RP-231585

3GPP RAN#101 | Sept. 11th - 15th 2023 | Bengaluru, India

Deutsche Telekom's AI/ML Air Interface objectives

It’s simple:

AI/ML Air Interface

AI/ML Air Interface

- Whether/how to continue Artificial Intelligence (AI)/Machine Learning (ML) air interface in Rel-19 depends on the outcome of the Rel-18 study.
- Normative work on AI/ML air interface is expected upon successful completion of the Rel-18 study
  - In particular, which are the set of sub use cases for the potential WI?
- Whether or not to have parallel study, e.g., new use case(s) (e.g., mobility led by RAN2?)
- Important to keep the total amount of work related to AI/ML air interface within a reasonable load in Rel-19

Work Focus for Rel-19

The (UC) outcome of the Rel-18 SI is baseline for normative work; further a 3GPP wide consistent life cycle management (LCM) incl. AI/ML model delivery/transfer is urgently needed (RAN/SA2/SA5)

Additionally, the following objectives for a 2nd Study Items are supported:

Objective 1

Development of a 3GPP wide consistent life cycle management (LCM) incl. AI/ML model delivery/transfer

Objective 2

Normative work for positive outcome of the Rel-18 SI UC analysis

Objective 3

New UC analysis:

- AI/ML based PA efficiency enhancements / Handling of PA non-linearities
- Channel estimation
- RS overhead reduction

Let’s start talking…