



AIRSPACE MANAGEMENT IN JORDAN

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JORDAN

**ASM WG/1 Meeting
(Doha, Qatar, 1 - 2 OCT 2024)**

Objectives:

- **Provide an Overview of Jordanian Airspace.**
- **Review Ongoing and Future Projects.**
- **Identify Key Challenges in Airspace Management.**
- **Proposed Mitigations for Airspace Challenges.**

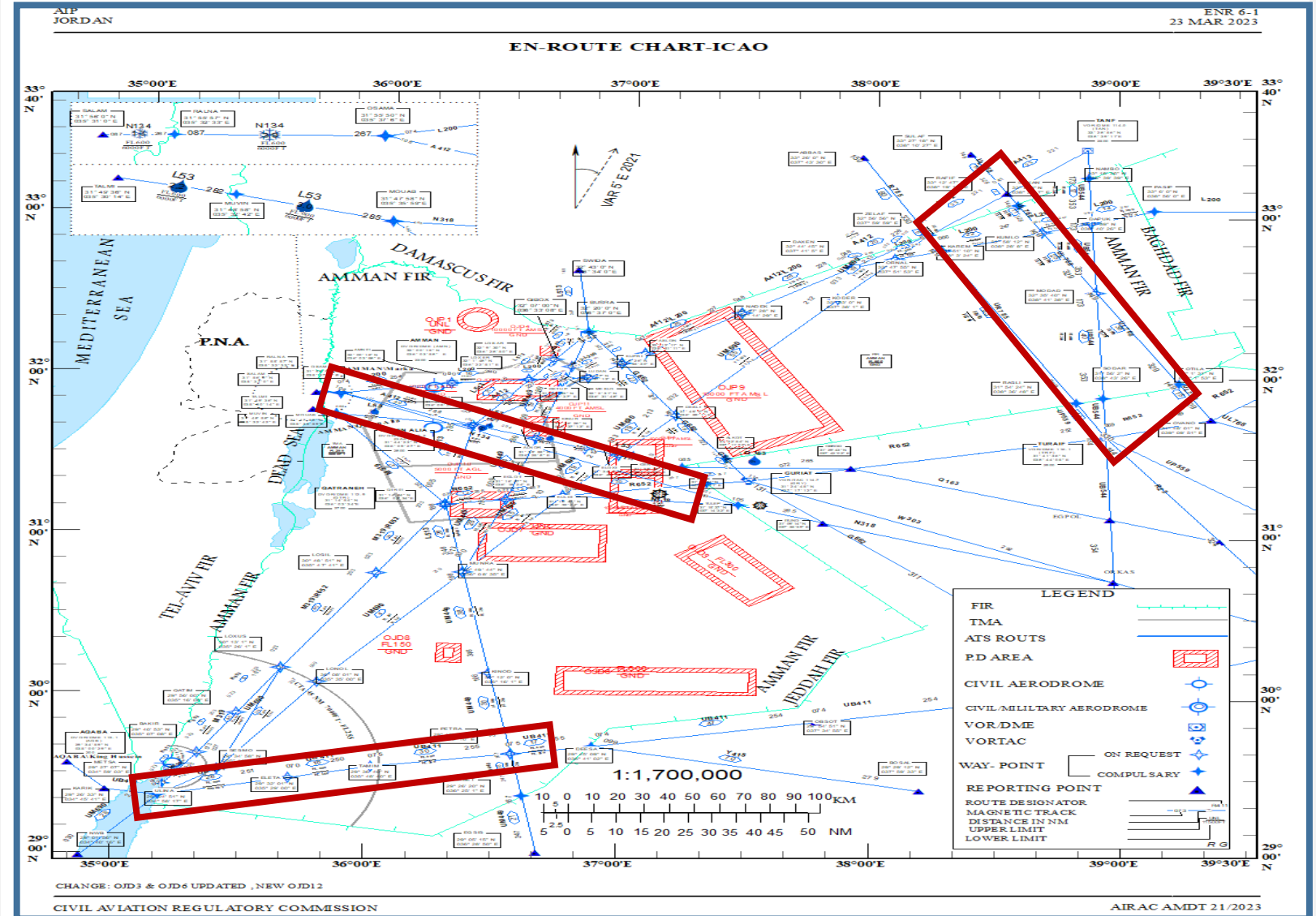


JORDAN AIRSPACE OVERVIEW

STRUCTURE AND SECTORIZATION

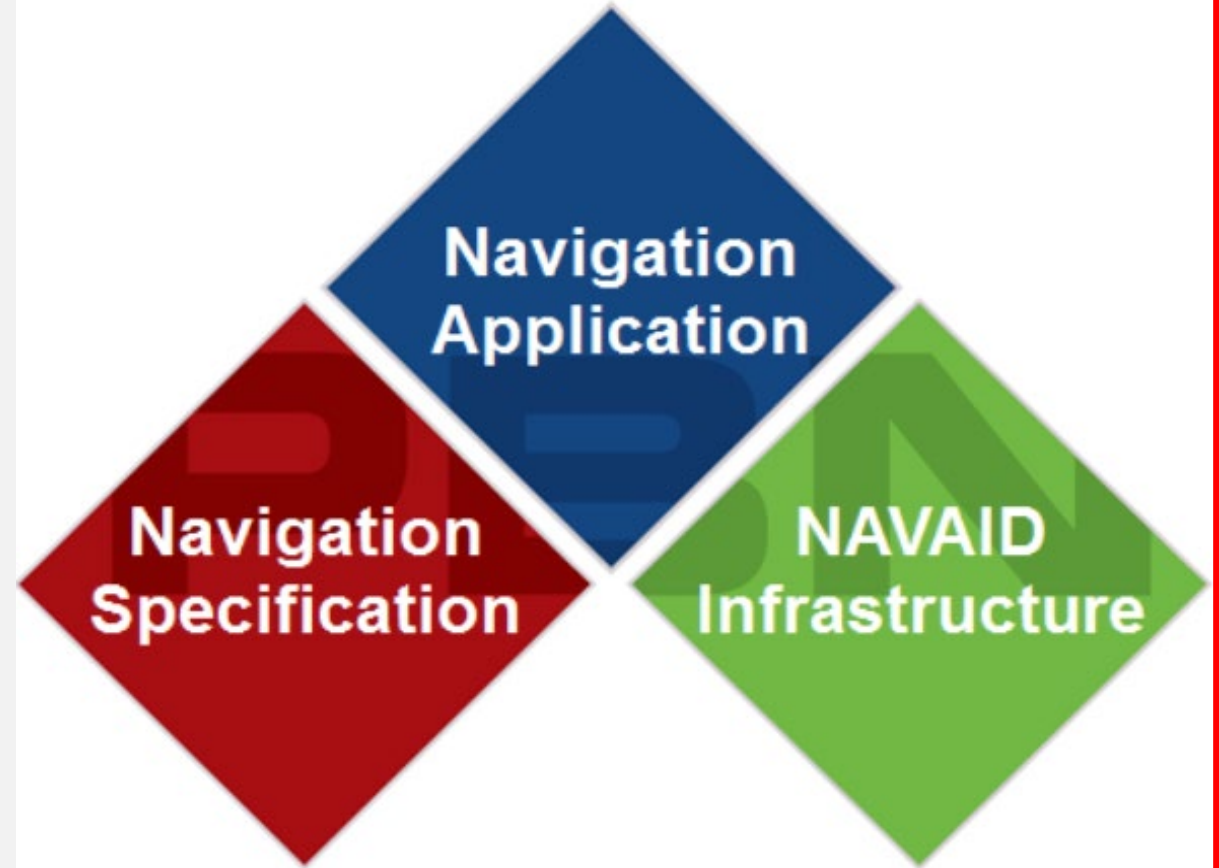
Jordanian airspace is divided into several sectors. The exact number of sectors may vary based on current air traffic and operational requirements.

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



NAVIGATION SPECIFICATION
PBN procedures

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



TRAFFIC VOLUME ANALYSIS

The traffic volume can be monitored and analyzed on daily monthly and yearly basis

TRAFFIC VOLUME STATISTICS

MENUE

TRAFFIC VOLUME

FINANCIAL

SPECIAL AREAS

MONTHLY REVENUE ▼
DEC ▼

TOTAL TRAFFIC 2023/... ▼
TOTAL OVERFLY... ▼

TRAFFIC DIFF 2023/2... ▼
OVERFLYING ... ▼

TOTAL FLIGHTS

TOTAL OVERFLYING

DIFFERENCE 2023/2024

● Increase ● Decrease ● Total

OVERFLYING TRAFFIC 2024

TOP AIRCRAFT TYPES

OVERFLYING TRAFFIC 2023

OVERFLYING HOURLY MOVEMENTS

The ongoing IFP and infrastructure updates

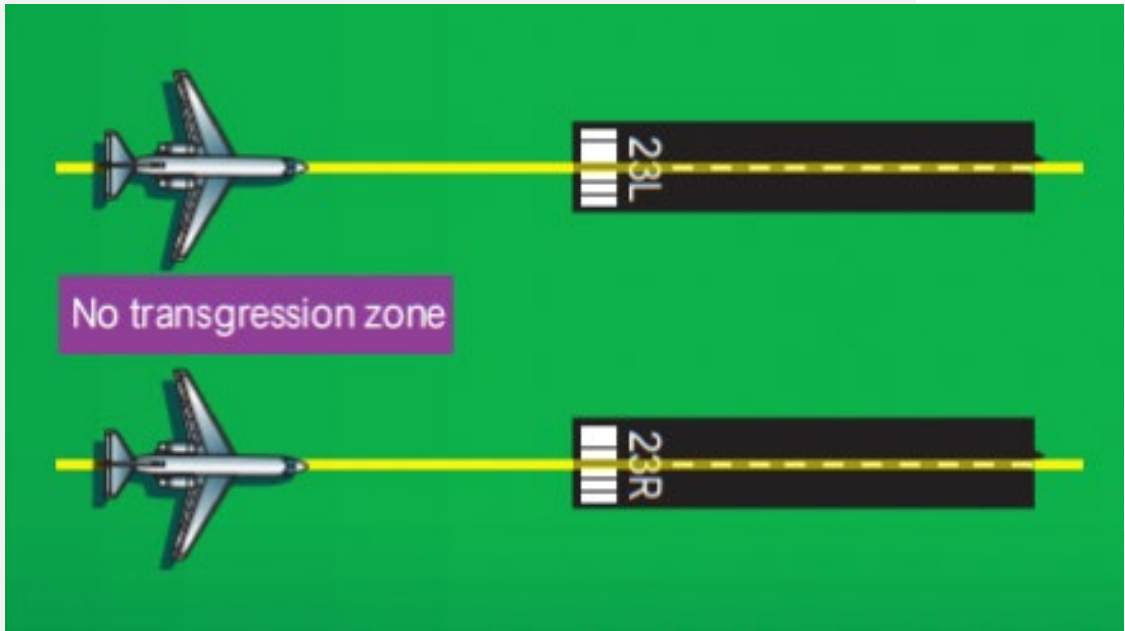
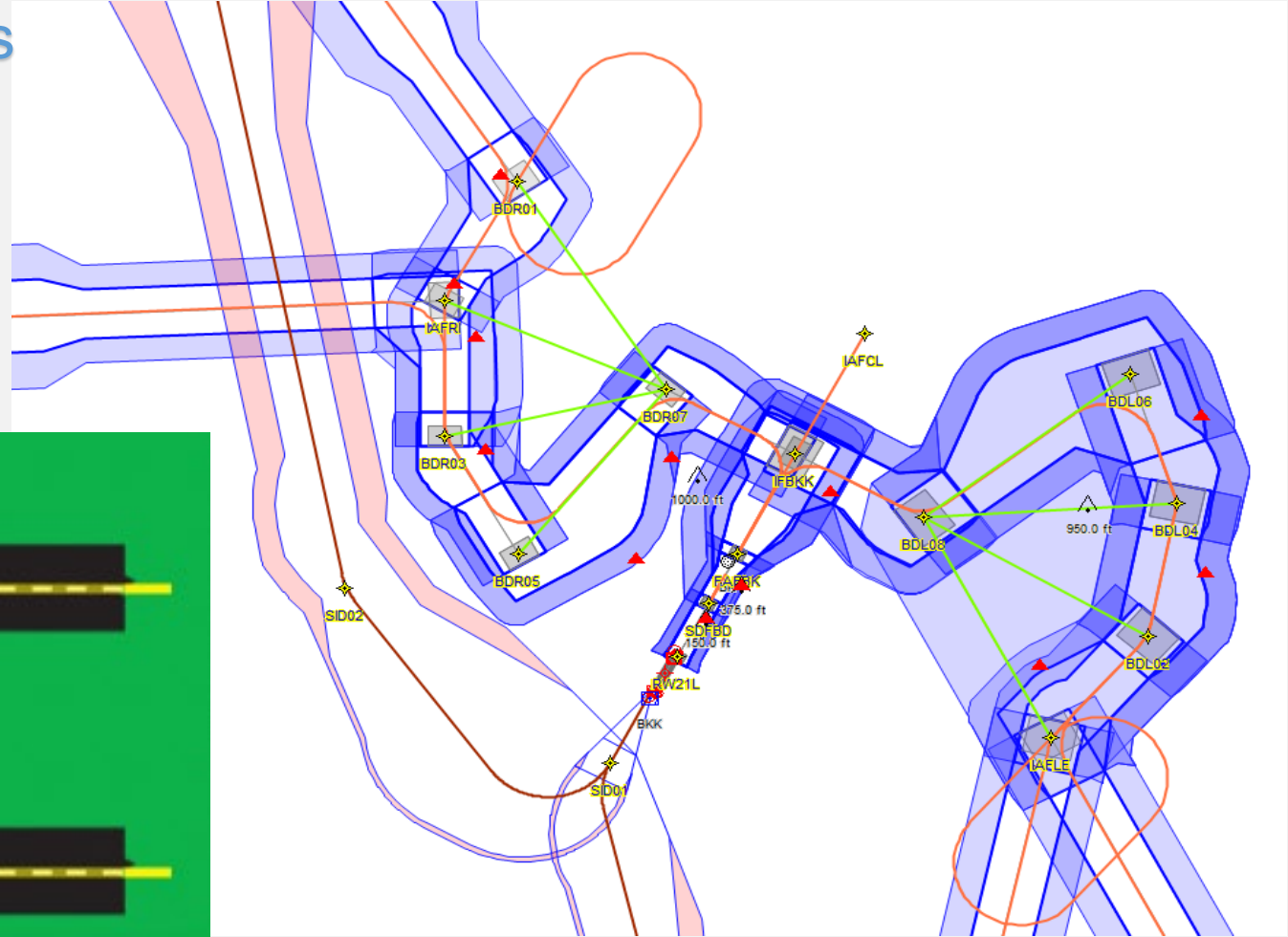
- Updates to **instrument approach procedures** will be rolled out to improve safety and efficiency.
- Certain routes will be implemented
- Infrastructure (New radar technology, new VORs , new PBN backup)

• These improvements aim to align with global standards such as PBN (Performance-Based Navigation) and ICAO's global air navigation plan.



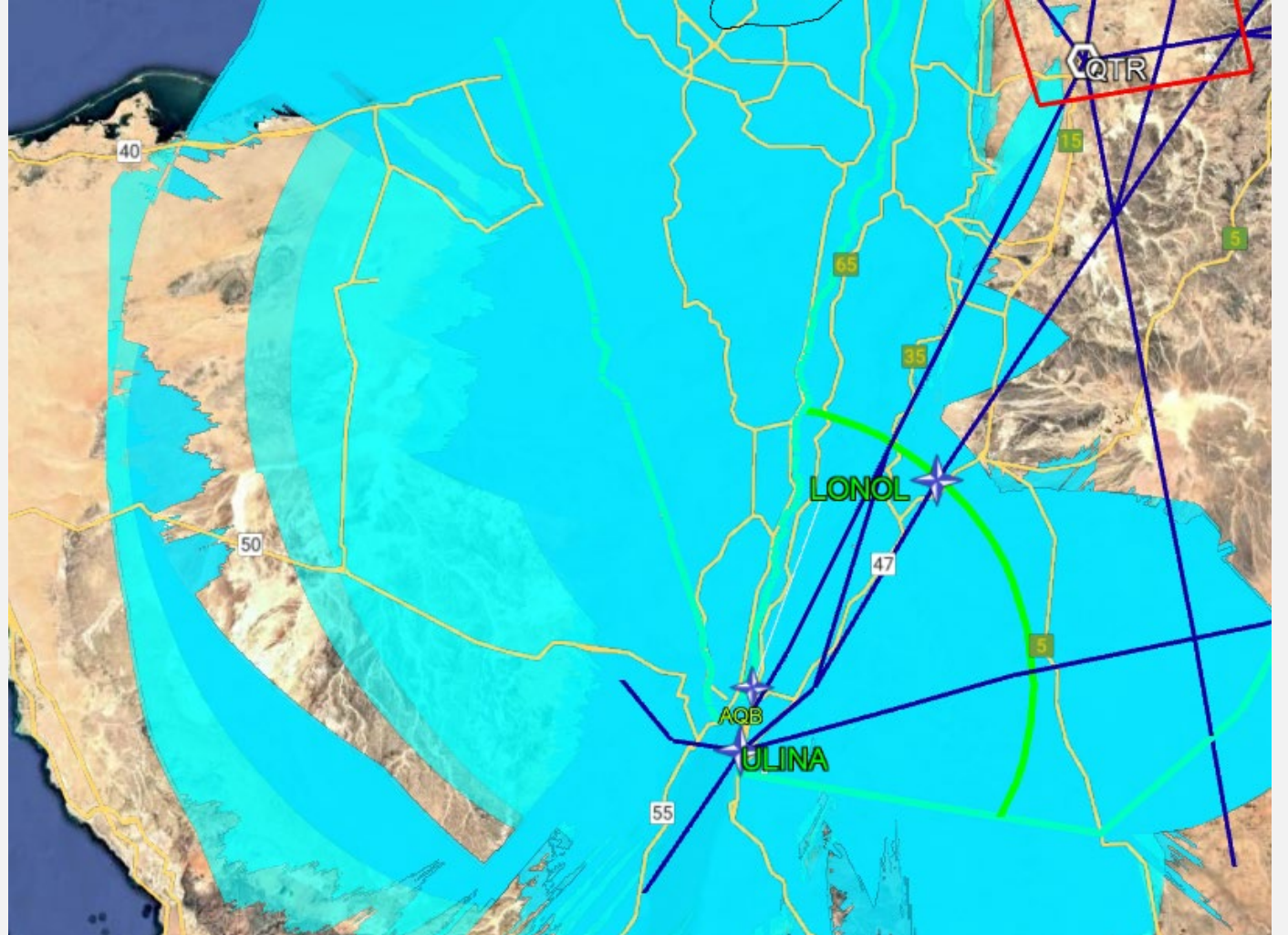
Instrument approach procedures

- PBN and conventional procedures for all airports
- SOIR for Queen Alia international



Wide Area Multi-lateration Surveillance WAM

Implementing a multi-lateration radar system will significantly enhance surveillance coverage in the southern part of Jordan below FL150, improving air traffic monitoring and safety in this region



Challenges in Airspace Management

- **Regional Conflicts:** The ongoing geopolitical situation in neighboring countries poses significant challenges.
- Jamming and spoofing
- changes to air traffic routes

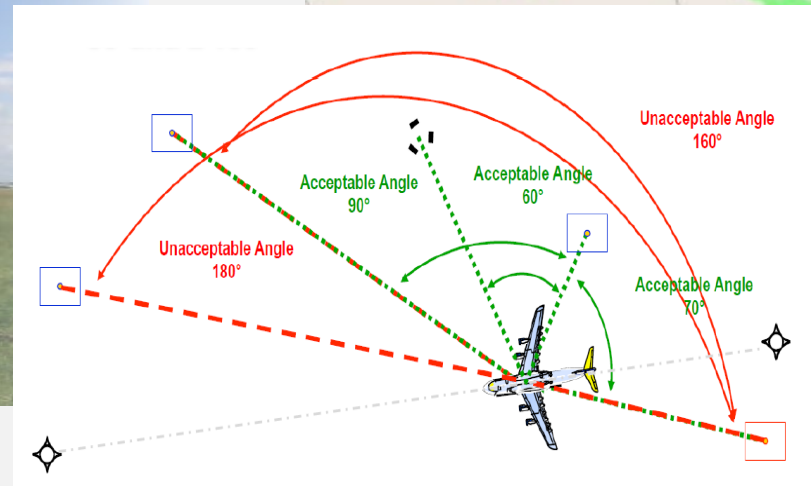
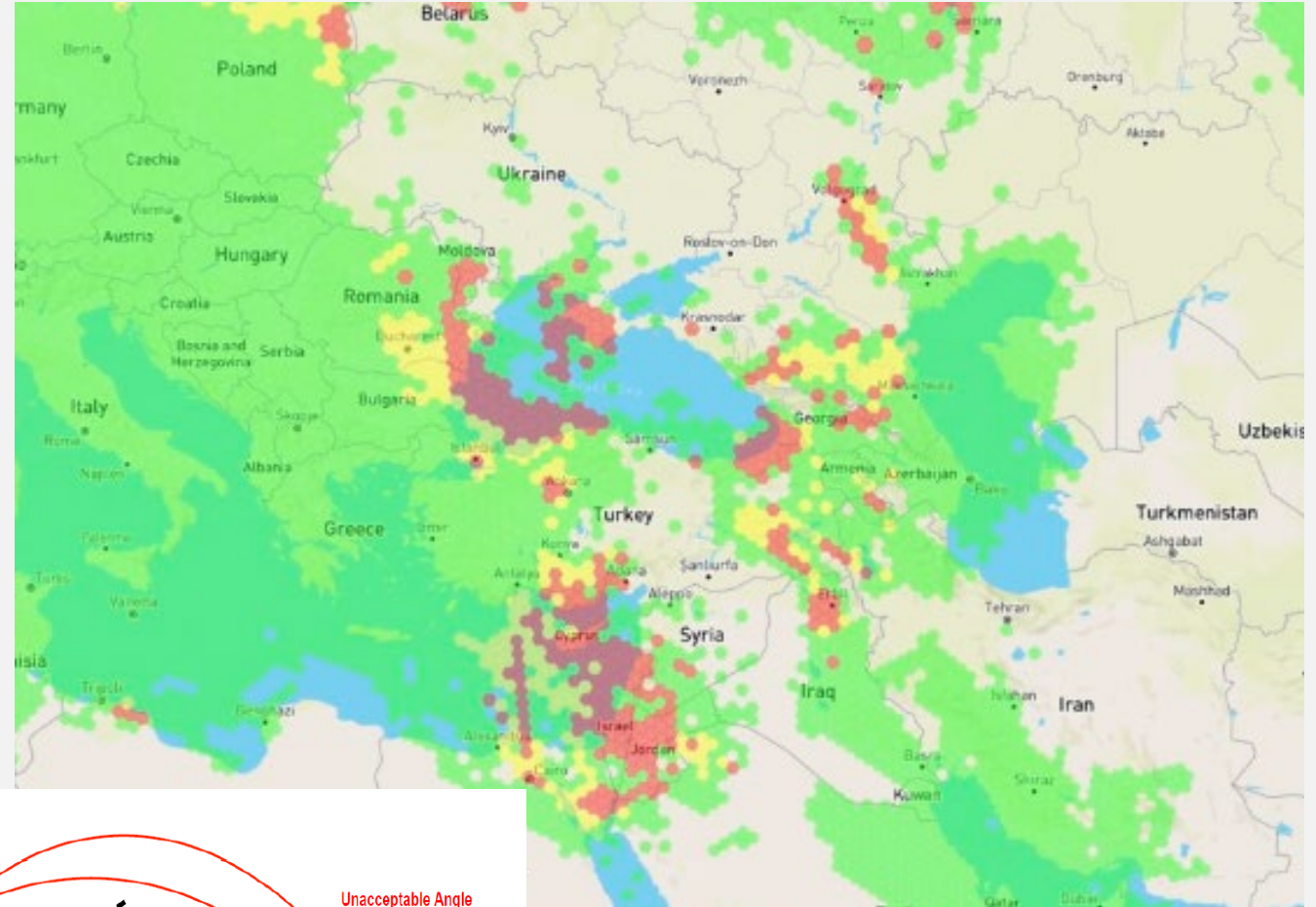
Despite these challenges, Jordan remains committed to ensuring **safe and efficient flying operations**.

This is achieved through **rigorous staff training**, continuous updates to **operational procedures**, and **strong coordination with adjacent countries** and international aviation bodies.



Jamming and spoofing

can be mitigated through robust ground infrastructure and radar service



ATM Contingency Plan

- Jordan's **Air Traffic Management (ATM) Contingency Plan** ensures continuity and flexibility in the face of regional challenges. The plan includes **conditional routes** that can be activated in emergencies or periods of increased air traffic.
- These routes provide alternative pathways to facilitate the safe flow of traffic during unexpected events, such as conflict or natural disasters.
- This allows Jordan to maintain traffic flow under adverse conditions while prioritizing safety.



Strategies for the Future

- To address these challenges, Jordan is focusing on several strategic areas:
- LOAs continuous review and updates
- **Operational Enhancements:** Improving coordination with neighboring airspaces to ensure seamless transitions and minimize delays.
- **Staff Development:** Continuous training of air traffic controllers and operational staff to adapt to new technologies and procedures.
- **Infrastructure Investments:** Upgrading air traffic control systems and navigation aids to accommodate future traffic growth and emerging aviation trends.



Thank you

