

**Dubrovnik, Croatia, March 6 - 9, 2017**

# **Consideration for NR band specification in Release 15**



# Identified Spectrums in RAN4 #82

- 14 spectrum ranges were identified
  - How to define band(s) for each frequency range will be determined in WI phase
- New spectrum range can be added in Rel 15 if requested

Frequency range/LTE band	Operators whose request is included in the frequency range
3.3-4.2 GHz	DOCOMO, KDDI, SBM, CMCC, China Unicom, China Telecom, KT, SK Telecom, LG Uplus, Etisalat, Orange, Telecom Italia, British Telecom, Deutsche Telekom
4.4-4.99 GHz	DOCOMO, KDDI, SBM, CMCC, China Unicom, China Telecom,
24.25-29.5 GHz	DOCOMO, KDDI, SBM, CMCC, KT, SK Telecom, LG Uplus, Etisalat, Orange, Verizon, T-mobile, Telecom Italia, British Telecom, Deutsche Telekom
31.8-33.4GHz	Orange, Telecom Italia, British Telecom
37-40 GHz	AT&T, Verizon, T-mobile
1.427-1.518G	Etisalat
1710-1785MHz/1805-1880MHz (Band 3)	CMCC, China Telecom
2500-2570MHz/2620-2690MHz (Band 7)	CHTTL, British Telecom
880-915MHz/925-960MHz (Band 8)	CMCC
832-862MHz/791-821MHz (Band 20)	Orange
703-748MHz/758-803MHz (Band 28)	Orange
2496-2690MHz (Band 41)	Sprint, China Telecom, C-Spire, China Unicom
1710-1780MHz/2110-2200MHz (band 66)	T-mobile
1920-1980MHz/2110-2170MHz (Band 1)	China Unicom, China Telecom

# Observations

- Multiple bands need to be specified by Dec 2017, in conjunction with so-called “early drop”
  - NR band standardization should be also accelerated from the original schedule (June, 2018 → December, 2017)
- Considering the expected work load in RAN4, it is not possible all 14 ranges will be fully analyzed for NR bands by Dec 2017
  - **we only have nine months and need to have some prioritization!!**

# KT`s View on NR band specification

- KT respects operators' NR spectrum plan identified in RAN4 # 82
- KT wants to stress that Korea has imminent need for NR bands
  - RP- 170154 in RAN #75 (by TTA)
    - the NR spectrum plan in Korea which might be available as early as 2018
  - R4- 1702200 in RAN4 #82 (by KT, SK Telecom, LG U+)
    - Korean operators' plan to use these spectrums
- Motivation for “early drop” proposal comes from market demand such as large-scale trial, commercialization as early as in 2019
- KT believes that 3GPP should apply the same criteria by which ‘early drop’ NR bands are selected.

## Proposal

- KT proposes that the following frequency ranges are spectrums that RAN4 will complete as NR bands by Dec 2017
  - 3.4GHz ~ 3.7 GHz (TDD, Single band)
  - 26.5 GHz ~ 29.5 GHz (TDD, Single band)
- Above proposal should be included in NR WID
  - KT will work with WI Rapporteur regarding exact text proposals

Thank you | 