

Terminal Flight Data Manager

Scheduled to begin deployment in 2020

TFDM delivers NextGen decision support capabilities for the airport surface, integrating flight, surface surveillance, and traffic management information using System Wide Information Management (SWIM).

What is TFDM?

Electronic Flight Data

TFDM will provide an improved Electronic Flight Data (EFD) exchange and Electronic Flight Strips (EFS) in the tower to replace printed flight strips. This functionality will be integrated with Flight Plans for automatic updating.

Collaborative Decision Making for the Surface

TFDM will provide a departure scheduler with live data provided by Air Traffic systems/ controllers and Flight Service Providers. The system will provide a departure metering capability, runway balancing and other surface management tools, improving surface traffic flow management.

Traffic Flow Management

TFDM will enhance the traffic flow management data integration with Time Based Flow Management (TBFM) and Traffic Flow Management System (TFMS) to enable airlines, controllers and airports to share and exchange real-time data. This will result in improved surface traffic management, as well as improved TBFM and TFMS products.

Systems Consolidation

TFDM will replace multiple unsupportable systems in the National Airspace System through integration of their functionality into TFDM. This achieves technology modernization, improved data sharing and lower maintenance costs. The systems to be consolidated include ARMT, DSP, EFSTS, AEFS, and SMA.

***TFDM is
the surface
management
solution for
NextGen***

With growing congestion on the airport surface due to the increase in commercial air traffic nationwide, the need for efficient aircraft traffic planning on the ground at the airport is critical. TFDM improves aircraft efficiency on the airport surface through:

- **Modernizing** the air traffic control tower equipment by improving the exchange of electronic flight data and implementing electronic flight strips.
- **Streamlining** the schedule sequence of departures to improve efficiency on the surface.
- **Optimizing** the experience for the flying public, Air Traffic Control, and the airline industry by improving the collaboration and decision-making capabilities between the gate and the tower.



Benefits of TFDM

Shared awareness of data for more efficient use of the airport surface

Flight Operators

- Improved schedule predictability/crew utilization
- Less taxi time/fuel burn
- Increased reliability of connections
- Aircraft may be held at gate instead of on the taxiway

Airport Operators

- Reduced CO2 footprint
- Reduced engine noise
- Improved predictability
- More balanced use of airport resources

Flying Public

- Improved predictability
- Fewer delays
- More reliable flight schedules
- Improved passenger satisfaction
- Passengers comfortably waiting in the terminal instead of in the aircraft waiting on the taxiway

Air Traffic Control

- Automatically updated flight plans and electronic flight strips
- Easier rescheduling
- Decreased telephone call volume
- Fewer aircraft in the movement area and departure queue
- Better sector demand loading predictions
- Improved surface situational awareness at the TRACON, ARTCC and the Command Center
- Improved safety—less heads down time



Reduces fuel burn



Improves and balances gate and runway usage



Improves customer satisfaction



Saves time



Automates manual functions

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NextGEN