

Status of implementation of the AFI Air Navigation Plan

1. Implementation of the Volume I

The table below provides the status of implementation of air navigation services and facilities identified in the Volume I of the AFI ANP.

Areas <i>Services and facilities</i>	Implementation status of Services and Facilities	
	Status (Implemented In Progress Not Implemented)	Remarks
AOP		
International aerodromes required in the AFI region	Implemented	All AFI States have designated Aerodromes used for International Flight operations. Some facilities and equipment at some Airports have met the requirements while others do not meet the requirements due to lack of proper maintenance. These include Runways, Taxiways, Aprons and ARFFS.
CNS		
Aeronautical Fixed Service (AFS)	Implemented	
Aeronautical Telecommunication Network (ATN)	In Progress	The ATN of the AFI region should have sufficient capacity to meet the minimum requirements for data communications for ATS, AIM, MET and SAR. Currently, full interoperability among ATN service providers is not yet achieved.
Aeronautical Mobile Service (AMS)	Implemented	
Air-ground communications for ATS	Implemented	
Air-ground data link communications	In Progress	CPDLC implemented by most of the ANSPs
Navigation	In Progress	Radio navigational aids (Nav aids) are implemented, together with satellite-based navigation systems. The majority of AFI States conduct flight inspections of their NAVAIDs. However, in some cases, the absence of a systematic calibration approach may affect the reliability of these aids and potentially impact flight safety. Strengthening regional coordination and promoting consistent calibration practices would help enhance overall safety and performance.
Surveillance	In Progress	Several AFI States have implemented surveillance systems, with some already engaging in data sharing. While, the surveillance data sharing among States is not yet fully effective, ongoing AASPG initiatives aim to enhance interoperability and promote broader collaboration.
Frequency Management	In Progress	Frequency assignment in the AFI Region is conducted by States in close coordination with ICAO Regional Offices and national spectrum authorities, in accordance with the regional frequency allotment plans and supported by the ICAO Frequency Finder tool. While this collaboration has improved frequency management, occasional

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		interference—often from non-aeronautical sources—remains a concern. Continued vigilance, enhanced awareness among national spectrum authorities, and strengthened regional cooperation are essential to safeguard aeronautical frequency integrity.
ATM		
ATM Contingency plan	In Progress	Only 38% of AFI States have developed, published and shared their ATM contingency plan with ICAO Regional Offices
Provision of air traffic services	Implemented	Air traffic services are provided by ANSPs on behalf of States in their areas of responsibility.
Regional ATS Routes and organized track structures	Implemented	
ICARD Global Database	Implemented	
Aircraft Identification - SSR Code Assignments	Implemented	
Performance-based Navigation (PBN)	In Progress	Most of the States have implemented Performance-based Navigation both for en-route and terminal area operations. However, the lack of flight validation of Instrument Flight Procedures in a systematic manner by some AFI States jeopardize safety of flights.
Flexible Use of Airspace	In Progress	Civil/military Cooperation is effective in 45%, however Flexible Use of Airspace implementation is at its tactical phase in only 38%.
Reduced Vertical Separation Minimum (RVSM)/Regional Monitoring Agencies	Implemented	The AFI Regional Monitoring Agency (ARMA) is the designated as Regional Monitoring Agency (RMA) for monitoring the RVSM height-keeping performance and approval status of aircraft.
Lateral limits coordinates of Flight Information Regions (FIR)/Upper Information Regions (UIR)	In Progress	The lateral limits coordinates of FIRs/UIRs are being collected and reviewed by the ICAO Regional Offices. A PfA of the AFI ANP is being prepared accordingly.
Charts of Flight Information Regions (FIR)/Upper Information Regions (UIR)	Not Implemented	The charts of FIRs/UIRs of the AFI Region are yet to be developed and incorporated to the AFI ANP
MET		
World area forecast system (WAFS) and meteorological offices	In Progress	<p>WAFC London has been designated as the centre for the operation of the aeronautical fixed service satellite distribution system / WAFS Internet File Service (SADIS and/or WIFS) and the Internet-based Secure SADIS service.</p> <p>However, some States are yet to implement the WAFS/SADIS services.</p>
Volcanic ash advisory centres (VAAC)	Implemented	Toulouse VAAC has been designated to prepare volcanic ash advisory information for the AFI Region

Areas <i>Services and facilities</i>	Implementation status of Services and Facilities	
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Tropical cyclone advisory centre (TCAC)	Implemented	La Reunion TCAC has been designated to prepare tropical cyclone advisory information for the AFI Region,
State Volcano Observatories	Implemented	The States responsible for the provision of a volcano observatory are Cameroon, Cape Verde, Comoros, Democratic Republic of Congo/RDC, Eritrea, Ethiopia, France (Réunion) and Kenya.
SAR		
Provision of search and rescue services by States in their own territory and areas of responsibility	In Progress	64% of States have established SAR services in their own territory and areas of responsibility. However, the level of SAR agreements signed between States is as low as 20% for the AFI Region.
Lateral limits coordinates of Search and Rescue Regions (SRR)	Not Implemented	The lateral limits coordinates of SRRs are yet to be incorporated to the AFI ANP
Chart of Search and Rescue Regions (SRR)	Not Implemented	The chart of SRRs is yet to be incorporated to the AFI ANP
AIM		
Provision of aeronautical data and aeronautical information by States in their own territory and areas of responsibility	Implemented	Aeronautical data and aeronautical information are provided by ANSPs on behalf of States in their areas of responsibility.

2. Implementation of the Volume II

The table below provides the status of implementation of air navigation services and facilities identified in the Volume II of the AFI ANP.

Areas <i>Services and facilities</i>	Implementation status of Services and Facilities	
	Status <i>(Implemented In Progress Not Implemented)</i>	Remarks
AOP		
Visual aids for low visibility aerodrome operations	In Progress	Some visual aids at Airports are not in good condition
Non-precision approach aids	In Progress	Some aids are not functional in some States
Runway declared distances for take-off	In Progress	Some States have runways declared for distances while others are not
Aerodrome capacity management	In Progress	Some States are yet to have Airport Capacity Management evaluation undertaken
Aerodrome capacity assessment and requirement	In Progress	Some States are yet to have Airport Capacity assessment and requirements evaluation taken
Closure of regular aerodromes: Availability of sufficient alternate aerodrome	In Progress	Few States have declared alternate aerodromes while others have not.

Areas <i>Services and facilities</i>	Implementation status of Services and Facilities	
	Status <i>(Implemented In Progress Not Implemented)</i>	Remarks
Scheduling aerodrome maintenance: Sufficiently advance notification of aircraft operators prior to undertaking scheduled work	In Progress	Some airports do not provide advance notification of aircraft operators prior to undertaking scheduled work.
CNS		
Aeronautical Fixed Service (AFS)	In Progress	ATS Direct Speech circuits and supporting networks are fully implemented. AFTN infrastructure is in place, while AMHS deployment is ongoing.
Contingency procedures for breakdown of an AFS communication centre	In Progress	
Aeronautical Telecommunication Network (ATN)	In Progress	States/ Sub regional ground networks are gradually migrating from legacy AFTN/X.25 systems to ATN/IPS, ensuring a smooth and cost-effective evolution of network infrastructure.
Migration of international or sub-regional ground networks to the ATN based on Internet Protocol (IP)	In Progress	
Provision of ICAO centralised off-line network management service to participating AFTN/ AMHS centres in the AFI Region under the ATS Messaging Centre (AMC)	In Progress	Lack of AMC registration by some AFI States hinders effective AMHS transition and coordination between COM Centres, impacting ATS messaging quality. States are encouraged to register and regularly update their AMC information.
Required ATS direct speech circuits	Implemented	AFI planned ATS/DS circuits are fully implemented, supported by satellite-based VSAT networks (AFISNET, NAFISAT, SADC/2, and CAFSAT). However, service performance needs improvement.
ATS Inter-facility Data Communication (AIDC) application and the Online Data Interchange (OLDI) application	In Progress	The implementation of ATS Inter-Facility Data Communication (AIDC) in the AFI Region is progressing, with several States and FIRs actively involved in regional coordination efforts.
Support of digital data exchange format for the dissemination of OPMET data and Aeronautical data	In Progress	
Aeronautical Mobile Service (AMS)	In Progress	HF coverage is in place for remote and oceanic AFI airspaces, while satellite networks have enhanced VHF coverage in remote continental areas.
Air-ground data link communications	In Progress	ADS-C is generally implemented alongside CPDLC to support operations in remote and oceanic airspaces. Implementation across concerned FIRs in the AFI Region is progressing well, in line with the AFI ANP and CNS requirements.
Required Communication Performance (RCP)	In Progress	

Areas <i>Services and facilities</i>	Implementation status of Services and Facilities	
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Navigation Infrastructure	In Progress	Regular flight calibration of NAVAID mechanisms should be reinforced in some States/
PBN Transition Strategy	In Progress	
Surveillance systems to be used in the AFI Region including SSR (Mode A, C and S), ADS-B, MLAT, WAM, ADS-C	In Progress	SSR systems are more widely deployed, while ADS technologies remain partially developed or planned. Implementation is largely national, with limited cross-border data sharing and regional integration.
Required Surveillance Performance (RSP)	In Progress	RSP implementation in the AFI Region is limited, with few indications of progress. States are encouraged to consider applying and monitoring RSP in line with ICAO Doc 9869.
Frequency Management for Aeronautical Mobile Service (AMS)	In Progress	States assign VHF AMS frequencies in line with Annex 10 and ICAO Doc 9718, using the ICAO Frequency Finder tool and applying agreed separation criteria and ATS prioritization. Coordination with ESAF and WACAF Offices ensures harmonized planning.
Frequency Management for Aeronautical Radio Navigation Services (ARNS)	Implemented	States assign frequencies for radio navigation aids in accordance with Annex 10 and ICAO Doc 9718, using the ICAO Frequency Finder tool. Coordination with ESAF and WACAF Regional Offices ensures harmonized planning, efficient spectrum use, and minimal interference for both international and national systems.
Support to ICAO Positions for ITU World Radiocommunication Conferences (WRCs)	Implemented	AFI States and international organizations actively support ICAO's position at ITU WRCs and related preparatory activities. Continued efforts are needed to promote awareness and sustained engagement, particularly among national spectrum authorities.
ATM		
Homogeneous ATM areas and major traffic flows/routing areas	Implemented	The homogeneous ATM areas and major traffic flows/routing areas are identified in Table GEN II-1, however the table needs to be updated to reflect changes occurred in air traffic flow in the AFI Region
Optimization of traffic flows through the continuous improvement of the regional ATS route network	In Progress	ATS Routes network is being reviewed for optimization of traffic flow between identified city pairs. User Preferred Routes is operational in many FIRs and cross-border Free route airspace deployment is planned for 2026.
Working Principles for the Construction of ATS Routes	Implemented	
Aircraft Identification-SSR Code Management: SSR Codes Allocation Plan of the AFI Region	Implemented	The AFI AAR Code management has been modernized and made efficient through the establishment of SSR sharing per group of FIRs (participation areas).

Areas <i>Services and facilities</i>	Implementation status of Services and Facilities	
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MET		
Meteorological Watch Offices (MWO)	Implemented	All States having accepted the responsibility for providing air traffic services within a flight information region (FIR) or a control area (CTA), established a MWO.
Aerodrome Meteorological Offices	Implemented	Aerodrome Meteorological Offices are established for the provision of the meteorological service required to satisfy the needs of international air navigation.
Meteorological observations and reports (METAR)	Implemented	For the AFI Region, routine observations, issued as METAR, should be made throughout the 24 hours of each day at intervals of one half-hour
Aerodrome forecast (TAF)	Implemented	
OPMET Information ((METAR, SPECI, TAF), SIGMET, AIRMET (if applicable)) disseminated to the international OPMET databanks designated for the AFI Region (namely Dakar and Pretoria OPMET databanks) and Secure SADIS	In Progress	Statistics provided by the RODBs show that for airports of some States, the rate of successful dissemination of OPMET Information to RODBs is still low.
Dissemination of SIGMET and Special air-reports messages to other meteorological offices in the AFI Region in accordance with the AFI meteorological bulletin exchange scheme (AMBEX)	In Progress	Satisfactory dissemination of SIGMET information but low rate of Special air-reports exchanged.
Provision of meteorological information for use by aircraft in flight through VOLMET broadcasts	In Progress	Low level of provision of VOLMET broadcasts services and lack of implementation of D-VOLMET
SAR		
Rescue Coordination Centres (RCCs) and Rescue Sub-Centres (RSCs)	In Progress	69% States have established and operationalise RCC/RSC in their SAR area of responsibility.
AIM		
Designated international NOTAM Office (NOF)	Implemented	All the States have designated a NOF for promulgating their NOTAM
Quality Management System (QMS) in AIM	In Progress	Although a good number of States have an ISO certified QMS, some States are yet to implement QMS
Integrated Aeronautical Information Database (IAID)	In Progress	Although a good number of States have a functioning AIXM database, some States are yet to implement such a database
Production of Aeronautical Information Publication (AIP)	Implemented	All the States have published their AIP, even if some of those AIPs are yet available online
Production of aeronautical charts	Implemented	All the States have designated a cartographic entity for producing their aeronautical charts

Areas <i>Services and facilities</i>	Implementation status of Services and Facilities	
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Provision of the sheets of the World Aeronautical Chart	In Progress	Most of the States are yet to provide the sheets of the World Aeronautical Chart under their responsibility
Provision of pre-flight information services	In Progress	The pre-flight information services are being improved through the progressive automation.

3. Implementation of the Volume III

The table below shows the status of implementation of ASBU Elements applicable in the AFI Region identified in the Volume II of the AFI ANP, as provided in the second edition of the AFI Air Navigation Report (AANR).

Areas <i>ASBU Threads</i>	Implementation status of applicable ASBU Elements	
	Status <i>(Implemented In Progress Not Implemented)</i>	Remarks
AOP		
ACDM - Airport Collaborative Decision Making	In Progress 19%	Some States have indicated to be implementing A-CDM.
CNS		
ASUR - Surveillance systems	In Progress 24%	
COMI - Communication infrastructure	In Progress 50%	
COMS – ATS Communication Service	In Progress 70%	
NAVS - Navigation systems	In Progress 54%	
ATM		
ACAS - Airborne Collision Avoidance System	Implemented	
APTA - Improve arrival and departure operations	In Progress 54%	
CSEP - Cooperative Separation	Not implemented	
DATS - Digital Aerodrome Air Traffic Services	Not implemented	
FRTO - Improved operations through enhanced en-route trajectories	In Progress 40%	
NOPS - Network Operations	Not implemented	
OPFL - Improved access to optimum flight levels in oceanic and remote airspace	Not implemented	
RSEQ - Improved traffic flow through runway sequencing	Not implemented	
SNET - Ground-based Safety Nets	In Progress 68%	
SURF - Surface operations	Not implemented	

Areas <i>ASBU Threads</i>	Implementation status of applicable ASBU Elements	
	Status <i>(Implemented In Progress Not Implemented)</i>	Remarks
TBO - Trajectory-based operations	Not implemented	
MET		
AMET – Meteorological Information	In Progress 32%	Although a good number of State having implemented the AMET-B0 elements, the level of implementation of the AMET-B1 elements is very low in the Region.
SAR		
GADS - Global Aeronautical Distress and Safety System (GADSS)	In Progress 58%	
AIM		
DAIM – Digital Aeronautical Information Management	In Progress 18%	Although a good number of States have an ISO certified QMS, some States are yet to implement QMS