**3GPP TSG-RAN WG4 Meeting #104-e draft R4-2214454**

**<Electronic Meeting>, 15 ‒ 26 August, 2022**

**Title:** WF on BC in RRC\_INACTIVE and initial access

**Agenda Item:** 11.7.4

**Source: Nokia**

**Document for:** Approval

# Sub-topic 1: Rel-16 RRC\_Connected Beam Correspondence applicability to Rel-18 RRC\_INACTIVE/IA Beam Correspondence

**Way forward/Agreements:**

* There is no UL beam sweep for IA BC requirements
* At least Msg1 will be tested.
* Use PC3 as baseline for testing and requirements and handle specific values for other PC afterwards and based on the same method
* BC is defined at maximum output power

**Way forward/FFS:**

* FFS: Discuss whether BC requirements values will be the same for RA-SDT, CG-SDT and initial access, if yes should all be tested?
* FFS: Discuss whether Msg1 and Msg A should have the same requirements? If yes, should both be tested?
* FFS: BC side conditions
* FFS whether RAR reception need to be also tested to verify the similarity between Tx and Rx beams.

# Sub-topic 2: UE beam type and DRX implications in Rel-18 Inactive Beam Correspondence

**Way forward/Agreement:**

None

**Way forward/FFS:**

* FFS: How beam refinement may work in RRC\_INACTIVE (RA-SDT and CG-SDT) and initial access
* FFS: Discuss the impact of fine beam vs rough beam for UE UL Tx beam on the test(s)
* FFS: Discuss if the refinement is the same as Rel-16 SSB only case
* FFS: Whether the peak EIRP the same as Rel-16 SSB only case achieved.
* FFS: Discuss DRX implications on UE beam refinement and on BC accuracy

# Sub-topic 3: Rel-18 Beam Correspondence Test Issues

**Way forward/Agreement:**

* BC test for RRC\_INACTIVE (if applicable) and RRC\_Idle is at UE maximum output power
* BEAM\_LOCK is not available in RRC\_INACTIVE and IA mode

**Way forward/FFS:**

* FFS: discuss if and how UE Tx beam should/would change during IA and what are the impact on the test method.
* FFS: Feasibility of testing UEs in Inactive mode
* FFS: Feasibility of triggering SDT in test mode for different UE implementations
* FFS: Whether and how UE Tx beam should/would change without beam lock function during IA when test equipment is holding RAR to achieving UE max output power.
* FFS: How to achieve and keep max power in testing
* FFS: Number of tests, test time implications and proposed test time reductions
* FFS: polarization aspects without beam lock function in testing