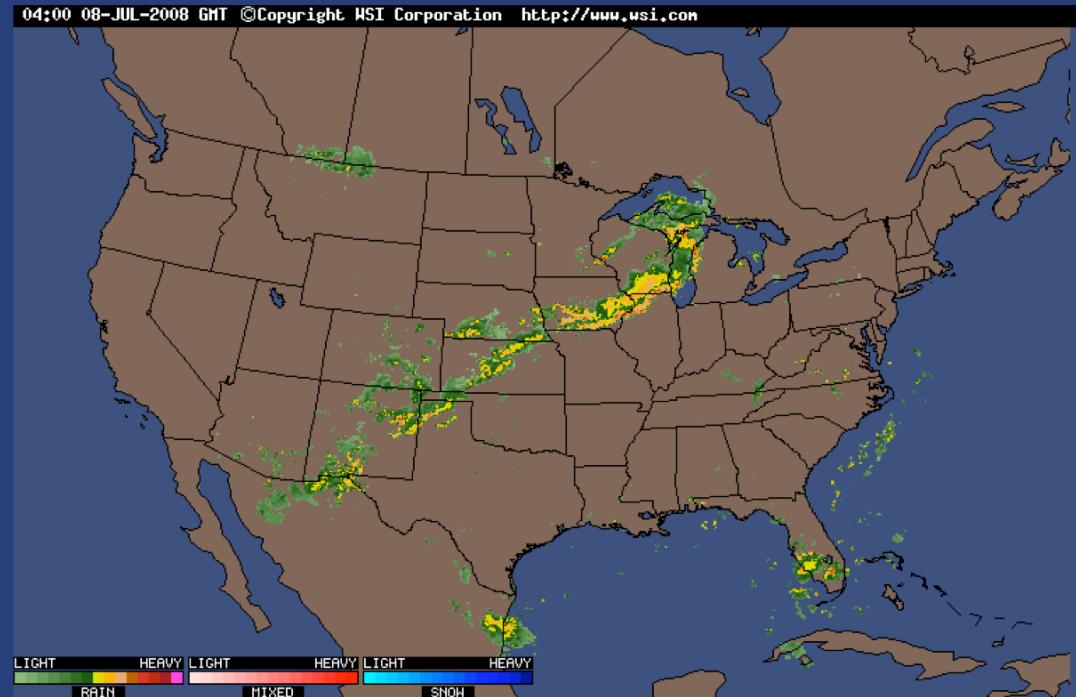
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Weather Evaluation Team

- Exploring ways to improve the current CCFP
- Researching a 8-24 hour Convective Forecast Product
- Developing a Terminal Area Forecast Website
- Exploring ways to share Forecasts



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Ground Delay Program Enhancement



- FSM Improvements
- TFM Advisory Improvements
- Exploring Control Time of Arrival (CTA) for GDPs
- Integrating TMA with GDP's
- AFP Route out credit
- Data Quality Report Card

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Airport CDM Team

- Newly established Team
- Developing a procedure/process to share airport surface data with stakeholders
- Collaborating with EuroControl Airport-CDM



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Fuel Advisory Team

- Team holds informational fuel briefings at Stakeholder Forums
- Working with FAA Facilities to Develop new Fuel saving Procedures



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CDM Training Team

- Joint Training Development
- Training for all new CDM Tools and Procedures
- Available on TFM Learning Center:
<http://TFMLEARNING.FLY.FAA.GOV>
- New ATCSCC 50113 TFM Course; Full CDM Team involvement, all Stakeholders are welcome

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CDM Around The World

- **Action Plan 26- Airport CDM, Runway Safety**
- **Surface CDM- Sharing information, joint procedures**
- **Joint CDM Meetings- Sharing ideas and information**



CDM FAA Flight Plan Activity

Develop a process to share airport surface data with stakeholders.

Target 1: Have a model in place to share surface data for a target airport. Due April 30, 2009

Target 2: Identify additional airports for data sharing. Due September 30, 2009

Utilize the Integrated Collaborative Routing (ICR) process during weather events.

Target 1: Develop and complete training. Due April 30, 2009

Target 2: Expand the use of ICR through the severe weather season. Due September 30, 2009

ATO Strategy: Shaping Our Future

Achieve a long-term shared commitment to a sustainable and responsive air transportation system

- **Create a transparent, documented framework to address current and emerging customer and stakeholder needs and impacts**
- **Strengthen our business planning with customers and stakeholders**
- **Keep customers and stakeholders well informed**

Collaborative Decision Making

Questions?

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