



INTERNATIONAL CIVIL AVIATION ORGANIZATION

Third Meeting of the APIRG Communications, Navigation and Surveillance Sub-Group (Nairobi, 26-30 April 2010)

Agenda Item 5: Aeronautical Mobile Service (AMS)

- Results of the AFI VHF and HF Communications Survey – 2009

(Presented by the International Air Transport Association)

SUMMARY
This working paper presents the outcome of the IATA Regional Survey on VHF and HF communications in the AFI Region, in accordance with APIRG/16 Conclusion xxx, and recommends remedial action by States/ANSPs.
Action by the meeting is at paragraph 3.
REFERENCE: APIRG/16 Report

1. INTRODUCTION

1.1. IATA conducts aeronautical mobile communications surveys in the AFI Region every 18 months, with the objectives to determine VHF/HF coverage within the region in order to identify deficiencies in communication and arrive at corrective action plans to address them in coordination with States and air navigation service providers (ANSPs).

1.2. The outcome of the last survey conducted in September 2007 was presented to the Sixteenth Meeting of the AFI Planning and Implementation Group (APIRG/16) in November 2007. APIRG/16 supported IATA surveys and called for States cooperation and participation in these surveys.

1.3. This working paper provides an analysis of the data collected during the IATA survey of AFI air/ground VHF and HF communications performance and quality of ATS services from 3rd to 23rd February 2009.

2. DISCUSSION

Participation of Airlines

2.1. The following airlines; Air France (AF), British Airways (BA), Emirates Airlines (EK), KLM Royal Dutch Airlines (KL), Kenya Airways (KQ), Swiss International Airlines (LX), Air Portugal (TP), Lufthansa (LH), Ethiopian Airlines (ET), Virgin Nigeria (VK), Iberia Airlines (IB) and Brussels Airlines (SN); provided data representing 1756 communication reports on 45 ATS units, including 33 FIRs. The data covers most of the AFI Region.

Participation of States / Air Traffic Services Units

2.2. Only the ATS Units of 17 ASECNA member States, Tunisia, Zimbabwe and Democratic Republic of the Congo (Lubumbashi) participated in the survey, i.e. 20 States out of 53, representing 9 FIRs (out of 33).

Summary of the results

2.3. The table below summarizes the VHF/HF usage and the respective success rate. The figures in the table have been arrived at based on the data received during the survey period and are indicative of the reality on the ground.

IATA VHF/HF Survey, 3-23 February 2009

ATS UNIT	TOTAL	VHF			TOTAL	HF			Total of VHF+HF	% VHF Usage	%HF Usage	%VHF usage Succesfull	%HF usage Succesfull
		Nil Comms	Comms	Comms+		Nil Comms	Comms	Comms+					
1. ABIDJAN	3	0	2	1	0	0	0	0	3	100	0	100	0
2. ACCRA	46	8	30	8	2	2	0	0	48	96	4	83	0
3. ADDIS	52	16	26	10	8	6	2	0	60	87	13	69	25
4. ALGIERS	152	15	83	54	9	5	4	0	161	94	6	90	44
5. ASMARA	4	3	1	0	3	3	0	0	7	57	43	25	0
6. BAMAKO	4	0	2	2	0	0	0	0	4	100	0	100	0
7. BEIRA	44	9	30	5	0	0	0	0	44	100	0	80	0
8. BENGHAZI	11	0	8	3	0	0	0	0	11	100	0	100	0
9. BRAZZAVILLE	64	24	28	12	27	24	3	0	91	70	30	63	11
10. CAIRO	43	13	21	9	5	4	0	1	48	90	10	70	20
11. CANARIAS	8	5	2	1	2	2	0	0	10	80	20	38	0
12. CASABLANCA	9	0	2	7	0	0	0	0	9	100	0	100	0
13. DAR ES SAL.	49	11	31	7	0	0	0	0	49	100	0	78	0
14. DAKAR	16	1	6	9	2	0	2	0	18	89	11	94	100
15. DJIBOUTI	4	1	0	3	0	0	0	0	4	100	0	75	0
16. DOUALA	17	1	6	10	0	0	0	0	17	100	0	94	0
17. ENTEBBE	8	0	7	1	0	0	0	0	8	100	0	100	0
18. GABORONE	5	0	3	2	0	0	0	0	5	100	0	100	0
19. HARARE	18	7	9	2	0	0	0	0	18	100	0	61	0
20. JO'BOURG	8	1	3	4	0	0	0	0	8	100	0	88	0
21. KANO	88	23	53	12	6	4	2	0	94	94	6	74	33
22. KHARTOUM	155	51	89	15	58	33	24	1	213	73	27	67	43
23. KIGALI	3	0	0	3	0	0	0	0	3	100	0	100	0
24. KINSHASA	45	26	17	2	46	31	15	0	91	49	51	42	33
25. KISANGANI	4	4	0	0	7	6	1	0	11	36	64	0	14
26. LAGOS	47	9	29	9	0	0	0	0	47	100	0	81	0
27. LIBREVILLE	7	1	5	1	0	0	0	0	7	100	0	86	0
28. LILONGWE	10	2	5	3	0	0	0	0	10	100	0	80	0
29. LUBUMBASHI	15	6	9	0	0	0	0	0	15	100	0	60	0
30. LUANDA	8	1	7	0	39	12	22	5	47	17	83	88	69
31. LUSAKA	23	4	14	5	4	4	0	0	27	85	15	83	0
32. MAURITIUS	3	2	1	0	3	1	2	0	6	50	50	33	67
33. MOGADISHU	0	0	0	0	62	30	31	1	62	0	100	0	52
34. NAIROBI	51	4	34	13	3	1	2	0	54	94	6	92	67
35. N'DJAMENA	83	24	51	8	24	16	7	1	107	78	22	71	33
36. NIAMEY	122	27	54	41	37	12	22	3	159	77	23	78	68
37. NOUAKCHOTT	42	4	22	16	0	0	0	0	42	100	0	90	0
38. OUGADOUGOU	5	0	3	2	0	0	0	0	5	100	0	100	0
39. ROBERTS	5	0	3	2	0	0	0	0	5	100	0	100	0
40. ST DEN.REUNION	1	0	0	1	0	0	0	0	1	100	0	100	0
41. SAO TOME	1	0	0	1	0	0	0	0	1	100	0	100	0
42. SEYCHELLES	4	0	2	2	23	17	6	0	27	15	85	100	26
43. TRIPOLI	24	7	7	10	109	72	31	6	133	18	82	71	34
44. TUNIS	3	0	0	3	0	0	0	0	3	100	0	100	0
45. WINDHOEK	6	0	3	3	0	0	0	0	6	100	0	100	0

Appendix to this working paper gives more details for all FIRs on which data were available.

In summary:

1. Only 34% of AFI States participated in the survey.
2. Few data were received from pilots in most cases (No or few reports for mandatory reporting points)
3. Improvements were noted in Accra, Addis, Dakar and Niamey FIRs.
4. Degradation was noted in Brazzaville (NE), Harare (SW), Kano, Khartoum, Kinshasa¹, Luanda, Mogadishu, Seychelles, Tripoli FIRs, as compared to:
 - a. the previous survey of that kind which was conducted from 3 to 23 September 2007); and
 - b. the situation prevailing at the time of RVSM Switchover in September 2008.
5. VHF
 - a. Low availability (77%)
 - b. Problems noted with remote stations
 - c. Extension potential exhausted
 - d. Densification versus Climax limitations
6. HF
 - a. Low availability (41%)
 - b. Low performance (subject to solar physics)

3. ACTION TO BE TAKEN BY THE MEETING

3.1 The meeting is invited to:

- 1) Note positive follow-up action taken by IATA in accordance with APIRG/16;
- 2) Request AFI States/ANSPs to pursue their efforts to improve and/or maintain extended VHF coverage and supporting facilities;
- 3) Request AFI States/ANPs of the Regional Air Navigation Plan (ANP) requirements concerning the implementation of controller-pilot data link communications (CPDLC); and
- 4) Request AFI States and all stakeholders concerned to fully support and participate in the next IATA Regional Survey on air-ground communications scheduled for June 2010.

-END-

¹ Corrective measures have been successfully implemented in Kinshasa FIR (last Quarter 2009).