METEOROLOGY PROJECT.1

AFI Region	Project Description				
Programme	Title of the Project	Start	End		
Aeronautical Meteorology	Implementation of information concerning en-route weather phenomena which may affect the safety of aircraft operations (SIGMET), Quality Management System for aeronautical meteorology (QMS/MET) service, in the AFI region				
(B0-AMET PFF Project Facilitators: ICAO ROs/MET, Dakar & Nairobi)	B0-AMET PFF-1 Project-Team Coordinator: South Africa 12 Experts contributing to the B0-AMET PFF-1 South Africa, Niger, Nigeria, Togo, Uganda, IATA, ASECNA, Mauritania, Côte d'Ivoire, WMO, Guinea,				
	Assist States in the implementation of :				
Objective	 a) SIGMET and standards and recommended practices of Annex 3 and Part V – MET of the AFI Air Navigation Plan II, III concerning the issuance and distribution of en-route weather phenomena including volcanic ash clouds (WV) (WC) and other phenomena (WS - thunderstorms, severe turbulence, icing, mountain waves, heavy sandstorms and to affect the safety of aircraft operations, and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV, WC and the evolution of such phenomena in time and space (SIGMET WV).), tropical c l duststorm	cyclones		
	 b) QMS/MET and certification where applicable, by developing a regional QMS/MET guide to assist States in MET documentation under ISO 9001: 2008, enhancing the training of MET personnel in States that have not in encouraging States to institute cost recovery mechanism to support QMS maintenance in accordance with ICAO And MET of the AFI ANP, and conducting audit trials; 	mplemente	d QMS,		
	c) An action plan to assist concerned States in their effort to remove air navigation deficiencies in the MET field listed ir and	the APIR	G report;		
	d) The transition plan from current aeronautical meteorological information to the future SWIM-enabled environment by encouraging AFI States to progressively develop capability of handling OPMET data in digital format (XML/GML XML/GML codes in operational environment by 2018.				
Scope	a) The SIGMET part of the project will comprise all Meteorological Watch Offices (MWOs) listed in Table MET II-1 of t ANP Volume II;				
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	b) QMS part of the project is related to all AFI aerodromes listed in the AFI ANP Table MET II-2 for the establishment and application of a duly organized quality system of MET service;				
	c) The list of States having long lasting MET deficiencies, is listed in the last report of the APIRG meeting; and				
	d) The Transition Plan part of the project is related to all AFI aerodromes listed in the AFI ANP Table MET II-2.				

AFI Region	Project Description						
Programme	Title of the Project	Start	End				
	a) SIGMET metric: Number of MWOs listed in AFI ANP Table MET II-1, with SIGMET procedures implemented in Dece	ember 2017					
Metrics	b) QMS metrics: Number of MET Provider States listed in AFI ANP Table MET II-2, with QMS/MET certified or recertific 2018	ed in Decer	nber				
	c) Deficiency metrics: Number of identified States in APIRG/20 report, with MET deficiencies removed in December 2018						
	d) d) Transition Plan metrics: Number of AFI States implemented OPMET data in digital format (XML/GML) in December	er 2018					
Strategy	All tasks will be carried out by MET experts nominated by AFI States participating in the project, led by the Project-Tea under the supervision of the B0-AMET PFF Project Facilitators (ROs/MET, Dakar and Nairobi) through the "GoTo M completion of the tasks, the results will be sent to the B0-AMET PFF Project Facilitators as a final document for sub necessary approval by the APIRG Projects Coordination Committee (APCC). For the purpose of collaborative decision-mal be held with the areas involved.	eeting" too mission to	l. Upon , and if				
Rationale	a) SIGMET: The lack of implementation by about 21% of AFI MWO Provider States, of information concerning phenomena which may affect the safety of aircraft operations (SIGMET), in the region and their repercussions on the navigation services call for tools to allow the personnel involved in the different air navigation areas to receive, disseminate quality information related to such events.	he provision	n of air				
	b) QMS: More accurate and timely meteorological information will optimize flight path planning and prediction, thus imprand efficiency; improved aerodrome reports and forecasts will optimise the use of available aerodrome capacity; a information will minimize the environmental impact of air traffic. Performance management will be an important part information quality assurance.	and meteor	ological				
	c) Deficiencies: The decrease or removal of MET deficiencies listed in the APIRG meetings, will increase air nav efficiency in the region.	igation saf	ety and				
	d) d) Digital OPMET: progressive implementation of digital OPMET (SIGMET, METAR, SPECI and TAF) in the AFI AFI States to be prepared for digital OPMET exchange in the future SWIM environment.	region, will	enable				

AFI Region	Project Description					
Programme	Title of the Project	Start	End			
	All APIRG specifically projects related to:					
Related projects	✓ Implementation of Improved Airport Operations through Airport-CDM (B0-ACDM)					
	✓ Implementation of Optimization of Approach Procedures including Vertical Guidance (B0-APTA)					
	✓ Implementation of Improved Operations through Enhanced En-Route Trajectories (B0-FRTO)					
	✓ Implementation of Improved Flexibility and Efficiency in Descent Profiles (CDO) (B0-CDO)					
	✓ Implementation of Improved Flexibility and Efficiency in Departure Profiles —Continuous Climb Operations (CCO)	(B0-CCO)				

Project Deliverable		Relationship with the performance - based regional plan (PFF)	Responsible Party	Status of Implementation	Date of Deliver	Comments
	updated AFI regional SIGMET Guide distributed and placed on ICAO website	AFI B0-AMET PFF-1	✓ AFI B0-AMET PFF Project Coordinators	New edition drafted	Before October 2015 (after APIRG/20)	Guide updated based on the regional SIGMET Guide Template
SIGMET	Current level of implementation of SIGMET assessed through annual SIGMET trials	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>	Yearly SIGMET Tests	December 2015	Results of SIGMET Tests in November 2015 will update the level of implementation under the new edition of the Guide
	An updated list of States not compliant with SIGMET format, established	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>		December 2015	
	Details guidance to States not issuing SIGMET, distributed	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>		December 2016	

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A Regional QMS/MET guide to assist States in the production of MET documentation under ISO 9001: 2008, developed, distributed and placed on ICAO website	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>		June 2016	
QMS, established and placed on ICAO website	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>		December 2015	
that have not implemented OMS	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> </ul>		December 2017	
report distributed		✓ AFI B0-AMET-1 Project Team Leader			
Training on cost recovery mechanism for MET performed; training workshop report encouraging Sates to institute cost recovery mechanism, distributed.	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>		December 2015	
distributed and placed on ICAO	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>		December 2015	
Current air navigation deficiencies in the MET field, assessed and confirmed	AFI B0-AMET PFF-1	✓ AFI B0-AMET PFF Project Coordinator	MET deficiencies established by	December 2015	Updated MET deficiencies to be established by
					APIRG/20
An updated list of MET deficiencies for remaining AFI States not listed in APIRG/19 report, established	AFI B0-AMET PFF-1	✓ AFI B0-AMET PFF Project Coordinator		December 2016	
	States in the production of MET documentation under ISO 9001: 2008, developed, distributed and placed on ICAO websiteAn updated list of States not implementing or partially implementing QMS, established and placed on ICAO websiteTraining of MET personnel in States that have not implemented QMS, performed, and training workshopreport distributedTraining on cost recovery mechanism for MET performed; training workshop report encouraging Sates to institute cost recovery mechanism, distributed.Report on QMS/MET Audit trials, distributed and placed on ICAO websiteCurrent air navigation deficiencies in the MET field, assessed and confirmedAn updated list of MET deficiencies for remaining AFI States not listed in	States in the production of MET documentation under ISO 9001: 2008, developed, distributed and placed on ICAO websiteAFI B0-AMET PFF-1An updated list of States not implementing QMS, established and placed on ICAO websiteAFI B0-AMET PFF-1Training of MET personnel in States that have not implemented QMS, performed, and training workshopAFI B0-AMET PFF-1report distributedAFI B0-AMET PFF-1Training on cost recovery mechanism for MET performed; training workshop report encouraging Sates to institute cost recovery mechanism, distributed.AFI B0-AMET PFF-1Report on QMS/MET Audit trials, distributed and placed on ICAO websiteAFI B0-AMET PFF-1Current air navigation deficiencies in the MET field, assessed and confirmedAFI B0-AMET PFF-1An updated list of MET deficiencies for remaining AFI States not listed inAFI B0-AMET PFF-1	States in the production of MET documentation under ISO 9001: 2008, developed, distributed and placed on ICAO websiteProject Coordinator ✓ AFI B0-AMET-1 Project Team LeaderAn updated list of States not implementing or partially implementing of MET personnel in States that have not implemented QMS, performed, and training workshopAFI B0-AMET PFF-1✓ AFI B0-AMET PFF Project Coordinator ✓ AFI B0-AMET PFF Project Coordinator ✓ AFI B0-AMET PFF Project Coordinatorreport distributedAFI B0-AMET PFF-1✓ AFI B0-AMET PFF Project Coordinatorreport distributed✓ AFI B0-AMET PFF Project CoordinatorTraining on cost recovery mechanism for MET performed; training workshop report encouraging Sates to institute cost recovery mechanism, distributed and placed on ICAO websiteAFI B0-AMET PFF-1Report on QMS/MET Audit trials, distributed and placed on ICAO websiteAFI B0-AMET PFF-1✓ AFI B0-AMET PFF Project Coordinator ✓ AFI B0-AMET PFF Project Coordinator <td>States in the production of MET documentation under ISO 9001: 2008, developed, distributed and placed on ICAO website       Project Coordinator Y AFI B0-AMET-1 Project Team Leader         An updated list of States not implementing QMS, established and placed on ICAO website       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator Y AFI B0-AMET-1 Project Team Leader         Training of MET personnel in States that have not implemented QMS, performed, and training workshop       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator         Training on cost recovery mechanism for MET performed; training workshop report encouraging States to institute cost recovery mechanism, distributed.       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator         FF-1       Y AFI B0-AMET PFF Project Coordinator       Y AFI B0-AMET PFF Project Coordinator         Training on cost recovery mechanism, distributed.       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator         V       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       MET deficiencies established by AFI B0-AMET PFF         Current air navigation deficiencies in the MET field, assessed and confirmed       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator         An updated list of MET deficiencies for remaining AFI States not listed in DPIBC/UP moort, arbitished in AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       MET deficiencies established by APIRG/19</td> <td>States in the production of MET documentation under ISO 9001: 2008, developed, distributed and placed on ICAO website       Project Coordinator Y AFI B0-AMET-1 Project Team Leader       June 2016         An updated list of States not implementing QMS, established and placed on ICAO website       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2015         Training of MET personnel in States that have not implemented QMS, performed, and training workshop       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2017         Training on cost recovery mechanism for MET performed; training workshop       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2017         Training on cost recovery mechanism for MET performed; training workshop report encouraging States to institute cost recovery mechanism, distributed       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2015         Report on QMS/MET Audit trials, distributed website       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2015         Current air navigation deficiencies in the MET field, assessed and confirmed       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator Y AFI B0-AMET PFF       MET deficiencies stablished by APIRG/19       December 2015         An updated list of MET deficiencies for remaining AFI States not listed in DBIG/10 anot ethicibed in APIRG/10 anot project Division       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2015</td>	States in the production of MET documentation under ISO 9001: 2008, developed, distributed and placed on ICAO website       Project Coordinator Y AFI B0-AMET-1 Project Team Leader         An updated list of States not implementing QMS, established and placed on ICAO website       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator Y AFI B0-AMET-1 Project Team Leader         Training of MET personnel in States that have not implemented QMS, performed, and training workshop       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator         Training on cost recovery mechanism for MET performed; training workshop report encouraging States to institute cost recovery mechanism, distributed.       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator         FF-1       Y AFI B0-AMET PFF Project Coordinator       Y AFI B0-AMET PFF Project Coordinator         Training on cost recovery mechanism, distributed.       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator         V       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       MET deficiencies established by AFI B0-AMET PFF         Current air navigation deficiencies in the MET field, assessed and confirmed       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator         An updated list of MET deficiencies for remaining AFI States not listed in DPIBC/UP moort, arbitished in AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       MET deficiencies established by APIRG/19	States in the production of MET documentation under ISO 9001: 2008, developed, distributed and placed on ICAO website       Project Coordinator Y AFI B0-AMET-1 Project Team Leader       June 2016         An updated list of States not implementing QMS, established and placed on ICAO website       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2015         Training of MET personnel in States that have not implemented QMS, performed, and training workshop       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2017         Training on cost recovery mechanism for MET performed; training workshop       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2017         Training on cost recovery mechanism for MET performed; training workshop report encouraging States to institute cost recovery mechanism, distributed       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2015         Report on QMS/MET Audit trials, distributed website       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2015         Current air navigation deficiencies in the MET field, assessed and confirmed       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator Y AFI B0-AMET PFF       MET deficiencies stablished by APIRG/19       December 2015         An updated list of MET deficiencies for remaining AFI States not listed in DBIG/10 anot ethicibed in APIRG/10 anot project Division       AFI B0-AMET PFF-1       Y AFI B0-AMET PFF Project Coordinator       December 2015

	List of States having develop action	AFI B0-AMET PFF-1 AFI B0-AMET PFF-2	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-2 Project</li> <li>Team Leader</li> </ul>	December 2015 December 2018	
	Reports on Specific training workshops in French and English to assist States concerned to address deficiencies related to the implementation of the AMBEX scheme and for the provision of further advice and awareness, issued	^S AFI B0-AMET PFF-2	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-2 Project</li> <li>Team Leader</li> </ul>	December 2016 and June 2018	
Deficiencies	An action plan to assist concerned	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>	December 2017	
Digital OPMET	Dakar and Pretoria RODBs Provider States developed capability of handling digital OPMET (SIGMET, METAR, SPECI, TAF) and provided technical assistance as required to other AEL States	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>	December 2016	In accordance with the AFI digital OPMET transition plan
	Dakar and Pretoria RODBs Provider	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>	December 2017	In accordance with the AFI digital OPMET transition plan

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	OPMET in RCC and NOC's in	AFI B0-AMET PFF-1	<ul> <li>✓ AFI B0-AMET PFF</li> <li>Project Coordinator</li> <li>✓ AFI B0-AMET-1 Project</li> <li>Team Leader</li> </ul>		December 2018	In accordance with the AFI digital OPMET transition plan	
✓ Funds to conduct the meetings, missions and to translate reports, regional guides and manuals. Likewise, participants must be given facilities to participate in Go To							

Meetings.

✓ Funds to conduct audit trials. States could cover the cost of trials by their lead auditors, since the experience obtained will contribute to improve the system. Likewise, participants must be given facilities to participate in GoTo Meetings.