International Civil Aviation Organization
CAR/SAM Regional Planning and Implementation Group (GREPECAS)
Eighteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/18)
Punta Cana, Dominican Republic, 9 to 14 April 2018

Agenda Item 4: Regional air navigation planning and implementation performance framework: Review of programmes and projects

4.2 Projects under the ATFM Programme (B0-SEQ, B0-FRTO, B0-NOPS and B0 ACDM)

IMPLEMENTATION OF THE ATFM/CDM CONCEPT IN THE DOMINICAN REPUBLIC

(Presented by Dominican Republic)

SUMMARY	
The goal of this Information Paper is to present to GREPECAS the status of the implementation of the ATFM/CDM concept in the Dominican Republic and the creation of the Air Traffic Flow Management Unit (FMU), with Collaborative Decision Making (CDM)	
Strategic Objectives	• Operational Safety • Air Navigation Capacity and Efficiency
References:	• CONOPS ATFM CAR/SAM • Port of Spain and Bogota Declaration • Doc. 9971

1. Introduction

1.1 The Dominican Institute of Civil Aviation (IDAC), through the Air Navigation Directorate (DINA), in charge of providing air navigation services for the Santo Domingo Flight Information Region, presents in a summarized manner the experience in the implementation of the ATFM/CDM concept, giving timely compliance with the stipulations of the Bogotá Agreement that was subsequently confirmed in the Port-of-Spain Agreement, referring to that by December 2018, "100% of the Area Control Centers (ACCs) in each corresponding Flight Information Regions (FIRs) should have ATFM measures implemented"

1.2 This systematic implementation has been carried out following the guidelines of the International Civil Aviation Organization and its reference manual under a collaborative decision making environment, incorporating internal and external clients and interested organizations in the formative, coordination, and communication processes, achieving a real and effective conceptualization of ATFM/CDM, facilitating the exchange, analysis, and management of strategic and pre-tactical measures in the operations.

2. Discussion

2.1 The growth of annual air transport demands strategic measures for the management of the operations in a framework of operational security and efficiency.

2.2 The ATFM/CDM concept contributes the exchange of local and regional information, being a valuable tool for the aeronautical community.

2.3 IDAC's Air Traffic Flow Management Unit is considered operative since January 2016,m and in this effectivity period processes relative to local and regional coordination have been implemented, being significant specifically in the improvement of the air traffic control service.

2.4 Before the implementation of the ATFM Unit information was limited and was managed in a tactical context, operations planning had little scope and ineffective measures of flow control were implemented that did not correspond with the goal of balancing demand with capacity.

2.5 Thanks to the support provided by the United States Air Traffic Control System Command Center (ATCSCC), our ATFM/CDM unit receives three (3) times a day a summary of the projected regular air traffic that will have incidence in the Santo Domingo Flight Information Region (FIR), classified in overflights, arrivals and departures, improving in this manner our outlook for effective decision making.

2.6 Additionally we receive the operational planning from all our airports and with this information we issue a static deliverable document call the ATFM/CDM Outlook, which allows an analysis of the impact of the demand relative to the capacity and to take pertinent balancing measures with a level of effectiveness that spans 3 or 4 hours in anticipation of the tactic phase, improving work shift. In the deliverable document the aircraft per airport count is projected, as also information regarding the status of navaids, NOTAMS in force, military operations, meteorological phenomena, VIP movements, special situations in adjacent FIRs, among other information of vital importance that help take measures tending to guarantee an optimal use of airspace in an environment in which operational safety is first. See Appendix A.

2.7 The ATFM(TMC) specialists collect information, analyze them, and once the deliverable is created socialize the data with the Area Control Center (ACC) supervisors and then use different diffusion means, to send them to the different air traffic service dependencies, to management, and the rest of the stakeholders in the CDM.

2.8 Although this is a static process created in a spreadsheet, it allows us have a perception very close to reality of the planned traffic for a work shift, with a margin of error of less than 5%

2.9 The ATFM/CDM concept has also allowed a regional interaction using the teleconference structure provided by CADENA (CANSO ATFM Data Exchange Network for the Americas), which are held every Friday at 1400UTC. In these teleconferences important operational information is exchanged between the Air Navigation Service Providers (ANSPs) and other participating organizations. Currently IDAC's ATFM/CDM Unit is responsible for the coordination and realization of the teleconferences, which accounts for the assistance of up to 41 participants.

2.10 Similarly at the local level we hold teleconferences with airports, airlines and other users of Dominican airspace where we keep them informed of the operational state of our air navigation systems and the context at the regional level.

2.11 In August 2017 the CADENA web platform, Operational Information System (OIS) was formed, in which IDAC's ATFM Unit and the rest of the participating States could upload important information about air traffic management measures in our respective Flight Information Regions, this tool complemented with the support we receive from the Command Center provides us with valuable information that helps us to comply with the different planning phases.

2.12 In the recently concluded year 2017, the Air Traffic Management System of the Dominican Republic was subject to a considerable growth of its air operations, which were managed guaranteeing a constant and safe flow where we balanced in timely manner the demand with the capacity, thanks to the timely measures implemented based on the information produced by our AFTM/CDM unit.

2.13 The ATFM/CDM Unit of the Dominican Republic is in a process of acquiring automated tools of our own domain with which we will complete our state of implementation and effectiveness in 100%.

3. Conclusion

3.1 It is recommendable to continue the development of these air traffic flow management units at the regional level and complement them with the implementation of automated systems capable of integrating in an environment of coordination and cooperation between States and the participating users.

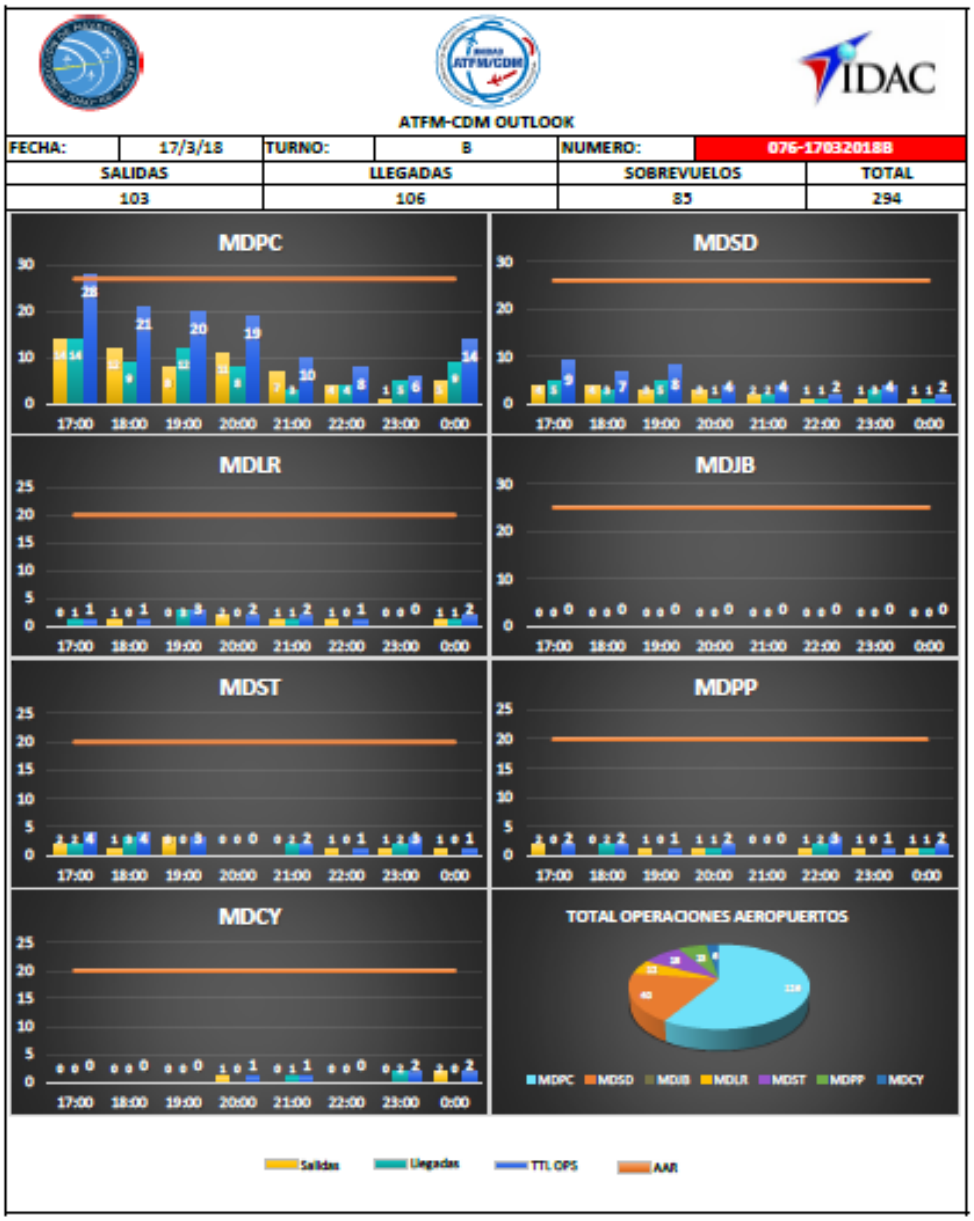
3.2 Continuous regional training is a determining factor to guarantee that all parts that interact with the ATFM/CDM processes are in the same regional context and that countries with more advancements can assist other under the ICAO NCLB program, to maintain a harmonized system where operational safety and air operation efficiency are beneficiaries.

3.3 Recognizing that the lack of training in this concept is a determining factor for regional development, the FAA in collaboration with the ICAO NACC office has created a formative training program to the end of guaranteeing an uneventful, simple and manageable implementation, available to all member States without exceptions. A first basic ATFM course was held las February in the Miami Route Control Center facilities, and another similar one is being programmed to be held in the Superior Academy of Aeronautical Sciences (ASCA) in the Dominican Republic the June 4th to 8th, 2018, thus we recommend the active participation of the States so that we can all achieve what was agreed for December 2018.

3.4 Additionally it would be recommendable to begin a high level analysis to define the feasibility of the creation of a regional entity that can integrate the information and provide ATFM service with a centralized vision in regional aspects. This entity could support those States that do not have the infrastructure for their own FMU/FMP units.

3.5 The meeting is invited to the take note of the information provided in this information paper.

APÉNDICE A/APPENDIX A
REPORTE ATFM-CDM OUTLOOK



-END-