



# Global and Regional Developments

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Dubai, UAE, 13 December 2016





# **Outline**

- ☐ ICAO Planning process
- □ Regional Implementation
- **GANP**
- MID Region working arrangements
- ☐ Regional Priorities and targets
- ☐ Monitoring and reporting mechanism
- □ Conclusion





# **Integrated Planning for Implementation**



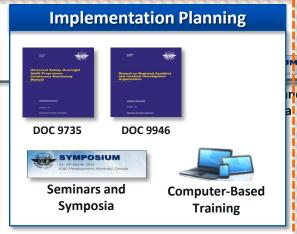
Using the point of view of the implementer

Provision of a **singular package** for implementation











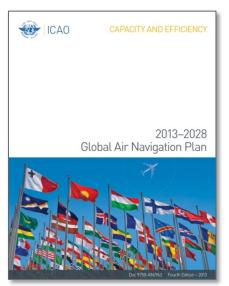




# **Reporting against the Current Global Plans**







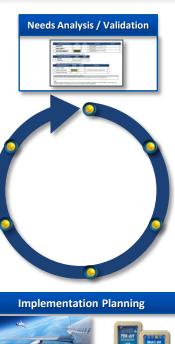
















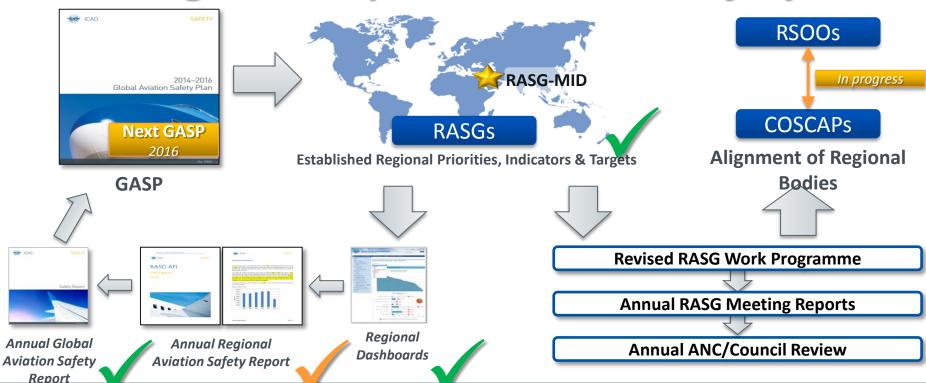


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# Regional Implementation – Safety



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# Regional Implementation – Air Navigation







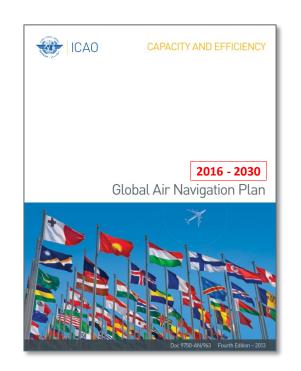
# **GANP** Update

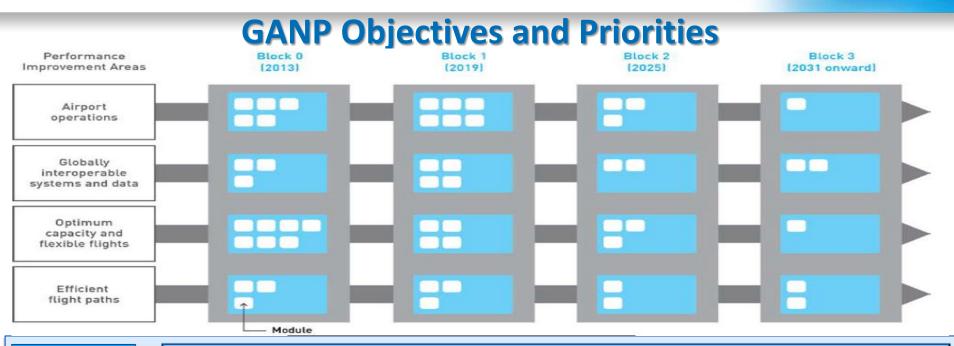
#### Objectives

- International and overarching framework of a global investment plan: make it more usable towards implementation
- Keep it **stable** while making the necessary updates/additions
- Adjust the **periodicity** to the Assembly and ICAO editing cycles

#### A Planning Document for Implementation

 GANP should be comprehensive planning tool to support the development and implementation of a harmonized global air navigation system





**PRIORITIES** 

### Performance Based Navigation (PBN)

Air Traffic Flow Management & Collaborative Decision-Making (ATFM/CDM)

Implementation of Aeronautical Information Management (AIM)





#### **ICAO MID REGION**



- **Located in** Cairo, Egypt
- **Established** in 1953
- Accredited to 15 States
- **English** is the working Language, however some States correspond in Arabic

**UAE** 





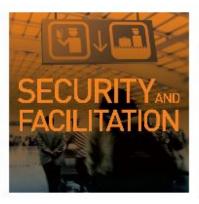


#### MID Office activities

The ICAO MID Office is supporting States to meet their obligations set out through the five strategic objectives:







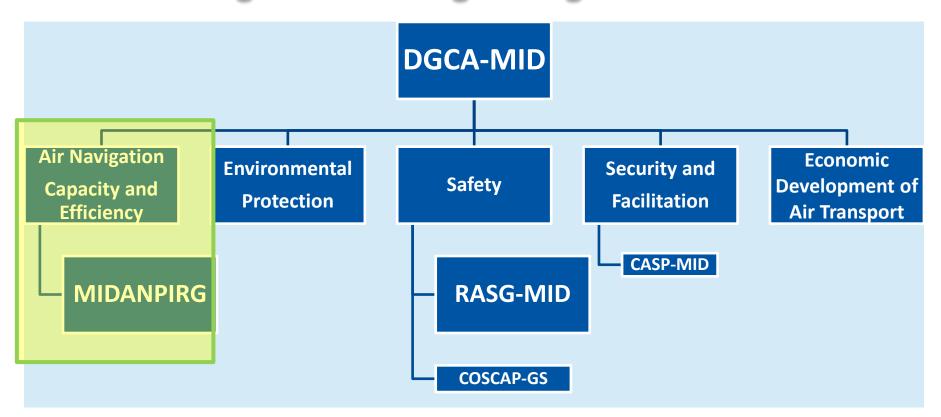








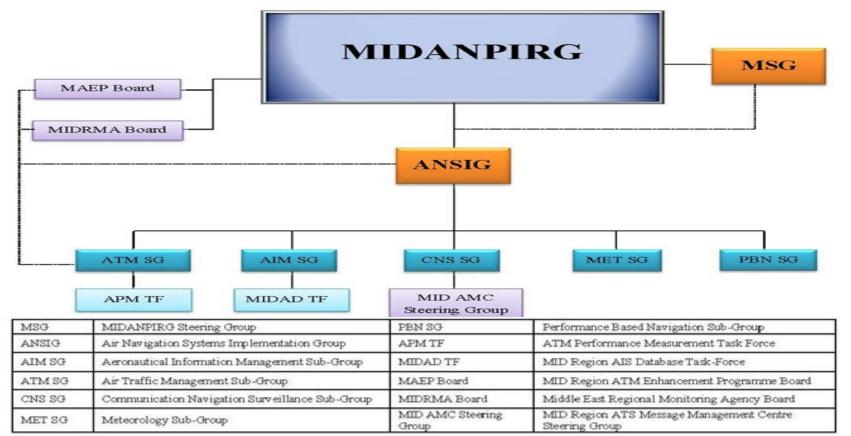
### **Regional Working Arrangements**







### **MIDANPIRG Organizational Structure**





# MIDANPIRG is held each 18 months and endorse the outcome of its subsidiary bodies Several documents are available on the ICAO MID Website to support States meeting the

Several documents are available on the ICAO MID Website to support States meeting their obligations such as:

- MID Doc 001: MIDANPIRG Handbook (includes the working arrangements and the terms of reference of all the Groups and Sub-groups)
- MID Doc 002: Air Navigation Strategy
- o MID Doc 003: MID Region ATM Contingency Plan
- o MID Doc 004: MID High Level Airspace Concept
- o MID Doc 005: MID SSR Codes Management Plan
- o MID Doc 006: MID Region AIDC/OLDI implementation
- o MID Doc 007: MID Region PBN Implementation Plan
- MID Air Navigation Plan (MID eANP, Doc 7908)
- Other documents





# Identification of priorities and performance targets

- ☐ Safety:
  - in line with the GASP
  - Priorities identified by RASG-MID (Focus Areas and emerging risks)
  - → MID Region Safety Strategy and Doha Declaration (safety targets)
- ☐ Air Navigation:
  - in line with the GANP
  - Priorities identified by MIDANPIRG (Priority 1 ASBU Block 0 Modules)
  - → MID Region Air Navigation Strategy and Doha Declaration (air navigation targets)





#### MID REGION AIR NAVIGATION STRATEGY

- The Strategy was endorsed by MSG/4 meeting (Cairo, 24-26 November 2014), based on the outcome of the relevant MIDANPIRG subsidiary bodies and inputs received from stakeholders.
- > The MID Region Air Navigation Strategy includes 11 ASBU Block 0 Modules identified as priority for implementation in the MID Region.



MID Doc 002

INTERNATIONAL CIVIL AVIATION ORGANIZATION

MIDDLE EAST AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (MIDANPIRG)

MID REGION
AIR NAVIGATION STRATEGY

EDITION JUNE, 2015

MID Region Air Navigation Strategy

June 2015



Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration

Service Improvement through Digital Aeronautical Information Management

Meteorological information supporting enhanced operational efficiency and safety

Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)



ICAO CAIRO	UNITING AVIATION
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**RSEQ** 

SURF

**ACDM** 

FICE

DATM

**AMET** 

**FRTO** 

**NOPS** 

**ASUR ASEP** 

**ACAS** 

**SNET** 

CDO

TBO

CCO

ICAO CAIRO UN	ITING AVI.	ATION	LEFT BEHIND
Performance Improvement Areas (PIA)	Module	Priority	Module Name
PIA 1:	APTA	1	Optimization of Approach Procedures including vertical guidance
Airport Operations	WAKE	2	Increased Runway Throughput through Optimized Wake Turbulence Separation

(AMAN/DMAN)

Airport-CDM

2

1

Globally Interoperable Systems and Data - Through **Globally Interoperable System Wide Information** 

Optimum Capacity and Flexible Flights - Through

Efficient Flight Path - Through Trajectory-based

**PIA 2:** 

**PIA 3:** 

**PIA 4:** 

**Operations** 

Management

**Global Collaborative ATM** 

NO COUNTRY LEFT BEHIND	
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Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)

Improved Operations through Enhanced En-Route Trajectories

Improved Flow Performance through Planning

Improved access to Optimum Flight Levels through

Increased Effectiveness of Ground-based Safety Nets

Improved Safety and Efficiency through the initial

Improved Flexibility and Efficiency in Descent Profiles (CDO)

Initial Capability for Ground Surveillance

Air Traffic Situational Awareness (ATSA)

Climb/Descent Procedures using ADS-B

application of Data Link En-Route

based on a Network-Wide view

**ACAS Improvements** 

Improved Traffic Flow through Sequencing

Improved Airport Operations through



Meteorological information supporting enhanced operational efficiency and safety

Improved Flow Performance through Planning based on a Network-Wide view

Improved Operations through Enhanced En-Route Trajectories

Improved Flexibility and Efficiency in Descent Profiles (CDO)

Improved Flexibility and Efficiency Departure Profiles - Continuous Climb



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Performance Improvement Areas (PIA)	Module	P
PIA 1:	APTA	

**Airport Operations** 

Globally Interoperable Systems and Data -

Optimum Capacity and Flexible Flights -

Efficient Flight Path - Through Trajectory-

**Through Globally Interoperable System** 

**Wide Information Management** 

**Through Global Collaborative ATM** 

**PIA 2:** 

**PIA 3:** 

**PIA 4:** 

based Operations

**SURF** 

**ACDM** 

FICE

**DATM** 

**AMET** 

**FRTO** 

**NOPS** 

**ACAS** 

CDO

CCO

Priority

**ACAS Improvements** 

Operations (CCO)

Improved Airport Operations through Airport-CDM Integration

Service Improvement through Digital Aeronautical Information Management

**Module Name** Optimization of Approach Procedures including vertical guidance

Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2) Increased Interoperability, Efficiency and Capacity through Ground-Ground





# **Doha Declaration**

- Accident and fatal accident: <u>regional average</u> rate to be in line with the <u>global average</u> rate by 2016 (In 2014: 4.4 vs. 3.1)
- USOAP-CMA: <u>regional average EI</u> to be above 70% by 2020; and 11 States to have at least 60% EI by 2020 (Average EI:66.1 and 8 States)
- SSC (if identified): to be resolved within 12 months from their identification (0 SSC)
- Aerodrome certification: 80% of the Intl aerodromes certified by 2020 (Status 54%)
- SSP: All MID States with EI>60% to complete implementation of SSP by 2020 (Status 0%)

- PBN: Approach with <u>vertical guidance</u> for <u>all</u>
   <u>RWY ends</u> by <u>2017 (Status 29% PBN only and ILS+PBN 69%)</u>
- AIDC/OLDI: <u>11 States</u> to implement AIDC/OLDI between their ACCs and <u>at least one adjacent</u>
   ACC by <u>2017 (Status 4 States)</u>
- AIM: <u>complete</u> implementation of <u>Phase I</u> of the transition from AIS to AIM by <u>2017 (Status 70%)</u>
- MET: <u>12 States</u> to complete implementation of QMS for MET by <u>2017 (Status 8 States)</u>
- ACAS: carriage of (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons by <u>2017 (Status 53%)</u>





# MID Air Navigation Plan (MID eANP)

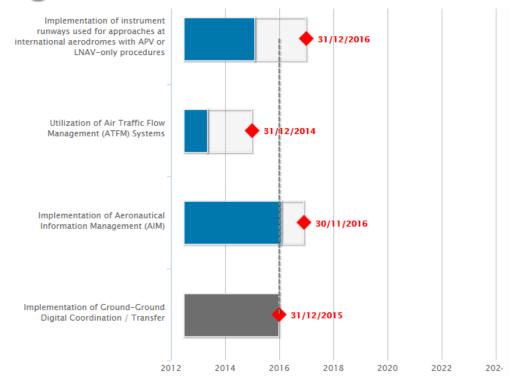
- Bridge between the SARPs/GANP and the States' air navigation plans and implementation status
- To meet those needs of specific areas not covered in the worldwide provisions
- New MID eANP approved on (VOL I: 21 Dec 2015; VOL II: 14 Feb 2016; VOL III: 15 Feb 2016)
- MID eANP
  - VOL I: Stable plan elements
  - VOL II: Dynamic plan elements
  - VOL III: Dynamic/Flexible plan elements, ASBUs, guidance and status
- Available at: <a href="http://www2010.icao.int/MID/Pages/MIDeANP.aspx">http://www2010.icao.int/MID/Pages/MIDeANP.aspx</a>







# **Regional Performance Dashboards**



http://www.icao.int/safety/Pages/Regional-Targets.aspx





# **MID Air Navigation Report**

- An integral part of the air navigation planning and implementation process in the MID Region
- Monitors planning and implementation progress for the Priority 1 ASBU Block 0 Modules
- Provides outlook 2020



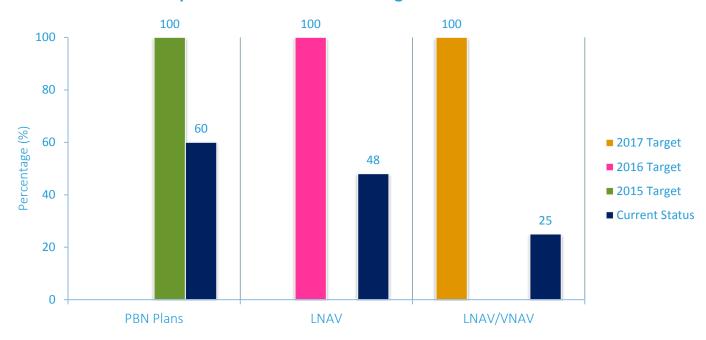






# **MID Air Navigation Report**

#### **BO-APTA Status of implementation in the MID Region**

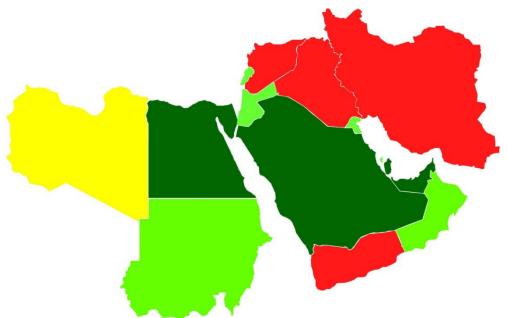








Module	Elements	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
	AMHS capability															
<b>BO-FICE</b>	AMHS impl. /interconnection															
	Implementation of AIDC/OLDI between adjacent ACCs															







#### **Status of Implementation**

	BO-AP	TA	BO-S	URF	ACOM.	BO-F	ICE		BO-DATM				BO-AMET		BO-FRTO		BO- MOPS	BIO- ACAS	B0-	CDO	B0-	cco	
State	PBN Plan LNAV/NAV	TOTAL	A-SMGCS1 A-SMGCS2	TOTAL	TOTAL	AMHS Cap AMHS lmp.	TOTAL	AIM Plans AIXM		WG584H WG584V	eTOD area 1 T eTOD area 1 O	eTOD area 4 T eTOD area 4 O	TOTAL	SADIS 26/FTP QMS	TOTAL	FUA Flex Routing	TOTAL	TOTAL	TOTAL	PBN STARs	TOTAL	PBN SIDs	TOTAL
Bahrain																							
Egypt																							
Iran																							
raq																							
lordan																							
Kuwait																							
Lebanon																							
Libya																		TBD					
Oman																		_					
Qatar																							
Saudi Arabia																							
Sudan																						-	
Syria																							
UAE																							
Yemen																							

#### Outlook 2020

Module	Current Status of implementation (approximate rate)	Projected Status of implementation by 2020 (approximate rate)
BO-APTA	33%	
BO-WAKE	(Priority 2)	
BO-RSEQ	(Priority 2)	
BO-SURF	46%	
B0-ACDM	0%	
BO-FICE	55%	
B0-DATM	61%	
BO-AMET	70%	
BO-FRTO	7%	
B0-NOPS	(Priority 2)	
B0-ASUR	(Priority 2)	
BO-ASEP	(Priority 2)	
B0-OPFL	(Priority 2)	
B0-ACAS	67%	
BO-SNET	(Priority 2)	
B0-CDO	10%	
во-тво	(Priority 2)	
B0-CCO	19%	



# **Some Challenges**

- Political/security situation in some MID States and conflict zones.
- Implementation of PBN and FUA/Civil/Military Cooperation
- Lack of resources for the provisions of support to States in a timely manner
- Implementation/joining of the agreed regional/sub-regional projects
- Low level of financial or in-kind contribution from States to regional activities





# **GMA Riyadh**

- **□** Supported the following projects/initiatives:
  - ARNOP, MID FPP, MENA RSOO, ICAO MID NCLB Activities for 2017, Flight Check and Air Navigation Charges Collection Agency; and ACAC Regional Training Cooperation Initiative.
- Supported the establishment of a MID Implementation Plan (MIDIP), which was supported also by A39
- Endorsed the Riyadh Declaration, which was supported also by A39
  - → Development of a Regional Roadmap to enhance Aviation Security and Facilitation
  - → Development of a MID SEC/FAL Plan
  - + Establishment of a MID RASFALG



#### **Conclusion**

- The priorities identified by MIDANPIRG and the RASG-MID helped all stakeholders to work towards the achievement of the agreed performance targets (Doha Declaration).
- Good progress has been recorded. But still targets not achieved.
- There is still room for improvement, but we need to address the main challenges; and develop plan of action for "each" State
- Leadership/Commitment/Political will/Accountability
- Collaboration of all stakeholders to provide required assistance and implement the regional/sub-regional projects
- MID NCLB Strategy/Plan
- MIDIP



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South American (SAM) Office Lima ICAO Headquarters Montréal

Western and Central African (WACAF) Office Dakar European and North Atlantic (EUR/NAT) Office Paris

Middle East (MID) Office Cairo Eastern and Southern African (ESAF) Office Nairobi

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