

3GPP TSG RAN Meeting #84  
Newport Beach, CA, USA  
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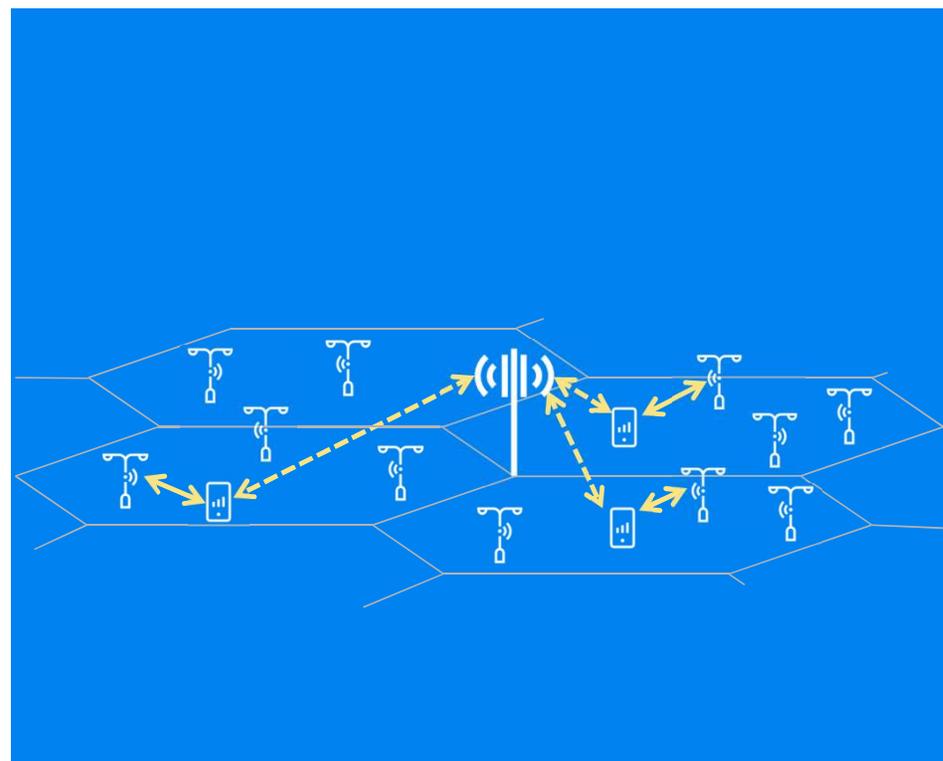
# Views on Rel-16 NR operation in the 5 and 6 GHz unlicensed bands

Agenda Item: 9.4.3  
Source: Ericsson  
Document for: Discussion

# Background



- Unlicensed spectrum as a complementary tool to augment operation and service offering has become an increasingly important toolkit for service operators
  - via licensed spectrum assistance, or purely based on unlicensed spectrum without associated licensed spectrum
- Key objective for Rel-16 NR-U WI is timely market readiness for service providers to deploy NR-U networks
  - WI should target only necessary changes from Rel-15 NR baseline to reduce implementation complexity and costs



# Rel-16 NR-U WI

## Essential functionalities



- Channel access mechanism
- Support of standalone, carrier aggregation and dual connectivity modes to address wide range of deployment and application cases
- Initial and random access adaptation to accommodate unlicensed band operation uncertainty
- Resource allocation to support reliable and efficient UL data and control information transmission
- Band definitions for the 5 and 6 GHz frequency ranges
  - Bands and channel rasters defined for both 5 and 6 GHz
  - gNB and UE RF core requirements for at least one band / band combination
  - RRM/RLM core requirements

# Way forward



- Features and mechanisms considered in other Rel-16 WIs should not be duplicated in the NR-U WI
  - E.g., power saving mechanisms are being addressed in power saving WI
- WGs should focus on finishing essential functionalities for the NR-U WI first
  - E.g., prioritize addressing wide bandwidth with (1) CA of 20 MHz carriers; or (2) transmission of wideband carrier when LBT succeeds in all LBT sub-bands
- Enhancements to Rel-15 functionality should be considered only if absolutely necessary for operation in unlicensed bands

