



*International Civil Aviation Organization*

**MIDANPIRG ATM/SAR/AIS Sub-Group**

**Twelfth Meeting (ATM/SAR/AIS SG/12)**  
*(Cairo, Egypt, 21 – 24 November 2011)*

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**Agenda Item 13: MID Region ATM and AIM Performance Objectives**

**MID REGION ATM AND AIM PERFORMANCE OBJECTIVES**

*(Presented by the Secretariat)*

**SUMMARY**

This paper presents briefly the outcome of the MIDANPIRG/12 meeting related to performance monitoring of the air navigation systems in the MID Region. The paper presents also revised ATM and AIM Performance Framework Forms (PFFs) for review and update, as necessary.

Action by the meeting is at paragraph 3.

**REFERENCES**

- AIS/MAP TF/6 Report
- MIDANPIRG/12 Report

**1. INTRODUCTION**

1.1 The Performance-Based Approach (PBA) adheres to strong focus on results through adoption of performance objectives and targets; collaborative decision making driven by the results; and reliance on facts and data for decision making. The assessment of achievements is periodically checked through a performance review, which in turn requires adequate performance measurement and data collection capabilities. In this regard, one of the key aspects of the performance based approach to air navigation planning is the development of performance objectives with related measurable indicators and metrics.

**2. DISCUSSION**

2.1 The meeting may wish to recall that data collection, processing, storage and reporting are fundamental to the performance-based approach and forms part of performance monitoring and management.

2.2 The meeting may wish to recall the following definitions:

- a) *Performance Objective*: objectives defined to satisfy ATM community expectations;

- b) *Performance Indicator*: Current/past performance, expected future performance as well as actual progress in achieving performance objectives is quantitatively expressed by means of performance indicators (also called Key Performance Indicators, or KPIs);
- c) *Performance target*: Performance targets are closely associated with performance indicators: they represent the values of performance indicators that need to be reached or exceeded to fully achieve performance objective; and
- d) *Metrics*: determine which data needs to be collected to calculate values of performance indicators. Metrics are challenging and expensive to collect; therefore it is important to keep them “SMART” (Specific, Measurable, Achievable, Realistic & Time-bound) and easy to measure.

2.3 The meeting may wish to note that MIDANPIRG/12 (Amman, Jordan, 17-21 October 2010) developed the following Conclusions related performance monitoring of the air navigation systems in the MID Region:

*CONCLUSION 12/47: MID REGION PERFORMANCE METRICS*

*That:*

- a) *the following MID Region Metrics be adopted for performance monitoring of the air navigation systems:*

*MID Metric 1: Number of accidents per 1,000 000 departures;*

*MID Metric 2: Percentage of certified international aerodromes;*

*MID Metric 3: Number of Runway incursions and excursions per year;*

*MID Metric 4: Number of States reporting necessary data to the MIDRMA on regular basis and in a timely manner;*

*MID Metric 5: The overall collision risk in MID RVSM airspace;*

*MID Metric 6: Percentage of air navigation deficiencies priority “U” eliminated;*

*MID Metric 7: Percentage of instrument Runway ends with RNP/RNAV approach procedure; and*

*MID Metric 8: Percentage of en-route PBN routes implemented in accordance with the regional PBN plan.*

- b) *the MIDANPIRG subsidiary bodies monitor the Metrics related to their work programmes; develop associated performance targets and provide feed-back to MIDANPIRG.*

*CONCLUSION 12/48: DATA COLLECTION FOR MID REGION PERFORMANCE METRICS*

*That, States be invited to:*

- a) incorporate the agreed MID Region Performance Metrics into their National performance monitoring process;*
- b) collect and process relevant data necessary for performance monitoring of the air navigation systems to support the regional Metrics adopted by MIDANPIRG; and*
- c) submit this data to the ICAO MID Regional Office on a regular basis.*

2.4 In accordance with MIDANPIRG/11 Conclusion 11/70 – “*Regional Performance Framework*”, and taking into consideration the outcome of the different MIDANPIRG subsidiary bodies, the MIDANPIRG/12 meeting reviewed the Regional PFFs related to AGA, AIM, ATM and CNS, as updated by the CNS/ATM/IC SG/5 meeting. It was recognized that the revised Regional PFFs, are much more mature than the previous version. However, it was underlined that the Regional PFFs could be further improved, giving that users provide their needs and expectations and States develop/update their National PFFs and report relevant data necessary for performance monitoring of the air navigation systems, as required.

2.5 An updated version of the ATM PFFs approved by MIDANPIRG/12 are at **Appendix A** to this working paper; and the AIM PFFs as reviewed and updated by the AIS/MAP TF/6 meeting are at **Appendix B** to this working paper.

2.6 The meeting may wish to note that the MIDRMA Board/11 meeting agreed to the following performance targets associated with the MID Metrics 4, 5 and 6:

- Performance Target associated with MID Metric 4: Minimum **80%** of States report necessary data to the MIDRMA on regular basis and in a timely manner;
- Performance Target associated with MID Metric 5: The overall collision risk in MID RVSM airspace meets the **ICAO overall TLS of  $5 \times 10^{-9}$**  fatal accidents per flight hour; and
- the elimination of **40%** of the deficiencies priority “U” (related to RVSM operations).

2.7 The following KPIs/Metrics were endorsed by the AIS/MAP TF/6 meeting for AIM performance monitoring in the MID Region:

- number of States having fully implemented WGS 84: (**7 States**);
- number of States having organised eTOD awareness campaigns and training programmes: (**5 States**);
- number of States having implemented eTOD for Areas 1 & 4: (**5 States**);
- Number of deficiency Priority “U” related to the AIS/MAP field: (**2**);
- Number of States having implemented QMS: (**6 States**);
- Number of States having developed eAIP: (**2 States**);
- Number of States having developed a National Plan for the transition from AIS to AIM: (**5 States**);
- Number of States having implemented an AIXM based AIS Database: (**5 States**);

- Number of States having implemented an Integrated Aeronautical Information Database (IAID): **(0 State)**.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this working paper;
- b) review and update the ATM and AIM PFFs at **Appendices A and B**, respectively;
- c) review and monitor the KPIs/Metrics and propose updates, as necessary; and
- d) urge States to develop/update their National PFFs in order to ensure their alignment with and support to the regional performance objectives.

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**APPENDIX A**

**MID REGIONAL PERFORMANCE OBJECTIVES  
 ATM PERFORMANCE OBJECTIVES**

<b>OPTIMIZATION OF THE ATS ROUTE STRUCTURE EN-ROUTE AIRSPACE</b>	
<b>Benefits</b>	
<b>Environment</b>	reductions in fuel consumption and CO <sub>2</sub> emission
<b>Safety</b>	Improved safety of ATS routes
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• ability of aircraft to conduct flight more closely to preferred trajectories</li> <li>• increase in airspace capacity</li> </ul>
<b>KPI</b>	<ul style="list-style-type: none"> <li>• status of implementation of RNAV 1 in the MID Region</li> <li>• status of implementation of the ATS Routes listed in the MID ATS Route Catalogue</li> <li>• status of implementation of RNAV 5 area in the level band FL160-FL460, in the MID Region</li> <li>• status of Duplicated 5LNCs in the MID Region</li> <li>• status of deficiencies related to non-implementation of ATS Routes</li> <li>• status of implementation of 20NM longitudinal separation</li> </ul>
<b>Performance Metrics:</b>	<ul style="list-style-type: none"> <li>• number of RNAV 1 Routes implemented, in accordance with the MID Basic ANP</li> <li>• number of implemented ATS Routes from the MID ATS Route Catalogue</li> <li>• number of States having implemented RNAV 5 area in the level band FL160-FL460</li> <li>• number of duplicate 5LNC eliminated</li> <li>• number of eliminated deficiency related to non-implementation of ATS Routes</li> <li>• number of concerned States implementing 20NM longitudinal separation</li> <li>• <b>percentage of CO<sub>2</sub> reduction of implemented new routes</b></li> </ul>

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013-2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
<b>AOM</b>	<i>En-route airspace</i>			
	<ul style="list-style-type: none"> <li>• develop Airspace Concept based on the MID PBN implementation plan, in order to design and implement a trunk route network, connecting major city pairs in the upper airspace and for transit to/from aerodromes, on the basis of PBN and, in particular, RNAV 5, taking into account interregional harmonization</li> </ul>	ongoing	ATM/SAR/AIS SG (ARN TF)	valid
	<ul style="list-style-type: none"> <li>• develop State PBN implementation plans related to ATS Route development</li> </ul>	2008-2012	States	valid
	<ul style="list-style-type: none"> <li>• monitor user requirements for the establishment of ATS routes in the MID Region</li> </ul>	Ongoing	ATM/SAR/AIS SG ARN TF	valid

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013-2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
	<ul style="list-style-type: none"> <li>provide status of PBN implementation</li> </ul>	2010-2012	States	valid
	<ul style="list-style-type: none"> <li>monitor the implementation of pending ATS Routes and update the MID Basic ANP and the MID ATS Route catalogue</li> </ul>	Ongoing	ATM/SAR/AIS SG ARN TF	valid
	<ul style="list-style-type: none"> <li>follow-up with States on the implementation of pending ATS Routes and update the list of air navigation deficiencies, accordingly</li> </ul>	Ongoing	ATM/SAR/AIS SG ARN TF	valid
	<ul style="list-style-type: none"> <li>monitor the implementation of RNAV 5 area in the level band FL160 - FL460 (inclusive)</li> </ul>	2008-2012	ATM/SAR/AIS SG ARN TF PBN/GNSS TF	valid
	<ul style="list-style-type: none"> <li>monitor the implementation of RNAV 1 routes in the MID Region</li> </ul>	Ongoing	ATM/SAR/AIS SG ARN TF	valid
	<ul style="list-style-type: none"> <li>implementation of 20NM longitudinal separation between States</li> </ul>	2010-2011	Bahrain; Iraq; Jordan; Kuwait; Saudi Arabia; Syria and UAE	Completed
	<ul style="list-style-type: none"> <li>monitor the process of allocation of 5LNCs</li> </ul>	Ongoing	ICAO	valid
	<ul style="list-style-type: none"> <li>elimination/Reduction of the use of duplicate 5LNCs</li> </ul>	2010-2012	ICAO States	valid
<b>linkage to GPIs</b>	GPI/5: performance-based navigation, GPI/7: dynamic and flexible ATS route management, GPI/8: collaborative airspace design and management, GPI/20: WGS-84			

<b>OPTIMIZATION OF THE TERMINAL AIRSPACE</b>	
<b>Benefits</b>	
<b>Environment Safety</b>	<ul style="list-style-type: none"> <li>• reductions in fuel consumption and CO<sub>2</sub> emission</li> <li>• enhance safety in terminal air space</li> </ul>
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• ability of aircraft to conduct flight more closely to preferred trajectories</li> <li>• increase in airspace capacity</li> <li>• facilitate utilization of advanced technologies (e.g., FMS based arrivals) and ATC decision support tools (e.g., metering and sequencing), thereby increasing efficiency</li> </ul>
<b>KPI</b>	<ul style="list-style-type: none"> <li>• status of implementation of PBN routes in terminal airspace</li> <li>• status of implementation of SID and STARS</li> </ul>
<b>Proposed Metrics:</b>	<ul style="list-style-type: none"> <li>• number of States implemented PBN routes in terminal airspace</li> <li>• total Number of PBN routes in MID region terminal airspace</li> <li>• number States implemented SID and STARS</li> <li>• <b>percentage of CO<sub>2</sub> reduction of implemented new routes</b></li> </ul>

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013-2016)</i>				
ATM OC COMPONENTS	TASKS	TIMEFRAME START-END	RESPONSIBILITY	STATUS
<b>AOM, AO</b>	<i>In terminal airspace</i>			
	<ul style="list-style-type: none"> <li>• develop Airspace Concept taking into consideration the MID PBN implementation plan, in order to design and implement optimized standard instrument departures (SIDs), standard instrument arrivals (STARS), instrument flight procedures, holding, approach and associated procedures (particular RNAV 1, Basic RNP1 and RNP AR)</li> </ul>	Ongoing	States	valid
	<ul style="list-style-type: none"> <li>• include terminal Airspace in the State PBN implementation plans</li> </ul>	Ongoing	(ATM/SAR/AIS SG) States, <b>MPST</b>	valid
	<ul style="list-style-type: none"> <li>• formulate safety plan (assessment and monitoring)</li> </ul>	2009-2012	States, <b>MPST</b>	valid
	<ul style="list-style-type: none"> <li>• <b>support for operational approvals</b></li> </ul>	<b>2012-2013</b>	<b>MPST</b>	<b>valid</b>
	<ul style="list-style-type: none"> <li>• publish national regulations for aircraft and operators approval using PBN manual as guidance and considering available foreign approval material</li> </ul>	2008-2012	States	valid
<ul style="list-style-type: none"> <li>• training</li> </ul>	2008-2012	States <b>MPST</b>	valid	

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013-2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
	<ul style="list-style-type: none"> <li>• system performance measuring (measurement and monitoring plan)</li> </ul>	2009-2012	States, ATM/SAR/AIS SG	valid
	<ul style="list-style-type: none"> <li>• implement SIDs and STARs</li> </ul>	2009-2012	States	valid
	<ul style="list-style-type: none"> <li>• monitor implementation progress in accordance with MID PBN implementation roadmap and States implementation plan</li> </ul>	2009-2012	States, ATM/SAR/AIS SG	valid
<b>Linkage to GPIs</b>	GPI/5: performance-based navigation, GPI/7: dynamic and flexible ATS route management, GPI/8: collaborative airspace design and management, GPI/10: terminal area design and management, GPI/11: RNP and RNAV SIDs and STARs and GPI/12: Functional integration of ground systems with airborne systems.			

<b>IMPLEMENTATION OF RNAV AND RNP APPROACHES</b>	
<b>Benefits</b>	
<b>Environment</b>	<ul style="list-style-type: none"> <li>• Reduce CO<sub>2</sub> emission</li> </ul>
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• reductions in fuel consumption and emissions;</li> <li>• improvements in capacity and efficiency at aerodromes</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>• improvements in safety at aerodromes</li> </ul>
<b>KPI</b>	<ul style="list-style-type: none"> <li>• status of implementation of PBN approaches</li> </ul>
<b>Proposed Metrics:</b>	<ul style="list-style-type: none"> <li>• number of States having implemented PBN approaches</li> <li>• percentage of CO<sub>2</sub> reduction of implemented new PBN approaches</li> </ul>

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013-2016)</i>				
ATM OC COMPONENTS	TASKS	TIMEFRAME START-END	RESPONSIBILITY	STATUS
<b>AOM, AO</b>	<i>At airports</i>			
	<ul style="list-style-type: none"> <li>• develop Airspace Concept based on the MID PBN Implementation Plan, in order to design and implement RNP APCH APV in most possible airports; RNP AR APCH at airports where there are obvious operational needs</li> </ul>	2009-2012	States	valid
	<ul style="list-style-type: none"> <li>• formulate safety plan (assessment and monitoring)</li> </ul>	2009-2012	States	valid
	<ul style="list-style-type: none"> <li>• support for operational approvals</li> </ul>	2012-2013	MPST	valid
	<ul style="list-style-type: none"> <li>• publish national regulations for aircraft and operators approval using PBN manual as guidance and considering available foreign approval material</li> </ul>	2008-2012	States	valid
	<ul style="list-style-type: none"> <li>• system performance measuring (measurement and monitoring plan)</li> </ul>	2009-2012	States, ATM/SAR/AIS SG	valid
	<ul style="list-style-type: none"> <li>• implement APV procedures</li> </ul>	2009-2012	States	valid
	<ul style="list-style-type: none"> <li>• monitor implementation progress in accordance with MID PBN implementation Plan and States implementation plan</li> </ul>	2009-2012	PBN/GNSS TF States, ATM/SAR/AIS SG	valid
<b>Linkage to GPIs</b>	GPI/5: performance-based navigation, GPI/7: dynamic and flexible ATS route management, GPI/8: collaborative airspace design and management, GPI/10: terminal area design and management, GPI/11: RNP and RNAV SIDs and STARs and GPI/12: FMS-based arrival procedures			

<b>ENHANCE CIVIL/MILITARY COORDINATION AND CO-OPERATION</b>	
<b>Benefits</b>	
<b>Environment</b>	<ul style="list-style-type: none"> <li>• reductions in fuel consumption and CO<sub>2</sub> emission</li> </ul>
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• allow a more efficient ATS route structure; and</li> <li>• increase airspace capacity</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>• ensure safe and efficient action in the event of unlawful interference</li> </ul>
<b>KPI</b>	<ul style="list-style-type: none"> <li>• number of ATS routes not implemented due to Military restrictions</li> <li>• number of Conditional Routes (CDR) implemented in accordance with user requirements</li> <li>• number of reported incident related to uncoordinated flights operating over high seas</li> </ul>
<b>Proposed Metrics:</b>	<ul style="list-style-type: none"> <li>• reduction of the number of ATS routes not implemented due to Military restrictions</li> <li>• increase the number of CDRs implemented in accordance with user requirements</li> <li>• reduction of the number of incident related to uncoordinated flights operating over high seas</li> <li>• <b>percentage of CO2 reduction of implemented new PBN approaches</b></li> </ul>

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013-2016)</i>				
ATM OC COMPONENTS	TASKS	TIMEFRAME START-END	RESPONSIBILITY	STATUS
<b>AOM, AUO</b>	<ul style="list-style-type: none"> <li>• establish civil/military coordination bodies at national level</li> </ul>	2008- <b>2014</b> 2	States	<b>valid</b>
	<ul style="list-style-type: none"> <li>• arrange for permanent liaison and close cooperation between civil ATS units and appropriate air defence units</li> </ul>	2008- <b>2014</b> 2	States	<b>valid</b>
	<ul style="list-style-type: none"> <li>• implement collaborative civil/military airspace planning at national level</li> </ul>	2008-2012	States	<b>valid</b>
	<ul style="list-style-type: none"> <li>• develop a regional strategy and an Action Plan for implementation of flexible use of airspace in a phased approach beginning with more dynamic sharing of restricted airspace while working towards full integration of civil and military aviation activities</li> </ul>	2009-2013	ATM/SAR/AIS SG ARN TF	<b>valid</b>
	<ul style="list-style-type: none"> <li>• implement FUA</li> </ul>	2009- 2016	States	<b>valid</b>
	<ul style="list-style-type: none"> <li>• monitor FUA implementation progress</li> </ul>	Ongoing	ATM/SAR/AIS SG	<b>valid</b>
<b>Linkage to GPs</b>	GPI/1: flexible use of airspace, GPI/7: Dynamic and flexible ATS route management, GPI/8: Collaborative airspace design and management			

<b>REGIONAL PERFORMANCE OBJECTIVES RVSM OPERATIONS IN THE MID REGION</b>				
<b>Benefits</b>				
<b>Environment</b>	<ul style="list-style-type: none"> <li>• reductions in fuel consumption and emissions;</li> </ul>			
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• increase airspace capacity</li> </ul>			
<b>Safety</b>	<ul style="list-style-type: none"> <li>• meet the agreed Target Level of Safety (TLS)</li> </ul>			
<b>KPI</b>	<ul style="list-style-type: none"> <li>• Status of States listed in the MANDD for non-reporting necessary data to the MIDRMA on regular basis and in a timely manner</li> <li>• Overall Target Level of Safety (TLS): <math>5 \times 10^{-9}</math> fatal accident per flight hour</li> </ul>			
<b>Proposed Metrics:</b>	<ul style="list-style-type: none"> <li>• number of States reporting necessary data to the MIDRMA on regular basis and in a timely manner</li> <li>• number of Overall vertical-collision risk in MID RVSM airspace</li> </ul>			
<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013 - 2016)</i>				
ATM OC COMPONENTS	TASKS	TIMEFRAME START-END	RESPONSIBILITY	STATUS
AUO, ATM SDM	<ul style="list-style-type: none"> <li>• develop an Action Plan for the implementation of RVSM within Baghdad FIR</li> </ul>	2009-2010	BFRI WG	Completed
	<ul style="list-style-type: none"> <li>• develop necessary planning material related to RVSM implementation in Baghdad FIR</li> </ul>	2009-2011	BFRI WG MIDRMA ICAO	Completed
	<ul style="list-style-type: none"> <li>• ensure that Iraq met all RVSM implementation requirements</li> </ul>	2010-2011	BFRI WG MIDRMA ICAO	Completed
	<ul style="list-style-type: none"> <li>• implement RVSM within Baghdad FIR</li> </ul>	2011	Iraq ICAO MIDRMA	Completed
	<ul style="list-style-type: none"> <li>• monitor RVSM operations in the MID Region</li> </ul>	Ongoing	MIDRMA Board ATM/SAR/AIS SG ICAO	valid
	<ul style="list-style-type: none"> <li>• develop MID RVSM Safety Monitoring Reports (SMR) with a view to demonstrate that safety objectives continue to be met</li> </ul>	Ongoing	MIDRMA	valid
	<ul style="list-style-type: none"> <li>• assess MID RVSM SMRs and take action as required</li> </ul>	Ongoing	ATM/SAR/AIS SG MIDRMA Board MIDANPIRG	valid
<b>linkage to GPIs</b>	GPI-2: Reduced Vertical Separation Minima			

<b>IMPLEMENTATION OF THE NEW ICAO FPL FORM</b>	
<b>Benefits</b>	
<b>Environment</b>	<ul style="list-style-type: none"> <li>• reductions in fuel consumption and CO<sub>2</sub> emission utilizing proper flight planning and aircraft capabilities are known in advance to ANSP</li> </ul>
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• ability of air navigation service providers to make maximum use of aircraft capabilities</li> <li>• ability of aircraft to conduct flights more closely to their preferred trajectories</li> <li>• facilitate utilization of advanced technologies thereby increasing efficiency</li> <li>• optimized demand and capacity balancing through the efficient exchange of information</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>• enhance safety by use of modern capabilities onboard aircraft</li> </ul>
<b>KPI</b>	<ul style="list-style-type: none"> <li>• status of implementation of ICAO new FPL provisions</li> <li>• status of updates in the FITS</li> </ul>
<b>Proposed Metrics:</b>	<ul style="list-style-type: none"> <li>• number of States meeting the deadline for implementation of the ICAO new FPL provisions</li> <li>• number of States providing the focal points and initiated impact studies</li> </ul>

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013 - 2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
<b>SDM</b>	<ul style="list-style-type: none"> <li>• Planning and implementation of transition elements</li> </ul>	2009-2012	INFPL SG	valid
	<ul style="list-style-type: none"> <li>• States to assign focal points and form and internal nucleus team</li> </ul>	2009 - 2010	States	valid
	<ul style="list-style-type: none"> <li>• ensure that enabling regulatory (regulations procedures, AIP etc..) provisions are developed</li> </ul>	2009- 2012	States	valid
	<ul style="list-style-type: none"> <li>• ensure that the automation and software requirements of local systems are fully adaptable to the changes envisaged in the new FPL form</li> </ul>	2009 - 2012	States	valid
	<ul style="list-style-type: none"> <li>• ensure that issues related to the ability of all system to pass information correctly and to correctly identify the order in which messages are received, to ensure that misinterpretation of data does not occur</li> </ul>	2009- 2012	States	valid
	<ul style="list-style-type: none"> <li>• analyze each individual data item within the various fields of the new flight plan form, comparing the current values and the new values to verify any problems with regard to applicability of service provided by the facility itself or downstream units</li> </ul>	2009 – 2011	INFPL SG States	valid

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013 - 2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
	<ul style="list-style-type: none"> <li>ensure that there are no individual State peculiarities or deviations from the flight plan provisions</li> </ul>	2009- 2012	States	valid
	<ul style="list-style-type: none"> <li>ensure that the accepting ATS Reporting Office accepts and disseminates all aircraft capabilities and flight intent to all the downstream ACCs as prescribed by the PANS-ATM provisions</li> </ul>	2009 – 2012	INFPL SG States	valid
	<ul style="list-style-type: none"> <li>plan the transition arrangements to ensure that the changes from the current to the new ICAO FPL form occur in a timely and seamless manner and with no loss of service</li> </ul>	2009-2012	States INFPL SG	valid
	<ul style="list-style-type: none"> <li>in order to reduce the chance of double indications it is important that any State having published a specific requirement(s) which are now addressed by the amendment should withdraw those requirements in sufficient time to ensure that aircraft operators and flight plan service providers, after 15 November 2012, use only the new flight plan indications.</li> </ul>	2009- 2012	States	valid
	<ul style="list-style-type: none"> <li>internal testing</li> </ul>	2009 – June 2012	States	valid
	<ul style="list-style-type: none"> <li>external testing and transition into operation</li> </ul>	1 April to 30 June 2012	States	valid
	<ul style="list-style-type: none"> <li>airspace users validation and filling of NEW FPLs if appropriate</li> </ul>	1 July to 14 November 2012	States and users	valid
	<ul style="list-style-type: none"> <li>Plan and ensure the training of relevant stakeholders (air traffic controllers, etc)</li> </ul>	2009 - 2012	States	valid
	<ul style="list-style-type: none"> <li>develop and make available, guidance material for users, including but not limited to ANSP personnel</li> </ul>	2009 - 2011	INFPL SG	valid

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013 - 2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
	<ul style="list-style-type: none"> <li>• establish and enhance as appropriate a central depository (FITS) in order to track the implementation status</li> </ul>	Ongoing	ICAO	Completed
	<ul style="list-style-type: none"> <li>• inform the ICAO regional offices on an ongoing basis</li> </ul>	Ongoing- Dec 2012	States	Valid
<b>linkage to GPIs</b>	GPI/18 Aeronautical Information			

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**APPENDIX B**

**MID REGIONAL PERFORMANCE OBJECTIVES  
 AIM PERFORMANCE OBJECTIVES**

<b>IMPLEMENTATION OF WGS-84 AND eTOD</b>	
<b>Benefits</b>	
<b>Environment</b>	<ul style="list-style-type: none"> <li>Supporting benefits described in performance objectives for PBN</li> </ul>
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>benefits described in performance objectives for PBN</li> <li>efficient use of airspace</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>improve situational awareness</li> <li>support determination of emergency contingency procedures</li> <li>improve safety in general</li> </ul>
<b>KPI</b>	<ul style="list-style-type: none"> <li>status of implementation of WGS-84 in the MID Region</li> <li>status of implementation of eTOD in the MID Region (for Areas 1 &amp; 4)</li> </ul>
<b>Proposed Metrics:</b>	<ul style="list-style-type: none"> <li>number of States having fully implemented WGS 84</li> <li>number of States having organised eTOD awareness campaigns and training programmes</li> <li>number of States having implemented eTOD for Areas 1 &amp; 4</li> </ul>

<i>Strategy</i>				
<i>Short term (2010-2012)</i>				
<i>Medium term (2013 - 2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
<b>ATM AUO</b>	<b>WGS-84</b>			
	<ul style="list-style-type: none"> <li>establish WGS-84 implementation goals in coordination with the national PBN implementation plan</li> </ul>	2009-2010	States	valid
	<ul style="list-style-type: none"> <li>complete WGS-84 implementation</li> </ul>	2012	States	valid
	<ul style="list-style-type: none"> <li>monitor the implementation of WGS-84 until complete implementation of the system by all States and take remedial action, as appropriate</li> </ul>	ongoing	ICAO & AIS/MAP TF	valid
<b>ATM CM, ATM SDM</b>	<b>eTOD</b>			
	<ul style="list-style-type: none"> <li>promote the awareness about the requirements for the provision of electronic Terrain and Obstacle Data (eTOD)</li> </ul>	ongoing	ICAO & AIS/MAP TF & States	valid
	<ul style="list-style-type: none"> <li>harmonize, coordinate and support the eTOD implementation activities on a regional basis</li> </ul>	ongoing	ICAO & AIS/MAP TF	valid

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013 - 2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
	<ul style="list-style-type: none"> <li>• provide Terrain and Obstacle data for area 1</li> </ul>	2008-2012	States	valid
	<ul style="list-style-type: none"> <li>• provide Terrain and Obstacle data for area 4</li> </ul>	2008-2012	States	valid
	<ul style="list-style-type: none"> <li>• assessment of Annex 15 requirements related to the provision of eTOD for area 2 and area 3</li> </ul>	2010-2012	States	valid
	<ul style="list-style-type: none"> <li>• development of an action plan for the provision of eTOD for area 2 and area 3</li> </ul>	2013	States	valid
	<ul style="list-style-type: none"> <li>• provide necessary Terrain and Obstacle data for area 2</li> </ul>	2015	States	valid
	<ul style="list-style-type: none"> <li>• provide necessary Terrain and Obstacle data for area 3</li> </ul>	2015	States	valid
<b>Linkage to GPIs</b>	GPI-5: Performance-based navigation GPI-11: RNP and RNAV SIDs and STARs GPI-9: Situational awareness GPI-18: Aeronautical Information GPI-20: WGS-84 GPI-21: Navigation systems			

### AIM PERFORMANCE OBJECTIVES

<b>REGIONAL PERFORMANCE OBJECTIVES TRANSITION FROM AIS TO AIM</b>	
<b>Benefits</b>	
<b>Environment</b>	<ul style="list-style-type: none"> <li>• reductions in fuel consumption</li> </ul>
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• improved planning and management of flights</li> <li>• efficient use of airspace</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>• improved safety</li> </ul>
<b>KPI</b>	<ul style="list-style-type: none"> <li>• Status of implementation of the AIRAC system in the MID Region</li> <li>• Status of implementation of QMS in the MID Region</li> <li>• Status of implementation of AIS Automation in the MID Region</li> </ul>
<b>Proposed Metrics:</b>	<ul style="list-style-type: none"> <li>• Number of deficiency Priority “U” related to the AIS/MAP field</li> <li>• Number of States having implemented QMS</li> <li>• Number of States having developed eAIP</li> <li>• Number of States having developed a National Plan for the transition from AIS to AIM</li> <li>• Number of States having implemented an AIXM based AIS Database</li> <li>• Number of States having implemented an Integrated Aeronautical Information Database (IAID)</li> </ul>

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013 - 2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
<b>AUO, ATM SDM</b>	<ul style="list-style-type: none"> <li>• improve the compliance with the AIRAC system</li> </ul>	Ongoing	States & AIS/MAP TF	valid
	<ul style="list-style-type: none"> <li>• use of the internet, including the ICAO MID Forum, for the advance posting of the aeronautical information considered of importance to users</li> </ul>	Ongoing	States & ICAO	valid
	<ul style="list-style-type: none"> <li>• signature of Service Level Agreements between AIS and data originators</li> </ul>	2009-2015	States	valid
	<ul style="list-style-type: none"> <li>• foster the implementation of QMS based on the MID Region Methodology for the implementation of QMS and the Eurocontrol CHAIN deliverables</li> </ul>	Ongoing	ICAO & AIS/MAP TF & States	valid
	<ul style="list-style-type: none"> <li>• monitor the implementation of QMS until complete implementation of the requirements by all MID States</li> </ul>	Ongoing	ICAO & AIS/MAP TF	valid
	<ul style="list-style-type: none"> <li>• review and update the deficiencies in the AIS/MAP field and provide necessary guidance for their elimination</li> </ul>	Ongoing	ICAO & AIS/MAP TF	valid

<i>Strategy</i> <i>Short term (2010-2012)</i> <i>Medium term (2013 - 2016)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
	<ul style="list-style-type: none"> <li>foster the development of eAIPs by MID States</li> </ul>	Ongoing	States & AIS/MAP TF	valid
<b>AUO, ATM SDM</b>	<ul style="list-style-type: none"> <li>monitor the implementation of AIS automation in the MID Region in order to ensure availability, sharing and management of electronic aeronautical information;</li> </ul>	2008-2013	ICAO & AIS/MAP TF	valid
	<ul style="list-style-type: none"> <li>establishment of Integrated Aeronautical Information Database (IAID)</li> </ul>	2011-2016	States	valid
	<ul style="list-style-type: none"> <li>foster the development of Regional/Sub-regional AIS databases.</li> </ul>	2011-2015	ICAO & AIS/MAP TF & States	valid
	<ul style="list-style-type: none"> <li>foster the implementation of Aerodrome mapping and electronic aeronautical charts in the MID Region</li> </ul>	2012-2016	ICAO & AIS/MAP TF & States	valid
	<ul style="list-style-type: none"> <li>foster the integrated improvement of AIS/AIM through proper training and qualification of the AIS/AIM personnel in the MID Region</li> </ul>	2011-2016	ICAO & AIS/MAP TF & States	valid
<b>Linkage to GPIs</b>	GPI-5: Performance-based navigation GPI-11: RNP and RNAV SIDs and STARs GPI/18: Aeronautical Information			