



Appendix I Performance Matrix of SAT CNS Infrastructure and Systems

State: _____ ANSP: _____ Quarter: _____ Year: _____ FIR: _____

SYSTEMS		Performance Indicators		
		A (%)	MTBF (H)	MTTR (H)
Communication	VHF			
	HF			
	AIDC/OLDI			
	CPDLC			
	AFTN/AMHS			
	VCS			
Surveillance Navigation	VOR			
	DME			
	NDB			
	GNSS			
	SSR			
	ADS-C			
	ADS-B			
	MLAT			

Indicators:

A - Service Availability

(%)

MTIS - Mean Time Inoperative Service (Minutes)

MTBF - Mean Time Between Service Failures (hours)

TTOS - Total Time Out Service-: Sum of the times that the service was inoperative. (hours)

A – Service Availability (SA): Is the service availability during a quarter.

$$A = \frac{TT - TTOS}{TT} \times 100$$

TT: Total Time of a quarter (90 days = 2160 hours)

MTIS – Mean Time Inoperative Service (MTIS): Is the average time that the service was inoperative each time the service failure occurred. For example, if during a quarter the service is inoperative for 2 times during 20 min and 30 min, respectively, the MTIS would be 25 Min.

MTBF – Mean Time Between Failures (MTBSF): Is the average time between service failures during operation. For example, if during a quarter (90 days = 2160 hours) the service is inoperative for 3 times and the times between failures are 20 days (480 hours) and 30 days (720 hours), respectively, the MTBF are 25 Days (600 hours).

TTOS – Total Time Out Service (TTOS): Sum of the times that the service was inoperative.

MTTR – Mean Time to repair (MTTR): Is the TTOS(Total Time Out Service)divided by the number of failures