



Agenda Item 5: Operational implementation of new ATM automated systems and integration of the existing systems

AIDC IMPLEMENTATION AND OPERATION IN ECUADOR

(Presented by Ecuador)

SUMMARY

This working paper presents the progress made in the implementation of AIDC at the control centre of Guayaquil and describes the action taken during the operational and pre-operational phases for the implementation of the system.

References:

- Final report of the SAM/IG/22 meeting (Lima, Peru, 19-23 November 2018).

1. Background

1.1 The exchange of automatic ATS messages between the Lima, Bogota, Cenamer control centres and approach units is a operation involving vital information of great responsibility for the parties. Each message sent and received requires a special configuration and controllers must have the necessary knowledge to avoid human error. One of the benefits of AIDC is that it reduces human error, but deficiencies in the overall automation process must be identified.

1.2 States and stakeholders must renew efforts for the AIDC operational phase. Ecuador is open to this system, and dialogues and coordination among focal points are underway. However, it is important to mitigate obstacles encountered among controllers, who should be made aware of the effective benefits to be derived from this system.

2. Discussion

2.1 On 18 August 2018, the LIMA ACC – GUAYAQUIL ACC migrated to the AIDC operational phase. The letter of agreement approved by the parties contains aspects and guidelines related to the coordination protocol. The implementation between the two centres was conducted satisfactorily, the ATC workload was reduced, and coordination between the two control centres was improved.

2.2 In January 2017, the AIDC was operationally implemented between the Guayaquil ACC and the Quito APP with very satisfactory results.

2.3 The AIDC between the Guayaquil ACC and the Manta APP is in the pre-operational phase since February 2018, with plans to migrate to the operational phase in June 2019.

BOGOTA – GUAYAQUIL AIDC

2.4 On 20 August 2018, the AIDC between the Bogota ACC and the Guayaquil ACC went back to the pre-operational phase and a memorandum of understanding was signed and approved for this phase. The following issues were identified:

- Some shifts did not follow the MOU regarding oral confirmation of the automatic response of AIDC messages.
Solution: Migrate to the operational phase.
Status: Underway.
- Generation of PAC messages for flight plans originating at the Bogota airport (SKBO).
Solution: Colombia DBM configuration for ABI message times.
Status: Resolved on 24 March 2019.
- Generation of LRM/65 in response to the TOC message from flights entering the Guayaquil FIR.
Solution: Under analysis by INDRA.
Status: Underway.

2.5 In January 2019, coordination took place with the new focal point of Colombia, who expressed his willingness and commitment to solve the issues described in 2.4.

2.6 A teleconference was held on 1 February between the focal points of Colombia and Ecuador, where they agreed to collect and exchange information as needed for the respective analyses.

2.7 The focal points of the two ACCs coordinated and conducted simultaneous checks on the week of 15 April 2019 to assess the behaviour of the AIDC with active traffic and to take corrective action as needed.

Note: *Based on the results of these checks, information will be updated prior to the SAM/IG/23 meeting.*

2.8 Ecuador proposes that, based on the results and reports obtained, the conclusions of the SAM/IG/23 meeting set a date for the operational phase and update the letter of operational agreement stating that AIDC is the primary means of coordination.

CENAMER – GUAYAQUIL AIDC

2.9 In late November 2018, AIDC tests were conducted between the CENAMER ACC and the Guayaquil ACC to solve the problem reported prior to the SAM/IG/22 meeting, where the automated system of the Guayaquil ACC that was not sending the ABI message in box 18 of the flight plan, and all messages were being rejected for flights originating in the Guayaquil FIR to the CENAMER FIR.

2.10 On 12 December 2018, tests continued after the automated CENAMER system was upgraded to a new FDP version that corrected box 10 and 18 of the flight plan. Since then, the AIDC message cycle has been working satisfactorily, except for the TOC and AOX messages, due to loss of the radar signal in some sectors.

2.11 Based on the satisfactory results obtained, consideration could be given to migrating to the operational phase by the second half of this year.

3 **Suggested action**

3.1 The Meeting is invited to analyse the information presented herein.
