**3GPP TSG-RAN WG2 Meeting #127bis R2-24xxxxx**

**Hefei, China, Oct 14th~ Oct 18th, 2024**

Agenda Item: 8.3.2

Source: Mediatek Inc.

Title: [AT127bis][016][AI Mob] Simulation table example (Mediatek)

Document for: Discussion, Decision

# Introduction

This report provides a summary for the following at-meeting email discussion:

* [AT127bis][016][AI Mob] Simulation table example (Mediatek)

Intended outcome: provide simulation table example and get comments/questions

Deadline: 10-17-24

As we may have a CB on AI mobility from 14:30 to 16:30 on Thursday (10/17), the deadline for providing comments is 12:00 on Thursday.

Companies providing input to this email discussion are requested to leave contact information below.

|  |  |  |
| --- | --- | --- |
| **Company** | **Name** | **Email Address** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Discussion

The offline discussion will collect companies' comments and suggestions on the example spreadsheets based on current agreements. Any further discussion beyond what has been agreed upon is not within the scope of this discussion.

Please notice the following revisions on the template:

1. New columns have been added according to the newly reached agreements, with the content written in red.
2. An example row has been added to define the format of each table's content.

## Scenario 2

Please provide comments on the spreadsheet example for Scenario 2: RRM Measurement Prediction Evaluation results for caseB in the table below.

|  |  |
| --- | --- |
| Company | Comment/suggestion |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Scenario 4

Please provide comments on the spreadsheet example for Scenario 4: RRM Measurement Prediction Evaluation results for caseA.

|  |  |
| --- | --- |
| Company | Comment/suggestion |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Scenario 3

Please provide comments on the spreadsheet example for Scenario 3: RRM Measurement Prediction Evaluation results for frequency.

|  |  |
| --- | --- |
| Company | Comment/suggestion |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Scenario 6

Please provide comments on the spreadsheet example for Scenario 6: RRM Measurement Prediction Evaluation results for spatial.

|  |  |
| --- | --- |
| Company | Comment/suggestion |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## General Rules for Filling the Table

The rules for filling out the table are as follows:

1. Please adhere to the format provided in the example as much as possible. Certain columns, such as "Other Factors, details of AI model" do not have strict content restrictions.
2. Please make sure to keep the same parameter units as the template provided.

Companies are encouraged to provide additional rules to facilitate the recording of simulation results.

|  |  |
| --- | --- |
| Company | Comment/suggestion |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# Conclusion

# Appendix-RAN2 Agreement in RAN2#127bis

* *For intra-frequency temporal domain, higher UE speeds result in larger prediction errors*
* *Initially, increasing the OW length can enhance prediction accuracy in the temporal domain case A, especially when the OW is relatively short. However, once the OW exceeds a certain threshold, further increases do not yield significant benefits. Conversely, for PW, longer durations correlate with decreased prediction accuracy. RAN2 will not define the actual threshold and fast fading assumption.*
* Majority of companies observe that among sub cases 1, 2, and 3, at least with shorter prediction window sub case 2 demonstrates the highest prediction accuracy
* Companies can provide multiple real time RSRP value(s) and/or average RSRP value over the entire window and should indicate in their simulation results what they have used. The companies should at least provide the results of only one value it should be the last value at the end of the PW. We will add two columns in the spreadsheet to capture the last value and the average value.
* Companies need to report whether earlier predicted results are also used as inputs for future RRM prediction.
* Companies should report with their simulation the correlation coefficient

* Higher-to-lower and lower-to-higher frequency prediction is comparable

For co-located scenario, the UE speed in the inter-frequency case has minor impact on

* prediction accuracy
* Companies are free to consider non-AI or simple AI models