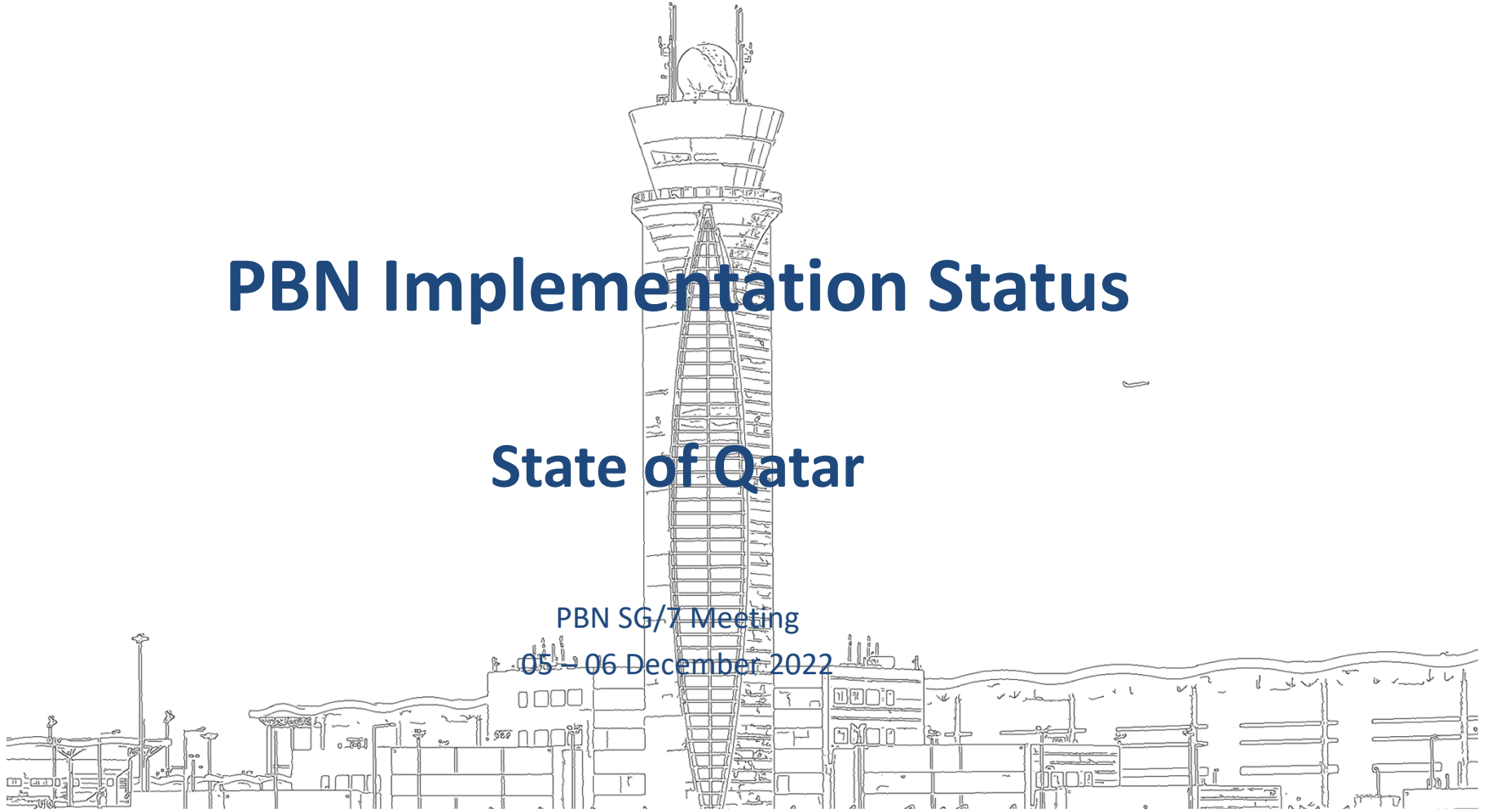


# PBN Implementation Status

## State of Qatar

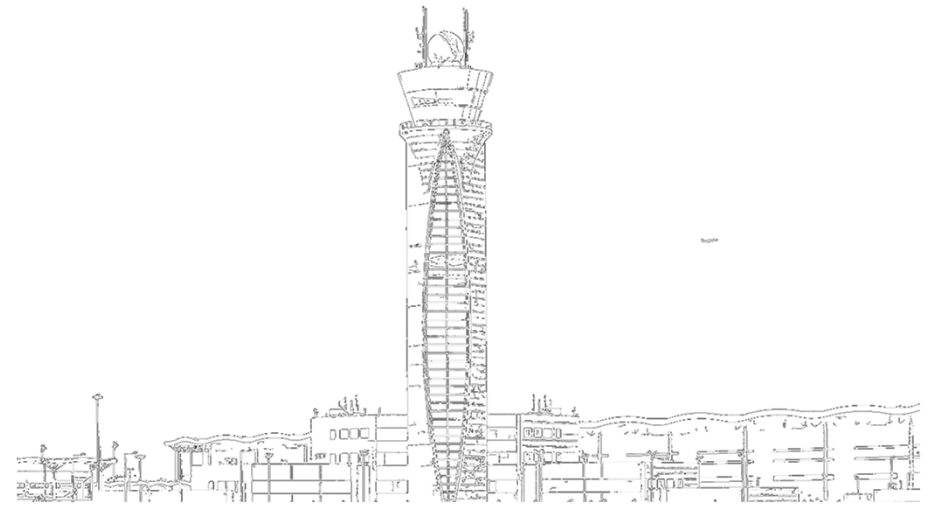
PBN SG/7 Meeting  
05 - 06 December 2022



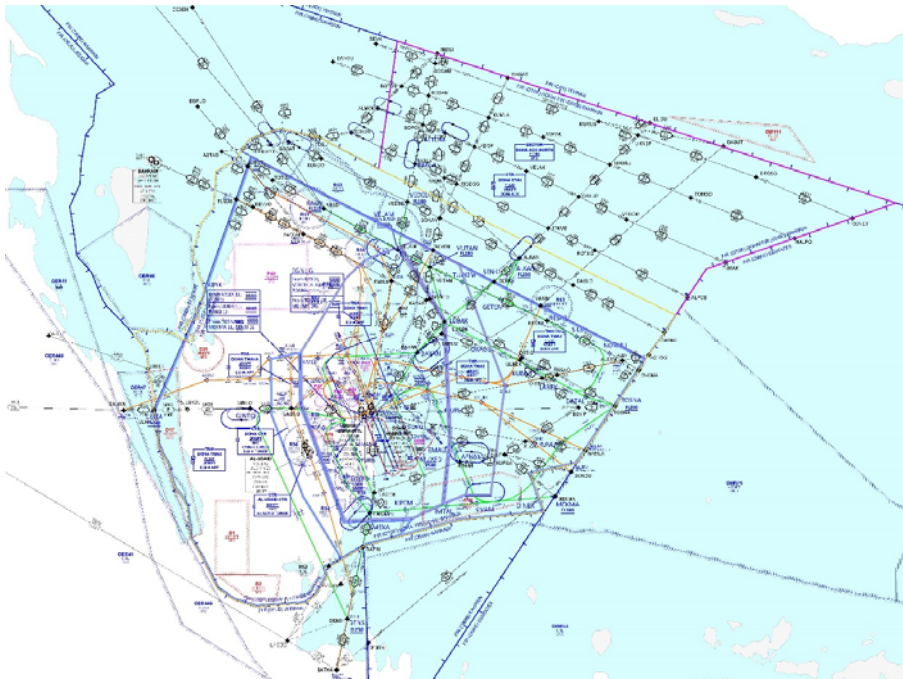
# Outline

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- Qatar airspace latest development
- Status of PBN Implementation
- Future Plans



# Qatar airspace latest development

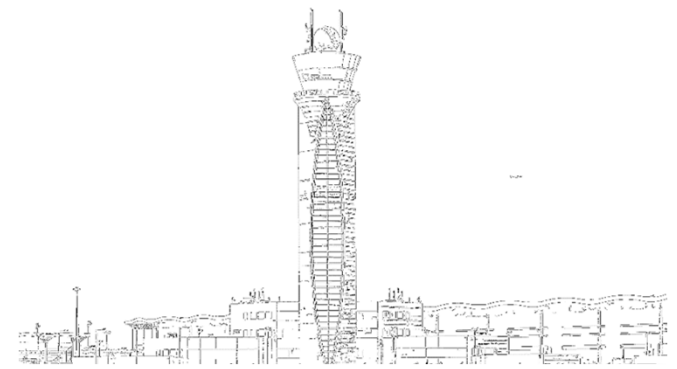


- capacity management enhancement procedures for arrivals in preference for an open STAR system designed on trombone transition procedures.
- ensure improved civil/military coordination and Flexible Use of Airspace (FUA) that benefited both civil and military operations.
- capacity enablers such as Independent Parallel Operations (IPO) influenced with Continuous Descent and Climb Operations (CDO/CCO) as far as practicable to realize the maximum efficiency and facilitate strategic de-confliction.

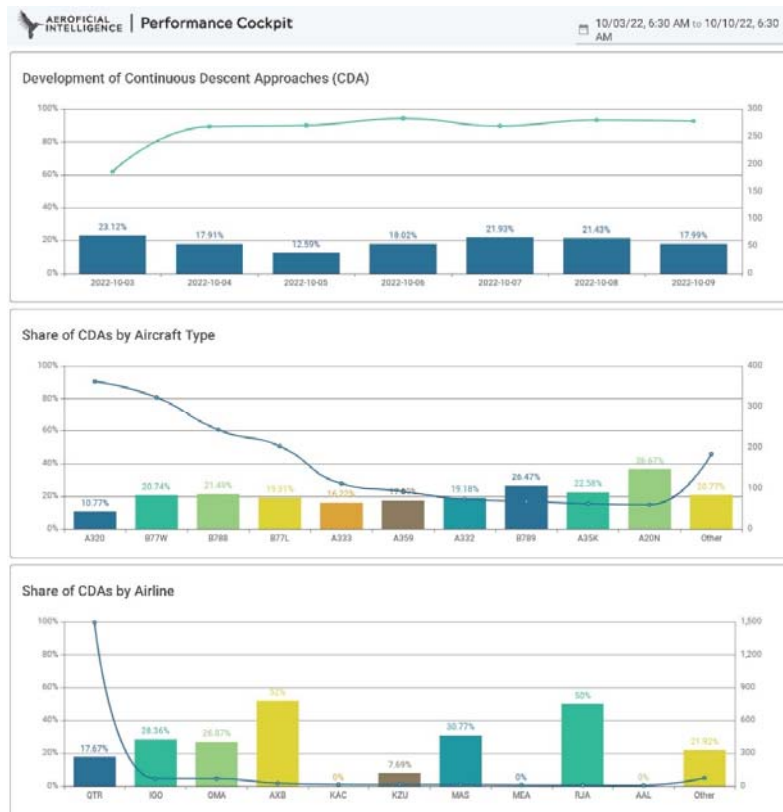
# Continuous Climb Operation (CCO)



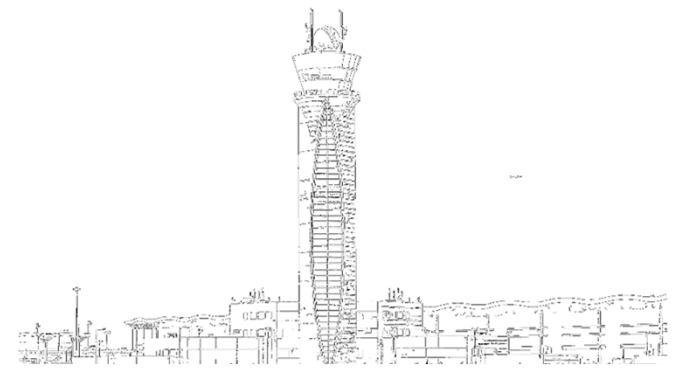
With the introduction of the new enhanced airspace within Doha FIR, CCO was operationally achieved. Actual aircraft operations are being monitored and data is collected for future development.



# Continuous Descend Operation (CDO)



With the introduction of the new enhanced airspace within Doha FIR, CDO was operationally achieved. Actual aircraft operations are being monitored and data is collected for future development.

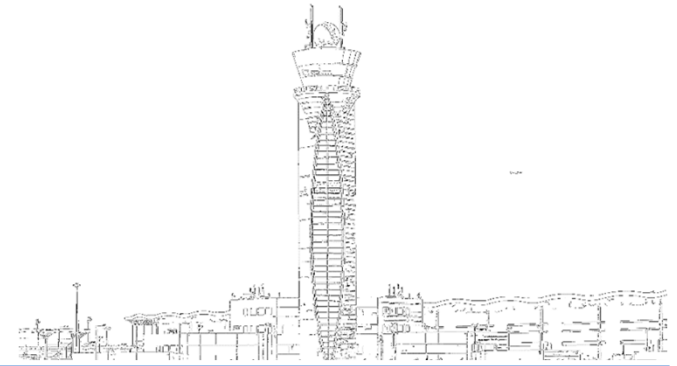


# Status of PBN Implementation

AD	RWY	ILS CAT I (RNAV Missed Approach)	ILS CAT I, II, III (RNAV Missed Approach)	LOC ONLY (RNAV Missed Approach)	LNAV	LNAV/ VNAV	RNAV SID	RNAV STAR	RNP AR
OTHH (Hamad)	16R		(1)	(1)	(1)	(1)	(9)	(17)	<i>planned</i>
	34L		(1)	(1)	(1)	(1)	(5)	(18)	<i>planned</i>
	16L		(1)	(1)	(1)	(1)	(8)	(17)	<i>planned</i>
	34R		(1)	(1)	(1)	(1)	(9)	(18)	<i>planned</i>
OTBD (Doha)	15	(1)	-	(1)	-	(1)	(16)	(17)	<i>planned</i>
	33		(1)	(1)	(1)	(1)	(12)	(18)	<i>planned</i>



- With the implementation of the Doha FIR, a full benefit of PBN will be achieved and bring more associated benefits of CDO/CCO (dedicated SIDs and STARs) to optimize the airspace.
- Strengthen civil/military cooperation towards effective airspace management that accommodates flexible use of airspace.
- With ICAO support, workshops and seminars for ATC and airspace user will be planned to ensure that PBN requirements and standards are fully understood and properly implemented.



- THANK YOU -

