**3GPP TSG RAN meeting #90e RP-20xxxx**

**Electronic Meeting, 7-11 December 2020**

**Agenda item:** TBA

**Source:** Email discussion moderator (Intel)

**Title:** Report from Email Discussion [90E][43][60GHz\_OTA]

**Document for:** Discussion and decision

# Introduction

This document provides as summary of the following email discussion during RAN#90-e:

**[90E][43][60GHz\_OTA]**

Goal: Generate an agreeable way forward.

Input contributions covered: 2661

# Discussion

## Background

The following summarizes the key observations and proposals listed in RP-202661:

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| ***Observation #1: OTA test methods are used as a baseline approach for NR mmWave test methodology for RF, RRM, and Demodulation testing.***  ***Observation #2: The existing mmWave OTA UE test methods are applicable to FR2 frequency bands and their extension to carrier frequencies above 52.6 GHz should be further studied***  **Proposal #1: Further study and define NR 52.6-71GHz OTA test methods within the Rel-17 timeframe**   * + **Option 1: Initiate a separate SI in parallel with NR 52.6 – 71 GHz WI**   + **Option 2: Extend the scope of the NR 52.6 – 71 GHz WI to cover the testability aspects**   **Proposal #2: Consider the following SI/WI objectives to enable NR 52.6-71GHz OTA test methods**   * + *Study and define the over the air (OTA) test methods for UE RF, RRM, and demodulation requirements for the 52.6GHz-71GHz frequency range [RAN4]*     - *Extend the applicability of the FR2 OTA test methods in TR 38.810 wherever possible*     - *Identify any changes needed, including general testing and calibration, permitted test methods, multi-path fading propagation conditions, measurement applicability criteria.*     - *Target device types: Handheld UE, laptop, tablet, FWA, vehicular mounted device; other UE types not precluded.* |

## Initial round

### Open issues

The following questions are proposed to be discussed in the initial round:

* Question #1: Whether to further study and define NR 52.6-71GHz OTA test methods within the Rel-17 timeframe
* Question #2: How to organize the NR 52.6-71GHz OTA test methods studies within the Rel-17 timeframe
  + Option 1: Initiate a separate SI to study NR 52.6-71GHz OTA test methods
  + Option 2: Extend the scope of the NR 52.6 – 71 GHz WI to cover the testability aspects
  + Option 3: other options?
* Question #3: Candidate study objectives
  + *Option 1: Study and define the over the air (OTA) test methods for UE RF, RRM, and demodulation requirements for the 52.6GHz-71GHz frequency range [RAN4]*
    - *Extend the applicability of the FR2 OTA test methods in TR 38.810 wherever possible*
    - *Identify any changes needed, including general testing and calibration, permitted test methods, multi-path fading propagation conditions, measurement applicability criteria.*
    - *Target device types: Handheld UE, laptop, tablet, FWA, vehicular mounted device; other UE types not precluded.*
    - *Utilize free space testing configuration for test methods definition.*

### Companies views’ collection

**Question #1: Whether to further study and define NR 52.6-71GHz OTA test methods within the Rel-17 timeframe?**

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| **Company** | **Comments** |
| Company A |  |
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**Question #2: How to organize the NR 52.6-71GHz OTA test methods studies within the Rel-17 timeframe**

* **Option 1: Initiate a separate SI to study NR 52.6-71GHz OTA test methods**
* **Option 2: Extend the scope of the NR 52.6 – 71 GHz WI to cover the testability aspects**
* **Option 3: other options?**

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| **Company** | **Comments** |
| Company A |  |
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**Question 3: Candidate study objectives**

* ***Option 1: Study and define the over the air (OTA) test methods for UE RF, RRM, and demodulation requirements for the 52.6GHz-71GHz frequency range [RAN4]***
  + ***Extend the applicability of the FR2 OTA test methods in TR 38.810 wherever possible***
  + ***Identify any changes needed, including general testing and calibration, permitted test methods, multi-path fading propagation conditions, measurement applicability criteria.***
  + ***Target device types: Handheld UE, laptop, tablet, FWA, vehicular mounted device; other UE types not precluded.***
  + ***Utilize free space testing configuration for test methods definition.***

Companies are encouraged to share views on the candidate objectives of the studies and whether proposed Option 1 objectives are acceptable.

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| **Company** | **Comments** |
| Company A |  |
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### Summary and recommendation for further discussion

## Intermediate round

## Fine-tuning round

# Conclusion

Based on the email discussion, the following are proposed:

* TBD