INTERNATIONAL CIVIL AVIATION ORGANIZATION

WESTERN AND CENTRAL AFRICA OFFICE

Twenty First Meeting of the AFI Satellite Network Management Committee (SNMC/21)
(Conakry, Guinea, 16-20 December 2013)

Agenda Item 1: Follow up on SNMC/20 Conclusions and Decisions

(Presented by the secretariat)

SUMMARY

The purpose of this paper is to inform the meeting on the status of implementation of the conclusions and Decisions of SNMC 20 meeting held in Abuja, Nigeria, from 08 to 12 October 2012.

Reference: SNMC 20 Report

Action by the meeting in paragraph 3

1. **Introduction**

   The Working discusses the status of implementation of Conclusions and Decisions adopted by the SNMC/20th Meeting held in held in Abuja, Nigeria, from 08 to 12 October 2012. Follow-up actions indicated in the tables have been established according to information available at the secretariat.

2. **Discussion**

2.1 The 20th meeting of SNMC (SNMC/20) was held in in Abuja, Nigeria, from 08 to 12 October 2012. The meeting deliberated on nine (09) agenda items and formulated 15 Conclusions and 06 Decisions.

2.2 The secretariat developed the final report that was circulated, finalized and posted at:
http://www.icao.int/WACAF/Pages/meetings-2012-snmc-20.aspx
Since then, many actions have been undertaken by States/Organizations and the secretariat for the implementation of these conclusions and decisions.

3. **Action Required**

The meeting is invited to:

a)   Review and up-date the status of implementation of SNMC/20 Conclusions and Decisions as attached in **Appendix** to this paper**.**

b)   Agree on any other follow-up action thereon.

Appendix

Status of implementation of the Conclusions/Decisions of SNMC 20

Agenda Item 1: Follow up on SNMC/19 Conclusions				
Conclusions/Decision	**Text**	**Organization**	**Status of implementation**	**Comments**
	Implementation of SNMC/19 outstanding conclusions SNMC			
Conclusion 20/01	**That:** **SNMC member States/Organizations are urged to implement the outstanding Conclusions/Decisions of SNMC previous meetings including those related to SNMC/19's as presented in Appendix B and to undertake corrective actions in order to:** a) **Restore and stabilize the AFISNET operational/technical reliability and availability as required;** b) **Provide adequate resources to ensure maintenance personnel exchange and training;** c) **Improve the maintenance coordination and monitoring procedures by bilateral and multilateral maintenance personnel exchange**	**All Organizations**	**Concerned Organizations to report**	
Decision 20/02	*Finalization of the common training programme for AFISNET maintenance personnel*			
	That: a) **A Task Force is established to finalize not later than end of July 2013, the draft training programme developed by Ghana for**	**GCAA**	**GCAA to report**	

		AFISNET maintenance personnel based on the common facilities and the provision of ICAO Training Manual for Air Traffic Safety Electronics Personnel (ATSEP), Doc 7192-AN/857 Part E-2. b) Ghana coordinate the work of the Task Force and report for circulation and consolidation among SNMC members with copy to ICAO WACAF Regional Office.			
Conclusion 20/03	*Development of training plans for Maintenance personnel*				
	That: SNMC States/Organizations develop and implement short, medium and long term training plans for maintenance personnel taking into consideration the provision of the common training programme and the training capability existing in the Region; The status of implementation of the short term training will be reported to next SNMC 2th meeting.	**All Organizations**	**States to report**		
Conclusion 20/04	*Licenses for AFISNET Maintenance Personnel*				
	That: SNMC Sates/Organizations undertake a harmonized study for a possible issuance of licenses to AFISNET Maintenance Personnel based on the successful implementation of the training programme and plans and subsequently ensure attractive position and conditions with regard to the responsibility and accountability required from the licensed	**All Organizations**	**States to report**		

	personnel.			
Decision 20/05	*Development of a calibration center for AFISNET Test Equipments*			
	That: **In accordance with Decisions 18/02 of SNMC/18 and 19/04 0f SNMC/19** **a) ASECNA tasked as Team leader by SNMC/19 pursue its effort in the development of the study for the implementation of the regional calibration center called upon by SNMC /18 and 19 meetings;** **b) SNMC members that have not done so, provide/complete an exhaustive list of tests equipments for the development of a data base and the finalization of the feasibility studies by <mark>end of January 201</mark>3 and;** **c) ICAO continue to support the implementation process;**	**ASECNA** **Sates** **ICAO**	**Organizations to report** **ICAO coordinated the collection of the list of**	**At the request of ASECNA ICAO purchase ISO/CEI/17025:2005 Document tests equipments and received data from Roberts FIR, GCAA** **This document contains the requirements for the capability of Test equiments calibration labs**
Decision 20/06	*Nomination of Focal point to follow up SNMC conclusions/decisions*			
	That: **a) The nominated Focal Points as per <mark>Appendix C</mark>, forward to the**	**Focal Point**	**States to Report**	

	current SNMC Coordinator (NAMA) a quarterly report on the status of implementation of the conclusions/decisions of SNMC 20; b) The current coordinator (NAMA) circulate amongst SNMC members a consolidated quarterly report on the status of implementation of the conclusions/decisions of SNMC 20; c) The electronic medium should be used for data exchange and reporting.	**NAMA coordinator**	**NAMA to report**	
Agenda Item 2: Review of AFISNET operational and technical statistics of availability
Conclusion 20/07	*Improvement of AFS (ATS/DS &AFTN) circuits*			
	That: As a matter of urgency concerned SNMC States conduct immediate collaborative actions aiming to investigating on the current failing AFS circuits and clear out the deficiencies reported to SNMC and attached in Appendix D	**ASECNA** **GCAA** **NAMA**	**Organizations to report**	
Decision 20/08	*Mitigation of missing Flight Plans*			
	That: a) Local Study Groups comprising technical and operational personal be established by each SNMC member not later than end of December 2012, in order to assess the technical and operational causes of missing flight plans, propose and undertake actions for their mitigation; b) The outcome of the local assessment should be shared with concerned centers for collaborative remedial actions;	**All Organizations**	**Organizations to report**	**No report to Secretariat on related activities**

		c) The current coordinator (NAMA) aggregate the reports of the local Study Groups and report to next SNMC meeting.	NAMA	NAMA to report	
Conclusion 20/09		*Automation of AFISNET operational Performance assessment*			
		That: In accordance with APIRG/18 deliberations (*APIRG/18 Report § 3.4.28*) adopting the Performance Data Collection Form (PDCF), 1) States/Organization endeavor to: a) Participate in the development of a comprehensive database for AFS-AFTN statistics management and monitoring in the AFI Region; b) Fill the Excel PDCF document and other relevant forms and report to the regional Office 2) ICAO assist States/Organization in the automation of AFISNET Performance assessment	All States	To consider when implementing AMHS systems	
Conclusion 20/10		*Automation of AFISNET Four Levels Performance Assessment system*			
		That: a) As a matter of urgency ASECNA circulate the model of four levels Performance Assessment principle for consideration by SNMC Administrations/Organizations; b) In order to ensure a common performance evaluation exercise an automated network Performance Assessment system development be initiated by ASECNA and presented to next SNMC meeting.	ASECNA	ASECNA to report	
		Agenda Item 3: Implementation of Special AFIRAN meeting recommendations 6/18 and 6/19 Audit of AFISNET			
Decision 20/11		*Terms of reference Action plan and timescale of the Audit of AFISNET*			

		ICAO	Implemented	The Secretariat coordinate the funding mechanism and funds are now available
	That: a) The revised terms of reference, the action plan and the timescale of the AFISNET audit, be adopted as per ==Appendix E== b) ICAO continues to coordinate the implementation process of the audit and launch the request for proposals for the audit to be completed within the timescale.			
Conclusion 20/12	*High level SNMC Administration meeting*			
	That: SNMC States/Organizations convene as soon as possible under the auspices of ICAO, a high level Administration heads meeting in order to agree on the funding mechanism for the implementation of Recommendation 6/18 of SP AFI RAN.	ICAO	Not implemented	Conclusion no more valid
Conclusion 20/13	*Participation of SNMC members in the meeting of the Task Force on the Development of a Regional Project on an AFI Integrated Aeronautical Telecommunication Infrastructure*			
	That: SNMC members endeavor to implement the Conclusion/Decisions derived from the outcome of the meetings of the Task Force for the AFI Aeronautical VSAT Networks Regional Project and actively participate in the future meetings of the Task Force for the development of an AFI Regional integrated aeronautical telecommunication infrastructure	States	Partially Implemented	Task force meeting attended by SNMC members
Agenda Item 4: Interconnection and interoperability of AFISNET with its neighboring networks (CAFSAT, NAFISAT, SADC2)				
Conclusion 20/14	*Completion of the interconnection process between AFISNET and its*			

	neighboring networks			
	That:			
	States/Organizations pursue the interconnection process between AFISNET and the neighboring networks in order to achieve the remaining AFS circuits required for ATM operation in particular:			
	a) **ASECNA and ATNS to continue their technical cooperation to assist the concerned States to establish via the interconnection between AFISNET and NAFISAT/SADC 2 the Moroni/Victoria, Moroni / Dar-es-Salam, Alger/Tripoli, Pointe Noire/ Luanda links and stabilize the following circuits: Brazzaville/Kinshasa, Luanda/Brazzaville;**	**ASECNA ATNS**	**ASECNA & ATNS to report**	
	b) **ASECNA, ENNA and French DGAC to complete the establishment of the link between Algiers and Aix.**	**ASECNA ENNA France**	**ASECNA, ENNA, France to report**	
	c) **ICAO continue to assist the concerned stakeholders with guidance and technical coordination meetings aiming to meeting agreement on cost effectiveness solutions for the implementation of the interconnection.**	**ICAO**		
Conclusion 20/15	*Bilateral agreement covering the interconnections between AFISNET*			

	and SADC/2 and NAFISAT			
	That: **ATNS and ASECNA continue further discussions to finalize and endorse the bilateral agreement covering the interconnections between AFISNET and SADC/2 / NAFISAT and assist other SNMC members if needed, to conclude similar agreements aiming to ensuring a quality of service level supported by the links.**	**ASECNA/ATNS**	**ASECNA & ATNS to report**	
	AFISNET in ICAO Aviation System Block Upgrades (ASBU) context			
Conclusion 20/16	**That** **SNMC States/Organizations endeavor to prepare and participate in the 12th (Montreal, 10-30 November 2012) Air Navigation Conference and take into account the ASBU concept and methodology to better conduct the AFISNET modernization exercise.**	**All States**	**Implemented**	
Agenda Item 5: Outcome of ITU WRC-12 pertaining to VSATs Networks and preparation of WRC-15				
Conclusion 20/17	*Implementation of Resolution 154 (COM 6/24)- WRC-12 and preparation of WRC-15*			
	That: **SNMC Sates/Organizations endeavor to:**	**All States**	**Still valid and Partially implemented**	

	a) Appropriate and promote the outcome on issues of WRC-12 related to the provision of spectrum for civil aviation; b) Actively participate in the studies called upon by Resolution *154* (COM6/24)-WRC 12 through the activities of AFI/FMG, ACP WG F meetings and ATU regional meetings; c) Strengthen their collaboration with their National Authority of Regulation of Telecommunication and other stakeholders involved in the usage of aeronautical spectrum in order to agree on Collaborative Decision Making (CDM) in support to the forthcoming ICAO position for the future WRC-15/16			
Agenda Item 6: AFISNET band width re-engineering
	Satellite back up and AFISNET band width re-engineering			
Conclusion 20/18	**That:** **SNMC Sates/Organizations:** a) develop a customer requirements to be submitted to the satellite Service Provider INTELSAT and that will address the feasibility of technical solutions to be deployed in case of satellite failure and; b) Schedule the IBS to leased band conversion with INTELSAT and complete the implementation of conclusion 17/10 and 18/13, 19/13 of respective SNMC/17, 18 and 19 meetings.	**States**	**Still valid** **Not implemented**	
Agenda Item 7: Review of the APIRG/18 conclusion related to AFISNET
Conclusion 20/19	Review of the APIRG/18 conclusion related to AFISNET			
	That: **SNMC Sates/Organizations:**	**All States**	**Still valid** **States to report**	

	a) Implement APIRG/18 Conclusions 18/24, 18/25 & 18/26 related respectively to:
	  1. Contingency Planning for AFI VSAT Networks Operations
	  2. Best practices for AFI VSAT Networks
	  3. Modernization of AFI VSAT Networks
	
	b) Increase their pace of participation to CNS/SG and APIRG forthcoming meetings.			

Agenda Item 8: Required Communication Performance of AMS supported by AFISNET				
Conclusion 20/20	*Required Communication Performance of AMS supported by AFISNET*			
	That: When re-engineering AFISNET States/Organizations take advantage of the benefit provided by RCP concept for the reinforcement of the Quality of Service of aeronautical mobile communication within SNMC airspace.	**All States**	**Still valid**	
Agenda Item 9: Review of the Term of reference and Work Programme of SNMC				
Decision 20/21	*Term of reference and Work Programme of SNMC*			
	That; **The revised Terms of Reference of SNMC is adopted as presented at** ==**Appendix**==	**All States**	**Implemented**	

Performance Data   Collection Form
Global Static parameters

Center

Date/

Parameters	Values	Remarks
Fixed Parameters		
Intelsat link Name	IS 901 @°E	
Transponder Number	36/36	
Satellite Earth Station Coordinates	LONG = ddd, mm O/E LAT = dd, mm N/S	Under WGS 84 Format
	AZ = ddd, mm O/E EL = dd, mm N/S	
Antenna Type and Size	….m	
Antenna Gain	Tx : …dBi Rx : …dBi	
SSPA type	X W	
Up Converter Frequency	MHz	
Down Converter Frequency	MHz	
Global Dynamic parameters		
EIRP		
G/T		
C/N0		
BER		
MTBF		
MTTR		
Parameter for Carrier Performance		
Carrier failure rate		
C/N0		
BER		

Performance of AFTN

Centre : Accra
Date /

Country	Terminal I	Terminal II	Support	COM Protocol	Speed	Transit Time	Routing	Monthly Availability 2011												½ Annual Average Availability	
								01		02		03		04		05		06		1	
								TX	RX	TX	RX	TX	RX	TX	RX	TX	RX	TX	RX	TX	RX
Ghana	Accra	Niamey	AFISNET																		

Qualitative performance of ATS/DS

Centre :
Date /

Country	Terminal I	Terminal II	Support	Connexion Time	Nb of Attemps	One Way Latence Time	Call set up time	Voice Quality (1 to 5)	Monthly Availability 2011						½ Annual Average Availability
									01	02	03	04	05	06	
Nigeria	Kano	Niamey	AFISNET												

Qualitative performance of Future CNS Services

Country	Terminal 1	Terminal II	Support	Provided Service	COM Protocol	Speed	Transit Time	Routing	Availability 2005-2010						Remarks
									05	06	07	08	09	10	
Mauritus	Maurice	Ivato	AFISNET	AIDC											
Liberia	Roberts	Dakar	AFISNET	AMHS											

Appendix D

Current AFS dysfunctions on AFISNET

Circuit		Service	Performances		
Terminal I	Terminal II		Average Availability	Comments	Futures actions
Accra	Brazzaville	ATS/DS	92.4%		
	Kano	ATS/DS	1%		
	Lagos	ATS/DS	92.4		
	Lome	ATS/DS	92.7		
	Luanda	ATS/DS	87.8		
Accra	Lome	AFTN	81.2%		
	Luanda	AFTN	77.8%		
	Ouagadougou	AFTN	89.3%		
	Sao Tome	AFTN	51.4%		
Brazzaville	Antanarivo	AFTN	88%		
	Dakar	AFTN	94%		
	Johannesburg	AFTN	87%		
	Kano	AFTN	43%		
	Kinshasa	AFTN	0%		
	Luanda	AFTN	6%		
	Niamey	AFTN	93%		
Dakar	Antananarivo	AFTN	91%		
	Bamako	AFTN	92%		
	Bissau	AFTN	95%		
	Brazzaville	AFTN	94%		
	Conakry	AFTN	95%		
	Libreville	AFTN	93%		
	Nouakchott	AFTN	94%		
	Niamey	AFTN	90%		
Niamey	Accra	AFTN	96%		
	Brazzaville	AFTN	86%		
	Dakar	AFTN	90%		
	Kano	AFTN	86%		
	Lome	AFTN	94%		
	N'Djamena	AFTN	94%		
	Nouakchott	AFTN	96%		