



SAFE SKIES.  
**SUSTAINABLE  
FUTURE.**



ICAO

PBN SG/10  
(Amman, Jordan, 10 - 11 December 2025)



# Radio Navigation Aids/Systems Publication

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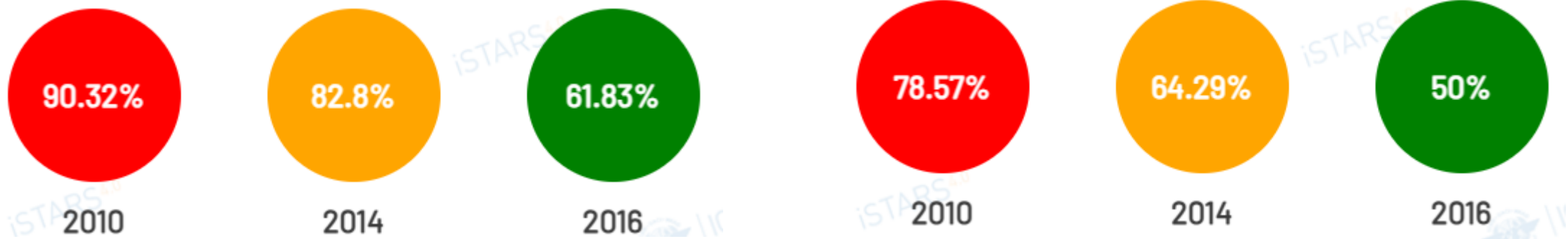
Radhouan Aissaoui  
RO-IM ICAO MID

## Assembly Resolution A37-11

States complete a PBN implementation plan as a matter of urgency to achieve:

- implementation of RNAV and RNP operations (where required) for En-route and terminal areas;
- implementation of approach procedures with vertical guidance (APV) (Baro-VNAV and/or augmented GNSS), including LNAV only minima, for all instrument runway ends, either as the primary approach or as a back-up for precision approaches by 2016 with intermediate milestones as : 30 per cent by 2010, 70 per cent by 2014; and
- implementation of straight-in LNAV only procedures, for instrument runways at aerodromes where there is no local altimeter setting available and where there are no aircraft suitably equipped for APV operations with a maximum certificated take-off mass of 5 700 kg or more;

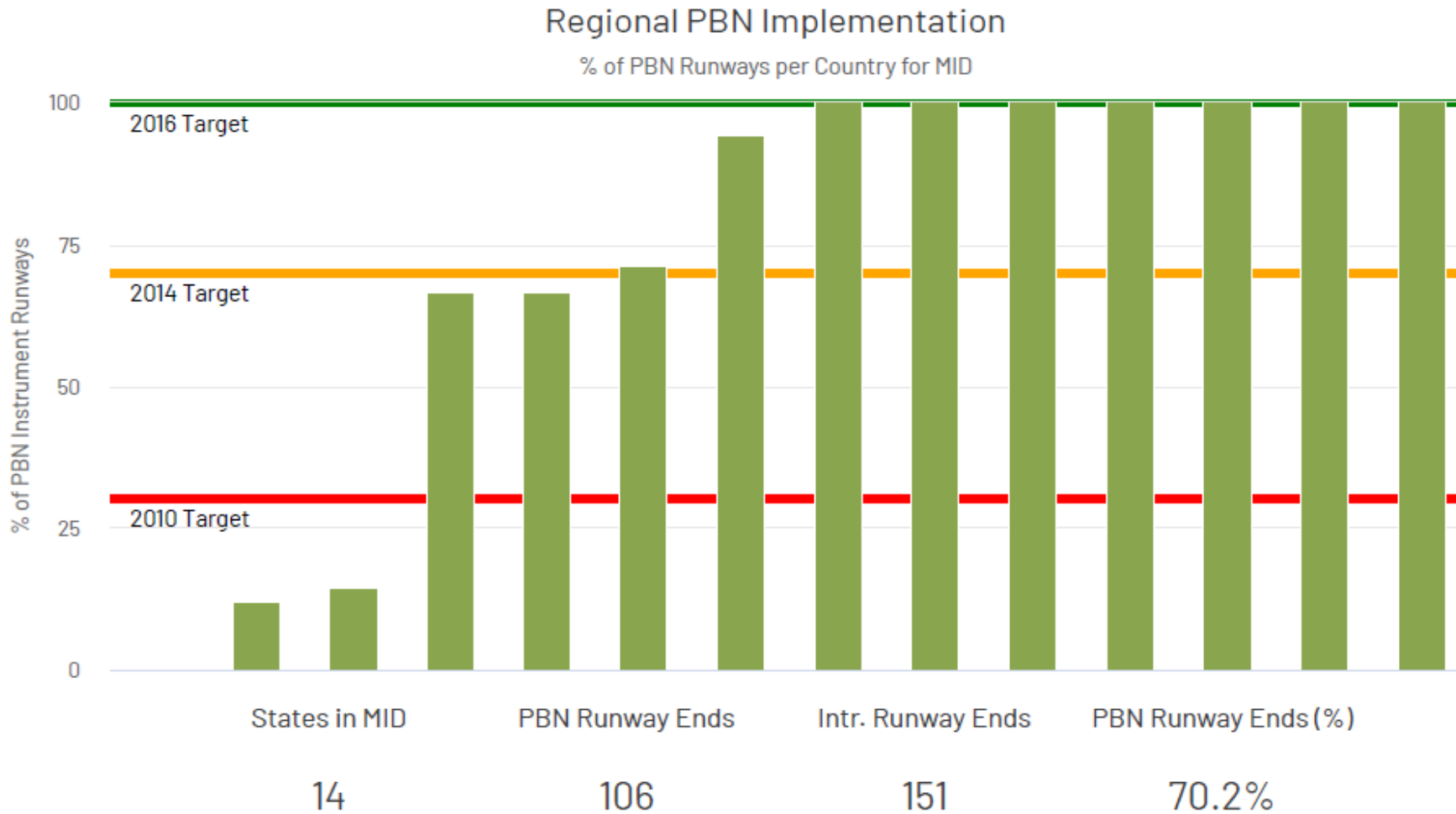
## Percentage of States in MID meeting the resolution Targets



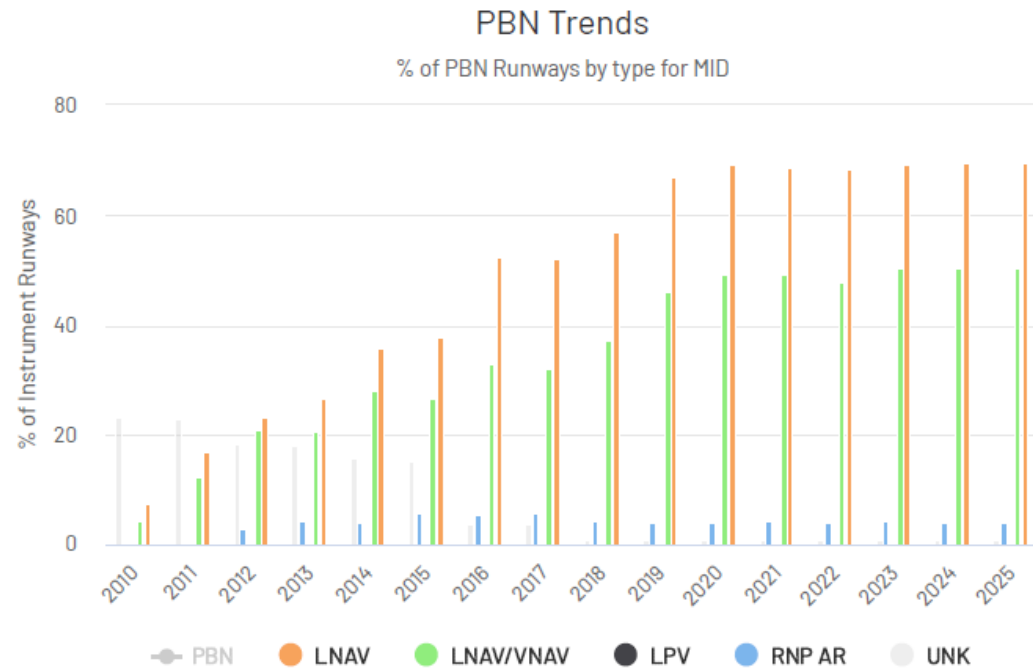
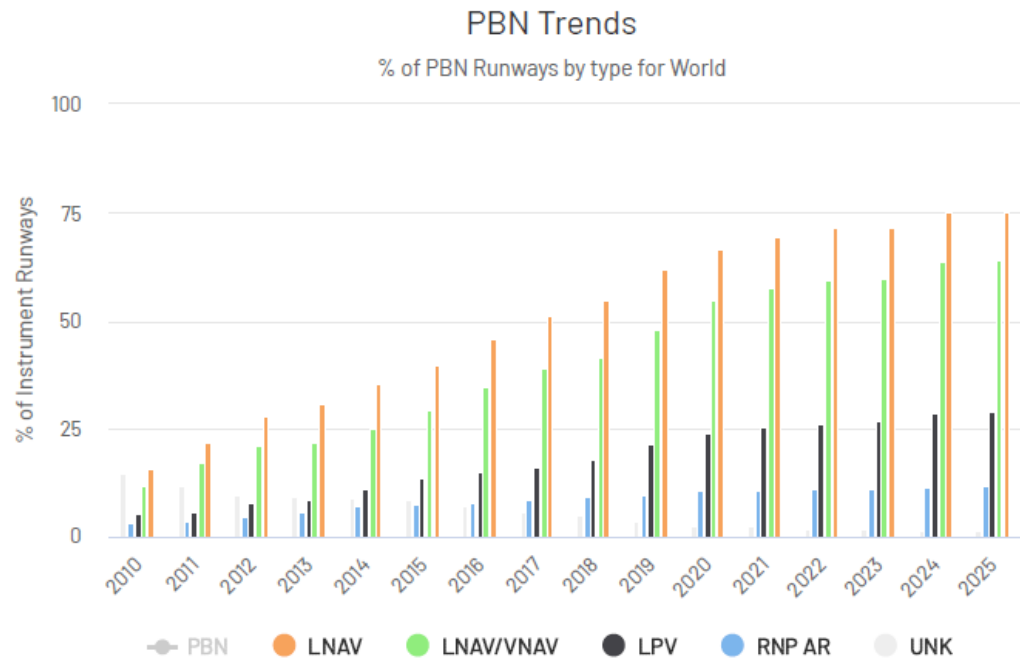
Percentage of States in World meeting the Resolution Targets for Applicable Years

Percentage of States in MID meeting the Resolution Targets for Applicable Years

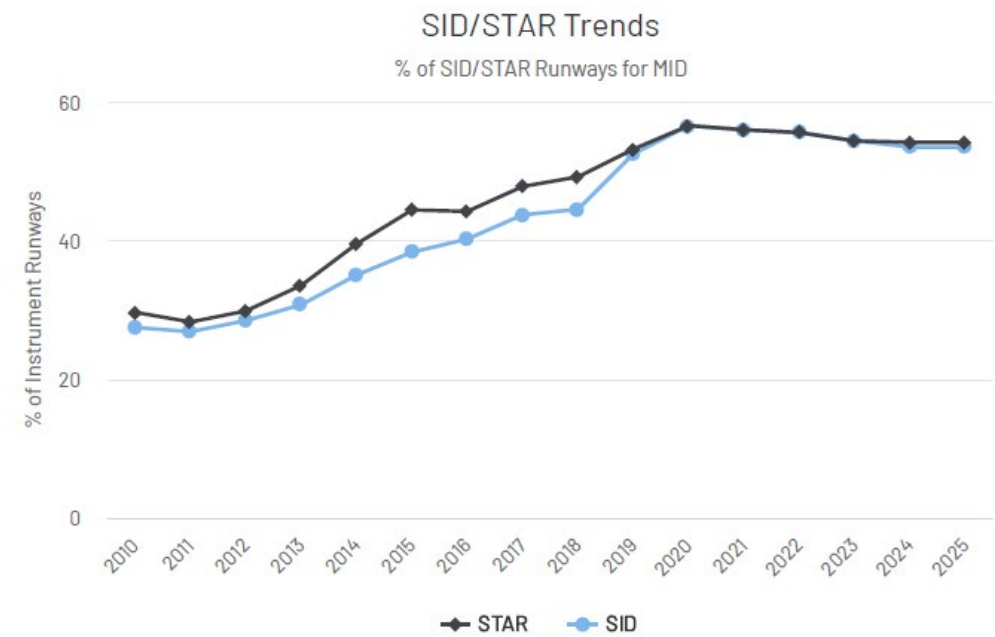
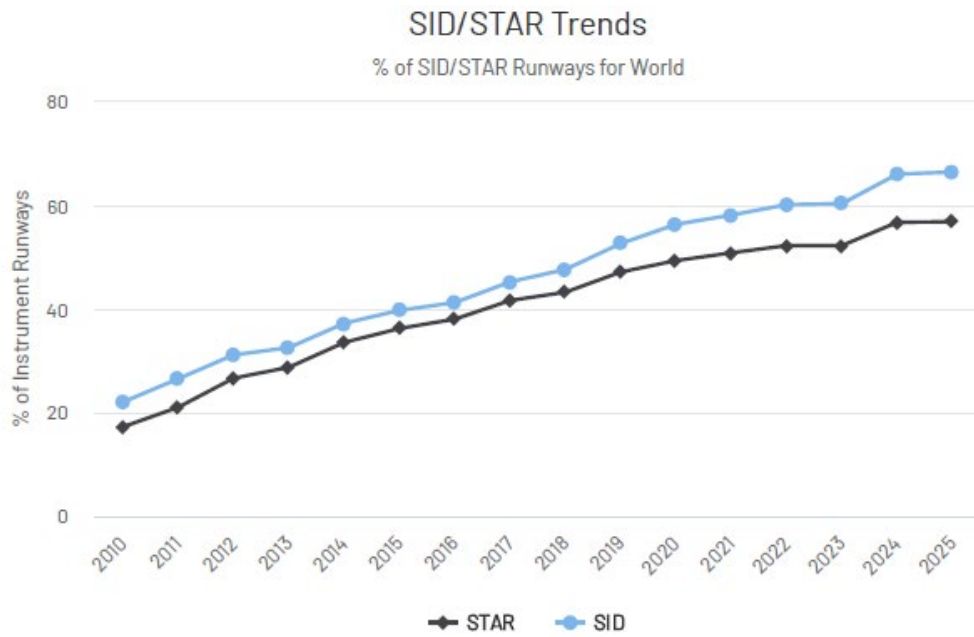
# PBN Implementation (Approach Procedures) Trend



## PBN Implementation (Approach Procedures) Trend



# PBN Implementation (Terminal Procedures) Trend



### National PBN Plan Submissions from MID Region



<b>Total States</b>	15
<b>Submitted</b>	7
<b>Updated</b>	1
<b>No Submission</b>	8

■ Submitted ■ Updated ■ No Submission

## APTA THREAD/ELEMENTS PRIORITY 1 (Block 0 & 1 IN THE MID REGION)

APTA-B0/1 PBN Approaches (with basic capabilities)

APTA-B0/2 PBN SID and STAR procedures (with basic capabilities)

APTA-B0/4 CDO (Basic)

APTA-B0/5 CCO (Basic)

APTA-B0/7 Performance based aerodrome operating minima – Advanced aircraft

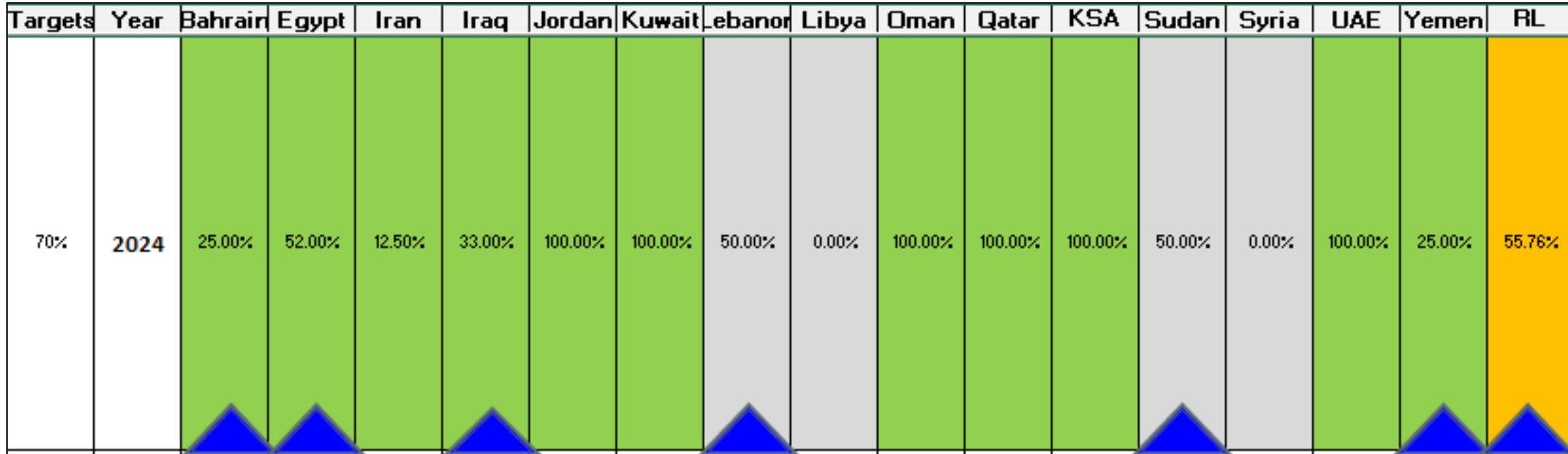
Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
APTA B0/1	PBN Approaches (with basic capabilities)	All RWYs ENDs at International Aerodromes	Indicator: % of Runway ends at international aerodromes provided with Baro-VNAV approach procedures (LNAV/VNAV)  Supporting metric: Number of Runways ends at international aerodromes provided with Baro-VNAV approach procedures (LNAV/VNAV)	46.7%	100%	Dec 2018	KPI10/ Capacity

APTA B0/1 : PBN  
Approaches (with  
basic  
capabilities)

Targets	Year	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	KSA	Sudan	Syria	UAE	Yemen	RL
100%	2024	100.00%	75.00%	12.50%	50.00%	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	100.00%	100.00%	12.50%	100.00%	50.00%	64.04%

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
APTA B0/2	PBN SID and STAR procedures (with basic capabilities)	All RWYs ENDs at International Aerodromes	<p>Indicator: % of Runway ends at international aerodromes provided with PBN SID and STAR (basic capabilities).</p> <p>Supporting Metric: Number of Runway ends at international aerodromes provided with PBN SID and STAR (basic capabilities).</p>	55%	70%	Dec 2022	KPI10 KPI11 KPI17 KPI19/ Efficiency Capacity

Implementation  
status of the APTA  
B0/2: PBN SID and  
STAR procedures  
(with basic  
capabilities)



Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
APTA B0/4	CDO (Basic)	OBBI, OIIE, OIKB, OIFM, OJAI, OLBA, OOMS, OTHH, OTBD, OEJN, OEMA, OEDF, OERK, HSSK, HSPN, OMAA, OMAL, OMAD, OMDW, OMDB, OMSJ, OMRK and OMFJ	Indicator*: % of International Aerodromes with CDO implemented as required. Supporting Metric: Number of International Aerodromes with CDO implemented as required. *As per the applicability area	65%	100%	Dec 2022	KPI19/ Efficiency
APTA B0/5	CCO (Basic)	OBBI, OIIE, OIKB, OIFM, OJAI, OLBA, OOMS, OTHH, OTBD, OEJN, OEMA, OEDF, OERK, HSSK, HSPN, OMAA, OMAL, OMAD, OMDW, OMDB, OMSJ, OMRK and OMFJ	Indicator*: % of International Aerodromes with CCO implemented as required. Supporting Metric: Number of International Aerodromes with CCO implemented as required. *As per the applicability area	65%	100%	Dec 2022	KPI17/ Efficiency

Implementation  
status of  
APTA B0/4 & B0/5 CCO  
and CDO Basics

Targets	Year	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	KSA	Sudan	Syria	UAE	Yemen	RL
100%	2024	100.00%		0.00%		0.00%		0.00%		0.00%	100.00%	100.00%	0.00%		100.00%		69.01%
Targets	Year	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	KSA	Sudan	Syria	UAE	Yemen	RL
100%	2024	100.00%		0.00%		0.00%		0.00%		0.00%	100.00%	100.00%	0.00%		100.00%		69.01%

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
APTA B0/7	Performance based aerodrome operating minima – Advanced aircraft	All States	Indicator: % of States authorizing Performance-based Aerodrome Operating Minima for Air operators operating Advanced aircraft. Supporting Metric: Number of States 1- having provisions for operational credits to enable lower minima based on advanced aircraft capabilities. (Reference: Annex 6 Part I para. 4.2.8.2.1) 2-Number of States Putting in place an approval process for the operational credit to Aircraft operator conducting PBAOM operations for low visibility operations ( Reference: Doc 9365 (AWO Manual)), as applicable.	85%	100%	Dec 2021	KPI10/ Capacity

## Implementation status of the APTA B0/7 PBAOM

Targets	Year	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	KSA	Sudan	Syria	UAE	Yemen	RL
50%	2024	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	100.00%	100.00%	90.36%

Module	Elements	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
B0- APTA	B0/1	Dark Green	Light Green	Yellow	Light Green	Dark Green	Dark Green	Dark Green	Red	Dark Green	Dark Green	Dark Green	Dark Green	Yellow	Dark Green	Light Green
	B0/2	Yellow	Light Green	Yellow	Yellow	Dark Green	Dark Green	Light Green	Red	Dark Green	Dark Green	Dark Green	Light Green	Red	Dark Green	Yellow
	B0/4	Dark Green	Grey	Red	Grey	Red	Grey	Red	Grey	Red	Dark Green	Dark Green	Red	Grey	Dark Green	Grey
	B0/5	Dark Green	Grey	Red	Grey	Red	Grey	Red	Grey	Red	Dark Green	Dark Green	Red	Grey	Dark Green	Grey
	B0/7	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Red	Red	Dark Green	Dark Green

Average Regional Implementation is **69.64%**.



## Questions for discussion

1. Many States recognize the benefits of PBN, yet the development and implementation of a comprehensive national PBN roadmap remain a challenge. What are the key hurdles States face in this process, and what strategies have proven effective in overcoming them?
2. What are the constraints for the States in the region to reach 100% PBN implementation as per Assembly resolution A37-11?
3. What is the usability of PBN procedures, if not being fully utilized, what are the roadblocks?
4. Whether ATCOs are trained for the implementation of PBN procedures and content of such trainings.
5. What, in your views, are the most common institutional, technical, and financial limitations that delay or hinder the deployment?
6. What should be the strategy for the region in PBN implementation?

# PBN implementation – Capacity Building and Assistance

## MIDANPIRG CONCLUSION 20/26: PBN CAPACITY-BUILDING AND ASSISTANCE ACTIVITIES

*That, States are encouraged to inform the ICAO MID Office under the MEP framework of their needs in terms of PBN capacity-building and required assistance activities, including PBN National Workshops to provide specific guidance related to PBN planning, implementation, including improvement of practices in PBN Design, operational approval, and continuous oversight.*

					
International Civil Aviation Organization	Organisation de l'aviation civile internationale	Organización de Aviación Civil Internacional	Международная организация гражданской авиации	منظمة الطيران المدنى الدولي	国际民用 航空组织
Ref: AN 6/28 – 23/167			14 August 2023		
<b>Subject:</b> Follow-up to MIDANPIRG Conclusion 20/26 on PBN Capacity-Building and Assistance Activities					
<b>Action required:</b> Inform the ICAO MID Office of your needs in terms of PBN capacity-building and required assistance activities					
Sir,					
I have the honour to refer to the Twentieth Meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/20) held in Muscat, Oman from 14 to 17 May 2023 and in particular to the following Conclusion:					
<b>CONCLUSION 20/26: PBN CAPACITY-BUILDING AND ASSISTANCE ACTIVITIES</b>					
<i>That, States are encouraged to inform the ICAO MID Office under the MIDANPIRG Enhancement Programme (MEP) framework of their needs in terms of PBN capacity-building and required assistance activities, including PBN National Workshops to provide specific guidance related to PBN planning, implementation, including improvement of practices in PBN Design, operational approval, and continuous oversight.</i>					
Accordingly, should you require any assistance related to PBN planning, implementation, including improvement of practices in PBN Design, operational approval, and continuous oversight activities, you are kindly requested to inform the ICAO MID Office of your needs in terms of PBN capacity-building and required assistance activities, including PBN National Workshops.					
Accept, Sir, the assurances of my highest consideration.					
					
					<b>Mohamed Abubaker Farea</b> Regional Director ICAO Middle East Office
<i>MW/RA</i>					
Ministry of Civil Aviation Complex Cairo Airport Road P.O. Box 85, Airport Post Office Cairo 11776 A.R.E		Tel: +2 (02) 2267 4840/1/5/6 Fax: +2 (02) 22674843		E-mail: <a href="mailto:icaomid@icao.int">icaomid@icao.int</a> <a href="http://www.icao.int/mi">http://www.icao.int/mi</a>	

## Action by the meeting

- note the information provided in this presentation;
- review and update, as necessary, the status of PBN implementation, at Appendix A; and
- invite States to inform the ICAO MID Office of their needs in terms of PBN capacity-building and required assistance activities.

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# Thank You



North American  
Central American  
and Caribbean  
(NACC) Office  
Mexico City

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

Asia and Pacific  
(APAC) Sub-office  
Beijing

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(APAC) Office  
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