



Spectrum Roadmap for Terrestrial Services

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Collaborating with the global ecosystem to drive innovation



Shaping the digital future



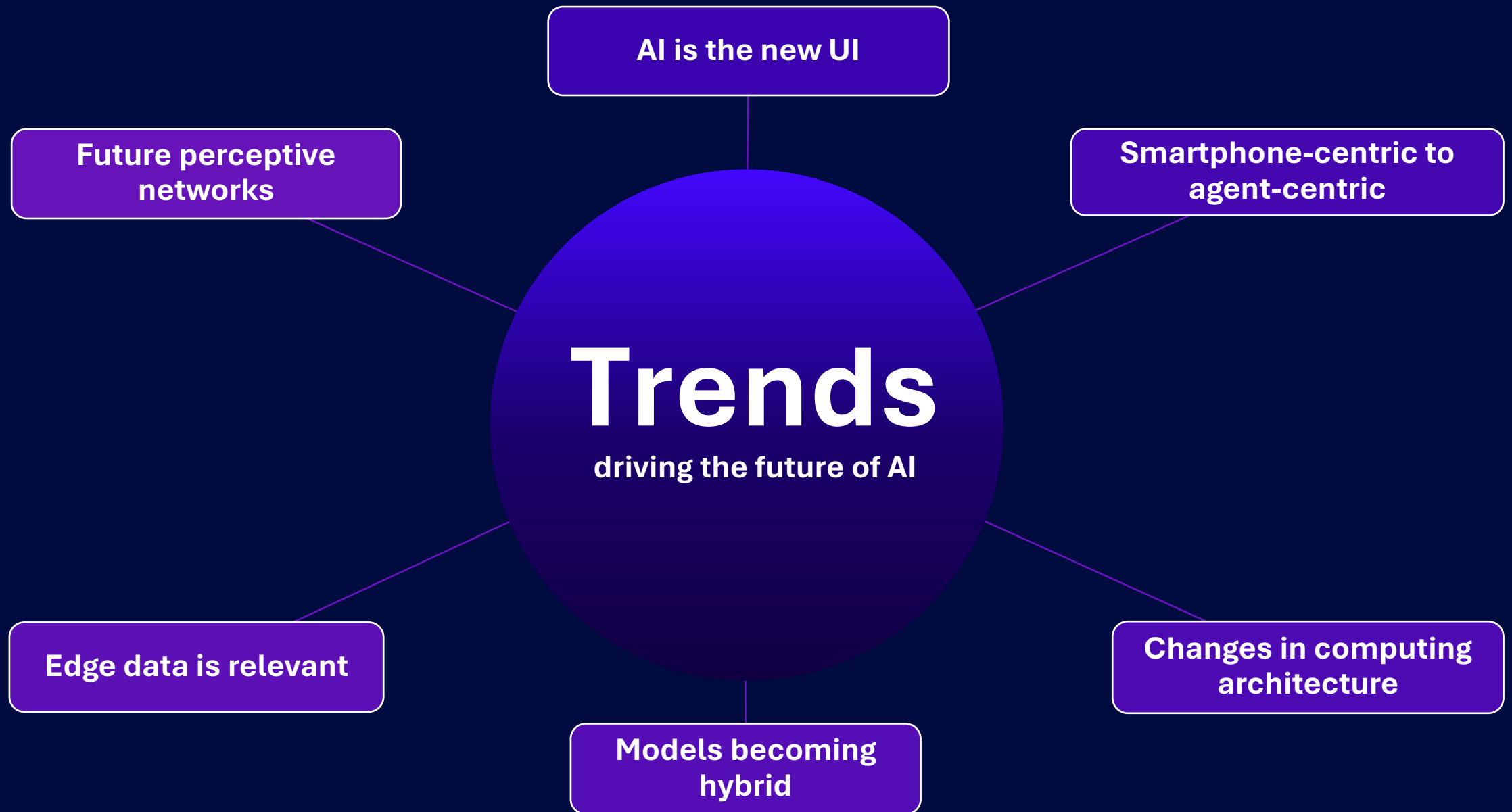
Powering the mobile revolution



Redefining connected processing



Enabling intelligent
computing everywhere



We stand at Edge of Intelligent Future

Edge Connectivity and AI

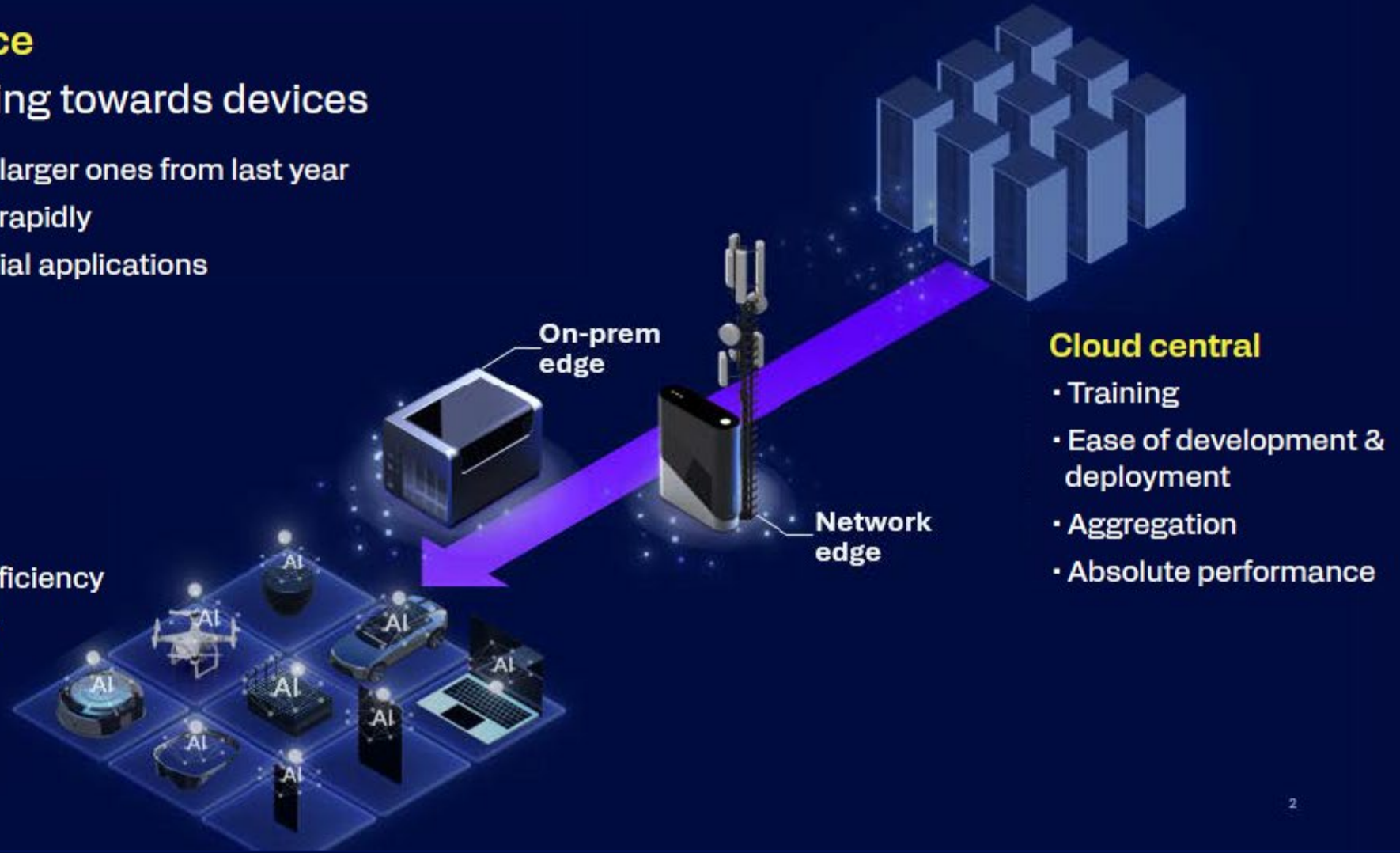
The era of AI inference

AI processing is moving towards devices

- New models outperforming larger ones from last year
- Model sizes are decreasing rapidly
- Increase focus on commercial applications
- AI is the new UI

On-device

- Inference
- Performance & efficiency
- Privacy & security
- Immediacy
- Reliability
- Personalization



Cloud central

- Training
- Ease of development & deployment
- Aggregation
- Absolute performance

6G will connect an expanded set of AI-powered devices and enable new services



Enabling tiered AI inferencing
on device, at network edge, and cloud



The smartphone remains the primary mobile hub for connectivity and compute



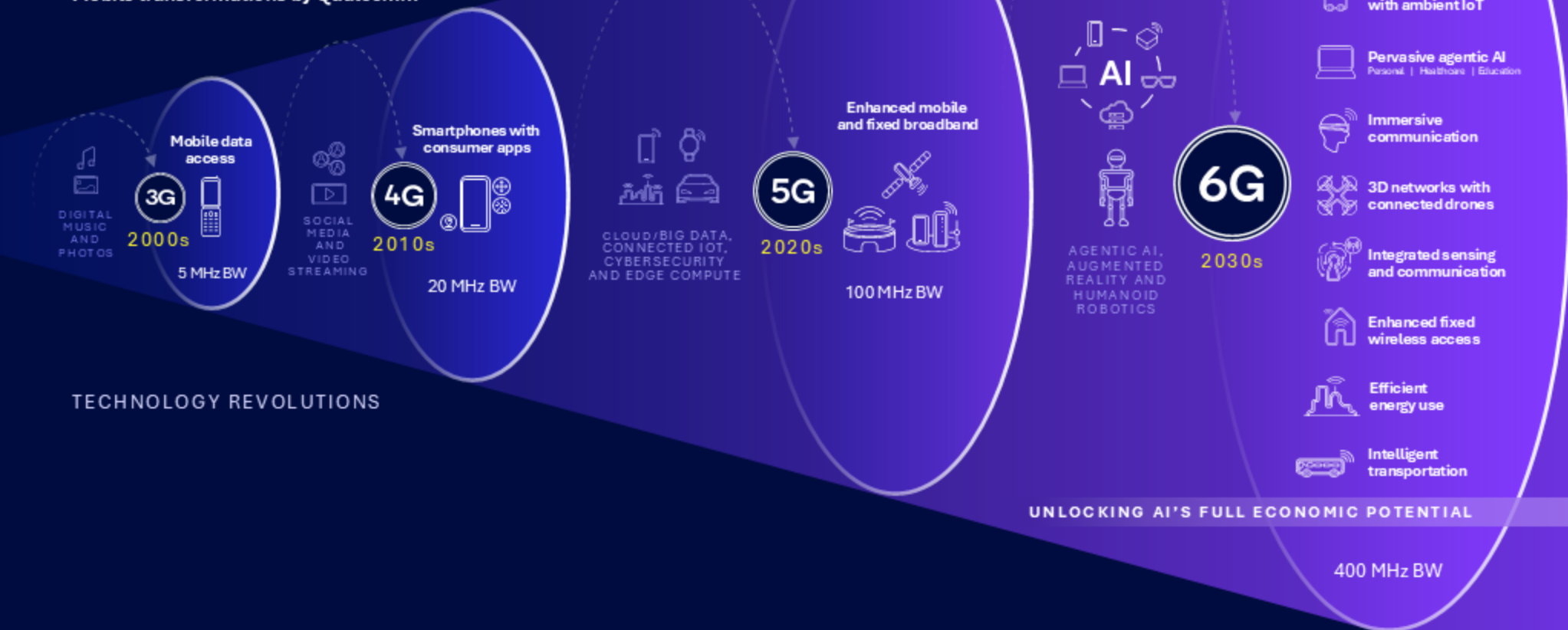
AI-powered consumer devices (glasses, watches, PCs) with cellular connectivity



AI-powered IoT devices, robots, and cars with cellular connectivity

Mobile connectivity is enabling intelligence everywhere

Mobile transformations by Qualcomm



TECHNOLOGY REVOLUTIONS



NEXT-GEN WIRELESS

Innovation platform for the next decade and beyond

New user experiences and services at scale

AI-native for efficient and resilient operations

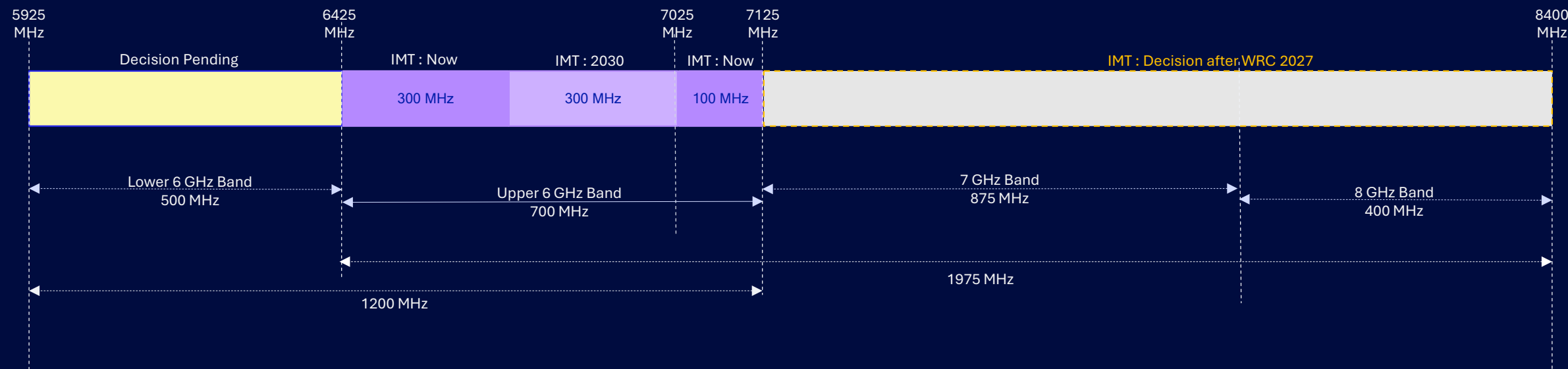
6G Spectrum Requirements

- Drivers
 - XR
 - Extensive Edge AI based use cases
 - Holographic communications
 - Integrated sensing and communication (ISAC)
- Spectrum requirements
 - GSA – 400 MHz contiguous block per operator
 - GSMA – 2 blocks of 200 MHz of contiguous blocks per operator
- New Spectrum bands for 6G
 - Greenfield spectrum must for 6G
 - Existing bands to continue with 4G/5G deployment till 6G gets stabilized
 - 600 MHz band (n105 : 663-703/612-652 MHz) is an essential complimentary 6G band
- Management of Incumbents by 2027
 - For India's 6G leadership, spectrum bands 7/8 GHz should be made available by 2027 for initial trials/pilots by 2028
 - Essential to plan migration path and refarming for incumbents using 7/8 GHz bands

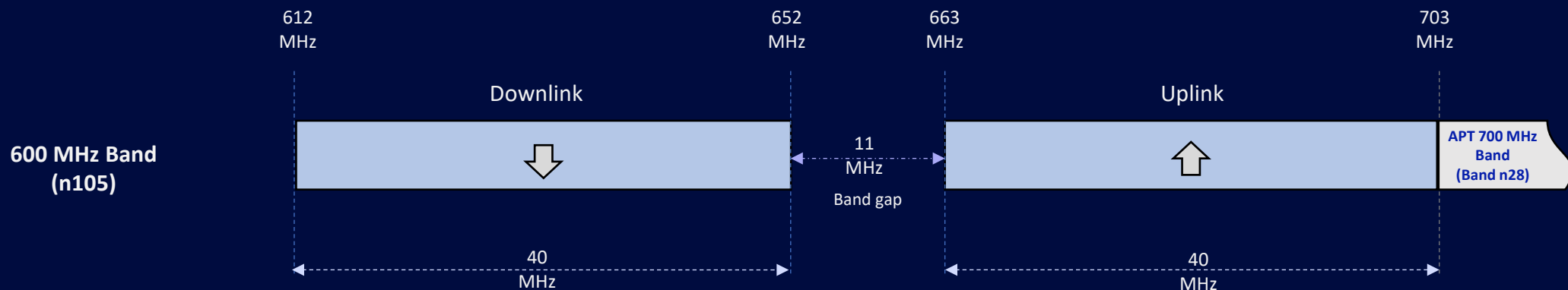
One India – One 6G Goal – Single alignment across all stakeholders including incumbents

India 6G Bands

- Mid Range



- Sub-GHz Range

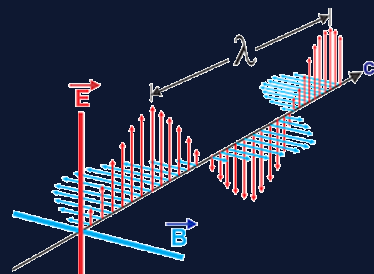


Summary : 6x6x6

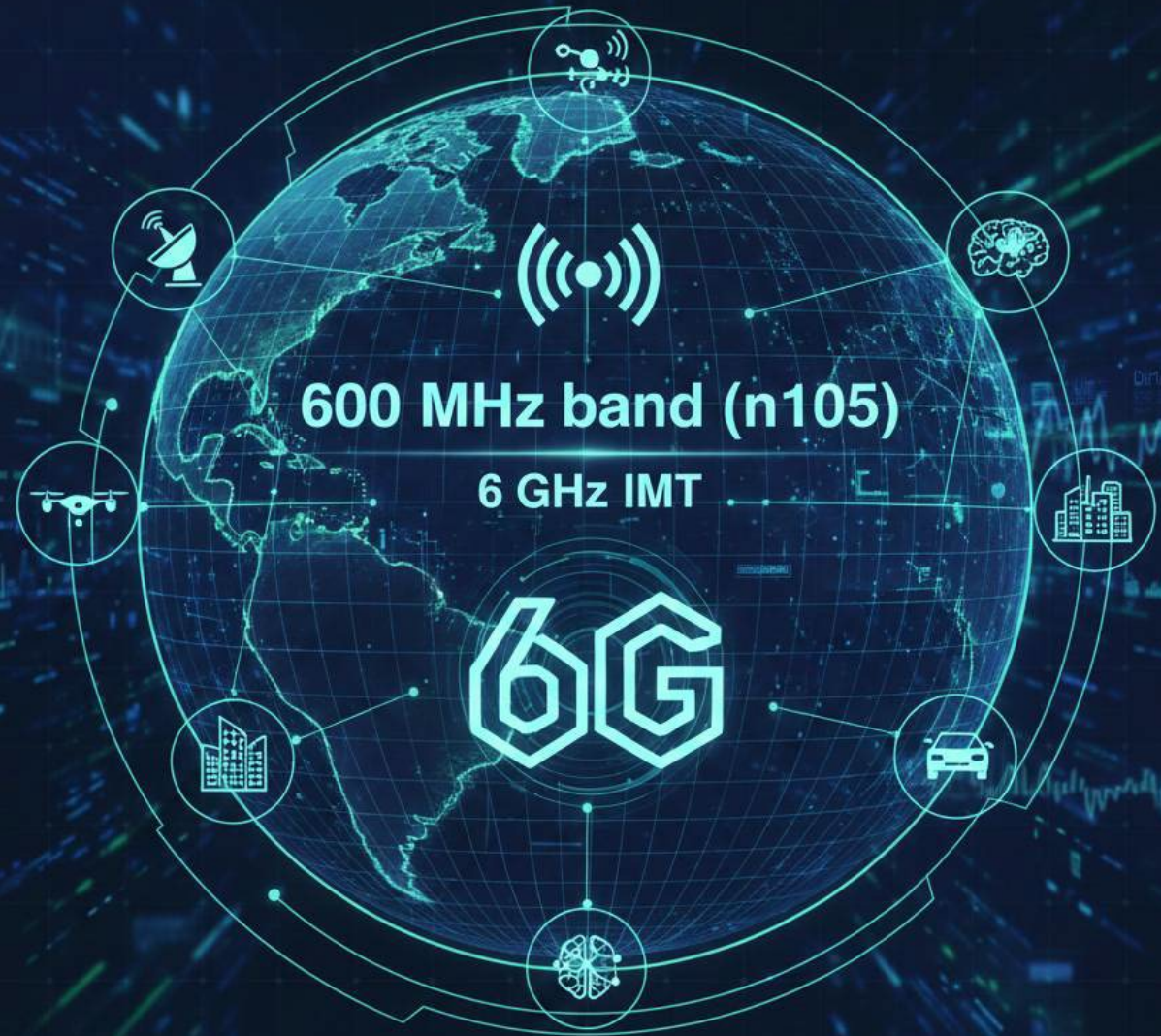
- 6_G

- 6-8 GHz

- 600 MHz



FUTURE OF CONNECTIVITY



ENABLING NEW FRONTIERS

Thank you



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