



The Future of CDM



CDM
Collaborative
Decision Making

What is Collaborative Decision Making

Philosophy

Embraces partnership, combines the talents and experiences of all individuals, and facilitates the harmonization and globalization of the world's airspace system

Process

Sharing data to create a common view of the ATM system from which to base decisions, and including stakeholders in the decision-making process

Why was CDM created?

To Achieve system goals ensuring the safest, most efficient aerospace system in the world

- *No single stakeholder has all the information, no two stakeholders have the same values, and all stakeholders interpret information through different experiences*
- *By sharing information, values and preferences, stakeholders learn from each other and build a common pool of knowledge*
- *Results in ATFM decisions and actions that are most valuable to the system*

Central Tenants of CDM

Collaborative data exchange will lead to improved decision-making

Tools and procedures need to be in place to enable air navigation service providers and the flight operators to more easily respond to changing conditions

Advance technological ATFM solutions that evolve the National Airspace System and influence global collaborative decision making for all stakeholders

Existing Shortfalls

CSG decision making by equal voting members

- 6 CSG Voting members, 3 FAA, 3 Industry
- Limits new entrants, IATA, ACI-NA, Commercial Space

CDM Data MOA as sole basis for membership

- Limits airport authorities or other industry participants who have information to share but may not qualify as Data under the MOA

CDM Membership as sole access to CDM Tools

Sub-Team process limits ability to address regional and local decisions

Competing Interests

- RTCA
- NextGen Advisory Committee (NAC)
- Tactical Operations Committee (TOC)
- NextGen Integration Working Group (NIWG)
- Other Collaborative Workgroups
- Competition for budget considerations

Protect the CDM Brand

CDM becomes a uniform process across the ATO, analogous to the Safety Management System, with AJR as lead for administration

- AJR will be the Primary Office of Responsibility for the CDM directive prescribing CDM process for all levels of the organization
- CSG governance placed under the CDM directive
- Allow for Airspace Community member participation at both local and national level

Path Forward

Modify CDM governance policies to allow expanded participation in CDM by more Airspace Community members including Airport Authorities, Commercial Space, Unmanned Aircraft Systems, etc...

Revise CDM MOA to Data Sharing Agreement, uncoupling CDM “membership” from data submission. Data submission remains requirement for access to current TFMS tools.

Establish FAA CDM Directive based on ICAO principles

Proposed FAA CDM Definition Based on ICAO

Collaborative decision making (CDM) is defined as a process focused on how to decide on a course of action articulated between the Federal Aviation Administration and one or more Air Traffic Flow Management (ATFM) community members. Through this process, ATFM community members share information related to that decision and agree on and apply the decision making approach and principles. The overall objective of the process is to improve the performance of the ATFM system as a whole while balancing the needs of individual ATFM community members.

Celebrate Success

- 1996 Flight Schedule Monitor (FSM)
- 1998 Common Constraint Situation Display (now TSD-C)
- 2004 Flow Evaluation Area (FEA)/Flow Constraint Area (FCA) Tool/Procedure
- 2005 Popup Management, GAAP, EDCT Change Tool
- 2006 Airspace Flow Program (AFP)
- 2007 Adaptive Compression

- 2008 Integrated Collaborative Rerouting
- 2009 Integrated Program Modeling (IPM)
- 2010 Reroute Impact Assessment Tool (RRIA)
- 2011 Unified Delay Program (UDP)
- 2014 Collaborative Trajectory Options Program (CTOP)
- 2015 Collaborative Aviation Weather Statement (CAWS)

What's Next?

FAA and Industry are committed to enhancing CDM for the future and developing a global collaborative partnership that is sustainable.

Step 1. Establish FAA/Industry workgroup to identify shortfalls of existing structure and suggest improvements

Step 2. Establish FAA Directive to both define and protect the CDM process

Step 3. Focus on "NOW Gen", i.e. improve/enhance existing tools and processes

Step 4. Build on Success!

Questions?