

INTERNATIONAL CIVIL AVIATION ORGANIZATION



AFI CNS/ATM IMPLEMENTATION PLAN

1995 -- 2015

Volume II – Status of Implementation of the AFI CNS/ATM Plan

Edition 5.1

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AFI CNS/ATM Implementation Plan
Volume II

DOCUMENT CHANGE RECORD

VERSION	DATE	REASON FOR CHANGE	SECTIONS AFFECTED
5.1	27/06/03	Adoption by APIRG/14 of CNS/ATM/IC/SG/4 Report. First issue	





History of the versions

- Doc003, Version 5.1, Volume II was published in October 2003, following the amendment of Doc 003 into 2 volumes by the APIRG/14 Meeting (Yaounde, 23-27 June 2003).

STATUS OF IMPLEMENTATION OF THE AFI CNSS/ATM PLAN

**STATUS OF IMPLEMENTATION BY STATES
AND ROUTING AREAS**

Legend:

	Target year
	WGS-84 aerodromes coordinates only implemented
	Implemented
	Not implemented

Status of Implementation of the AFI CNS/ATM Plan

Explanations

1. Part I: AFI CNS/ATM Objectives Implementation - Summary

This appendix shows in summary form the percentage implementation of each objective in the plan for every area of routing. The percentage is calculated by the ratio of States that have actually implemented over the total number of States comprising the area of routing.

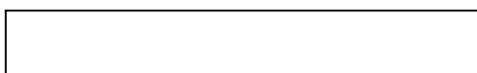
2. Part II: Status of implementation by States

2.1 The target year is indicated by a black band.

2.2 When an objective is implemented, it is shown on screen as a blue band or in print as:



2.3 When an objective is not implemented, the row is left blank.



2.4 When a State had indicated that it plans to implement an objective at a certain date, this is shown in bracket after the State name:

Eg. Chad (2003).

2.5 For WGS-84, when a State has implemented only aerodrome coordinates, this is shown on screen in tan or in print as:



2.6 When a target year has not yet been selected this is indicated by (TBD) (i.e. to be determined). The rows are left blank.

AFI CNS/ATM Implementation Plan
Volume II

Part I
Status of Implementation of the AFI CNS/ATM Plan

Summary

Target Year	Objective	Percentage implementation – October 2003					
		AR1	AR2	AR3	AR4	AR5	AR6
	Number of AFI States	4	4	17	23	16	6
1999	Provision of area control service in upper airspaces	<u>100</u>	0	<u>82</u>	<u>87</u>	<u>100</u>	<u>100</u>
1999	Pursue the implementation of fixed RNAV routes contained in the AFI ANP*	<u>100</u>	NA	<u>66</u>	<u>69</u>	<u>100</u>	<u>100</u>
1999	Implementation of WGS-84	<u>100</u>	<u>50</u>	<u>76</u>	<u>65</u>	<u>62</u>	<u>83</u>
1999	Complete implementation of all AFTN circuits	<u>100</u>	<u>75</u>	<u>70</u>	<u>74</u>	<u>81</u>	<u>100</u>
1999	Complete implementation of all ATS/DS circuits	<u>100</u>	<u>0</u>	<u>35</u>	<u>60</u>	<u>37</u>	<u>100</u>
1999	Extension of VHF coverage at all operationally significant altitudes	<u>100</u>	NA	<u>88</u>	<u>69</u>	<u>100</u>	<u>100</u>
1999	Progressive provision of SSR in selected airspaces*	NA	NA	<u>66</u>	<u>33</u>	<u>66</u>	NA
2000	Progressive reduction of lateral separation minima in selected airspaces from 100 NM to 50 NM (in RNP 10 environment) as dictated by operational requirements	<u>100</u>	NA	NA	NA	NA	<u>16</u>
TBD	Progressive reduction of lateral separation minima in selected airspaces from 50 NM to 30 NM (in RNP 5 environment) as dictated by operational requirements	<u>NA</u>	NA	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	NA
2000	Uniform application of 10 minutes longitudinal separation in the upper airspace	<u>100</u>	<u>NA</u>	<u>82</u>	<u>87</u>	<u>100</u>	<u>83</u>
2000	Progressive introduction of Automatic Dependent Surveillance Service with full ground capability by 2005	<u>25</u>	<u>25</u>	<u>11</u>	<u>6</u>	<u>0</u>	<u>80</u>
2000	Continuation of introduction of Random RNAV routes in oceanic airspaces	NA	<u>TBD</u>	NA	NA	NA	<u>100</u>
2000	Progressive introduction of random RNAV routes above FL 350 in continental airspaces	NA	NA	<u>NA</u>	<u>NA</u>	<u>NA</u>	NA
2000	GNSS en route	<u>0</u>	<u>25</u>	<u>17</u>	<u>4</u>	<u>0</u>	<u>16</u>

* Requirement does not apply to all States in AR

AFI CNS/ATM Implementation Plan
Volume II

Target Year	Objective	Percentage implementation – October 2003					
		AR1	AR2	AR3	AR4	AR5	AR6
	Number of AFI States	4	4	17	23	16	6
2000	Progressive introduction of GNSS-based procedures;	<u>75</u>	<u>75</u>	<u>41</u>	<u>60</u>	<u>31</u>	<u>66</u>
2001	Progressive introduction of RNP 5 in selected upper airspaces	NA	NA	<u>0</u>	<u>6</u>	<u>0</u>	<u>16</u>
2001	Progressive introduction of Longitudinal RNAV/RNP separation minima of 10 minutes and / or 80NM RNAV derived distance in selected airspaces	<u>0</u>	NA	NA	NA	NA	NA
2001	Progressive introduction of Controller pilot data link communications (CPDLC) with full capacity in 2005	<u>25</u>	<u>25</u>	<u>11</u>	<u>6</u>	<u>0</u>	<u>50</u>
2003	Progressive Implementation of 1000 ft Vertical Separation Minima (RVSM) between FL290 and FL410 in selected airspaces	<u>100</u>	<u>TBD</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
2005	Progressive introduction of AIDC with completion by 2008	<u>NA</u>	NA	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>25</u>





NA: not applicable
TBD: to be determined

STATUS OF IMPLEMENTATION OF THE AFI CNS/ATM PLAN

Part II

**STATUS OF IMPLEMENTATION BY STATES
AND ROUTING AREAS**

Legend:

	Target year
	WGS-84 aerodromes coordinates only implemented
	Implemented
	Not implemented

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-1	AFI Region	10 min longitudinal separation using Mach Number technique																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		
AR-1	AFI Region	50NM lateral separation																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		
AR-1	AFI Region	30NM lateral separation (TBD)																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-1	AFI Region	ATC in upper airspace																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		
AR-1	AFI Region	Fixed RNAV routes																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-1	AFI Region	30NM longitudinal separation with radar surveillance																	
	Morocco	(10NM longitudinal separation with radar surveillance)																	
	Portugal ¹																		
	Spain																		
AR-1	AFI Region	25NM lateral separation with radar surveillance																	
	Morocco	(10NM lateral separation with radar surveillance)																	
	Portugal ¹																		
	Spain																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-1	AFI Region	Distance-based separation 80NM																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		
AR-1	AFI Region	RVSM																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-1	AFI Region	Extension of VHF coverage																	
	Brasil ¹																		
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		
AR-1	AFI Region	DCPC (data)																	
	Brasil ¹																		
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		
AR-1	AFI Region	AIDC																	
	Brasil ¹																		
	Morocco																		
	Senegal																		
	Spain																		

Note: 1: Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-1	AFI Region	AFTN circuits																	
	Brasil ¹																		
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		
AR-1	AFI Region	ATS/DS circuits																	
	Brasil ¹																		
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-1	AFI Region	RNP 10																	
	Cape Verde																		
	Senegal																		
AR-1	AFI Region	WGS-84																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-1	AFI Region	GNSS en-route																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		
AR-1	AFI Region	GNSS TMA/NPA																	
	Cape Verde																		
	Morocco																		
	Senegal																		
	Spain																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (SURVEILLANCE COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-1	AFI Region	ADS/CPDLC in RNP airspace																		
	Brasil ¹																			
	Cape Verde (2004)																			
	Morocco																			
	Senegal (2004)																			
	Spain																			

Note: 1: Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-2	AFI Region	10 min longitudinal separation (TBD)																	
	Angola																		
	Ghana																		
	Senegal																		
	South Africa																		
AR-2	AFI Region	Random routing [TBD]																	
	Angola																		
	Ghana																		
	Senegal																		
	South Africa																		
AR-2	AFI Region	RVSM [TBD]																	
	Angola																		
	Ghana																		
	Senegal																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-2	AFI Region	DCPC (data)																	
	Angola																		
	Argentina ¹																		
	Brasil ¹																		
	Ghana																		
	Senegal (2004)																		
	South Africa																		
AR-2	AFI Region	Gradual introduction of BOP between AFTN main centres																	
	Senegal																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-2	AFI Region	AFTN																	
	Angola																		
	Ghana																		
	Senegal																		
	South Africa																		
AR-2	AFI Region	ATS/DS																	
	Angola																		
	Ghana																		
	Senegal																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-2	AFI Region	RNP10																	
	Angola																		
	Ghana																		
	Senegal																		
	South Africa																		
AR-2	AFI Region	WGS-84																	
	Angola	Aerodromes only																	
	Ghana																		
	Senegal																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-2	AFI Region	GNSS en-route																	
	Angola																		
	Ghana																		
	Senegal																		
	South Africa																		
AR-2	AFI Region	GNSS TMA/NPA																	
	Angola																		
	Ghana																		
	Senegal																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (SURVEILLANCE COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-2	AFI Region	ADS/CPDLC																	
	Angola																		
	Ghana																		
	Senegal (2004)																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	Fixed RNAV routes																		
	Egypt																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Seychelles																			
	Somalia																			
	Sudan																			
	Tanzania																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-3	AFI Region	10 min longitudinal separation																	
	Burundi																		
	Comoros																		
	Djibouti																		
	Egypt																		
	Eritrea																		
	Ethiopia																		
	France (Reunion)																		
	Kenya																		
	Libya																		
	Madagascar																		
	Mauritius																		
	Rwanda																		
	Seychelles																		
	Somalia																		
	Sudan (April 2003)																		
	Tanzania																		
Uganda																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	Lateral separation: progressive introduction of 30 NM / RNP 5 in upper airspace (TBD)																		
	Burundi																			
	Comoros																			
	Djibouti																			
	Egypt																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Rwanda																			
	Seychelles																			
	Somalia																			
	Sudan																			
Tanzania																				
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	Introduction of RVSM between FL 350 and FL 390 (TBD)																		
	Burundi																			
	Comoros																			
	Djibouti																			
	Egypt (27/11/2003 > FL 290)																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Rwanda																			
	Seychelles																			
	Somalia																			
	Sudan																			
Tanzania																				
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	Introduction of RVSM between FL 290 and FL 410 (TBD)																		
	Burundi																			
	Comoros																			
	Djibouti																			
	Egypt (27/11/2003)																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Rwanda																			
	Seychelles																			
	Somalia																			
	Sudan																			
Tanzania																				
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-3	AFI Region	Area control service																	
	Burundi																		
	Comoros																		
	Djibouti																		
	Egypt																		
	Eritrea																		
	Ethiopia																		
	France (Reunion)																		
	Kenya																		
	Libya																		
	Madagascar																		
	Mauritius																		
	Rwanda																		
	Seychelles																		
	Somalia																		
	Sudan																		
	Tanzania																		
Uganda																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	Gradual implementation of random RNAV above FL 350 (TBD)																		
	Burundi																			
	Comoros																			
	Djibouti																			
	Egypt																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Rwanda																			
	Seychelles																			
	Somalia																			
	Sudan																			
Tanzania																				
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	VHF coverage extension																		
	Burundi																			
	Comoros																			
	Djibouti																			
	Egypt																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Rwanda																			
	Seychelles																			
	Somalia																			
	Sudan																			
Tanzania																				
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	DCPC (data)																		
	Burundi																			
	Comoros																			
	Djibouti																			
	Egypt																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Rwanda																			
	Seychelles																			
	Somalia																			
	Sudan																			
	Tanzania																			
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	AFTN																		
	Burundi																			
	Comoros																			
	Djibouti																			
	Egypt																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Rwanda																			
	Seychelles																			
	Somalia																			
	Sudan																			
	Tanzania																			
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	ATS/DS																		
	Burundi																			
	Comoros																			
	Djibouti																			
	Egypt																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Rwanda																			
	Seychelles																			
	Somalia																			
	Sudan																			
	Tanzania																			
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-3	AFI Region	Gradual introduction of BOP between AFTN main centres																	
	Egypt																		
	Ethiopia																		
	Kenya																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-3	AFI Region	Gradual Introduction of AIDC																	
	Egypt																		
	Eritrea																		
	Ethiopia																		
	Kenya																		
	Libya																		
	Madagascar																		
	Mauritius																		
	Seychelles																		
	Somalia																		
	Sudan																		
	Tanzania																		
	Uganda																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	RNP 10																		
	AFI Region	RNP 5																		
	Burundi	RNP 10																		
	Comoros																			
	Djibouti																			
	Egypt																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Rwanda																			
	Seychelles																			
	Somalia																			
	Sudan																			
	Tanzania																			
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-3	AFI Region	WGS-84																	
	Burundi	Aerodromes only																	
	Comoros																		
	Djibouti																		
	Egypt																		
	Eritrea																		
	Ethiopia																		
	France (Reunion)																		
	Kenya																		
	Libya																		
	Madagascar																		
	Mauritius																		
	Rwanda																		
	Seychelles																		
	Somalia																		
	Sudan																		
	Tanzania																		
Uganda																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-3	AFI Region	GNSS en-route																	
	Burundi																		
	Comoros																		
	Djibouti																		
	Egypt																		
	Eritrea																		
	Ethiopia																		
	France (Reunion)																		
	Kenya																		
	Libya																		
	Madagascar																		
	Mauritius																		
	Rwanda																		
	Seychelles																		
	Somalia																		
	Sudan																		
Tanzania																			
Uganda																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-3	AFI Region	GNSS TMA/NPA																	
	Burundi																		
	Comoros																		
	Djibouti																		
	Egypt (2005)																		
	Eritrea																		
	Ethiopia																		
	France (Reunion)																		
	Kenya																		
	Libya																		
	Madagascar																		
	Mauritius																		
	Rwanda																		
	Seychelles																		
	Somalia																		
	Sudan																		
	Tanzania																		
Uganda																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (SURVEILLANCE COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	Gradual introduction of ADS/CPDLC																		
	Egypt (2004)																			
	Eritrea																			
	Ethiopia																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Seychelles																			
	Somalia																			
	Sudan																			
	Tanzania																			
	Uganda																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (SURVEILLANCE COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-3	AFI Region	SSR in selected airspaces																	
	Egypt																		
	Kenya																		
	Sudan (2003)																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (SURVEILLANCE COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-3	AFI Region	Progressive introduction of computer assisted conflict detection and resolution																		
	Egypt																			
	Eritrea																			
	Ethiopia																			
	France (Reunion)																			
	Kenya																			
	Libya																			
	Madagascar																			
	Mauritius																			
	Seychelles																			
	Somalia																			
	Sudan																			
	Tanzania																			
Uganda																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	Fixed RNAV routes																	
	Algeria																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Libya																		
	Niger																		
	Nigeria																		
	South Africa																		
	Tunisia																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	10 min longitudinal separation																	
	Algeria																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa																		
Swaziland																			
Tunisia																			
Zambia																			
Zimbabwe																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	Area control in upper airspace																	
	Algeria																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa																		
Swaziland																			
Tunisia																			
Zambia																			
Zimbabwe																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	Lateral separation: gradual introduction of 30 NM in RNP 5 environment (TBD)																	
	Algeria																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa																		
Swaziland																			
Tunisia																			
Zambia																			
Zimbabwe																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	RVSM: between FL 350 and FL 390 (TBD)																	
	Algeria (2003)																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa																		
Swaziland																			
Tunisia (FL290-410)																			
Zambia																			
Zimbabwe																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	Random routing above FL 350 (TBD)																	
	Algeria																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa																		
Swaziland																			
Tunisia																			
Zambia																			
Zimbabwe																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-4	AFI Region	VHF coverage extension																		
	Algeria																			
	Angola (2004)																			
	Botswana																			
	Cameroon																			
	Central African Republic																			
	Chad																			
	Congo																			
	D.R. of Congo																			
	Equatorial Guinea																			
	Gabon																			
	Lesotho																			
	Libya																			
	Malawi (2003)																			
	Mozambique (2004)																			
	Namibia																			
	Niger																			
	Nigeria																			
	Sao Tome & Principe																			
	South Africa																			
Swaziland																				
Tunisia																				
Zambia																				
Zimbabwe																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	Data links (DCPC)																	
	Algeria																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa																		
Swaziland																			
Tunisia																			
Zambia																			
Zimbabwe																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-4	AFI Region	AFTN circuits																		
	Algeria																			
	Angola																			
	Botswana																			
	Cameroon																			
	Central African Republic																			
	Chad																			
	Congo																			
	D.R. of Congo																			
	Equatorial Guinea																			
	Gabon																			
	Lesotho																			
	Libya																			
	Malawi																			
	Mozambique																			
	Namibia																			
	Niger																			
	Nigeria																			
	Sao Tome & Principe																			
	South Africa																			
Swaziland																				
Tunisia																				
Zambia																				
Zimbabwe																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	ATS/DS circuits																	
	Algeria																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa																		
Swaziland																			
Tunisia																			
Zambia																			
Zimbabwe																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	Introduction of BOPs between AFTN main centres																	
	Algeria																		
	Congo																		
	Niger																		
	South Africa																		
	Tunisia																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-4	AFI Region	Gradual introduction of AIDC																		
	Algeria																			
	Angola																			
	Botswana																			
	Chad																			
	Congo																			
	D.R. of Congo																			
	Libya																			
	Malawi																			
	Mozambique																			
	Namibia																			
	Niger																			
	Nigeria																			
	South Africa																			
	Tunisia																			
Zambia																				
Zimbabwe																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	RNP 5																	
	Algeria																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa																		
Swaziland																			
Tunisia																			
Zambia																			
Zimbabwe																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-4	AFI Region	WGS-84																		
	Algeria																			
	Angola																			
	Botswana																			
	Cameroon																			
	Central African Republic																			
	Chad																			
	Congo																			
	D.R. of Congo																			
	Equatorial Guinea																			
	Gabon																			
	Lesotho																			
	Libya																			
	Malawi																			
	Mozambique																			
	Namibia																			
	Niger																			
	Nigeria																			
	Sao Tome & Principe																			
	South Africa																			
Swaziland																				
Tunisia																				
Zambia																				
Zimbabwe																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	GNSS en-route																	
	Algeria																		
	Angola																		
	Botswana																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa																		
Swaziland																			
Tunisia																			
Zambia																			
Zimbabwe																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	GNSS TMA/NPA																	
	Algeria																		
	Angola*																		
	Botswana*																		
	Cameroon																		
	Central African Republic																		
	Chad																		
	Congo																		
	D.R. of Congo*																		
	Equatorial Guinea																		
	Gabon																		
	Lesotho*																		
	Libya																		
	Malawi*																		
	Mozambique*																		
	Namibia*																		
	Niger																		
	Nigeria																		
	Sao Tome & Principe																		
	South Africa*																		
Swaziland*																			
Tunisia																			
Zambia*																			
Zimbabwe*																			

*: Not published as at October 2003

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (SURVEILLANCE COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-4	AFI Region	ADS/CPDLC																	
	Algeria																		
	Angola																		
	Botswana																		
	Chad (2003)																		
	Congo																		
	D.R. of Congo																		
	Libya																		
	Malawi																		
	Mozambique																		
	Namibia																		
	Niger																		
	Nigeria																		
	South Africa																		
	Tunisia																		
Zambia																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (SURVEILLANCE COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-4	AFI Region	SSR radar in en route airspace over TMA's																		
	Angola: Luanda																			
	Chad: N'Djamena																			
	Congo: Brazzaville																			
	D.R. of Congo: Kinshasa																			
	South Africa																			
	Tunisia																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	10 min longitudinal separation																	
	Benin																		
	Burkina Faso																		
	Chad																		
	Côte d'Ivoire																		
	Gambia																		
	Ghana																		
	Guinea																		
	Guinea Bissau																		
	Liberia																		
	Mali																		
	Mauritania																		
	Niger																		
	Nigeria																		
	Senegal																		
	Sierra Leone																		
	Togo																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-5	AFI Region	Area control service in upper airspace																		
	Benin																			
	Burkina Faso																			
	Chad																			
	Côte d'Ivoire																			
	Gambia																			
	Ghana																			
	Guinea																			
	Guinea Bissau																			
	Liberia																			
	Mali																			
	Mauritania																			
	Niger																			
	Nigeria																			
	Senegal																			
Sierra Leone																				
Togo																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-5	AFI Region	Fixed RNAV routes																		
	Chad																			
	Mali																			
	Mauritania																			
	Niger																			
	Nigeria																			
	Senegal																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	Lateral separation of 30 NM in RNP 5 environment (TBD)																	
	Benin																		
	Burkina Faso																		
	Chad																		
	Côte d'Ivoire																		
	Gambia																		
	Ghana																		
	Guinea																		
	Guinea Bissau																		
	Liberia																		
	Mali																		
	Mauritania																		
	Niger																		
	Nigeria																		
	Senegal																		
Sierra Leone																			
Togo																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	RVSM between FL 350 and FL 390 (TBD)																	
	Benin																		
	Burkina Faso																		
	Chad																		
	Côte d'Ivoire																		
	Gambia																		
	Ghana																		
	Guinea																		
	Guinea Bissau																		
	Liberia																		
	Mali																		
	Mauritania																		
	Niger																		
	Nigeria																		
	Senegal																		
	Sierra Leone																		
Togo																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	Random routing above FL 350 (TBD))																	
	Benin																		
	Burkina Faso																		
	Chad																		
	Côte d'Ivoire																		
	Gambia																		
	Ghana																		
	Guinea																		
	Guinea Bissau																		
	Liberia																		
	Mali																		
	Mauritania																		
	Niger																		
	Nigeria																		
	Senegal																		
	Sierra Leone																		
Togo																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-5	AFI Region	VHF coverage																		
	Benin																			
	Burkina Faso																			
	Chad																			
	Côte d'Ivoire																			
	Gambia																			
	Ghana																			
	Guinea																			
	Guinea Bissau																			
	Liberia																			
	Mali																			
	Mauritania																			
	Niger																			
	Nigeria																			
	Senegal																			
	Sierra Leone																			
Togo																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-5	AFI Region	AFTN circuits																		
	Benin																			
	Burkina Faso																			
	Chad																			
	Côte d'Ivoire																			
	Gambia																			
	Ghana																			
	Guinea																			
	Guinea Bissau																			
	Liberia																			
	Mali																			
	Mauritania																			
	Niger																			
	Nigeria																			
	Senegal																			
Sierra Leone																				
Togo																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-5	AFI Region	ATS/DS circuits																		
	Benin																			
	Burkina Faso																			
	Chad																			
	Côte d'Ivoire																			
	Gambia																			
	Ghana																			
	Guinea																			
	Guinea Bissau																			
	Liberia																			
	Mali																			
	Mauritania																			
	Niger																			
	Nigeria																			
	Senegal																			
Sierra Leone																				
Togo																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	Progressive introduction of DCPC (data)																	
	Benin																		
	Burkina Faso																		
	Chad																		
	Côte d'Ivoire																		
	Gambia																		
	Ghana																		
	Guinea																		
	Guinea Bissau																		
	Liberia																		
	Mali																		
	Mauritania																		
	Niger																		
	Nigeria																		
	Senegal																		
Sierra Leone																			
Togo																			
AR-5	AFI Region	Gradual introduction of ATN compatible BOP between AFTN main centres																	
	Niger																		
	Senegal																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	AIDC																	
	Chad																		
	Côte d'Ivoire																		
	Ghana																		
	Niger																		
	Nigeria																		
	Roberts FIR																		
	Senegal																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	RNP 5																	
	Benin																		
	Burkina Faso																		
	Chad																		
	Côte d'Ivoire																		
	Gambia																		
	Ghana																		
	Guinea																		
	Guinea Bissau																		
	Liberia																		
	Mali																		
	Mauritania																		
	Niger																		
	Nigeria																		
	Senegal																		
Sierra Leone																			
Togo																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	WGS-84																	
	Benin																		
	Burkina Faso																		
	Chad																		
	Côte d'Ivoire																		
	Gambia																		
	Ghana																		
	Guinea																		
	Guinea Bissau																		
	Liberia																		
	Mali																		
	Mauritania																		
	Niger																		
	Nigeria																		
	Senegal																		
	Sierra Leone																		
Togo																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-5	AFI Region	GNSS en-route																		
	Benin																			
	Burkina Faso																			
	Chad																			
	Côte d'Ivoire																			
	Gambia																			
	Ghana																			
	Guinea																			
	Guinea Bissau																			
	Liberia																			
	Mali																			
	Mauritania																			
	Niger																			
	Nigeria																			
	Senegal																			
Sierra Leone																				
Togo																				

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	GNSS TMA/NPA																	
	Benin																		
	Burkina Faso																		
	Chad																		
	Côte d'Ivoire																		
	Gambia																		
	Ghana																		
	Guinea																		
	Guinea Bissau																		
	Liberia																		
	Mali																		
	Mauritania																		
	Niger																		
	Nigeria																		
	Senegal																		
	Sierra Leone																		
Togo																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (SURVEILLANCE COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-5	AFI Region	SSR along Abidjan/Accra/Lagos																	
	Côte d'Ivoire																		
	Ghana																		
	Nigeria																		
AR-5	AFI Region	ADS/CPDLC Full ground capability by 2005																	
	Chad (2003)																		
	Côte d'Ivoire																		
	Ghana																		
	Niger																		
	Nigeria																		
	Roberts FIR																		
	Senegal (2004)																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	10 min longitudinal separation																	
	Australia ¹																		
	Comoros																		
	France (Reunion)																		
	India ¹																		
	Madagascar																		
	Maldives ¹																		
	Mauritius																		
	Seychelles																		
	South Africa																		

Note: 1: Outside AFI. Indicated for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	Random routing in selected portions of the airspace																	
	Australia ¹																		
	Madagascar																		
	Mauritius																		
	South Africa																		

Note: 1: Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-6	AFI Region	Fixed RNAV routes																		
	Madagascar																			
	Mauritius																			
	Seychelles																			

Note: 1: Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	ATC in upper airspace																	
	Australia ¹																		
	Comoros																		
	France (Reunion)																		
	India ¹																		
	Madagascar																		
	Maldives ¹																		
	Mauritius																		
	Seychelles																		
	South Africa																		

Note: 1: Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	Reduction of lateral separation to 50 NM coinciding with RNP 10																	
	Australia ¹																		
	Comoros																		
	France (Reunion)																		
	India ¹																		
	Madagascar																		
	Maldives ¹																		
	Mauritius																		
	Seychelles																		
	South Africa																		

Note: 1: Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	ATM OBJECTIVE	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-6	AFI Region	RVSM along selected itineraries between FL 350 and FL 390 evolving towards FL 290/410 from 2005																		
	Australia ¹																			
	Comoros																			
	France (Reunion)																			
	India ¹																			
	Madagascar																			
	Maldives ¹																			
	Mauritius																			
	Seychelles																			
	South Africa																			

Note: 1: Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	VHF coverage																	
	Comoros																		
	France (Reunion)																		
	Madagascar																		
	Mauritius ²																		
	Seychelles ¹																		
	South Africa ¹																		
AR-6	AFI Region	DCPC (data)																	
	Australia ³																		
	Comoros																		
	France (Reunion)																		
	India ³																		
	Madagascar																		
	Maldives ³																		
	Mauritius																		
	Seychelles																		
	South Africa																		

Notes: 1: Maximum technically possible range of 250 NM attained
 2: Coverage extension in progress. To be completed in 2001.
 3: Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	AFTN circuits																	
	Comoros																		
	France (Reunion)																		
	Madagascar																		
	Mauritius																		
	Seychelles																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	ATS/DS circuits																	
	Comoros																		
	France (Reunion)																		
	Madagascar																		
	Mauritius																		
	Seychelles																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (COMMUNICATIONS COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	AIDC																	
	Australia ¹																		
	India ¹																		
	Madagascar																		
	Maldives ¹																		
	Mauritius																		
	Seychelles																		
	South Africa																		

Note: 1- Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	RNP 5 (coastal areas)																	
	Australia ¹																		
	Comoros																		
	France (Reunion)																		
	India ¹																		
	Madagascar																		
	Maldives ¹																		
	Mauritius																		
	Seychelles																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	RNP 10 (oceanic areas)																	
	Australia ¹																		
	Comoros																		
	France (Reunion)																		
	India ¹																		
	Madagascar																		
	Maldives ¹																		
	Mauritius																		
	Seychelles																		
	South Africa																		

Note: 1- Outside AFI. Added for coordination.

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	WGS-84																	
	Comoros																		
	France (Reunion)																		
	Madagascar																		
	Mauritius																		
	Seychelles																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	GNSS en-route																	
	Comoros																		
	France (Reunion)																		
	Madagascar																		
	Mauritius																		
	Seychelles																		
	South Africa																		

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (NAVIGATION COMPONENTS)																				
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010	
AR-6	AFI Region	GNSS TMA/NPA																		
	Comoros																			
	France (Reunion)																			
	Madagascar																			
	Mauritius																			
	Seychelles																			
	South Africa																			

AFI AIR TRAFFIC MANAGEMENT SYSTEM IMPLEMENTATION BY STATE - (SURVEILLANCE COMPONENTS)																			
AREA OF ROUTING	REGIONS/STATES AFFECTED	SYSTEM COMPONENTS	1994	95	96	97	98	99	2000	1	2	3	4	5	6	7	8	9	2010
AR-6	AFI Region	ADS/CPDLC																	
	Australia ¹																		
	India ¹																		
	Madagascar																		
	Maldives ¹																		
	Mauritius																		
	Seychelles																		
	South Africa																		

Note: 1- Outside AFI. Added for coordination.