International Civil Aviation Organization

Eleventh Meeting of the Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG/11)

Video Teleconference, 02 – 06 August 2021

Agenda Item 3: ATFM/CDM Global Update

THE CANSO AIR TRAFFIC FLOW MANAGEMENT (ATFM) DATA EXCHANGE NETWORK FOR COOPERATIVE EXCELLENCE (CADENCE)

(Presented by CANSO ATFM Data Exchange Network for Cooperative Excellent (CADENCE) Task Force (TF) Co-Chair)

SUMMARY

The CANSO Air Traffic Flow Management (ATFM) Data Exchange Network for Cooperative Excellence Task Force (CADENCE TF) was created to support the implementation of a regional Operational Information System (OIS). The purpose of this OIS is to accelerate the implementation/enhancement of regional ATFM through the CADENCE offered OIS capabilities based on the CANSO ATFM Data Exchange Network for the Americas (CADENA) OIS.

1. INTRODUCTION

1.1 On 22 March 2021, CANSO and CGH Technologies, Inc. signed an agreement that secures the provision of a purpose built collaborative software platform (a.k.a. Operational Information System or OIS) based on the successful regional initiative CADENA (CANSO ATFM Data Exchange Network for the Americas).

1.2 The CADENA Regional Implementation Group (RIG) was kicked off in August 2016 and has been working effectively together to reduce air traffic delays, lessen environmental impact and improve collaborative planning on everything from runway construction to the management of air traffic following natural disasters. CADENA has been very successful in Latin America and the Caribbean.

1.3 Introduction of the CADENA OIS has contributed to the success of CADENA. The CADENA OIS was built to ensure that all participants can participate in the exchange of operational information quickly and inexpensively. It supports the uploading of files in a variety of formats such as pdf, Word, PowerPoint, and Excel spreadsheets. It also provides the formatted entry of advisories, airport delay information, contingency situation forms, and ATFM measure information.

1.4 The CANSO Air Traffic Flow Management (ATFM) Data Exchange Network for Cooperative Excellence Task Force (CADENCE TF) was created on 24 March 2021 as a strategic initiative to develop a network for operational coordination and information sharing among air navigation service providers (ANSPs) in flight information regions (FIRs) around the world. The CADENCE TF will focus on the implementation of an Operational Information System (OIS) which will contribute to regional ATFM/collaborative decision making (CDM) processes and procedures.

2. DISCUSSION

2.1 The CADENCE TF wishes to work with other regions to share the success gained in the Latin Americas and Caribbean regions. The notable contribution to regional ATFM/CDM by CADENCE would be the implementation of a basic, regional OIS, at no cost to ANSPs and other stakeholders.

2.2 The new platform will be made available in all regions, supported by CGH Technologies, Inc., the developer of the CADENA platform. The CADENCE OIS will enable ANSPs and aircraft operators to share information on factors affecting airspace demand and capacity, facilitate situational awareness, and engage all stakeholders in the development of collaborative approaches to optimise the flow of air traffic.

2.3 The baseline OIS offered to regions consists of the CADENA OIS version 3.2 functions that are described in the "CADENA Operational Information System (OIS) Manual, version 3.2.2" dated 3 December 2020.

2.4 Each region is unique in terms of its ATFM/CDM development. Each state and territory are also unique. To support the regional ATFM/CDM implementation and enhancement needs, the CADENCE TF will work with the respective regional ICAO office, CANSO office, ANSPs, and other ATFM stakeholders.

2.5 The implementation of the regional OIS will begin with forming a Regional Implementation Group (RIG), if necessary. The Asia Pacific region already has a regional ICAO ATFM Steering Group and a sub-regional ATFM collaboration groups such as the AMNAC with organized structures and state/ANSP participation that could serve this function.

2.6 The decision on what operational information could be shared will be determined by the participants of the Asia Pacific OIS implementation group.

2.7 The CADENCE offered OIS platform is capable of sharing a wide variety of operational information and it is described in the CADENA OIS Manual. The OIS supported information to be exchanged includes:

1) Regional ATFM Measures
2) Active Reroutes and Route database
3) Airport Delays (arrival and departure)
4) Advisories (Urgent or FYI)
5) ATFM Daily Plan
6) Email Push Notification
7) Contingency Forms
8) Airport/Airspace Capacity

2.8 The CADENCE TF will help implement the Asia Pacific regional OIS including ANSP and aircraft operator training to use the OIS effectively. The CANSO APAC hosted the CADENCE Webinar on 4 May 2021. The CADENCE TF is happy to host additional CADENCE Webinars to further demonstrate the capabilities of an Asia Pacific ATFM OIS.

Useful Information

2.9 The public view of the existing CADENA OIS is accessible via https://www.cadenaois.org.

2.10 When the regional OIS is implemented, it will be supported by technical staff at CGH Technologies' offices in Herndon, Virginia, USA. The technical staff is normally available from 1200 UTC to 0000 UTC.

2.11 If the region wishes to enhance its regional OIS beyond the base OIS offered by CADENCE, the region will need to work with CANSO and CGH Technologies to define the enhancements and establish any associated enhancement costs.

2.12 The CADENCE TF will continue to support the enhanced version of regional OIS and regional ATFM TF/RIG activities.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) review the contents of this information paper;

b) discuss the material and provide any feedback;

c) evaluate if the regional OIS is beneficial for ATFM/CDM enhancement in the ICAO APAC region to support regional ATFM/CDM; and

d) if the CADENCE support is desirable, contact the CADENCE TF for further discussion.