**3GPP TSG RAN WG1 #122 R1-250XXXX**

**Bengaluru, India, Aug 25th – 29th, 2025**

Agenda Item: 10.1

Source: Ad-Hoc Chair (Ericsson)

Title: Session notes for 10.1 Artificial Intelligence (AI)/Machine Learning (ML) for NR air interface enhancements

Document for: Discussion, Decision

## Artificial Intelligence (AI)/Machine Learning (ML) for NR air interface enhancements

*Please refer to RP-251870 for detailed scope of the WI.*

[122-R20-AI/ML] Email discussion on Rel-20 AI/ML – xxx

* To be used for sharing updates on online/offline schedule, details on what is to be discussed in online/offline sessions, tdoc number of the moderator summary for online session, etc

R1-2506206 Work plan for NR\_AIML\_air\_Ph2 Qualcomm Incorporated

### CSI spatial/frequency compression without temporal aspects (“Case 0”)

R1-2506375 Enhancements for Case-0 CSI Compression in Rel-20 Rakuten Mobile, Inc

#### 10.1.1.1 Inference related aspects

*Including target CSI type, measurement and report configuration, CQI RI determination, payload determination, quantization configuration codebook, UCI mapping, CSI processing criteria and timeline, priority rules for CSI reports.*

R1-2505148 Discussion on inference related aspects for CSI spatial/frequency compression without temporal aspects (“Case 0”) FUTUREWEI

R1-2505239 AI/ML CSI Spatial/Frequency Compression: Inference Aspects InterDigital, Inc.

R1-2505133 Inference related aspects of AI/ML for CSI compression Ericsson

R1-2505161 Discussion on AIML for CSI compression inference related aspects Spreadtrum, UNISOC

R1-2505199 Inference related aspects for CSI compression Huawei, HiSilicon

R1-2505260 Inference for AI/ML based CSI Compression Google

R1-2505299 Specification support on inference related aspects of AI/ML-based CSI compression CATT

R1-2505405 Discussion on inference related aspects for CSI compression vivo

R1-2505452 Discussion on inference related aspects of two-sided AI/ML model based CSI feedback Xiaomi

R1-2505477 Discussion on interference related aspects for CSI compression TCL

R1-2505491 Discussion on inference related aspects of CSI compression ZTE Corporation, Sanechips

R1-2505573 Views on inference related aspects of CSI compression Samsung

R1-2505617 Discussion on inference related aspects for CSI compression KT Corp.

R1-2505670 Discussion on Inference related aspects for AI CSI compression Ofinno

R1-2505687 Inference related aspects for CSI compression Lenovo

R1-2505699 Discussion on inference aspects for AI/ML-based CSI compression Panasonic

R1-2505746 Inference related aspects for AI/ML CSI compression OPPO

R1-2505802 CSI Compression: Inference Related Aspects Nokia

R1-2505819 Discussion on inference related aspects for CSI compression LG Electronics

R1-2505902 On inference related aspects for AI based CSI spatial/frequency domain compression Apple

R1-2505935 Discussion on inference aspects of CSI compression NEC

R1-2505944 Discussions on Inference Related Aspects for CSI Compression Sharp

R1-2505945 Discussion on inference of AI/ML CSI compression Transsion Holdings

R1-2505962 Discussion on inference related aspects in CSI compression with AI/ML Fujitsu

R1-2506029 CSI spatial/frequency compression without temporal aspects (“Case 0”)- Inference related aspects MediaTek Inc.

R1-2506057 Discussion on inference related aspects of CSI compression ETRI

R1-2506088 Discussion on inference related aspects of CSI compression CMCC

R1-2506122 Discussion on inference aspects of CSI compression KAIST

R1-2506149 Discussion on Inference related aspects for AI/ML based CSI compression ITL

R1-2506207 Specification of inference aspects of AIML CSI compression Qualcomm Incorporated

R1-2506294 Discussion on the inference-related aspects of AI/ML CSI compression NTT DOCOMO, INC.

R1-2506353 Discussion on AI/ML CSI Compression inference aspects CEWiT

R1-2506377 Discussion on Inference-Related Aspects of Case-0 CSI Compression Rakuten Mobile, Inc

#### 10.1.1.2 Other aspects

*Including NW and UE data collection for training, performance monitoring, as well as model pairing related issues.*

R1-2505700 Discussion on other aspects for AI/ML-based CSI compression Panasonic

R1-2505574 Views on other aspects of CSI compression Samsung

R1-2505134 Other aspects of AI/ML for CSI compression Ericsson

R1-2505149 Discussion on other aspects for CSI spatial/frequency compression without temporal aspects (“Case 0”) FUTUREWEI

R1-2505162 Discussion on AIML for CSI compression other aspects Spreadtrum, UNISOC

R1-2505200 Other aspects for CSI compression Huawei, HiSilicon

R1-2505240 AI/ML CSI Spatial/Frequency Compression: Other Aspects InterDigital, Inc.

R1-2505261 Other Aspects for AI/ML based CSI Compression Google

R1-2505300 Specification support on other aspects of AI/ML-based CSI compression CATT

R1-2505406 Discussion on other aspects for CSI compression vivo

R1-2505453 Discussion on other aspects of CSI spatial/frequency compression Xiaomi

R1-2505478 Discussion on other aspects for CSI compression TCL

R1-2505492 Discussion on other aspects of CSI compression ZTE Corporation, Sanechips

R1-2505685 Other aspects Tejas Network Limited

R1-2505688 Other aspects for CSI compression Lenovo

R1-2505747 Other aspects for AI/ML CSI compression OPPO

R1-2505803 CSI Compression: Other Aspects Nokia

R1-2505820 Discussion on other aspects for CSI compression LG Electronics

R1-2505903 On other aspects for AI based CSI spatial/frequency domain compression Apple

R1-2505930 Discussion on other aspects of CSI compression NEC

R1-2505963 Discussion on other aspects of CSI compression Fujitsu

R1-2506030 CSI spatial/frequency compression without temporal aspects (“Case 0”)- Other aspects MediaTek Inc.

R1-2506058 Discussion on other aspects of CSI compression ETRI

R1-2506089 Discussion on other aspects of CSI compression CMCC

R1-2506108 Discussions on Performance Monitoring for AI/ML CSI Compression Sony

Withdrawn

R1-2506208 Specification of other aspects of AIML CSI compression Qualcomm Incorporated

R1-2506249 Discussions on other aspects for NR air interface enhancements Sharp

R1-2506295 Discussion on other aspects of AI/ML CSI compression NTT DOCOMO, INC.

R1-2506315 Other Aspects of CSI spatial/frequency compression Indian Institute of Tech (M)

R1-2506339 Discussion on AIML based CSI compression ASUSTeK

R1-2506354 Discussion on AI/ML CSI Compression other aspects CEWiT

R1-2506378 Discussion on Data-collection / Monitoring / Model-pairing Rakuten Mobile, Inc

R1-2506386 Other aspects for CSI compression IIT Kanpur

### Inter-vendor training collaboration for two-sided AI/ML models

*Including specification of standardized dataset format/content plus dataset exchange (“Direction A, sub-option 4-1”), as well as RAN4-triggered issues.*

R1-2505964 Discussion on inter-vendor training collaboration for two-sided AI/ML models Fujitsu

R1-2506090 Discussion on inter-vendor training collaboration for CSI compression CMCC

R1-2505135 Inter-vendor training collaboration for two-sided AI/ML models Ericsson

R1-2505150 Discussion on inter-vendor training collaboration for two-sided AI/ML models FUTUREWEI

R1-2505163 Discussion on Inter-vendor training collaboration for two-sided AI/ML models Spreadtrum, UNISOC

R1-2505201 Inter-vendor training collaboration for two-sided AI/ML models Huawei, HiSilicon

R1-2505241 AI/ML CSI Spatial/Frequency Compression: Inter-vendor Collaboration InterDigital, Inc.

R1-2505262 Inter-Vendor Collaboration for AI/ML based CSI Compression Google

R1-2505301 Discussion on Inter-vendor training collaboration for CSI compression CATT

R1-2505407 Discussion on inter-vendor training collaboration for two-sided AI/ML models vivo

R1-2505454 Discussion on inter-vendor training collaboration for two-sided AI/ML models Xiaomi

R1-2505479 Discussion on inter-vendor collaboration for CSI compression TCL

R1-2505493 Discussion on inter-vendor training collaboration for two-sided AI/ML models ZTE Corporation, Sanechips

R1-2505575 Views on inter-vendor training collaboration for two-sided AI/ML models Samsung

R1-2505642 Discussion on Inter-vendor Training Collaboration for AI/ML models NEC

R1-2505689 Inter-vendor training collaboration for two-sided AI/ML models Lenovo

R1-2505701 Discussion on inter-vendor training collaboration for two-sided AI/ML models Panasonic

R1-2505748 Inter-vendor training collaboration for AI/ML CSI compression OPPO

R1-2505804 Inter-vendor training collaboration for two-sided AI/ML models Nokia

R1-2505806 Reference Model for Data Generation NTU

R1-2505821 Discussion on Inter-vendor training collaboration for two-sided models LG Electronics

R1-2505904 Inter-vendor training collaboration for two sided AI/ML models Apple

R1-2506012 Discussions on Inter-vendor training collaboration Sharp

R1-2506031 Inter-vendor training collaboration for two-sided AI/ML models MediaTek Inc.

R1-2506059 Discussion on inter vendor training collaboration for two-sided AI/ML models ETRI

R1-2506109 Discussion on Inter-Vendor Training collaboration for Two-Side AI/ML Models Sony

R1-2506209 Inter-vendor training collaboration for two-sided CSI compression use case Qualcomm Incorporated

R1-2506296 Discussion on the inter-vendor training collaborations for two-sided AI/ML models NTT DOCOMO, INC.