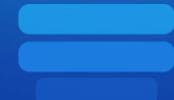TSG RAN#81
Gold coast, Australia
10-13 September 2018

RP-181700

On the scope of the 2-step RACH feature

Samsung

Introduction and background

✓ **2-step RACH feature has been extensively discussed and studied in RAN WGs already during the SI phase**

✓ **Potentially it allows a UE to get an access to the network in 2 steps instead of 4 steps thus reducing further access delays**

✓ **A number of contributions on 2-step RACH have been submitted to NR-U SI**

✓ **However, 2-step RACH feature can bring benefits also to the core NR functionality**

- Faster resumption procedure
- Faster transition to the RRC_CONNECTED state
- Potentially faster transmission of user plane data

Proposals

✓**We ask TSG RAN to clarify the scope of the 2-step RACH feature.**

● In particular, we propose to note explicitly that 2-step RACH feature is *not* specific to any use case or deployment scenario and should be designed accordingly.

● NR-U specific enhancements, if any, are not precluded.

✓**We ask TSG RAN to clarify where this feature should be further studied**

✓**Potential options are:**

● UE power saving SI

● Physical Layer Enhancements for NR URLLC SI

● NR-U SI (with an explicit NOTE that it is not limited to unlicensed depoyments)

Thank You!