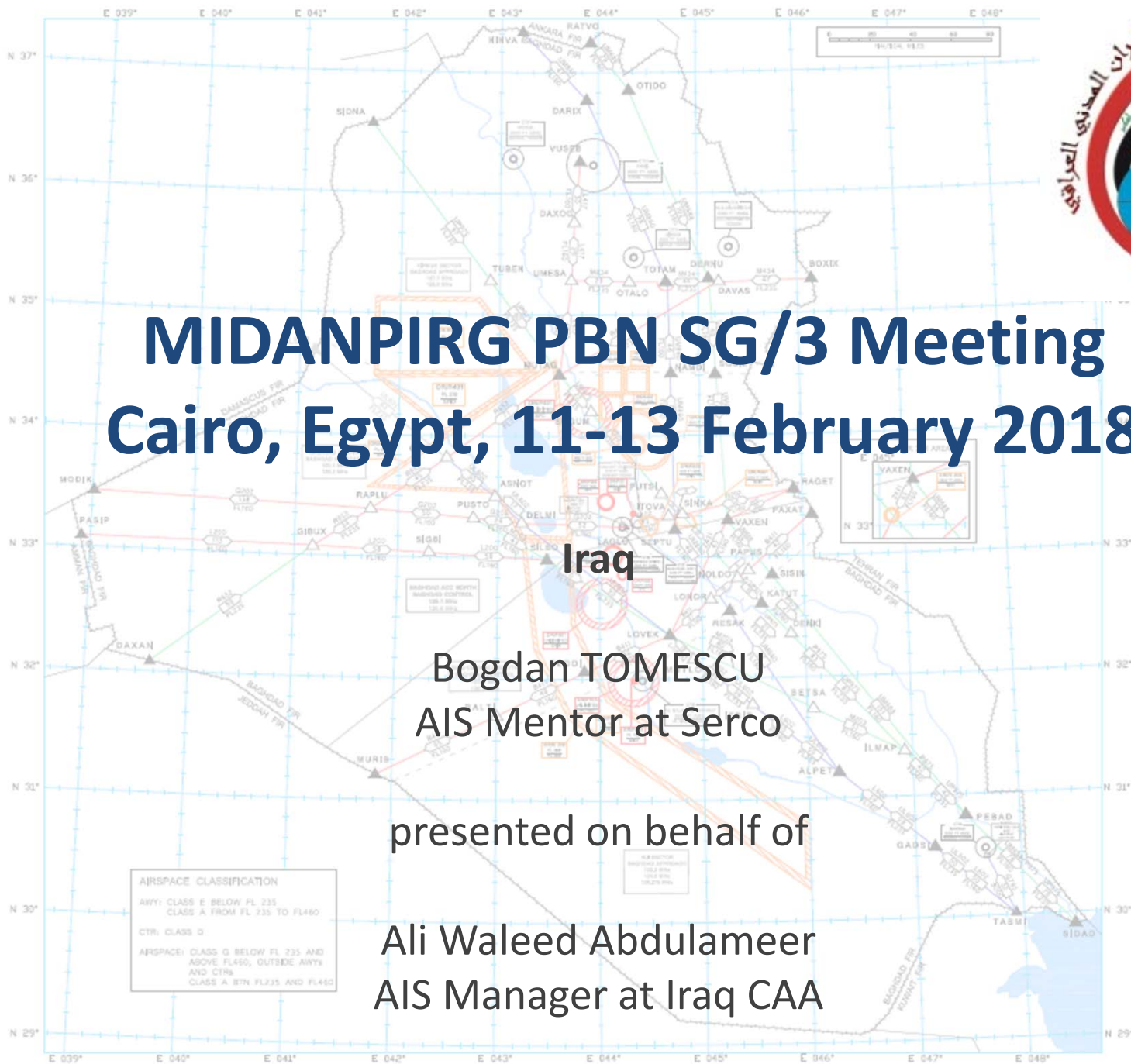




# MIDANPIRG PBN SG/3 Meeting Cairo, Egypt, 11-13 February 2018



Iraq

Bogdan TOMESCU  
AIS Mentor at Serco

presented on behalf of

Ali Waleed Abdulameer  
AIS Manager at Iraq CAA

**AIRSPACE CLASSIFICATION**  
ANY: CLASS E BELOW FL 235  
CLASS A FROM FL 235 TO FL450  
CTR: CLASS D  
AIRSPACE: CLASS G BELOW FL 235 AND  
ABOVE FL450, OUTSIDE ANYs  
AND CTRs  
CLASS A BTN FL235 AND FL450

# Presentation Outline

- Brief of the State National PBN Implementation Plan
- Status of Implementation
- Post assessment of PBN Implementation
- Challenges
- Thoughts/Recommendations



# National PBN Implementation Plan

- No formal national PBN implementation plan exists
- Obstacle surveys and procedure design, including PBN, have been identified as priorities for the development of ATM in Iraq
- Tender specifications being developed to outsource PBN procedure design for Baghdad and Basrah International Airports
- Airspace re-design project (including RNAV 1 ATS routes) to start in 2019 timeframe



# Status of Implementation

Overview of the State's PBN capabilities:

- Regulations: No regulations regarding PBN design/oversight in place, at the moment
- PANS-OPS Inspectorate: Procedure design oversight is under the responsibility of Iraq CAA
- Airspace concept: New airspace concept for Iraq to be developed in timeframe 2019-2020
- Procedure Design Entity: Procedure design is outsourced to external tenders. Internal procedure design capability under development.
- Number of procedure designers: 2 trained designers (basic PANS-OPS)
- Automated tools: NIL
- Obstacle surveys: No recent surveys at aerodromes without PBN procedures



# Status of Implementation

RWY Ends	ILS / CAT	LNAV	LNAV/ VNAV	LPV	RNP AR	RNAV SID	RNAV STAR
ORNI 10	CAT I	Yes	Yes	No	No	Yes	Yes
ORNI 28	CAT I	Yes	Yes	No	No	Yes	Yes
ORBI 15L	CAT I	No	No	No	No	No	No
ORBI 33R	CAT I	No	No	No	No	No	No
ORBI 15R	No	Yes	No	No	No	No	No
ORBI 33L	No	Yes	No	No	No	No	No



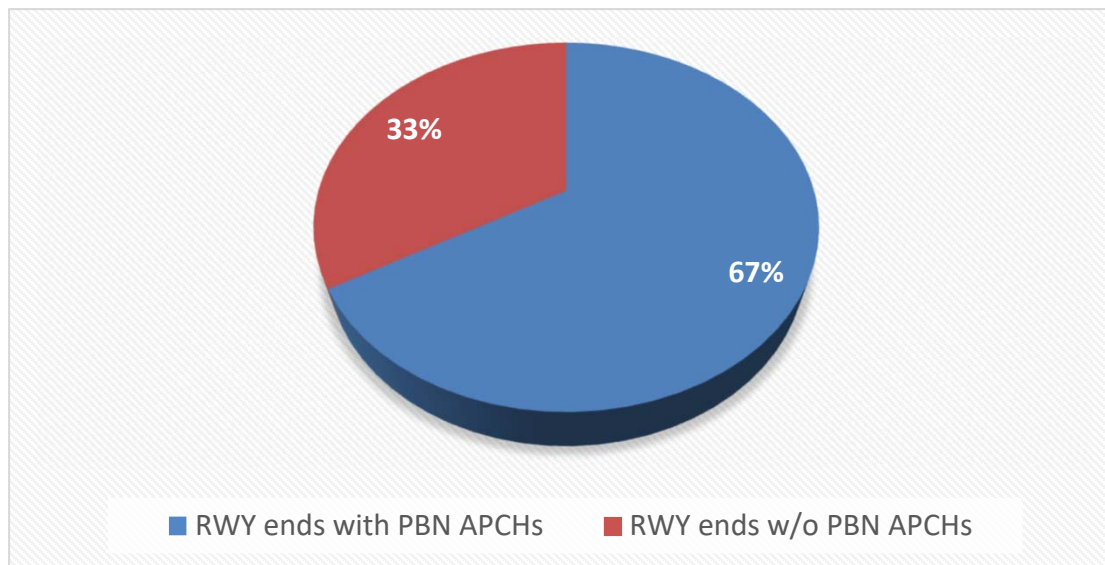
RWY Ends	ILS / CAT	LNAV	LNAV/ VNAV	LPV	RNP AR	RNAV SID	RNAV STAR
ORMM 14	No	No	No	No	No	No	No
ORMM 32	CAT I	No	No	No	No	No	No
ORER 18	CAT II	Yes	No	No	No	No	No
ORER 36	CAT I	Yes	No	No	No	No	No
ORSU 13	CAT I	Yes	No	No	No	No	No
ORSU 31	CAT I	Yes	No	No	No	No	No



# Status of Implementation

## Implementation progress

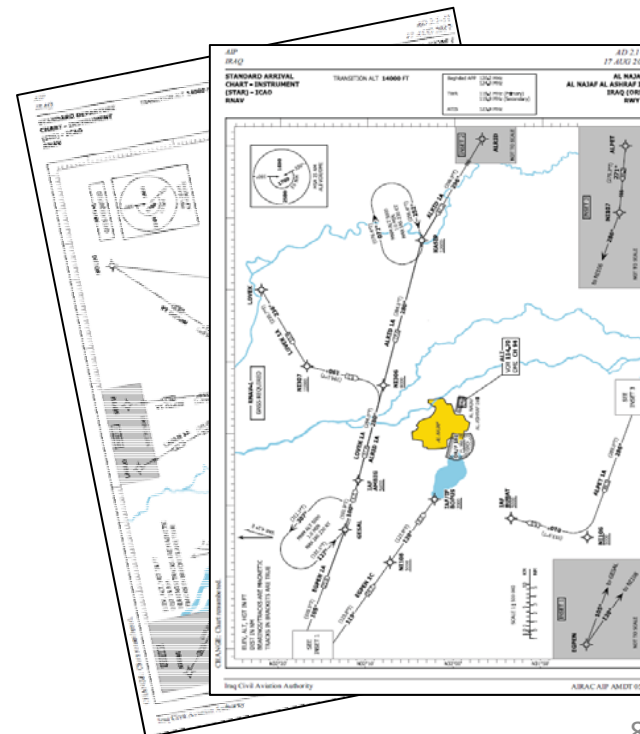
- 8 RWY ends with PBN approaches out of a total of 12 RWY ends



- 4 RWY ends without PBN approaches (3 of them with ILS approaches)

# Post assessment of PBN Implementation

- Increased aerodrome access in case of NAVAID unserviceability
- RNAV SIDs and STARs published at Al-Najaf International Airport
  - Less controller workload
  - Aligned with the airspace structure





# Challenges

- Budget restrictions
- Uncoordinated implementation
- Lack of automation and input data
- Further training required



# Thoughts/Recommendations

- Create awareness at the level of ICAA and aerodromes regarding PBN implementation benefits and timelines
- National PBN implementation plan, developed jointly by ICAA and aerodromes

National PBN Implementation Pan					
Stakeholder	Item	Description	Start date	End date	Progress
TBD					

- Develop internal procedure design and oversight capability





**Thank you**