



FAA
Air Traffic Organization



CANSO's ATFM Data Exchange Network for the Americas

CADENA

Presented to: ICAO MID ATM SG/4 (Amman)
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CADENA

- **C**ANSO (Civil Air Navigation Services Organisation)
- **A**TFM (Air Traffic Flow Management)
- **D**ata **E**xchange
- **N**etworks
(for)
- **A**mericas



Initial Members

- COCESNA
- DC-ANSP
- CGNA
- EANA
- ECNA
- FAA
- IDAC
- JCAA
- SENEAM
- TTCAA



CADENA

- CADENA is breaking ground and changing the way the region delivers air traffic flow management initiatives on a regional level
- CADENA has been implemented and is a game changer
- More States are joining the effort
- The aviation community is realizing the benefits of collaboration



Approaches

- Setting the stage
- Near-Term: Operational Improvements
- Mid-Term: Traffic Flow Management Data Exchange
- Long-Term: Traffic Management Measures Assisted by Decision Support Tools



CADENA History

- Established - Jun 2016
- CADENA RIG Meetings
 - 1st at Cuba; 2nd at Argentina; 3rd at Curacao; 4th at Kingston; 5th at Brazil
- Weekly Regional TFM CDM Operational Planning Web Conference – Dec 2016
- CADENA Operational Information System (OIS) – Aug 2017
- TFM Data Exchange Agreement and Certification with TTCAA – Sep 2017
- TFM Data Exchange with TTCAA – Oct 2017



Weekly Regional TFM CDM Operational Planning Web Conference

- Weekly Web Conference on Fridays
- Ad-hoc Web Conference as needed
- CADENA ANSPs share the responsibility of hosting the Web Conferences
- Regional aviation stakeholders participate
- Information shared, discussed, and plan established collaboratively
- Focused on Simple and Effective Solutions



Three Key Success Ingredients

Inclusiveness

- The process to establish regional ATFM capabilities must be inclusive regardless of participants' ATFM maturity and involvement level.

Collaboration

- Collaboration is the most important ingredients to the success of regional ATFM.

Basic Solution

- An initial solution could be simple, inexpensive, and well-know technology.



CADENA Participants

Aren't Just CANSO Members

ANSP Members

1. Argentina
2. Brazil (joined in Feb 2017)
3. Central America
4. Cuba
5. Curacao
6. Dominican Republic
7. Jamaica
8. Mexico
9. Trinidad and Tobago
10. USA
11. Aruba (joined Feb 2017)
12. Costa Rica (joined Feb 2017)

Airlines

- Aeromexico
- Air Canada (*)
- American
- Azul Aerolines (*)
- Caribbean Airlines
- Copa
- Delta
- JetBlue
- Sky Airlines
- Sprit Airlines (*)
- United
- UPS (*)
- Volaris
- WestJet (*)

(*) after April 2017

Stakeholders

- ACI (Airport Council International)
- ALTA (Latin American and Caribbean Air Transport Association)
- IATA (International Air Transport Association)
- NBAA (National Business Aviation Association)

Observer (since Oct 2017)

Chile, Columbia, Panama, Venezuela, Uruguay



CADENA Operational Information System

OIS: An effective method to **share information**.



The screenshot displays the CADENA OIS interface. On the left is a map of the Americas with red outlines of flight regions. On the right is a 'Regional Operations Plan' section with three entries:

- SENEAM Mexico Updated on :31/Jul/2017 16:37**
 - Anticipated Demand: High
 - TMM Planned: 25 MIT MWUN LTFC due to demand
 - Weather: No Significant Weather
 - Volcanic Ash: None
 - Constraints: None
 - Special Events: None
 - Equipment Outages: None
 - Other: High demand at MWUN. Expanded MIT and delays possible.
- FAA Miami Updated on :31/Jul/2017 16:32**
 - Anticipated Demand: Medium
 - TMM Planned: Expect expanded MIT for MIA LTFC due to Thunderstorms
 - Weather: Thunderstorms
 - Volcanic Ash: None
 - Constraints: Thunderstorms impacting MIA.
 - Special Events: None
 - Equipment Outages: None
 - Other: Thunderstorms impacting arrival and departure routes at MIA. Delays are possible.
- COCESNA Central America Updated on :31/Jul/2017 16:29**
 - Anticipated Demand: High
 - TMM Planned: 20 MIT MHTG LTFC due to TSTMS
 - Weather: Thunderstorms
 - Volcanic Ash: None
 - Constraints: Thunderstorms impacting arrivals to MHTG

CADENA member FMUs upload their ATFM Daily Plan (ADP) daily
<https://www.cadenois.org/>



Importance of Flight Data Exchange

- ATFM balances Demand and Capacity
- Members share normal operational Capacity information
- Irregular operational Capacity information is discussed and traffic management initiatives are determined via collaboration (Weekly and Ad-Hoc web conference)
- Useful knowledge of Demand Data requires flight data exchange among members to ensure effective collaboration



Questions?

