

UAE UHF Spectrum Plan

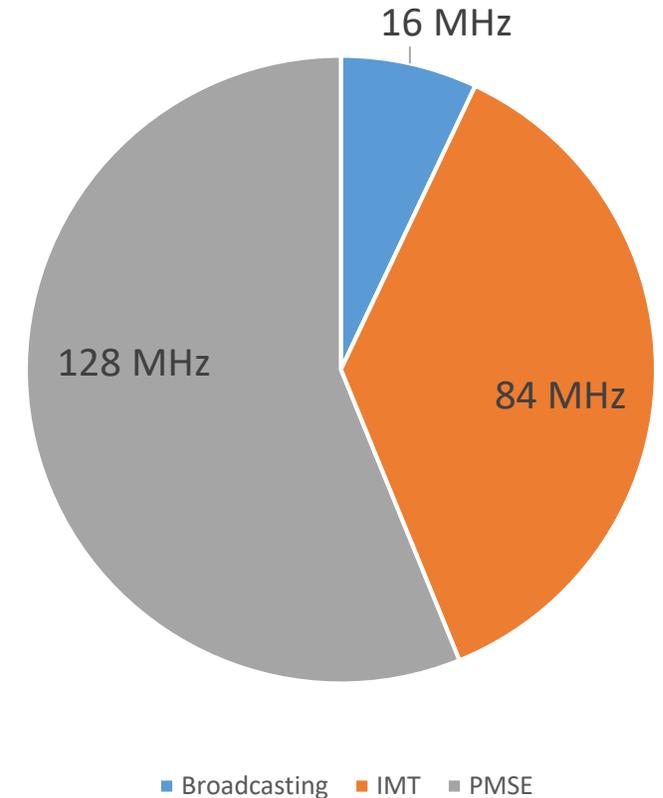
Importance of the 470–694 MHz Band

- Historically used for analog and digital TV broadcasting.
- Increasingly valuable for mobile broadband, especially with the 5G rollout.
- Also supports wireless audio devices (e.g., microphones for events)
- In the UAE:
 - FTTH penetration: 99.5% – reducing reliance on terrestrial TV.
 - Growing demand for 5G, especially in rural and underserved areas.

The UAE sees this band as pivotal to its future 5G strategy.

- Current primary use: PMSE (Programme Making and Special Events)
- Only two active terrestrial TV channels – underutilized band
- In November 2024, TDRA Formally allocated the 600 MHz band for IMT (WRC-23 footnote 5.307A) aimed to boost national broadband capabilities.

Status of the 470-698 MHz band



- Minimal internal interference due to limited broadcasting use.
- Cross-border interference remains a concern.
- UAE's role as a major event hub increases PMSE demand.



Steps Taken to Address Challenges

- Regional coordination initiated with GCC countries
- Bilateral talks on cross-border interference mitigation
- Engagement with wireless microphone manufacturers to:
 - Explore alternative frequency bands for PMSE
 - Ensure continued support for the events sector

- Both UAE operators are in the trial phase for 600 MHz IMT deployment
- Nationwide test sites being deployed to:
 - Assess QoS in various environments
 - Monitor and evaluate cross-border interference risks

- UAE is proactively managing the 470–694 MHz band as part of digital transformation.
- Strategic decisions balance mobile broadband expansion and existing spectrum users.
- With regional coordination and forward-thinking policy, the UAE is ready to unlock the full potential of this band for 5G and future technologies.

TDRA

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