



Agenda Item 4: Assessment of operational requirements to determine the implementation of improvements in communications, navigation and surveillance (CNS) capabilities for operations in route and terminal area

Speech communications between ATS adjacent boundary dependencies

(Presented by the Secretariat)

SUMMARY	
This working paper presents the results of the analysis of the ATS speech communications between ATS dependencies, requested by the Fourteenth Workshop/Meeting of the SAM Implementation Group (SAM/IG/14).	
REFERENCE:	
Report of the Fourteenth Workshop/Meeting of the SAM Implementation Group (SAM/IG/14) (Lima, Peru, 10 to 14 November 2014).	
<i>ICAO strategic objectives:</i>	<i>A – Safety</i> <i>B – Air navigation capacity and efficiency</i>

1 Introduction

1.1 The SAM/IG/14 meeting analyzed the current problems in speech communications between boundary control towers and in this respect it was recognised that there was a broad variety of communication media between them (VHF, private telephony, radio links, satellite links), with the various problems that entails.

1.2 As a result of this review, the meeting considered that the information regarding the existing ATS speech communications between ATS units should be completed. In this respect the meeting encourages SAM States to report the existing ATS speech circuits between adjacent control towers, the means of communication used for this service, and measures being taken (or foreseen to be taken) for enhancing them. The information should be sent to the South American Regional Office by 15 December 2014.

2 Analysis

2.1 As **Appendix** to this working paper, a chart with the information forwarded by the States is presented, containing the ATS speech circuits between ATS boundary units and the means of communication used between them.

2.2 From the chart it can be observed that most of the ATS speech circuits have been implemented via REDDIG and local links, to bring the ATS speech service to the REDDIG node installed in the State, from the boundary ATS unit.

2.3. Most of these circuits via REDDIG were operating normally and could be implemented by means of communications more affordable while maintaining the required security via VHF FM communications.

2.4 These communications via VHF FM could replace ATS speech communications via telephone, as well as be implemented in those locations that require updates.

2.5 In this sense as a follow-up to SAM/IG/14 request, the Meeting is invited to analyse the possibility of implementing in all ATS dependencies direct communications via VHF FM for ATS speech service between adjacent border ATS units.

2 Suggested action

3.1 The Meeting is invited to:

- a) Take note of the information provided;
- b) Update and complete the information presented in the Appendix of this working paper.

APPENDIX

LIST OF ATS SPEECH CIRCUITS BETWEEN ATS BOUNDARY DEPENDENCIES IN THE SAM REGION

STATE	FROM	TO	COMMUNICATION MEAN	TABLE CNS 1 C FASID
Argentina	Aeroparque TWR	Colonia (Uruguay) TWR	Vía REDDIG	X
Posadas (Argentina) and Encarnacion (Paraguay)	Catarrata TWR	Foz de Iguazu (Brazil)	Vía REDDIG	No
	Paso de los Libres TWR	Uruguaiana (Brazil) TWR	Vía REDDIG	No
	Posada TWR	Encarnacion (Paraguay) TWR	To be implemented	No
Bolivia	Puerto Suarez TWR	Curumba (Brazil) TWR	Vía REDDIG (Pending Bolivia's side)	No
	Guayaramirin TWR	Guajaramirim (Brasil) AFIS	Radio VHF	No
Brazil	Tabatinga AFIS	Amazonas (Colombia) APP	Radio VHF Vía REDDIG	X
	Foz de Iguazu TWR	Catarrata (Argentina) TWR	Vía REDDIG	No
	Uruguaiana AFIS	Paso de los Libres (Argentina) TWR	Vía REDDIG	No
	Corumba APP/AFIS	Puerto Suarez (Bolivia) TWR	Vía REDDIG (Pending Bolivia's side)	No
	Guajaramirim AFIS	Guayaramirín (Bolivia) AFIS	Radio VHF	No
Chile	Arica TWR	Tacna (Peru)TWR	Radio VHF (153.05Mhz) Vía REDDIG	No
Colombia	Andes APP	Tulcan (Ecuador) TWR	Red VSAT Colombia	X
	Cúcuta TWR	San Antonio Táchira (Venezuela) TWR	Radio	X
	Leticia TWR	Iquitos (Perú) TWR	Vía REDDIG	No
Ecuador	Tulcán TWR	Andes (Colombia) APP	Red VSAT Colombia	X
	Santa Rosa TWR	Piura (Peru)	Telephone	No
	Santa Rosa TWR	Tumbes (Peru) TWR	Telephone	No
French Guyana				
Guyana				
Panama				
Paraguay	Guarani TWR	Foz de Iquazu	Vía REDDIG	No

STATE	FROM	TO	COMMUNICATION MEAN	TABLE CNS 1 C FASID
	Encarnación TWR	Posada (Argentina)	To be determined	No
Peru	Piura (TWR)	Santa Rosa T Santa Rosa TWR (Ecuador)	Telephone	No
	Tumbes TWR	Santa Rosa (Ecuador) TWR	Telephone	No
	Iquitos TWR		Telephone	No
	Iquitos TWR	Leticia (Colombia) TWR	Via REDDIG	No
Suriname				
Uruguay	Colonia TWR	Aeroparque (Argentina)TWR	ATS speech circuit REDDIG	X
Venezuela	Josefa Camejo (TWR)	Aruba (APP)	MEVA/REDDIG interconnection	X
	San Antonio del Tachira TWR	Cucuta TWR	Radio	X