**3GPP TSG-RAN WG2 Meeting #113-eR2-21xxxxx**

**Online, 25th Jan – 5th Feb 2021**

**Agenda item:** 8.13.4

**Source:** vivo (Rapporteur)

**Title:** The report of[Offline-822][NR R17 SONMDT] M6 (vivo)

**Document for:** Discussion and Agreement

# 1 Introduction

This is to report the result of the following email discussion at RAN2#113-e meeting [1].

* [AT113-e][822][NR/R17 SON/MDT]  M6 (vivo)

For QoS monitoring related delay reporting to CN, RAN2 to choose one of the following options for the total delay measurement M6 over MCG/SCG for split bearers WITHOUT PDCP duplication.

Option a: the maximum value between two legs;

Option b: weighted average (consider the number of packets) over MN and SN;

Option c: simply by average the values of M6 from MN and M6 from SN;

Option d: raw data (separate delay in MN and SN);

Option e: no differentiation

Intended outcome: Agreeable WF

Deadline: Thursday 04/02/2021

According to the chair’s guidance, this report is used to collect companies’ views on the measurement options regarding M6 for split bearers without PDCP duplication, and to find an agreeable way forward.

Companies are welcome to provide their opinions by Thursday 04/02/2021, UTC 12:00.

# 2 Contact Information

To make it easier to find the correct contact delegate in each company for potential follow-up questions, the rapporteur encourages the delegates who provide input to provide their contact information in this table:

|  |  |
| --- | --- |
| Company | Contact: Name (E-mail) |
| vivo | Wen Ming (ming.wen@vivo.com) |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# 3 Discussion

How to measure the total delay measurement M6 over MCG/SCG for split bearers WITHOUT PDCP duplication was firstly discussed in the *[Post112-e][852] R17 L2M enhancement* [2], companies’ views are split on this issue, and no consensus is achieved during the online session.

There are also contributions [3][4][5] submitted to this meeting that are relevant to this topic. Both [3][4] are supportive of **Option b (weighted average)**, the argument is that the weighted average considering the number of packets over MN and SN can reflect accurately the average total delay of all the packets of the same split bear over MN and SN. While [5] states that generally the RAN part of delay is to get averaged values, but from NW’s point of view, both **min and max values** are also useful for delay measurement monitoring, the maximum and minimum values can be used for network layer delay demarcation and locating.

Nontheless, more companies are invited to provide their feedback on this issue so that we can find an agreeable WF based on the majority view.

Question: Which of the option should be used to measure the total delay measurement M6 over MCG/SCG for split bearers WITHOUT PDCP duplication.

* Option a: the maximum value between two legs;
* Option b: weighted average (consider the number of packets) over MN and SN;
* Option c: simply by average the values of M6 from MN and M6 from SN;
* Option d: raw data (separate delay in MN and SN);
* Option e: no differentiation.
* Option f: others (please specify).

|  |  |  |
| --- | --- | --- |
| Company | Option a/b/c/d/e/f… | Detailed Comments |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Conclusion:**

# 4 Conclusion

**TBD**

# 5 References

1. R2-113-e SONMDT HuNan 2021-01-29-0630 UTC
2. R2-2100703 Report of [Post112-e][852][NR R17 SONMDT] R17 L2M enhancement (vivo) vivo report Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core
3. R2-2100288 Discussion on L2 measurements for split bearers China Telecommunication discussion Rel-17
4. R2-2101417 On layer-2 measurements Ericsson discussion
5. R2-2101698 Discussion on L2M Huawei, HiSilicon