



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

Implementation of AIDC Protocol in Brazil

(Presented by Brazil)

SUMMARY	
This working paper presents information about the implementation of AIDC protocol in brazilian ATC Centres.	
References:	
<ul style="list-style-type: none">• Fifteenth Workshop/Meeting of the SAM Implementation Group (SAM/IG/15);• Declaration of Bogotá	
ICAO strategic objective:	<i>A – Safety</i> <i>B-Capacity and efficiency of air navigation</i>

1 Introduction

1.1. In the Fifteenth Workshop/Meeting of the SAM Implementation Group (SAM/IG/15) (Lima, Perú, 11 to 15 May 2015) Brazil presented the plans made to implement AIDC protocol in your ATC Centres.

1.2. As part of the plans, Brazilian Administration made efforts to implement SAGITARIO ATC automated system, developed by Atech, replacing the older system X-4000, who doesn't have the AIDC functionalities. SAGITARIO is operational in ACCs Brasilia, Curitiba, Amazônico and Recife. It's been implemented in ACC Atlantico, wich will be operational until February, 2017. Concerning to the APPs, the new system is operational in Belém, Brasília, Belo Horizonte, Campo Grande, Curitiba, Macaé, Manaus, Recife, Rio de Janeiro, São Paulo, Porto Alegre Pirassununga. Also, is planed the implementation, until 2018, of the others APP, totalizing twenty one APP sites.

2 Discussion

2.1. The SAGITARIO system has the ability to provide "handoff" capacity through protocols Doc.4444, OLDI and AIDC. Nowadays the Brazilian ACCs uses Doc. 4444 protocol to make the "handoff" between adjacent FIR.

2.2. To meet the Bogotá Statement, the Brazilian Administration decided to adopt the use of AIDC protocol in their ACC until the end of 2015. The interconnection between automated systems of neighbors' countries will be accomplished during 2016. To do so, the following actions were outlined:

- 1) Conclusion of the SAT (Site Acceptance Test) regarding to the AIDC protocol, interconnecting the ACC-BS with ACC-CW. Tests already carried out, with successful results.
- 2) Training of controllers from ACCs Amazônico, Brasília, Curitiba and Recife. Already done in Brasília, Manaus and Recife. The training to the controllers of ACC Curitiba is scheduled to July, 2016;
- 3) The operational implementation of AIDC is scheduled as following:
 - a) ACC-CW ⇔ ACC-RE: July, 2016
 - b) ACC-RE ⇔ ACC-BS: June, 2016
 - c) ACC-CW ⇔ ACC-BS: July, 2016
 - d) ACC-CW ⇔ ACC-AZ: July, 2016
 - e) ACC-AZ ⇔ ACC-BS: June, 2016
 - f) ACC-AZ ⇔ ACC-RE: to be operational in May, 2016.
- 4) Revision of the operational agreements: to be accomplished during second semester of 2016.

2.3. Also, Brazil made AIDC interconnection tests with Peru, which already uses this protocol in their ACC through INDRA AIRCON 2100 system, instead of the planned tests with Colombia, in order to verify the technical compatibility of these automated systems. Such were successful and proved the technical compatibility between these automated systems, related to the use of AIDC protocol.

3. **Suggested actions**

3.1 The meeting is invited to:

- a) Note the information presented;
- b) consider the impacts that Brazilian AIDC implementation plans can produce in the interconnection of AIDC in the SAM Region, according to the Declaration of Bogotá; and
- c) analyze other aspects related to this theme.

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