



MEDIATEK

NR Unlicensed Clarifications

AI 9.3.5
Mediatek Inc.



2-Step RACH

- ❑ At NR Ad-hoc in July, it was assumed in RAN2 that Contention based 2-Step RACH will be studied for NR-U.
- ❑ At RAN2#103 a majority of views expressed that 2-Step RACH should be studied with the assumption that it is a general purpose procedure used for NR-U and other purposes for which contention based RACH is applicable.
- ❑ We assume that the radio scenarios of Rel-15 are applicable, e.g. coupling loss requirement.
- ❑ Proposal: 2-step RACH is studied in the NR-U SI, assuming that it is a general purpose procedure that may be applicable to cases where contention based RACH is applicable, i.e. including Licensed cases.

Connected Mode Mobility 1(2)

- ❑ A number of system functions, such as Handover, was never needed for LAA, but are needed for NR-U SA.
- ❑ At RAN2#103, a significant number of contributions on Conditional Handover, to address Mobility Robustness were put forward. Discussions were difficult due to diverging views on what can be discussed in the NR-U SI, vs. what should be postponed to the NR Mobility WI.
- ❑ Observations:
 - In general, the overlap between these items would typically be in terms of enhancements for Mobility Robustness (HO success rate) and/or enhancements for Handover Interruption time.
 - There could also be other NR-U specific issues not expected to be covered in the NR Mobility WI, e.g. PCI confusion etc.

Connected Mode Mobility 2(2)

- Proposal: Clarify that, with respect to Connected Mode Mobility functions potentially overlapping with the NR Mobility WI, the scope of the NR-U SI is:
 - Alt 1: The scope of the NR-U SI is Zero, nothing to be discussed in the NR-U SI. All discussion is postponed to the NR Mobility WI.
 - Alt 2: The scope of the NR-U SI includes only to identify NR-U-specific problems and issues. Discussion on solutions is postponed to the NR Mobility WI.
 - Alt 3: The scope of the NR-U SI includes to identify NR-U-specific problems and issues, and their solutions.

- Mediatek has a preference for Alt2.

Channel Access Priorities

- ❑ For LAA the allocation of Channel Access priorities was completely determined in RAN1.
- ❑ For NR-U there are more cases, e.g. RACH for SR, BFR, Handover, Initial access, PUCCH for SR etc.
- ❑ Channel Access Priority seems to be applicable to QoS expectations.
- ❑ Proposal: If Channel Access Priorities is agreed to be applicable, the discussion on channel access priority mapping (e.g. w.r.t. Use Cases, QoS class) for non-scheduled UL transmissions is done in RAN2



everyday genius