3GPP TSG RAN MEETING #84
NEWPORT BEACH, USA, JUNE 03 - 06, 2019
RP-191412

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REPORT ON NR BEYOND 52.6GHZ WORKSHOP

SOURCE: INTEL CORPORATION

AGENDA ITEM: 9.3.3

DOCUMENT FOR: INFORMATION

INTRODUCTION

Intel organized and hosted a 3GPP industry workshop on “5G NR evolution beyond 52.6GHz” in Santa Clara, CA, USA, on May 20-21, 2019.

Background of the workshop

- 3GPP Release 15 and 16 NR specifications have considered operations up to 52.6GHz bands.
- Support for NR operations in spectrum above 52.6Hz is expected to be a main content of NR evolution in Rel-17 onwards, with target use cases of eMBB, Industrial IOT, wireless backhaul, V2X, non-terrestrial network, AR/VR, etc. for both licensed and unlicensed (or license-exempt) spectrum.
- 3GPP RAN plenary is studying regulatory requirements, use cases and deployment scenarios, and system design requirements, etc., and follow up WG-led study/work items are expected in Rel-17 onwards.

Objective of the workshop

- To exchange views on NR beyond 52.6GHz which can facilitate 3GPP’s future work.
- This is not an official 3GPP workshop and therefore is not for any decision/conclusion, but is for exchange of views, information, and findings.

PARTICIPANTS

83 delegates from 32 companies attended the workshop.

Apple	Huawei	Motorola	Rohde & Schwarz
AT&T	Intel	National Instruments	Samsung
Charter	InterDigital	Nokia	Sony
CATT	ITL	NTT DOCOMO	T-Mobile
CMCC	ITRI	OnFace	Verizon
Ericsson	Lenovo	OPPO	Xiaomi
Fraunhofer HHI	LGE	Panasonic	vivo
Google	MediaTek	Qualcomm	ZTE

AGENDA

AI 1. Spectrum availability and regulatory requirements

AI 2. Use case & deployment scenarios

AI 3. Design requirements & considerations inc. target system BW and channelization

AI 4. Waveform

- Waveform candidates, methodology & metrics for waveform comparison, preliminary evaluation results, etc.

AI 5. 3GPP Work plan for Rel-17 and beyond (w.r.t. NR above 52.6GHz)

- Scope and timeline for relevant SIs/WIs for Rel-17 and beyond for different use cases, deployment scenarios, and spectrum, e.g., eMBB, URLLC, IIOT, mMTC, V2X, Uu, Sidelink, backhaul/IAB, NTN, licensed/unlicensed spectrum, etc.

SCHEDULE

Day 1 (Mon May 20)

09:00 Welcome, Agenda, Logistics

09:30 **AI 1:** "Overview of spectrum availability and regulatory requirements - TR38.807 summary"

10:30 Coffee break

10:50 **AI 2:** "Use case & deployment scenarios"

11:40 **AI 3:** "Design requirements & considerations inc. target system BW and channelization"

12:30 Lunch break

13:30 **AI 3:** "Design requirements & considerations inc. target system BW and channelization"

14:20 **AI 4:** "Waveform"

15:00 Coffee break

15:20 **AI 4:** "Waveform"

17:00 Close Day 1

17:40 Dinner

Day 2 (Tue May 21)

09:00 **AI 4**: "Waveform"

10:40 Coffee break

11:00 **AI 4:** "Waveform"

12:30 Lunch break

13:30 **AI 4:** "Waveform"

15:00 **AI 5:** "3GPP work plan for Rel-17 and beyond w.r.t. NR above 52.6GHz"

15:50 Wrap-up

16:00 Close Day 2

MEETING MINUTES

(All presentation materials are downloadable from https://drive.google.com/drive/u/0/folders/1nWlDEAPyAuzO8lZlGy3nWTOIc8omkeoI)

AI 1. Spectrum availability and regulatory requirements

- Intel, as the rapporteur of the ongoing RAN Plenary Study Item, “NR above 52.6GHz”, presented a summary of the corresponding section of TR38.807.

AI 2. Use case & deployment scenarios

- Intel, as the rapporteur of the ongoing RAN Plenary Study Item, “NR above 52.6GHz”, presented a summary of the draft TP to TR38.807, RP-190698 that is collecting inputs to RAN#83.

AI 3. Design requirements & considerations inc. target system BW and channelization

- AT&T, NTT DoCoMo, Ericsson, Intel, Nokia, Qualcomm, Samsung, vivo, ZTE presented their views on the subject.

AI 4. Waveform

- AT&T, NTT DoCoMo, Ericsson, Intel, LGE, Nokia, Qualcomm, Samsung, vivo, ZTE presented their views on waveform candidates, methodology & metrics for waveform comparison, link level and system level simulation results, etc.

AI 5. 3GPP Work plan for Rel-17 and beyond (w.r.t. NR above 52.6GHz)

- NTT DoCoMo, Ericsson, Intel, Nokia, Qualcomm, Samsung, vivo, ZTE presented their views on scope and timeline for relevant SIs/WIs for Rel-17 and beyond for different use cases, deployment scenarios, and types of spectrum (licensed/unlicensed).

3GPP Industry Workshop:
"NR beyond 52.6GHz"
Santa Clara, CA, USA
May 20-21, 2019
Agenda/Schedule & Other Info

THANK YOU !