

# PBN IMPLEMENTATION IN JORDAN



Prepared by

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#### AIRSPACE OVERVIEW

AIP JORDAN

CIVIL AVIATION REGULATORY COMMISSION

Jordanian airspace is divided into several sectors.

The exact number of sectors may vary based on current air traffic and operational requirements.

Upper East Lower East West Terminal Control Areas (TMA) Aqaba sector

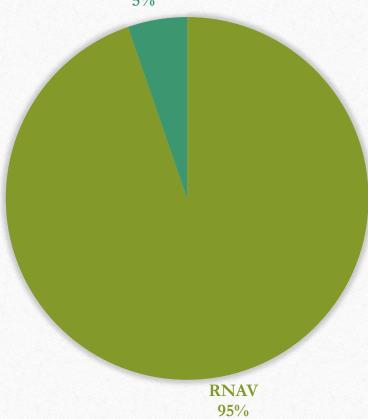
EN-ROUTE CHART-ICAO AMMAN FIR On the last ATS ROUTS PD AREA VOR/DME VORTAC REPORTING POINT ROUTE DESIGNATOR
MAGNETIC TRACK
DISTANCE IN NM
UPPER LIMIT
LOWER LIMIT

AIRAC AMDT 21/2023

MOST OF THE AIRTRAFFIC
ARE LEANING TOWARDS
PBN THAN THE
CONVENTIONAL (GROUND
BASED PROCEDURES)

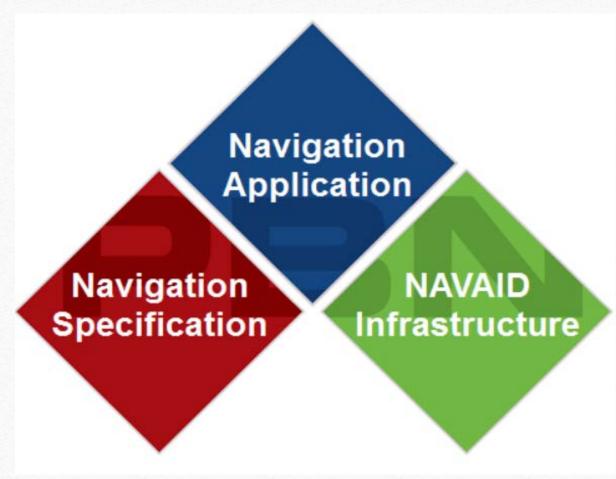
#### **GNSS VS CONV OJAI**

Conv 5%



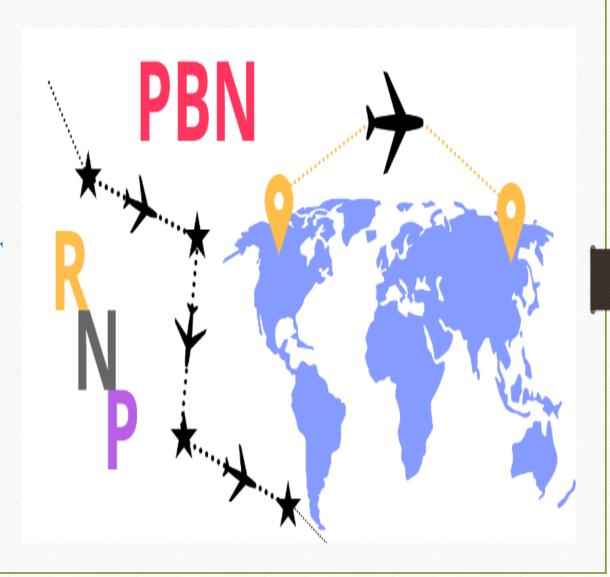
#### NAVIGATION SPECIFICATION

- RNAV 5 (GNSS) EN-ROUTE
- RNAV 1 (GNSS) TMA
- RNP APCH



# PBN PROCEDURE IN JORDAN

- PBN IN JORDAN WAS PLANNED
   WITHIN A STRATIGY TO IMPLEMENT
   THROUGHOUT THREE STAGES
- 2009-2010 NEAR TERM
- 2011-2015 MID TERM
- 2016-2025 FAR TERM



## PRESENT IFP

OUR PBN PROCEDURE HAS STARTED
IN 2012 SINCE THEN THE PBN IFP
HAS PASSED THROUGH MULTIPLE CHANGES
AND UPDATES TILL 2017 DUE TO

- NEW AIRPORT CONSTRUCTION
- NEW ROUTES NEEDED
- NEW PROCEDURE HAS BEEN CREATED
- TRANSITION APPROACHES HAVE BEEN CREATED



## NEW IFP PROJECT 2023-2024

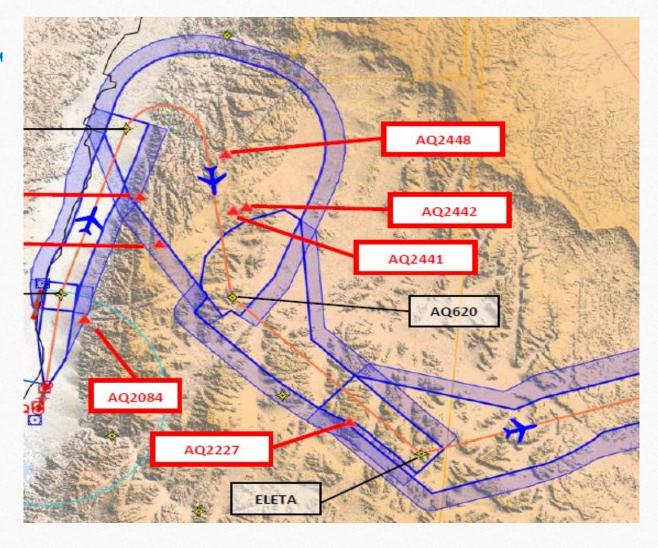
**DUE TO** 

- NEW AIRPORT CONSTRUCTIONS AGAIN
- DECOMESIONING OF SOME OF THE NAV AIDS
- MULTIPLE UN NEEDED PROCEDURES
- MILITARY AREAS HAVE BEEN CHANGED
- AQABA AIRPORT CHALLENGES
- ATFM



## NEW IFP PROJECT

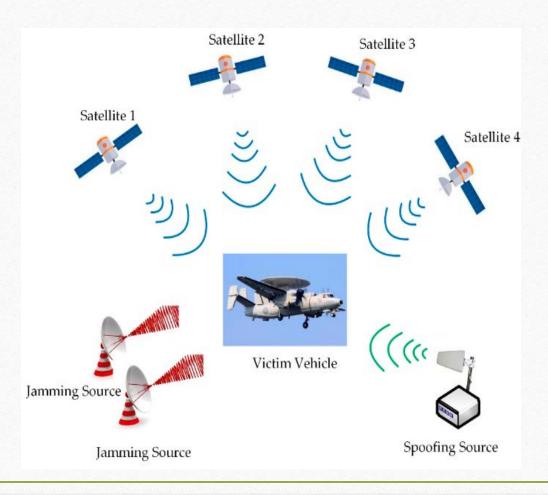
- REVIEWING AND UPDATING EXISTING IFPS TO ALIGN WITH INTERNATIONAL STANDARDS.
- ENHANCING NAVIGATION ACCURACY
- INCREASING THE CAPACITY AND EFFICIENCY OF AIRSPACE UTILIZATION.
- ENSURING COMPLIANCE WITH THE LATEST TECHNOLOGIES AND REGULATIONS.
- SEGRATED SID AND STAR
- CDO CCO SUPPORT



## CHALLENGES AND FUTURE DEVELOPMENTS



#### **GNSS INTERFERENCE**



## PROSPECTIVE PROJECTS

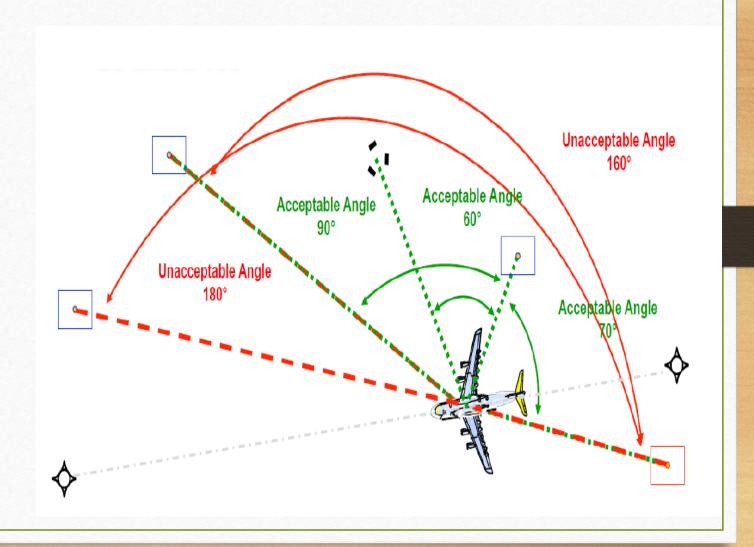
• MLAT (MULTI-LATERATION RADAR)

MLAT PROJECT IN AQABA AREA WHERE
RADAR SERVICE IS NOT AVAILABLE
BELOW FL150



## DME – DME

- GNSS systems can be susceptible to interference or signal degradation.
- DME-DME offers redundancy, ensuring navigation remains reliable even in challenging conditions.



## Thank you

