

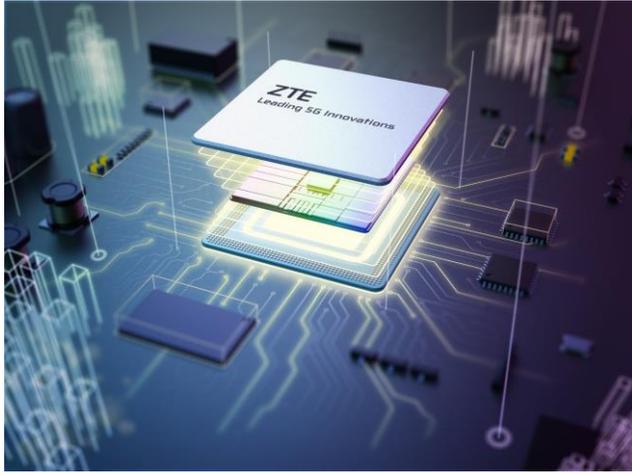
3GPP TSG RAN Meeting #103

Maastricht, Netherlands, March 18-21, 2024

Agenda Item: 9.3.1.3

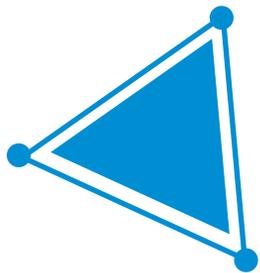
TDoc Number: RP-240466

ZTE



Views on Rel-19 AI/ML for Air Interface

Source: ZTE, Sanechips



RAN1 & RAN2 coordination on AI/ML framework

Background: WID (RP-234039)

Study objectives with corresponding checkpoints in RAN#105 (Sept '24):

<<<CSI part omitted>>>

- ❑ Necessity and details of model Identification concept and procedure in the context of LCM [RAN2/RAN1]
- ❑ CN/OAM/OTT collection of UE-sided model training data [RAN2/RAN1]:
 - For the FS_NR_AIML_Air study use cases, identify the corresponding contents of UE data collection
 - Analyse the UE data collection mechanisms identified during the FS_NR_AIML_Air (TR 38.843 section 7.2.1.3.2) study along with the implications and limitations of each of the methods
- ❑ Model transfer/delivery [RAN2/RAN1]:
 - Determine whether there is a need to consider standardised solutions for transferring/delivering AI/ML model(s) considering at least the solutions identified during the FS_NR_AIML_Air study

Observations in working groups

- ❑ RAN1's previous assessment was that RAN1 could focus on the “necessity and requirements” aspect for AI/ML framework and RAN2 could focus on the “how” aspect. However, during the RAN1 discussion in RAN1#116, it was observed that, without discussing the detailed solution of model identification and model transfer/delivery, it is difficult for RAN1 to conclude the “necessity and requirements” aspect.
- ❑ RAN2 will commence the study on AI/ML framework in 2024 Q2. To ensure efficient progress and avoid parallel/duplicated discussions between RAN1 and RAN2, RAN guidance is imperative.

Proposal 1: RAN outlines clear guidance on how to split work between RAN1 and RAN2 for AI/ML framework study.

Minor updates on the WID of AI/ML for air interface

AI/ML CSI prediction

- ❑ RAN1 discussed whether one-sided model for CSI prediction could be either UE-side model or NW-side model. However, it is confirmed in RAN1 that RAN1 continues to study UE-sided model for AI/ML CSI prediction.

Proposal 2: Update the following objective for AI/ML CSI prediction.

- *For CSI prediction (~~one~~ UE-sided model), further study performance gain over Rel-18 non-AI/ML based approach and associated complexity, while addressing other aspects requiring further study/conclusion as captured in the conclusions section of the TR 38.843 (e.g., cell/site specific model could be considered to improve performance gain).*

AI/ML Positioning

- ❑ Based on our understanding, AI/ML positioning enhancement is only applicable for Uu positioning, i.e., not applicable to sidelink positioning. Thus, it is proposed to replace TS38.355 by TS37.355 in the Table “Impacted existing TS/TR” in RP-234039.

Proposal 3: Replace TS38.355 by TS37.355 in the Table “Impacted existing TS/TR” in RP-234039



Thank You!