



**INTERNATIONAL CIVIL AVIATION ORGANIZATION
WESTERN AND CENTRAL AFRICAN OFFICE**

**Seventh Meeting of the Central Atlantic FIR Satellite (CAFSAT) Network
Management Committee (CNMC/7)
Paris, France, 05 - 06 June 2017**

**Agenda Item 2: *Review the performance of CAFSAT earth stations and the
operational statistics of availability for supported links***

Lisbon and Santa Maria CAFSAT stations availability

(Presented by Portugal)

Summary

This working paper presents information on availability of Lisbon and Santa Maria CAFSAT stations during the year of 2016 and the 1st trimester of 2017.

Background

According Conclusion SAT/16/14 and Decision CNMC/1/02 each trimester statistics of availability of CAFSAT earth stations are to be sending to ICAO Dakar Office and CNMC manager.

Discussion

Portugal has presented a quarterly report on availability of CAFSAT earth stations of Lisbon and Santa Maria.

This WP presents the consolidated report of year 2016 and for the 1st trimester of 2017. Presented data is for Level 4 (client base equipment to client base equipment).

Suggested action

Meeting is invited to note the information of this WP.

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(14 pages)

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CAFSAT Collection of the Performance Statistics Data

(1st semester 2016)

Performance of AFTN

Centre: Lisbon (Coordinates: 38° 46' 29.14" N / 09° 07' 28.77 W, under WSG 84 format))

Date: 26/07/2016

Country	Terminal I	Terminal II	Support	Com Prot.	Speed	Transit time	Routing	Monthly Availability 2016												½ Annual Average Availability			
								01		02		03		04		05		06		1			
Portugal	Lisbon	Santa Maria	CAFSAT	Assy. V.24	2.4 Kbps		Direct	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx		
								100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
		01						02		03		04		05		06							
		Tx						Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx

Quality Performance of ATS/DS

Centre: Lisbon

Date: 26/07/2016

Country	Terminal I	Terminal II	Support	Connection Time	Nb.. of Attempts	One Way Latency Time	Call set up time	Voice Quality (1 to 5)	Monthly Availability 2016						½ Annual Average Availability
									01	02	03	04	05	06	
Portugal	Lisbon	Santa Maria 1	CAFSAT					4	01	02	03	04	05	06	
		100%		100%	100%	100%	100%	100%	100%						
		Santa Maria 2					4	01	02	03	04	05	06		
		100%		100%	100%	100%	100%	100%	100%						
		Casablanca AMS (Foia)					4	01	02	03	04	05	06		
		100%		100%	100%	100%	100%	100%	100%						



CNS Services OLDI and Radar Data

Centre: Lisbon

Date: 26/07/2016

Country	Terminal I	Terminal II	Support	Provided Service	COM Protocol	Speed	Transit Time	Routing	Monthly Availability 2016						½ Annual Average Availability	
									01	02	03	04	05	06		
Portugal	Lisbon	Casablanca	CAFSAT	OLDI	X.25	9.6 Kbps		Direct	01	02	03	04	05	06		
		Casablanca		Radar Fóia	HDLC	9.6 Kbps		Direct	01	02	03	04	05	06	100%	
		Casablanca		Radar Porto Santo	HDLC	9.6 Kbps		Direct	01	02	03	04	05	06	100%	
										01	02	03	04	05	06	100%

26/07/2016



CAFSAT Collection of the Performance Statistics Data

Appendix B

(2nd semester 2016)

Performance of AFTN

Centre: Lisbon (Coordinates: 38° 46' 29.14" N / 09° 07' 28.77" W, under WGS 84 format)

Date: 30/01/2017

Country	Terminal I	Terminal II	Support	Com Prot.	Speed	Transit time	Routing	Monthly Availability 2016												½ Annual Average Availability	
								07		08		09		10		11		12		2	
								Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx
Portugal	Lisbon	Santa Maria	CAFSAT	Assy. V.24	2.4 Kbps		Direct	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
								100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			

Quality Performance of ATS/DS

Centre: Lisbon

Date: 30/01/2017

Country	Terminal I	Terminal II	Support	Connection Time	Nb.. of Attempts	One Way Latency Time	Call set up time	Voice Quality (1 to 5)	Monthly Availability 2016						½ Annual Average Availability
									07	08	09	10	11	12	
Portugal	Lisbon	Santa Maria 1	CAFSAT					4	100%	100%	100%	100%	100%	100%	100%
		Santa Maria 2						4	100%	100%	100%	100%	100%	100%	
		Casablanca AMS (Foia)						4	100%	100%	100%	100%	100%	100%	
										100%	100%	100%	100%	100%	
										100%	100%	100%	100%	100%	
										100%	100%	100%	100%	100%	



CNS Services OLDI and Radar Data

Centre: Lisbon

Date: 30/01/2017

Country	Terminal I	Terminal II	Support	Provided Service	COM Protocol	Speed	Transit Time	Routing	Monthly Availability 2016						½ Annual Average Availability
									07	08	09	10	11	12	
Portugal	Lisbon	Casablanca	CAFSAT	OLDI	X.25	9.6 Kbps		Direct	07	08	09	10	11	12	100%
		Casablanca		Radar F6ia	HDLC	9.6 Kbps		Direct	07	08	09	10	11	12	100%
		Casablanca		Radar Porto Santo	HDLC	9.6 Kbps		Direct	07	08	09	10	11	12	100%
									07	08	09	10	11	12	

30/01/2017



CAFSAT Collection of the Performance Statistics Data

Appendix C

(1st trimester 2017)

Performance of AFTN

Centre: Lisbon (Coordinates: 38° 46' 29.14" N / 09° 07' 28.77 W, under WSG 84 format)

Date: 09/05/2017

Country	Terminal I	Terminal II	Support	Com Prot.	Speed	Transit time	Routing	Monthly Availability 2017												½ Annual Average Availability	
								01		02		03		04		05		06		1	
Portugal	Lisbon	Santa Maria	CAFSAT	Assy. V.24	2.4 Kbps		Direct	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx		
								100 %	100 %	100 %	100 %	100 %	100 %								
		01						02		03		04		05		06					
		Tx						Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	

Quality Performance of ATS/DS

Centre: Lisbon

Date: 09/05/2017

Country	Terminal I	Terminal II	Support	Connection Time	Nb.. of Attempts	One Way Latency Time	Call set up time	Voice Quality (1 to 5)	Monthly Availability 2017						½ Annual Average Availability		
									01	02	03	04	05	06			
Portugal	Lisbon	Santa Maria 1	CAFSAT					4	01	02	03	04	05	06			
		Santa Maria 2					4	01	02	03	04	05	06				
		Casablanca AMS (Foia)					4	01	02	03	04	05	06				
									01	02	03	04	05	06			



CNS Services OLDI and Radar Data

Centre: Lisbon

Date: 09/05/2017

Country	Terminal I	Terminal II	Support	Provided Service	COM Protocol	Speed	Transit Time	Routing	Monthly Availability 2017						½ Annual Average Availability
									01	02	03	04	05	06	
Portugal	Lisbon	Casablanca	CAFSAT	OLDI	X.25	9.6 Kbps		Direct	01	02	03	04	05	06	
		Casablanca		Radar Fóia	HDLC	9.6 Kbps		Direct	100%	100%	100%				
		Casablanca		Radar Porto Santo	HDLC	9.6 Kbps		Direct	01	02	03	04	05	06	
									100%	100%	100%				
									01	02	03	04	05	06	

09/05/2017



CAFSAT Collection of the Performance Statistics Data

Appendix D

(1st semester 2016)

Performance of AFTN

Centre: Santa Maria (Coordinates: 36° 58' 22.45" N / 25° 09' 55.01" W, under WGS 84 format)

Date: 26/07/2016

Country	Terminal I	Terminal II	Support	Com Prot.	Speed	Transit time	Routing	Monthly Availability 2016												½ Annual Average Availability	
								01		02		03		04		05		06		1	
								Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx		
Portugal	Santa Maria	Lisbon	CAFSAT	Assy V24	2.4Kbps		Direct	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %		
		Sal		Assy. V24	2.4Kbps		Direct	01		02		03		04		05		06			
								Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	99.78%	99.78%

Quality Performance of ATS/DS

Centre: Santa Maria

Date: 26/07/2016

Country	Terminal I	Terminal II	Support	Connexion Time	Nb of Attempts	One Way Latency Time	Call set up time	Voice Quality (1 to 5)	Monthly Availability 2016						½ Annual Average Availability
									01	02	03	04	05	06	
Portugal	Santa Maria	Canary	CAFSAT					4	99.95%	99.88%	99.85%	100%	100%	100%	99.95%
		Sal						4	100%	99.78%	98.91%	100%	100%	100%	
		Lisbon 1						4	100%	100%	100%	100%	100%	100%	100%
		Lisbon 2						4	100%	100%	100%	100%	100%	100%	



CNS Services OLDI and Radar Data

Centre: Santa Maria

Date: 26/07/2016

Country	Terminal I	Terminal II	Support	Provided Service	COM Protocol	Speed	Transit time	Routing	Monthly Availability 2016						½ Annual Average Availability
									01	02	03	04	05	06	
Portugal	Santa Maria	Canary	CAFSAT	OLDI	X.25	2.4 Kbps		Direct	01	02	03	04	05	06	99.95%
					99.95%	99.88%	99.85%	100%	100%	100%					
		Sal		OLDI	X.25	1.2 Kbps		Direct	01	02	03	04	05	06	99.78%
				100%	99.78%	98.91%	100%	100%	100%						
				01	02	03	04	05	06						
				01	02	03	04	05	06						

26/07/2016



CAFSAT Collection of the Performance Statistics Data

Appendix E

(2nd semester 2016)

Performance of AFTN

Centre: Santa Maria (Coordinates: 36° 58' 22.45" N / 25° 09' 55.01" W, under WGS 84 format)

Date: 30/01/2017

Country	Terminal I	Terminal II	Support	Com Prot.	Speed	Transit time	Routing	Monthly Availability 2016												½ Annual Average Availability	
								07		08		09		10		11		12		2	
Portugal	Santa Maria	Lisbon	CAFSAT	Assyn V24	2.4Kbps		Direct	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx
								100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
		Sal		Assyn V24	2.4Kbps		Direct	07		08		09		10		11		12			
								Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx
100%	100%	100%	100%	98.86%	98.86%	100%	100%	100%	100%	100%	100%	100%	100%	99.81%	99.81%						

Quality Performance of ATS/DS

Centre: Santa Maria

Date: 30/01/2017

Country	Terminal I	Terminal II	Support	Connetion Time	Nb of Attemps	One Way Latency Time	Call set up time	Voice Quality (1 to 5)	Monthly Availability 2016						½ Annual Average Availability
									07	08	09	10	11	12	
Portugal	Santa Maria	Canary	CAFSAT					4	07	08	09	10	11	12	99.93%
		100%							100%	100%	100%	99.77%	99.83%		
		Sal						4	07	08	09	10	11	12	99.81%
		100%							100%	98.86%	100%	100%	100%		
		Lisbon 1						4	07	08	09	10	11	12	100%
		100%							100%	100%	100%	100%	100%		
		Lisbon 2						4	07	08	09	10	11	12	100%
		100%							100%	100%	100%	100%	100%		



CNS Services OLDI and Radar Data

Centre: Santa Maria

Date: 30/01/2017

Country	Terminal I	Terminal II	Support	Provided Service	COM Protocol	Speed	Transit time	Routing	Monthly Availability 2016						½ Annual Average Availability	
									07	08	09	10	11	12		
Portugal	Santa Maria	Canary	CAFSAT	OLDI	X.25	2.4 Kbps		Direct	07	08	09	10	11	12	99.93%	
									100%	100%	100%	100%	99.77%	99.83%		
		Sal		OLDI	X.25	1.2 Kbps			Direct	07	08	09	10	11	12	99.81%
										100%	100%	98.86%	100%	99.97%	99.72%	
										07	08	09	10	11	12	
							07	08	09	10	11	12				

30/01/2017



CAFSAT Collection of the Performance Statistics Data

Appendix F

(1st trimester 2017)

Performance of AFTN

Centre: Santa Maria (Coordinates: 36° 58' 22.45" N / 25° 09' 55.01" W, under WGS 84 format)

Date: 09/05/2017

Country	Terminal I	Terminal II	Support	Com Prot.	Speed	Transit time	Routing	Monthly Availability 2017												½ Annual Average Availability	
								01		02		03		04		05		06		1	
								Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx		
Portugal	Santa Maria	Lisbon	CAFSAT	Assy V24	2.4Kbps		Direct	100 %	100 %	100 %	100 %	100 %	100 %								
		Sal		Assy. V24	2.4Kbps		Direct	01		02		03		04		05		06			
								Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx
								100 %	100 %	99.9 %	99.9 %	98.8 %	98.8 %								

Quality Performance of ATS/DS

Centre: Santa Maria

Date: 09/05/2017

Country	Terminal I	Terminal II	Support	Connexion Time	Nb of Attempts	One Way Latency Time	Call set up time	Voice Quality (1 to 5)	Monthly Availability 2017						½ Annual Average Availability
									01	02	03	04	05	06	
Portugal	Santa Maria	Canary	CAFSAT					4	100%	100%	100%				
		Sal						4	100%	99.99%	98.80%				
		Lisbon 1						4	100%	100%	100%				
		Lisbon 2						4	100%	100%	100%				



CNS Services OLDI and Radar Data

Centre: Santa Maria

Date: 09/05/2017

Country	Terminal I	Terminal II	Support	Provided Service	COM Protocol	Speed	Transit time	Routing	Monthly Availability 2017						½ Annual Average Availability		
									01	02	03	04	05	06			
Portugal	Santa Maria	Canary	CAFSAT	OLDI	X.25	2.4 Kbps		Direct	01	02	03	04	05	06			
										100%	100%	100%					
		Sal		OLDI	X.25	1.2 Kbps		Direct	01	02	03	04	05	06			
											100%	99.99%	98.57%				
											01	02	03	04	05	06	
									01	02	03	04	05	06			

09/05/2017