



International Civil Aviation Organization

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
SIXTEENTH MEETING (APIRG/16)
(Kigali, Rwanda 19-23 November 2007)**

Agenda Item 4: AFI Regional Air Navigation Planning and Implementation Issues

4.2 : Communications, navigation and surveillance

COMMUNICATIONS ISSUES IN THE AFI REGION

(Presented by IATA)

1. Introduction

1.1 This paper reports on the lack of improvement in air/ground communications in Luanda FIR, the results of the IATA 2007 Communications Survey and the amendments to the IATA Flight Broadcast Procedure (IFBP).

2. Discussion

2.1 Air/ground communications in Luanda FIR

2.1.1 APIRG/15 adopted Conclusion 15/15 – *Air/ground communications in Luanda FIR*, which called on Angola to urgently improve air/ground communications. In response, Angola initiated two projects: new HF communication system and VHF coverage extension. These two projects have experienced several delays, and as a result mobile communications in Luanda FIR are still very difficult, as corroborated by the IATA 2007 Communications Survey (paragraph 2.2 below refers). For the HF project, the initial target date was May 2007. Installation occurred in July 2007 and tests have been conducted in August. Operational use was expected in September 2007. The VHF project was initially planned for completion in September 2007. However, the target date has slipped to January 2008, then again to February 2008. The IATA Regional Coordinating Group Meeting (September 2007) has expressed concerns about these delays, which have been occurring for several years, despite strenuous efforts by IATA and ICAO.

2.1.2 In view of the persistent lack of reliable aeronautical mobile communications in Luanda FIR, the APIRG is requested to send a strong signal to Angola on the need to improve air/ground communications in its FIR.

2.2 Results of the 2007 AFI Communications Survey

2.2.1 A survey of AFI air/ground VHF and HF communications performance, and quality of ATS services was conducted by IATA from 3 to 23 September 2007. A total of 626

communication reports have been received so far on 37 ATS units, including 29 FIRs. The analysis of the data is being finalized and will be provided to all concerned partners. A summary of the first results is as follows.

VHF communications

2.2.2 Improved VHF coverage has been noted, with significant progress in FIRs Addis Ababa, Algiers, Antananarivo, Beira, Dar es Salaam, Niamey and Ndjamen. However, more coverage and improvements in availability of VHF stations is required in Brazzaville, Kinshasa, Luanda, Lusaka, Mogadishu, Seychelles and Tripoli FIRs. Percentage VHF and HF usage is shown below for some typical FIRs.

FIR	VHF % usage	HF % usage
Accra	80	20
Addis Ababa	87	13
Algiers	90	10
Antananarivo	60	40
Beira	85	15
Brazzaville	46	54
Dar es Salaam	100	0
Kinshasa	48	52
Khartoum	59	41
Luanda	18	82
Mogadishu	0	100
Ndjamen	71	29
Niamey	86	14
Seychelles	32	68
Tripoli	46	54

HF communications

2.2.3 Improvements in HF availability, RT techniques and phraseology are required in FIRs: Brazzaville, Kinshasa, Khartoum, Luanda, Mogadishu, Ndjamen and Tripoli.

Controller-to-pilot data link communications (CPDLC)

2.2.4 It should be noted that CPDLC is available in FIRs Algiers and Antananarivo.

2.3 IATA Flight Broadcast Procedure (IFBP)

2.3.1 The IATA Flight Broadcast Procedure (IFBP) is applied in designated airspace, as a safety net to ensure the safety of air operations in cases when the service provided by ATC units is not adequate and/or reliable. ICAO has consistently made IFBP mandatory in AFI to accommodate the increased charter flights during the period of Hajj as an adequate safety net.

2.3.2 During IATA AFI Regional Coordinating Group (RCG) meeting held in October 2007, RCG revised the area of applicability (see page 4) due to sufficient mobile communications coverage as follows:

- a) Exclude Seychelles FIR; Mauritius FIR; Nairobi FIR; Entebbe FIR; Antananarivo FIR; Dar Es Salaam FIR; Lusaka FIR and Beira FIR.
- b) Revise the Johannesburg Oceanic and Windhoek FIR to cover area up to S 20 00' 00" as a buffer due to lack of mobile communications coverage in Angola
- c) Content of the broadcast message is maintained however the procedure is revised in order to avoid congestion and reduce number of IFBP transmissions.

2.3.3 The revised procedure shall be effective 17 January 2008 and to be circulated to all concerned stakeholders as soon as possible.

2.3.4 It has been noted that some FIR do not have deficiencies in service provided by ATC units, however they are included in IFBP procedure as a safety net for neighboring deficient FIRs.

3. **Action by APIRG:**

3.1 The APIRG is invited to:

- a) Note the lack of progress in air/ground communications in Luanda FIR, and to send a strong signal to Angola to finalize its VHF and HF communications projects
- b) Note the summary results of the IATA communications survey
- c) Note the revised IATA Flight Broadcast Procedure (IFBP).

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