



Surface CDM Team -SCT-

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CDM

Collaborative
Decision Making

SCT

- **SCT uses the CDM model of data sharing and stakeholder collaboration to bridge the Traffic Flow gap between the NAS and the gate**
- **The S-CDM CONOPS remains a primary guidance document for industry engagement and focus**

● **Closed tasking:**

- Tasking #60 Refined EOBT definition and conceptual use in TBFM scheduling
- Tasking #58 Exploration to admit Airports as CDM members/participants
- Tasking #65 Collaborative Site Implementation Team participation

● **Current taskings:**

- Tasking #66 Establish a national procedure for close-in TBFM scheduling

SCT Tasking 58

● **Tasking 58:**

- Allow participation of airport operators in CDM

● **Background**

- Lack of surface data exchange by non-CDM members at airports with a heavy international presence leads to lack of overall surface data elements, which skew overall predictability. Airports can fill in the data gaps (CONOPS)
- Airport operators are a key stakeholder in surface operations, but readily do not disseminate data to CDM members (e.g., # of diversions that can be accepted, de-icing throughput rates, surface conditions, etc)

SCT Tasking

● **Tasking 58: Approach**

- Demonstrate need for airport authority participation in S-CDM activities
- Enable data exchange of real-time air traffic data for all S-CDM stakeholders including airport managing authorities
- Expand data quality reporting to include airport managing authorities

● **Next Steps**

- Further define airport operator data elements for sharing, and timing/accuracy requirements
- Update CDM Membership Agreement

SCT Tasking 65

● Tasking 65:

- Terminal Flight Data Manager (TFDM) Collaborative Site Implementation Team (CSIT)

● Background

- TFDM will be bring new TFM and S-CDM capabilities to the NAS
- CSIT activities were used to reduce risk in TFDM program development
- CSIT activities intend to capture existing processes and procedures at a given site, so they may be evaluated for their potential impact to TFDM capabilities, expose gaps and identify opportunities

Understanding SCDM-related Operations

- **Establish a forum to begin dialog with local Stakeholders about Surface CDM capabilities**
- **Observe local Stakeholders' operations to understand:**
 - Existing automation and communications capabilities
 - Data exchange - schedule data, real-time flight information, including information that is shared, e.g., Flight Information Display System
 - Existing processes and procedures affecting departures, including gate hold
 - Coordination and communication among local Stakeholders

Understanding Operations cont.

- **Gain understanding of the operations particular to each site**
 - Common use gates
 - Significant number of unscheduled demand and special events

CSIT Activity

- **CSITs- completed 2 out of 4 and then suspended task**
- **As a result of budgetary changes, FAA's IOC deployment of TFDM is now planned for 2022**
- **CSG voted in favor of suspending CSIT Tasking, until a to-be-specified time, closer to new IOC date**

SCT tasking 60/66

● **Tasking 60 / 66:**

- TBFM Scheduling Demonstration with EOBT

● **Background**

- TBFM is used to balance traffic demand and capacity
- Departing (“close-in”) flights that need to enter an overhead arrival stream are oftentimes disadvantaged and can be unpredictably assigned disproportionate amount of delay
- More predictable, less variable actual departure times can reduce strain on the operator in the form of DOT3 and FAR117 compliance

Task 60

- **Tasking 60 focused on the conceptual process for early TBFM scheduling**
- **Tasking 66 will focus on modeling and process development**
 - Earlier TBFM scheduling of close-in departures destined to a TBFM-metered arrival airport has been taking place at several airports across the NAS
 - However these activities have not been coordinated, or conducted in a consistent manner
 - Development of standardized procedures, rather than ad hoc procedures, can promote the practice of earlier TBFM scheduling for close-in departures across the NAS

Task 66

● Approach Phase I

- Development of test procedures to achieve earlier scheduling, via call for release, of close-in departures onto a TBFM timeline
 - *Note: The test procedures developed as part of this tasking are envisioned to be standardized for use across the NAS with respect to current conditions and capabilities*
- Evaluate the test procedures in a lab environment to validate intended effects to the scheduling operations, and provide data that may help mitigate risk and inform the implementation strategy

Task 66

● Approach Phase II

- In conjunction with the identified ATC facilities and flight operators, execute the established test procedures as part of a 90-day trial involving close-in departures to LGA, and close-in departures to MSP
- Collect lessons learned from these trials as well as future trials, to provide input towards harmonizing the approach for earlier TBFM scheduling used for all airports

Anticipated Future Task Areas

- **ATD-2 support for CLT demonstration**
 - Subject Matter Expertise on Surface CDM Concept of Operations

Surface CDM Team

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