

ATO Space Collaborative Decision Making (SpCDM) Overview

September 2023



...BY SHARING INFORMATION, VALUES, AND PREFERENCES, STAKEHOLDERS LEARN FROM EACH OTHER AND BUILD A COMMON POOL OF KNOWLEDGE, RESULTING IN DECISIONS AND ACTIONS THAT ARE MOST VALUABLE TO THE SYSTEM...

ATO SpCDM Purpose

Recommendation of the Airspace Access Priorities Aviation Rulemaking Committee (AAP ARC)

-8/21/19 report

ARC recommendation #3

"...the FAA establish a CDM like space operations committee to recommend appropriate information to be exchanged with the FAA for more dynamic airspace management and situational awareness and to help implement the details charted by the steering committee." –p.21



Preview: CDM charter highlights

Scope

- Data and information exchange
- Integrated air and space operations and initiatives
- Access to the NAS (airspace), policies and procedures
- Tools and technology, and data quality

Executive Steering Committee (ESC) designations

Space Operations Committee (SpOC) formation

Sub teams

Handling of proprietary information – (protect) to the full extent authorized by law

Data and information exchange

- Utilize relevant data elements
- Further define the data sets
- Focus on methods



ATO SpCDM is and is not...

ATO SpCDM is

- √ Focused on space operations
- ✓ An operating paradigm and a philosophy through information exchange
- ✓ Follows best practices of 25+ history with Aviation CDM
- ✓ Allow space operators to build the collaboration framework with FAA – leverage existing industry bodies where appropriate rather than duplicate

ATO SpCDM is not

- Not about licensing and regulation
- X ATO SpCDM is not a decision making body (e.g. FACA)
- × Will not make decisions or consensus for FAA, rather inform ATO Space Operations
- × Not creating data standards

The work is voluntary



ATO Space CDM Core Elements

Executive Steering Committee (ESC)

Space Operations Committee (SpOC)

Data Exchange Sub Team

International Sub Team

Future Sub Team(s)

DE 1: Space Data Integrator (SDI) DE 2: Mission Planning & Data Exchange

FY21

- ➤ Launch ATO Space CDM ✓
- FAA leadership approval
- ➤ Initiated charter ✓

FY22

- Pilot sub-teams
- Initiate SpOC
- ➤ Launch sub-teams ✓

FY22-24

- Host general meetings/sub teams
- Assess program for future SpOC programs



ATO SpCDM Sub Teams

Sub Teams provide a forum for the ATO service units within the FAA and industry to connect and address space-related issues. The collaborative nature of the sub team serves as a cornerstone to the CDM process.

Sub Teams:

- ✓ Consist of government and industry professionals with specific subject matter expertise from FAA and ESC member organizations
- ✓ Are charged by the ESC to explore specific tasks
- ✓ Provide recommendations and requests for tasks to the ESC and SpOC for deliberation, discussion, and approval

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ATO SpCDM 12-Month Schedule (as of September 2023)

	Key overall activities	Executive Steering Committee	SpOC	Location
	Significant meetings	Meet every 6 months	Meet every 2 months	Alternating locations
FY24 Q1	SpOC general meeting (VII)	October 26, 2023	October 24-25, 2023	Washington, DC
FY24 Q2	SpOC general meeting (VIII)		February TBD, 2024	TBD
FY24 Q3	SpOC general meeting (IVX)	April 25, 2024	April 23-24, 2024	TBD
FY24 Q3	SpOC general meeting (X)		June 12-13, 2024	TBD
FY25 Q1	SpOC general meeting (XI)	October 24, 2024	October 22-23, 2024	TBD

ATO SpCDM Space Operations Committee (SpOC)

Air Traffic Organization (ATO)

System Operations

NAS Operations

Space Operations

Safety & Technical Training

Air Traffic Services

International

Policy

Program Management Organization

Strategy

Terminal Services

Technical Operations

Active Launch and Reentry Operators (LROs) Space Perspective

ABL Space Systems

Blue Origin

Boeing

Firefly Aerospace

Relativity Space

Rocket Lab

Sierra Space

SpaceX

Stoke Space

United Launch Alliance

Virgin Galactic

Other stakeholders as appropriate e.g., FAA Office of Commercial Space Transportation (AST), NASA, Space Force, and key associations



ATO SpCDM SpOC

Participants actively work with Space Operations

Launch and Reentry Operators

- Active intent to launch by 2025
- Actively working with Space Operations on launch and reentry operations
- Maintain launch and reentry operational vehicles
- Active with gov't agencies (NASA/DoD)

Will also include

- FAA Air Traffic Organization (ATO) representatives
- Key Associations

Considerations for the future

- > International Organizations
- Stakeholders as appropriate

Not expecting to include at this time

- Spaceports
- Regional Space Agencies
- > Facilitators of Space Ops



ATO SPACE CDM

COLLABORATION IS THE ONLY WAY WE WILL ACHIEVE COMPREHENSIVE SPACE INTEGRATION

Executive Steering Committee



QUESTIONS

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