



International Civil Aviation Organization

CAR/SAM REGIONAL PLANNING IMPLEMENTATION GROUP (GREPECAS)

**Fifth Meeting of the CNS Committee of the GREPECAS ATM/CNS Subgroup (CNS/COMM/5)**

Lima, Peru, 13 to 17 November 2006

CNS/COMM/5-WP/14

28/09/06

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**Agenda Item 5:           Review of the deficiencies related to the CNS systems and other general issues**

## **REVIEW OF DEFICIENCIES IN THE CNS SYSTEMS OF THE CAR/SAM REGIONS**

(Presented by the Secretariat)

### **SUMMARY**

This Working Paper presents the status of the lists of deficiencies in the communications, navigation and surveillance fields, reported in the CAR/SAM Regions, and proposes to analyze it with a view to updating it and recommending the relevant solutions.

#### **References:**

- GREPECAS/13 Report, Santiago, Chile, 14 – 18 November 2005.
- Report of ASB/6 Meeting, Santiago, Chile, 13 November 2005.
- Deficiencies database updated in the ICAO NACC and SAM Regional Offices.

## **1. Introduction**

1.1 In accordance with the standardized methodology for the identification, evaluation and notification of the air navigation deficiencies, the ICAO NACC and SAM Regional Offices, the GREPECAS and its contributory bodies should maintain updated the list of deficiencies and recommend solutions to each one of them.

1.2 The Aviation Safety Board (ASB) of GREPECAS in its Sixth Meeting held in Santiago, Chile, 13 November 2005, reviewed the list of deficiencies and identified those having a greater impact on air operations safety, considering that they required urgent solutions, and thus they were assigned “U” priority, developing actions in order to resolve them.

1.3 The GREPECAS/13 Meeting also held in Santiago, Chile, from 14 to 18 November June 2005, reviewed the lists of existing deficiencies in the CAR/SAM Regions in the air navigation systems, including the Report of the ASB/6 Meeting. Likewise, the Meeting formulated Conclusion 13/92 - *Action for resolving Urgent Air Navigation Deficiencies*, as well as Conclusion 13/94 - *Air Navigation Deficiencies presented by IATA*.

1.4 Based on the above paragraphs, the corresponding parts on the existing deficiencies in the CNS systems/services in the States/International Organizations of the CAR and SAM Regions are included in **Appendices A** (CAR) and **B** (SAM) to this Working Paper. **Appendices C** (CAR) and **D** (SAM) present to the Meeting the information on the Corrective Action Plans and **Appendices E** (CAR) and **F** (SAM) include all the deficiencies that have been corrected.

1.5 Not all CAR/SAM States/Territories have informed the ICAO Regional Offices in Mexico and Lima on the Action Plans developed to correct the deficiencies in the air navigation fields. Within this context and considering the concern that the Air Navigation Commission, the ICAO Council and GREPECAS have repeatedly expressed on the many deficiencies and the time that these have persisted, from the first report, without action being taken for their correction, States/Territories that have not yet taken actions in this regard, are encouraged to implement GREPECAS Conclusion 13/92, by using the revised format for action plans for the resolution of regional air navigation deficiencies presented in **Appendix G**. Civil aviation authorities have taken note regarding their responsibility under Article 28 of the Chicago Convention for providing safe, regular and efficient air navigation services.

## 2. Analysis

2.1 The Meeting should carefully examine the lists of CNS deficiencies included in Appendixes A and B, classified with priority “U”, “A” and “B”, so that the CNS Committee may review and recommend the relevant solutions to each one of the CNS deficiencies.

2.2 It is also possible that not all the existing deficiency cases are mentioned in the lists of Appendixes A and B, and that some of them might be already solved. Therefore, the CNS Committee, based on the FASID Tables, on the relevant SARPs and on information that the members and observers of the CNS Committee might submit, could identify other deficiencies.

## 3. Suggested Action

3.1 The Meeting is invited to,

- a) note the information presented in this working paper;
- b) update the status of implementation/solution of the corresponding CNS deficiencies contained in Appendixes A and B and recommend, as necessary, amendments and corrective actions to each one of the deficiencies, classified with priority “U”, “A” and “B”;
- c) identify other CNS deficiencies that might exist in the CAR and SAM Regions and propose the corresponding corrective actions; and
- d) submit the results of its analysis to the GREPECAS/14 Meeting and submit the ASB/7 Meeting the urgent deficiencies, both through the ATM/CNS Subgroup.

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## OUTSTANDING DEFICIENCIES (A,B,U)

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE CAR REGION

CNS/COMM/5  
WP/14  
Appendix A

Identification		Deficiencies			Corrective Action				
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action	
<b>CNS Aruba</b>									
CNS 29 C	Surveillance Systems (Table CNS 4A)	Aruba/Reina Beatrix APP/Aruba's radar	Current radar deficiency of Aruba relates to replacement of antenna motor and substitution of wave-guide.	06/00		Repair the radar.	Aruba	TBD	A
<b>CNS Bahamas</b>									
CNS 24 C	Radio Navigation Aids (Table CNS 3) - ILS Cat. I Runway 14	Bahamas/Freeport Intl.	This ILS is not in service.		The facility was recommended for final approach and landing.	Bahamas plans to replace the ILS.	Bahamas	TBD	A
CNS 49 C	Radio Navigation Aids (Table CNS 3) VOR/DME West End	Bahamas/West End	The VOR/DME stations is recommended in the FASID, but it is not implemented.	01/2004		This station is recommended for the West End Intl. Airport, Grand Bahamas Island.	Bahamas	TBD	B
<b>CNS Belize/Belice</b>									
CNS 57 C	ATS speech circuits plan (Table CNS 1C) Belize APP - Merida ACC	Belize and Mexico	The circuit is out of service since 1 June 2003.	06/2003	Informed during the CA/ANE/WG/3 Meeting and reported by the DCA of Belize.	To implement a direct circuit to establish communications in 15 seconds.	Mexico and Belize	TBD	A
<b>CNS Netherlands Antilles/Antillas Neerlandesas</b>									
CNS 51 C	ATS Speech Circuits Plan (Table CNS 1C) Curaçao ACC-Baranquilla ACC	Neetherland Antilles and Colombia	Due to a broken down the circuit was discontinued and the impossibility to replace the Curaçao terminal equipment. For this, the IDD is use.	03/2003	Informed in the C/CAR WG/3 Meeting	To install temporarily a VSAT station of the Colombian network in Curaçao. Implement in a medium-term this circuit through a MEVA II and REDDIG interconnection	Neetherland Antilles and Colombia	TBD	A
<b>CNS Trinidad and Tobago/Trinidad y Tabago</b>									
CNS 3 C	AFTN Plan (Table CNS 1A) AFTN Circuits - Caracas (M)/Port of Spain (M)	Venezuela-Trinidad & Tobago/AFTN COM Centres	The circuit is implemented by a LTT/a circuit with velocity of 300 bps and ITA-2 code and it has some deficiencies of capacity and availability. The circuit is out of service during temporary periods since September 2001.	03/01	Reported by CAR/SAM AIS/ATM/CNS 02/00 Informal Meeting	It is implemented IA-5 code, but it should be implemented a circuit by 2400 bps and X.25 protocol. There are plans to implement a REDDIG node in Piarco to solve this problem.	Venezuela and Trinidad & Tobago	31Dec.04	A
CNS 2 C	AFTN Plan (Table CNS 1A) AFTN Circuits Georgetown's)- Port of Spain (M)	Guyana-Trinidad & Tobago/AFTN COM Centres	The circuit was upgraded to 300 baud as interim measure, but the availability is low.	03/01	Reported by CAR/SAM AIS/ATM/CNS 02/00 Informal Meeting	To implement a circuit by 2400 bps, IA-5 code and X.25 protocol. There are plans to implement a REDDIG node in Piarco to solve this problem. The AFTN traffic of Guyana was temporarily rerouted through Caracas, Venezuela.	Guyana and Trinidad and Tobago	31Dec.04	A

## OUTSTANDING DEFICIENCIES (A,B,U)

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE CAR REGION

CNS/COMM/5  
WP/14  
Appendix A

Identification		Deficiencies			Corrective Action				
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action	
CNS 4 C	ATS Speech Circuits Plan (Table CNS 1C) - Piarco ACC/Georgetown ACC (CM5 Circuit)	Trinidad and Tobago-Guyana	The circuit is reliable only at 90%.	03/98	Reported by the NACC and SAM Regional Offices.	There are plans to implement a REDDIG node in Piarco to solve this problem.	CAAs Trinidad & Tobago and Guyana	31Dec.04	A
CNS 5 C	ATS Speech Circuits Plan (Table CNS 1C) - Piarco ACC/Maiquetia ACC	Trinidad and Tobago-Venezuela	The circuit is reliable only at 80%.	03/98	Reported by the NACC and SAM Regional Offices.	There are plans to implement a REDDIG node in Piarco to solve this problem.	CAAs Trinidad & Tobago and Venezuela	31Dec.04	A
CNS 52 C	ATS Speech Circuits Plan (Table CNS 1C) Piarco ACC/Paramaibo ACC	Trinidad and Tobago-Suriname	A IDD is used; but according to the FASID a direct circuit (D) is required	11/02003	Reported in RO/CNS mission	There are plans to implement a REDDIG node in Piarco to solve this problem.	Trinidad and Tobago-Suriname	31Dec.04	A
CNS 53 C	Communications Plan VHF/HF AMS (Table CNS 2A) TTCP Crown Point Intl. Airport - APP-I	Trinidad & Tobago	The APP-I service is not implemented	11/03	Reported in the RO/CNS mission	Implement the APP/service station, but Trinidad & Tobago informed that the APP service at Crown Point Intl. Airport is provided by Piarco. Trinidad & Tobago will sent a letter to ICAO proposing the removal of this requirement in the table CNS 2A of the FASID.	Trinidad & Tobago	TBD	A

# OUTSTANDING DEFICIENCIES (A,B,U)

CNS/COMM/5  
WP/14  
Appendix B

## REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE SAM REGION

Identification		Deficiencies			Corrective Action				
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action	
<b>CNS Ecuador</b>									
CNS 29 S	Aeronautical Mobile Service Plan. Table CNS 1A. Lack of HF AMS communications in the Guayaquil FIR	Ecuador	Guayaquil AMS HF system out of service	9/2004	Due to civil works in Guayaquil International Airport the HF station of the mobile aeronautical service is out of service . During the ICAO CNS mission from the 18th to 20th August 2004 the HF system was fouded with 4 months out of service.	Install theHF system. No information we received in order to implement the corrective actions	Estado	TBD	A
<b>CNS Paraguay</b>									
CNS 21 S	Radio Navigation Service Plan. Table CNS 3. VOR	Paraguay, Mariscal Estigarribia	This VOR is not implemented	05/1989	This facility, recommended for en-route navigation, would support air routes UA320 and UA321	Plans of Paraguay would be presented to GREPECAS meeting WAITING FOR THE ACTION PLAN FOR THE INSTALLATION OF VOR/DME	Paraguay	TBD	A

## ACTION PLAN FOR RESOLVING REGIONAL AIR NAVIGATION DEFICIENCIES

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE CAR REGION

Identification		Deficiencies		Action Plan			
Requirements	States/facilities	Description	Date of presentation	Corrective Action	Executing Body	Date of correction	Difficulties Encountered
<b>CNS Belize/Belice</b>							
CNS 9 C	ATS Speech Circuits Plan (Table CNS 1C) - Belize APP-Puerto Barrios TWR	Belize-Guatemala/COCESNA	The required circuit is not implemented.	21/09/06	Study and implement a possible via. Action Plan: The category of the Puerto Barrios airport was changed to domestic; therefore, this circuit is no longer an international requirement.	Belize, Guatemala and COCESNA	TBD
<b>CNS COCESNA</b>							
CNS 16 C	ATS Speech Circuits Plan (Table CNS 1C) - La Aurora APP - Puerto Barrios TWR	COCESNA-Guatemala	The required circuit is not implemented. An IDD is being used.	21/09/06	Find a mean to implement the circuit or a proposal to amend the FASID. Action Plan: The category of the Puerto Barrios airport was changed to domestic; therefore, this circuit is no longer an international requirement.	COCESNA-Guatemala	TBD
CNS 39 C	Radio Navigation Aids (Table CNS 3) DVOR/DME Puerto San José, Guatemala	COCESNA-Guatemala	The equipment is obsolete	21/09/06	Replacement of a new DVOR/DME Station. This has been included in a COCESNA and State Members project. Action Plan: The replacement of this radio aid has been included in a COCESNA Project.	COCESNA-Guatemala	TBD
CNS 42 C	Radio Navigation Aids (Table CNS 3) DVOR/DME Toncontin Airport, Tegucigalpa, Honduras	COCESNA-Honduras	The replacement of the equipment is require	21/09/06	Replacement of a new DVOR/DME station and location. Action Plan: The replacement of this radio aid has been included in a COCESNA Project and it will be installed in the fourth trimester of 2006.	COCESNA-Honduras	2006
CNS 38 C	Radio Navigation Aids (Table CNS 3) ILS Intl. Airport, San Salvador, El Salvador, Runway 07	COCESNA-EI Salvador	The equipment is obsolete	21/09/06	COCESNA informed that public works have initiated to install new equipment in runway 25 and will be terminated on mid-2006. Action Plan: The ILS is in place. Installation details are yet to be defined.	COCESNA-EI Salvador	2007
CNS 40 C	Radio Navigation Aids (Table CNS 3) ILS/DME Intl. Airport La Aurora, Guatemala.	COCESNA-Guatemala	The replacement of the equipment is require	21/09/06	COCESNA informed that the ILS/DME installation is pending. The on-the-site study performed determined that the implementation is not feasible. Action Plan: Within the radio aids replacement project carried out by COCESNA, the corresponding study was carried out and it was concluded that the implementation of this radio aid is not feasible.	COCESNA-Guatemala	TBD
CNS 46 C	Radio Navigation Aids (Table CNS 3) ILS/DME Philip S.W. Goldson Airport, Belize, Belize	COCESNA-Belize	The replacement of the equipment is require	21/09/06	A new equipment ILS/DME is required. Action Plan: The replacement of this radio aid has been included in a COCESNA Project and it will be installed in 2007.	COCESNA-Belize	2006
CNS 47 C	Surveillance Systems (Table CNS 4A)	COCESNA	No complete coverage of a secondary radar exists in the Northeast Centralamerican FIR.	21/09/06	To implement a secondary radar in the Swan Island or Grand Cayman. Action Plan: COCESNA plans to implement a secondary radar in Cayman Islands.	COCESNA	2008

## ACTION PLAN FOR RESOLVING REGIONAL AIR NAVIGATION DEFICIENCIES

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE CAR REGION

Identification		Deficiencies		Action Plan				
Requirements	States/facilities	Description	Date of presentation	Corrective Action	Executing Body	Date of correction	Difficulties Encountered	
CNS 48 C	Surveillance Systems (Table CNS 4A)	COCESNA	No existence of a surveillance in the remotes zones of the Pacific FIR CENAMER remotes zones.	21/09/06	Bearing in mind the improvements made by COCESNA in the ACC CENAMER, COCESNA is evaluating the feasibility of implementing ADS based on satellite communications.	COCESNA	2006	No changes have been made.
<b>CNS Guatemala</b>								
CNS 18 C	ATS Speech Circuits Plan (Table CNS 1C) - La Mesa APP - Puerto Barrios TWR	Guatemala- Honduras- COCESNA	The required circuit is not implemented. An IDD is being used.	21/09/06	COCESNA informed that the airport changed to national category. Action Plan: The category of the Puerto Barrios airport was changed to domestic; therefore, this circuit is no longer an international requirement.	Guatemala, Honduras and COCESNA	TBD	
<b>CNS Mexico</b>								
CNS 56 C	ATS speech circuits (Table CNS 1C) - Belize APP - Merida ACC	Belize and Mexico	The circuit is out of service since 1 June 2003.	10/10/2006	To implement a direct circuit to establish communications in 15 seconds. Action Plan: ICAO will convene a Meeting with the participation of Belize, Mexico and COCESNA to analyse this situation.	Mexico and Belize	TBD	The MID/ACC reports indicate that the traffic registered is very scarce between MID/ACC and BZE/APP and the coordination is made through CENAMER/ACC-MID/ACC as established in the corresponding Letter of Agreement between both Units.
CNS 54 C	VHF/AMS-voice. Aeronautical Mobile Service Plan (Table CNS 2A)	United States	Lack of VHF-AMS oral coverage under the FL280 in Houston oceanic FIR in the CTA Merida boundaries with the CTA Monterrey. This requirement does not figure in the Table CNS 2A of the FASID, which ICAO is coordinating with the United States.	10/02/2004	To implement the required equipment for the operation of VHF/AMS oral functions. Implement a VHF remote stations in Mexico, based in a current agreement between United States and Mexico, as well as its mitigation by implementing ADS-B.	United States/Mexico	2005	Budget specific approval for this purpose.
<b>CNS Netherlands Antilles/Antillas Neerlandesas</b>								
CNS 27 C	Radio Navigation Aids (Table CNS 3) - ILS Cat. I	Netherlands Antilles/Philipsburg/Princess Juliana, St. Maarten I.	This ILS is not implemented.	05/2006	Netherlands Antilles plans to implement the ILS or GNSS Cat I system should be updated. Action Plan: GNSS procedures will be applied.	Netherlands Antilles	TBD	The ILS required for the St. Maarten airport could not be installed due to construction obstacles.
CNS 28 C	Radio Navigation Aids (Table CNS 3) - VOR/DME	Netherlands Antilles/Willemstad/Hato, Curacao	The VOR and the DME are implemented, but the VOR is disabled due to close construction.	05/2006	There are plans in the Netherlands Antilles to replace this facility by a new VOR/DME. Action Plan: A new VOR/DME will be installed in the Hato International Airport, Curacao in 2007.	Netherlands Antilles	2007	
CNS 23 C	Radio Navigation Aids (Table CNS 3) - VOR/DME ABA	Netherlands Antilles	DME in bad conditions, and the VOR and DME need to be replaced. VOR/DME ABA is installed in Aruba/Reina Beatrix Intl., but is the responsibility of Netherlands Antilles.	05/2006	VOR DME equipment need to be replaced. Action Plan: The Administration has no plans to replace the VOR/DME ABA installed in Aruba.	Netherlands Antilles	TBD	

## ACTION PLAN FOR RESOLVING REGIONAL AIR NAVIGATION DEFICIENCIES

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE CAR REGION

Identification		Deficiencies	Action Plan				
Requirements	States/facilities	Description	Date of presentation	Corrective Action	Executing Body	Date of correction	Difficulties Encountered

<b>CNS Trinidad and Tobago/Trinidad y Tabago</b>
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CNS	22 C	VHF/HF-AMS Communications Plan (Table CNS 2A) TTZP Piarco HF Voice	Trinidad and Tobago/CAR-A(3), CAR-B(1), SAM-2(2)	Several reports of pilots indicated that Piarco ACC was not available via HF frequencies. The Piarco centre has not implemented all required frequency, so it does not has 24 hours a day communication availability.	10/2004	It has been agreed that airlines contact Piarco ACC through ARINC's HF radio facilities in New York, this temporary solution was implemented. Through an ICAO Technical cooperation project a new equipment has been installed and according to information from Trinidad and Tobago, it was expeted that its commissioning would be in September 2005.	CAA Trinidad and Tobago.	09/2005
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## ACTION PLAN FOR RESOLVING REGIONAL AIR NAVIGATION DEFICIENCIES

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE SAM REGION

Identification		Deficiencies		Action Plan				
Requirements	States/facilities	Description	Date of presentation	Corrective Action	Executing Body	Date of correction	Difficulties Encountered	
<b>CNS Argentina</b>								
CNS 11 S	Aeronautical Mobile Service Plan. Table CNS 1A. Lack of HF communicaitons coverage in the Ezeiza FIR, Oceanic Sector	Argentina	Deficiencies in the HF communications have been identified in the oceanic part of the Ezeiza FIR.	October 2005	Total renewal of the HF equipments in Ezeiza (October 1999). The HF transmitter and receiver field antenna repaired on October 1999. FA Atlantic circuit, links verified 86,84%. New position was incorporated for the FA Atlantico. Operational extension of ACC Ezeiza and TMA Baires. Incorporation of means of communications between the aeronautical station and the remote equipment, obtaining the noise suppression in aeronautical station of the ACC. Receive only one HF frequency it is missing the monitor of other HF frequencies of the family assigned.	Argentina CAA	March 2007	Installation of a module in the Ezeiza ACC that permit the selection of more than one HF frequency.
<b>CNS Brazil/Brasil</b>								
CNS 19 S	Radio Navigation Service Plan. Table CNS 3. VOR/DME	Brazil, Corumba	This VOR/DME is not implemented	September 2004	THE VOR/DME WILL NOT BE INSTALLED. THEY ASKED TO REMOVE IT FROM TABLE CNS 3 OF THE FASID.	Brazil		It will be not implemented
CNS 23 S	Radio Navigation Service Plan. Table CNS 3. VOR/DME	Brazil, Ilheus	This VOR/DME is not implemented	September 2004	THE VOR/DME WILL NOT BE INSTALLED. THEY ASKED TO REMOVE IT FROM TABLE CNS 3 OF THE FASID.	Brazil		It will be not implemented
<b>CNS Ecuador</b>								
CNS 28 S	Aeronautical Mobile Service Plan. Table CNS 1A. Lack of VHF communications in the Guayaquil FIR	Ecuador	North portion of the Guayaquil FIR lacked VHF communications coverage	June 2004	Ecuador assured the deficiency will be resolved by September 2004	State	09/2004	
<b>CNS Guyana</b>								
CNS 30 S	FASID Table CNS 3	Timehri /Cheddi Jagan Intl Airport	ILS system out of service . This system was installed in 1978. Difficults in its maintenance.	January 2005	The CAA of Guyana is analyzing the convenience to accept the FAA donation of an ILS in a simple configuration.	State	To be determine	Lack of resource
CNS 31 S	FASID Table CNS 3	Timehri /Cheddi Jagan Intl Airport	DME system out of service . This system was installed in 1978. Difficults in its maintenance. Both DME unities out of service in their RF final power.	January 2005	The CAA of Guyana is analyzing the convenience to accept the FAA donation of an DME in a simple configuration.	State	To be determine	Lack of resource
<b>CNS Paraguay</b>								
CNS 15 S	Radio Navigation Service Plan. Table CNS 3. DME	Paraguay ASUNCION/S. Pettirossi	This DME is not implemented	January 2005	PARAGUAY INFORMED THAT THEY ARE NOT GOING TO INSTALL A DME DUE THAT THEY HAVE INSTALLED A MIDLE AND A FAR MARKER	Paraguay		It will be not implemented

## ACTION PLAN FOR RESOLVING REGIONAL AIR NAVIGATION DEFICIENCIES

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE SAM REGION

Identification		Deficiencies	Action Plan				
Requirements	States/facilities	Description	Date of presentation	Corrective Action	Executing Body	Date of correction	Difficulties Encountered

#### CNS Suriname

CNS	26 S	Radio Navigation Service Plan. Table CNS 3. NDB	Suriname PARAMARIBO/Zorg en Hoop	This NDB is not implemented	January 2005	THE NDB WON'T BE INSTALLED THEY ASKED TO REMOVE IT FROM TABLE CNS 3 OF THE FASID.	Suriname	It will be not implemented
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#### CNS Venezuela

CNS	14 S	Aeronautical Mobile Service Plan. Table CNS 1A. Lack of VHF communications in the Maiquetia FIR	Venezuela	Due to the lack of VHF coverage in some segments of ATS routes crossing the Maiquetia FIR, ATS is not yet provided in the required level	January 2004	A NEW VHF COMMUNICATION SYSTEM FOR MAIQUETIA ACC WAS ACQUIRED THROUGH THE ICAO TECHNICAL COOPERATION WHIT THE AIM TO GUARANTEE THE COMPLETE COVERAGE OF THE ACC .	Venezuela CAA	03/07	Delay in the process of acquisition
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## CORRECTED DEFICIENCIES (A,B,U)

CNS/COMM/5  
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Appendix E

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE CAR REGION

Identification		Deficiencies			Corrective Action				
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action	
<b>CNS Bahamas</b>									
CNS 31 C	Radio navigation Aids (Table CNS 3) - VOR	Bahamas, Nassau, Nassau Intl.	VOR is regularly out of service.	Sept. 2000	- IATA report Sept. 2000 - ICAO Visit, Oct. 2000 - IFALPA Meeting, Nov. 2000	Corrected.	Bahamas	2002	U
<b>CNS Belize/Belize</b>									
CNS 8 C	ATS Speech Circuits Plan (Table CNS 1C) - Belize APP-La Aurora APP	Belize-Guatemala-COESNA	The required circuit is not implemented.	11/99	COESNA informed that the circuit was implemented through the the Central American (CAMSAT) VSAT network, but its integration in the final equipment of La Aurora APP is pending.	COESNA informed the implementation of this circuit	Belize, Guatemala and COESNA.	04/2004	A
CNS 7 C	ATS Speech Circuits Plan (Table CNS 1C) - Belize APP-Tikal APP	Belize-Guatemala	The required circuit is not implemented. International direct dialling by public switch telephone network (IDD) is being used.	11/99	COESNA informed that the circuit was implemented through the Central American (CAMSAT) VSAT network, but its integration to the final equipment of Tikal APP is pending	COESNA informed that this circuit has been implemented.	Belize, Guatemala and COESNA	04/2004	A
<b>CNS COESNA</b>									
CNS 32 C	ATS Speech Circuits Plan (Table CNS 1C) and AFTN Plan (Table CNS1A)	COESNA-Mexico	Merida-CENAMER communications link is in bad conditions (2 ATS voice circuits, 1 AFTN circuit and other future circuits.	04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COESNA-Mexico	09/2004	A
CNS 33 C	ATS Speech Circuits Plan (Table CNS 1C) ATS Speech Circuit Bogota ACC/CENAMER ACC.	COESNA-Colombia	The circuit presents low availability, but there are plans for improvement.	04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COESNA-Colombia	2004	A
CNS 34 C	ATS Speech Circuits Plan (Table CNS 1C) ATS Speech Circuit Guayaquil ACC/CENAMER ACC	COESNA-Ecuador		04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COESNA-Ecuador-Colombia	2004	A
CNS 35 C	Communications Plan VHF/HF AMS (Table CNS 2A)	COESNA	Deficient VHF/AMS coverage in the Northeast sector of the Central America FIR.	04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COESNA	2006	A
CNS 36 C	Radio Navigation Aids (Table CNS 3) VOR/DME Limon International	COESNA-Costa Rica	VOR/DME Station Puerto Limon Airport, Costa Rica. Has exceeded his useful life, no logistic support is available.	004/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COESNA-Costa Rica	2006	B
CNS 41 C	Radio Navigation Aids (Table CNS 3) DME Gen. Anaclero Maza Castellanos Airport, Tical, Guatemala.	COESNA-Guatemala	The replacement of the equipment is required	04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COESNA-Guatemala	2005	B

## CORRECTED DEFICIENCIES (A,B,U)

CNS/COMM/5  
WP/14  
Appendix E

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE CAR REGION

Identification		Deficiencies			Corrective Action				
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action	
CNS 45 C	Radio Navigation Aids (Table CNS 3) DOVR Monseñor Scharlet, Bluefields, Nicaragua	COCESNA-Nicaragua	The replacement of the equipment is required	04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COCESNA-Nicaragua	2006	B
CNS 44 C	Radio Navigation Aids (Table CNS 3) DVOR/DME Intl. Airport of Managua, Nicaragua	COCESNA-Nicaragua	The replacement of the equipment is required	04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COCESNA-Nicaragua	2005	B
CNS 37 C	Radio Navigation Aids (Table CNS 3) ILS Daniel Oduber Quiroz Airport, Liberia, Costa Rica.	COCESNA-Costa Rica	The equipment is obsolete	04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COCESNA-Costa Rica	2005	B
CNS 43 C	Radio Navigation Aids (Table CNS 3) ILS/DME Airport Ramon Villeda Morales, San Pedro Sula, Honduras	COCESNA-Honduras	The replacement of the equipment is required	04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	COCESNA-Honduras	2006	B
<b>CNS Dominican Republic/República Dominicana</b>									
CNS 25 C	Radio Navigation Aids (Table CNS 3) -DME	Dominican Republic/Punta Cana	This DME is not implemented.		The facility was recommended for final approach and landing.	Corrected	Dominican Republic	2001	A
<b>CNS El Salvador</b>									
CNS 10 C	ATS Speech Circuits Plan (Table CNS 1C) - El Salvador APP-La Aurora APP	El Salvador-Guatemala/COCESNA	The required circuit is not implemented. A multi-point circuit is being used, but it has some deficiencies.	11/99	COCESNA informed that the circuit was implemented, but its integration in the final equipment of La Aurora APP is pending.	Corrected	El Salvador, Guatemala and COCESNA	2004	A
CNS 11 C	ATS Speech Circuits Plan (Table CNS 1C) - El Salvador APP-La Mesa APP	El Salvador-Honduras-COCESNA	The required circuit is not implemented. A multipoint circuit is being used, but it has some deficiencies.	11/99	.	Corrected	El Salvador, Honduras and COCESNA.	2002	A
CNS 12 C	ATS Speech Circuits Plan (Table CNS 1C) - El Salvador APP-Managua APP	El Salvador-Nicaragua and COCESNA	The required circuit is not implemented. A multipoint circuit is being used, but it has some deficiencies.	11/99		Corrected	El Salvador, Nicaragua and COCESNA.	2002	A
CNS 13 C	ATS Speech Circuits Plan (Table CNS 1C) - El Salvador APP-Toncontin APP	El Salvador-Honduras and COCESNA	The required circuit is not implemented. A multipoint circuit is being used, but it has some deficiencies.	11/99		Corrected	El Salvador, Honduras and COCESNA.	2002	A
<b>CNS Guatemala</b>									
CNS 15 C	ATS Speech Circuits Plan (Table CNS 1C) - La Aurora APP - La Mesa APP	Guatemala-Honduras-COCESNA	The required circuit is not implemented. A multipoint circuit is being used, but it has some deficiencies.	11/99	COCESNA informed that the circuit is implemented, but its integration in the final equipment of La Aurora APP is pending.	Corrected	Guatemala, Honduras and COCESNA	2004	A

## CORRECTED DEFICIENCIES (A,B,U)

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### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE CAR REGION

Identification		Deficiencies			Corrective Action				
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action	
CNS 14 C	ATS Speech Circuits Plan (Table CNS 1C) - La Aurora APP - Tikal APP	Guatemala-COCESNA	The required circuit is not implemented. International direct dialling by public switch telephone network (IDD) is being used.	11/99	COCESNA informed that the circuit was implemented through the CAMSAT, but its integration in the final equipment of La Aurora APP and Tikal APP is pending.	Corrected	Guatemala and COCESNA.	2004	A
CNS 19 C	ATS Speech Circuits Plan (Table CNS 1C) - Tikal APP - CENAMER ACC	Guatemala-COCESNA	The required circuit is not implemented.	11/99	COCESNA informed that the circuit was implemented, but its integration in the final equipment at Tikal APP is pending.	Corrected	Guatemala y COCESNA	2004	A
<b>CNS Honduras</b>									
CNS 17 C	ATS Speech Circuits Plan (Table CNS 1C) - La Aurora APP - Toncontin APP	Guatemala- Honduras-COCESNA	The required circuit is not implemented. An IDD is being used.	11/99	COCESNA informed that the circuit was implemented through the CAMTSAT, but its integration in the final equipment of La Aurora APP is pending.	Corrected	Guatemala, Honduras and COCESNA	2005	A
<b>CNS Jamaica</b>									
CNS 26 C	Radio Navigation Aids (Table CNS 3) - ILS Cat I	Jamaica/Kingston/Norman Manley Int'l.	This ILS is not implemented.		Jamaica informed that the ILS will be commissioned and in service for the Norman Manley International Airport in Kingston, Jamaica.	Corrected	Jamaica	2006	A
CNS 21 C	VHF/HF-AMS Communications Plan (Table CNS 2A) VHF/AMS Voice coverage implementation	Jamaica/Kingston FIR VHF frequencies	Deficient VHF coverage in the Eastern portion of the Kingston FIR (TARBA and AMBIN point) and in the western end (PESTO point, FL 190).	03/99	Jamaica informed that in April 2002 the installation of a new VHF station was finalized, which is related with the corrective action of relocating Jamaica's VHF station to a higher place of the Island. Therefore, it is considered that this action was carried out. With regard to the suggested action of implementing a remote VHF station at Grand Cayan, Jamaica informed that coverage trials have been performed and it is expected that for 1 October 2002 the remote VHF station will be commissioned to operate.	Corrected	Jamaica	03/2003	A
<b>CNS Mexico</b>									
CNS 50 C	ATS Speech Circuits Plan (Table CNS 1C) and AFTN Plan (Table CNS1A)	Mexico-COCESNA	Merida-CENAMER communications link is in bad conditions (2 ATS voice circuits, 1 AFTN circuit and other future circuits)	04/2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	Corrected	Mexico-COCESNA	2006	A
CNS 55 C	HF/AMS-voice. Mobile Aeronautical Service plan (CNS2A and CNS2B Tables). Merida ACC	Mexico	Low availability (80%) of the Mexico Radio HF/AMS voice communications, installed in Merida due that the HF and SELCAL equipment are obsolete	01/2002	RO/ATM mission	Mexico completed final tests of the new HF/AMS and SELCAL equipment are being carried out. Corregida	Mexico	06/2005	U

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### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE CAR REGION

Identification		Deficiencies			Corrective Action				
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action	
<b>CNS Netherlands Antilles/Antillas Neerlandesas</b>									
CNS	1 C AFTN Plan (Table CNS 1A) AFTN Circuits Aruba (S)- Curacao (S)	Aruba-Netherlands Antilles / AFTN COM Centres	The circuit is implemented by a LTT/a circuit with velocity of 75 baud and ITA-2 code, and it has some deficiencies.			Corrected	Netherlands Antilles.	2003	B
CNS	20 C VHF/HF-AMS Communications Plan (Table CNS 2A) VHF/AMS Voice coverage implementation	Netherlands Antilles/Curacao FIR frequencies	Deficient VHF coverage in the Northwest portion of the Curacao FIR.	03/99		Corrected	Netherlands Antilles.	2003	A
<b>CNS Trinidad and Tobago/Trinidad y Tabago</b>									
CNS	6 C ATS Speech Circuits Plan (Table CNS 1C) - Piarco ACC/Point Salines APP (A4 Circuit)	Trinidad & Tobago-Grenada	The circuit is now secondary to E/CAR AFS voice network and will be decommissioned. The circuit is occasionally out of service.	02/98	Reported by the NACC Regional Office. Problems have been attributed to the commercial provider (Cable & Wireless)	Corrected	CAAs Trinidad & Tobago and Grenada	11/2003	A
<b>CNS United States/Estados Unidos</b>									
CNS	30 C AFTN Plan (Table CNS 1A) AFTN Circuits United States (M) - Panama (T)	United States / AFTN COM Centres	This circuit is implemented by a SAT/a circuit with velocity of 75 baud and ITA-2 protocol. This indicates a deficiency.		During the MEVA/6 Meeting, April 1999, actions were coordinated with the involved States to implement the circuit through the MEVA network, pending the finalization of the contract between Panama and MEVA Provider. The target date of implementation was 30 August 1999.	Corrected	Panamá, United States and MEVA provider.	2002	B

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## REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE SAM REGION

Identification		Deficiencies			Corrective Action				
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action	
<b>CNS Argentina</b>									
CNS 3 S	AFTN circuits Buenos Aires (M) - Johannesburg (M)	Argentina	This circuit is not yet implemented	05/1989	CAR/SAM/2 RAN Meeting	A CAFSAT VSAT node was installed in Ezeiza on October 2005 and the AFTN circuit was installed.	Argentina and South Africa	October 2005	A
CNS 9 S	ATS speech circuits plan. Table CNS 1C. Ezeiza ACC/Johannesburg ACC	Argentina	This circuit was not yet implemented. Its implementation was planned as part of the ATS speech switched network using the Ezeiza ATS voice switch so as to meet requirements with the ACCs of Ezeiza, Johannesburg, Montevideo and Brasilia	05/1989	CAR/SAM/2 RAN Meeting	CAFSAT VSAT node was installed in Ezeiza on October 2005 and the oral circuit was installed.	Corresponding CAAs	October 2005	A
CNS 27 S	Radio Navigation Service Plan. Table CNS 3. DME	Argentina, Rio Grande	This DME is not implemented	05/1989	This facility was recommended to be associated with a VOR for en route and terminal navigation to support several air routes. The VOR station is operating at the significant point	They associate the DME at the ILS and they are continuing working in order that during the year 2005 they incorporate the DME at the VOR.	Argentina	End of 2005	B
<b>CNS Bolivia</b>									
CNS 18 S	Radio Navigation Service Plan. Table CNS 3. ILS/DME	Bolivia COCHABAMBA/Jorge Wilsterman	This ILS/DME facility is not implemented	05/1989	This ILS/DME facility has the purpose to provide navigation guidance for approach and landing operations to runway 31	THE ILS SYSTEM HAS BEEN ACQUIRED MISSING ITS INSTALLATION	Bolivia	October 2005	A
<b>CNS Brazil/Brasil</b>									
CNS 13 S	Aeronautical Mobile Service Plan. Table CNS 1A. Lack of VHF communications coverage in the Manaus, Porto Velho and Recife FIRs	Brazil/Brasil	Due to the lack of VHF coverage in some segments of ATS routes crossing the Manaus, Porto Velho and Recife FIRs, ATS is not yet provided in the required level.	09/1994	GREPECAS Conclusion 4/10. IATA Report	Corrected	Brazil CAA	December 200	U
CNS 12 S	Aeronautical mobile service plan. Table CNS 1A. Lack of HF communications coverage in the Brasilia FIR, Oceanic Sector	Brazil/Brasil	Deficiencies in the HF communications have been identified in the oceanic part of the Brasilia FIR	09/1994	GREPECAS/4. IATA Report.	Corrected	Brazil CAA	Junio 2002	U
<b>CNS Paraguay</b>									
CNS 1 S	AFTN Plan. Table CNS 1A. Asuncion AFTN COM Centre	Paraguay	The current automatic system is very old and has problems of provision of spare parts affecting the availability of the service	11/2000	COM/SG/9 Meeting. Information provided by Paraguay	An AFTN switch has been leased in substitution of the old AFTN. An AMHS system is going to be acquired.	Paraguay	June 2005	A

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### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE SAM REGION

Identification		Deficiencies			Corrective Action				
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action	
<b>CNS Peru</b>									
CNS 25 S	Radio Navigation Service Plan. Table CNS 3. ILS CAT II	Peru LIMA-CALLAO/Jorge Chavez	The current ILS system meets CAT I performance	05/1989	According to the Plan, the ILS requires Category II signal quality	Peru has indicated that the airport meets operational conditions for the Category. Only pending is ILS flight inspection.	Peru	Middle of 200	B
<b>CNS Venezuela</b>									
CNS 7 S	ATS speech circuits plan. Table CNS IC. ACC Piarco/ACC Maiquetia	Trinidad & Tobago, Venezuela	The reliability of the circuit is 80%	03/1998	ICAO Regional Offices	The REDDIG VSAT node was installed in Piarco at the end of September 2006	Respective CAAs	09/2006	A

**APPENDIX G**

**ACTION PLAN FOR THE RESOLUTION OF EACH ONE OF THE REGIONAL AIR NAVIGATION DEFICIENCIES  
PLAN DE ACCIÓN PARA RESOLVER CADA UNA DE LAS DEFICIENCIAS REGIONALES DE NAVEGACIÓN AÉREA**

State/Intl. Organization:

Estado/Org. Internacional:

Date/Fecha:

<b>ID</b>	<b>Deficiency/ Deficiencia</b>	<b>Corrective Action/ Acción correctiva</b>	<b>Date of Correction/ Fecha de corrección</b>	<b>Executing Body/ Organo Ejecutor</b>	<b>Difficulties encountered/ Dificultades encontradas</b>
<b>Identificación de la deficiencia usando el formato AREA-NUM-REG</b>	<b>Descripción exacta de la deficiencia tal y como aparece en la Base de Datos</b>	<b>El Estado deberá informar la acción correctiva propuesta o que llevará a cabo, tomando en cuenta la acción ya descrita por la Secretaría</b>	<b>Fecha estimada para concluir la acción correctiva de la deficiencia, indicando al menos el año en que se finalizará</b>	<b>Responsable de llevar a cabo la acción correctiva</b>	<b>Mencionar cualquier dificultad encontrada o que se pueda presentar para la adecuada implementación de la acción correctiva.</b>
<b>Identify the deficiency using the format AREA-NUM-REG</b>	<b>Exact description of the deficiency as appears in the Databank</b>	<b>State must inform the proposed corrective action or to be carried out, taking into account the action described by the Secretariat</b>	<b>Estimated date for the conclusion of the corrective action of the deficiency, indicating at least the year in which it will be completed</b>	<b>Responsible of carrying out the corrective action</b>	<b>Indicate any difficulty encountered or that could appear for the adequate implementation of the corrective action</b>