



**Third Meeting of the Air Navigation System  
Implementation Group  
(ANSIG/3)  
*Cairo, Egypt, 2-4 July 2018***



**EGYPT  
ASBU B0 IMPLEMENTATION STATUS**

*ANSIG/3, Cairo, Egypt, 2-4 July 2018*



# Outline

- Brief on the Egypt National ASBU Implementation Plan**
- Overall Progress in ASBU Implementation**
- Challenges**
- Lessons Learned**
- Recommendations**
- Outlook 2020**



# EGYPT

## National ASBU Implementation Plan



# EGYPT National ASBU Implementation Plan



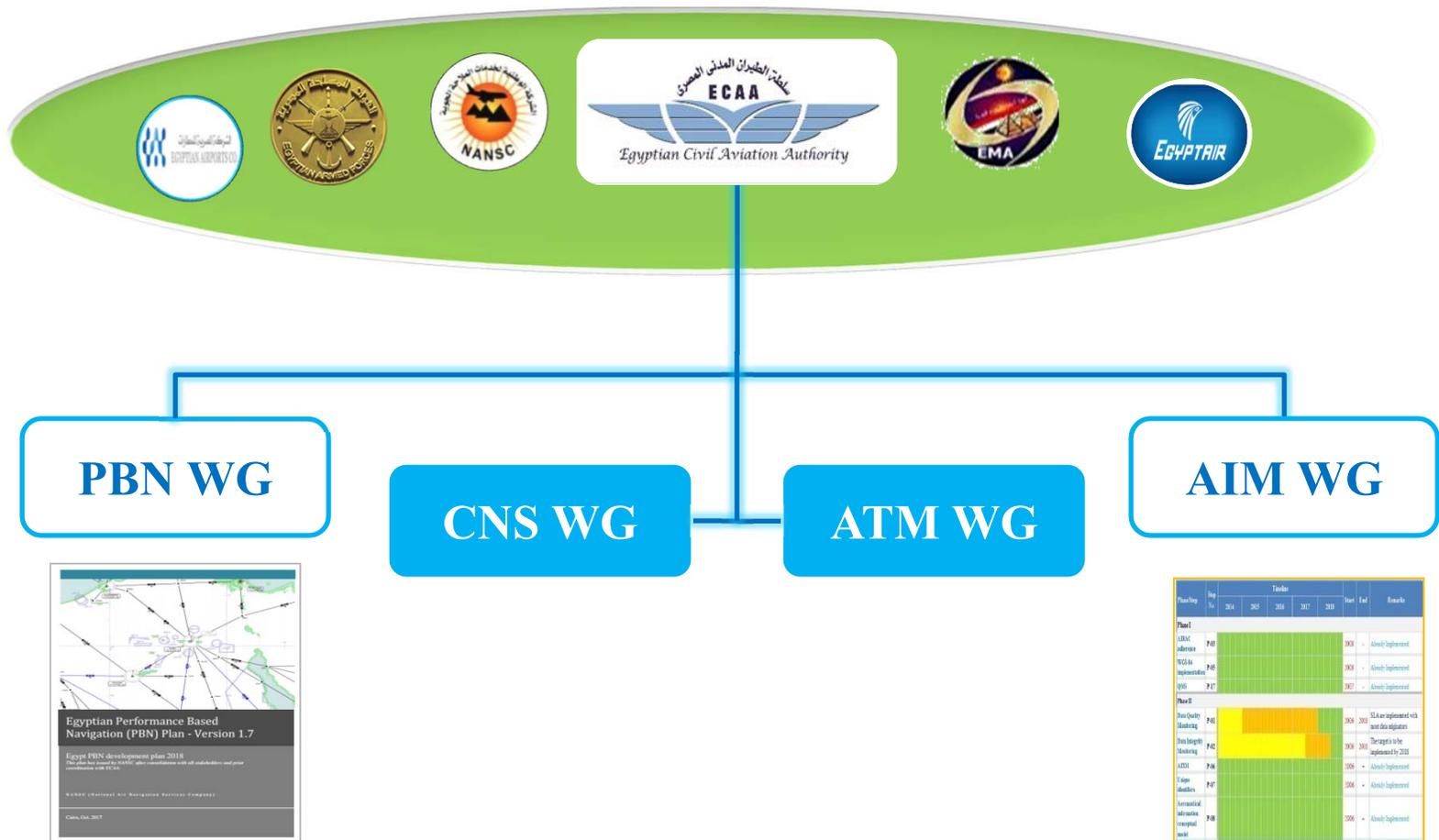
- Develop Egypt strategic plan with a goal of global aviation system interoperability.
  
- Implement priority 1 ASBU Block 0 modules according to Egypt operational requirements and the MID region air navigation strategy to be in line with global strategic objectives.



# EGYPT National ASBU Implementation Plan



## Egypt National ASBU Committee





# Overall Progress in ASBU Implementation

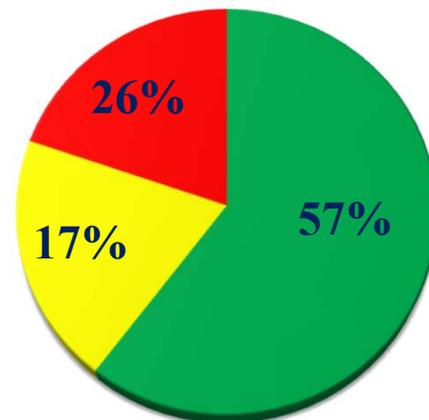


# Overall Progress in ASBU B0 Implementation (Priority 1)



ASBU B0	APTA		SURF		ACDM	FICE			DATM							AMET		FRTO		NOPS	ACAS	SNET		CDO		CCO			
	PBN Plan	LNAV	LNAV/VNAV	ASMGCS 1		ASMGCS 2	AMHS Cap.	AMHS Imp.	AIDC/OLDI	AIM Plan	AIXM	eAIP	QMS	WGS-84	eTOD Area 1 T	eTOD Area 1 O	eTOD Area 4 T	eTOD Area 4 O	SADIS 2G/FTP			QMS	FUA	Flex. Routing	Total	Total	STCA	MSAW	PBN STARS
EGYPT	Green	Yellow	Yellow	Green	Green	Red	Green	Green	Green	Green	Yellow	Green	Green	Green	Red	Green	Red	Green	Green	Red	Red	Green	Green	Green	Green	Yellow	Red	Yellow	Red
	Yellow	Yellow	Yellow	Green	Red	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Red	Red	Red	Green	Green	Green	Yellow	Yellow	Yellow	Yellow

ASBU B0 / Element



- Implemented
- Partially Impl.
- Not Implemented



# Overall Progress in ASBU B0 Implementation (Priority 2)



Module	Module Title	Status		Remarks
		Yes	No	
<b>B0-WAKE</b>	Increased Runway Throughput through Optimized Wake Turbulence Separation	Yes		
<b>B0-RSEQ</b>	Improve Traffic flow through Runway Sequencing (AMAN/DMAN)		No	
<b>B0-ASUR</b>	Initial capability for ground surveillance	Yes		PSR , SSR and MLAT Implemented
<b>B0-ASEP</b>	Air Traffic Situational Awareness (ATSA)		No	
<b>B0-OPFL</b>	Improved access to optimum flight levels through climb/descent procedures using ADS-B		No	
<b>B0-TBO</b>	Improved Safety and Efficiency through the initial application of Data Link En-Route		No	



# Challenges



- CBA for defining clear planning to implement new technologies (Ex. GBAS) in the medium Term Plan.**
- Software updates according to PANS-OPS new criteria.**
- Implementation of ATFM system (efficient SID & STAR).**
- Comprehensive training is required for operational personnel and Procedure designers.**
- Civil/Military coordination and FUA.**
- Interoperability issues between different systems (Neighboring ACCs – Meteorological Systems).**



# Lessons Learned



## Working groups Development

The implementation of working groups for different subjects has proven to be very useful and effective.

## Early Stakeholder Engagement

ASBU implementation requires close collaboration between Airspace stakeholders for the implementation of identified ASBU modules in an efficient and harmonized manner.

## Cooperation of neighboring States, according to regional plan, is essential

## Sharing and exchanging of experiences during implementation can facilitate the progress of plan and reduce implementation time and costs.



# Recommendations



## Inviting ICAO MID Office for establishing ASBU Implementation

Action group from ANP focal points and experts to focus on:

- The difficulties related to the implementation of some specific Modules/elements CCO/CDO, A-CDM , ...etc.
- Expedite the implementation status of ASBU by Sharing states experiences and transfer the effective methodologies of the implementation.

ICAO invited to arrange ASBU workshops in order to keep the states updated with the new methodologies and structure that will be introduced in 2019 update of GANP as preparation for ASBU Block 1



# Outlook 2020

## (Status of ASBU Block 0 Modules by 2020)



Module	Module Title	Status by 2020				Remarks
		FI	PI	NI	N/A	
<b>B0-APTA</b>	Optimization of Approach Procedures including vertical guidance	FI				
<b>B0-WAKE</b>	Increased Runway Throughput through Optimized Wake Turbulence Separation	FI				
<b>B0-RSEQ</b>	Improve Traffic flow through Runway Sequencing (AMAN/DMAN)		PI			
<b>B0-SURF</b>	Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)	FI				
<b>B0-ACDM</b>	Improved Airport Operations through Airport-CDM	FI				<i>Conducting CBA in the 2nd phase (Analysis phase) of the implementation plan <u>(In Progress)</u></i>
<b>B0-FICE</b>	Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration	FI				



# Outlook 2020

## (Status of ASBU Block 0 Modules by 2020)



Module	Module Title	Status by 2020				Remarks
		FI	PI	NI	N/A	
<b>B0-DATM</b>	Service Improvement through Digital Aeronautical Information Management	FI				
<b>B0-AMET</b>	Meteorological information supporting enhanced operational efficiency and safety	FI				
<b>B0-FRTO</b>	Improved Operations through Enhanced En-Route Trajectories	FI				
<b>B0-NOPS</b>	Improved Flow Performance through Planning based on a Network-Wide view	FI				
<b>B0-ASUR</b>	Initial capability for ground surveillance	FI				
<b>B0-ASEP</b>	Air Traffic Situational Awareness (ATSA)	TBD				



# Outlook 2020

## (Status of ASBU Block 0 Modules by 2020)



Module	Module Title	Status by 2020				Remarks
		FI	PI	NI	N/A	
<b>B0-OPFL</b>	Improved access to optimum flight levels through climb/descent procedures using ADS-B		PI			
<b>B0-ACAS</b>	ACAS Improvements	FI				
<b>B0-SNET</b>	Increased Effectiveness of Ground-Based Safety Nets	FI				
<b>B0-CDO</b>	Improved Flexibility and Efficiency in Descent Profiles (CDO)		PI			
<b>B0-TBO</b>	Improved Safety and Efficiency through the initial application of Data Link En-Route				N/A	
<b>B0-CCO</b>	Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)		PI			



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# Thank You !

**Presented By**

**Eng. Khaled Eltanany**

**ANS Safety Oversight Inspector / CNS**