**3GPP TSG RAN WG1 Meeting #110bis-e R1-22xxxxx**

**e-meeting, Oct 10th – 19th, 2022**

**Source: Intel Corporation, CATT, Ericsson**

**Title: Comments to Draft TR 38.859 v020: Study on expanded and improved NR positioning**

**Agenda item: 9.5**

**Document for: Discussion**

# Introduction

A draft for TR 38.859: Study on expanded and improved NR positioning incorporating decisions until week #1 of RAN1 #110bis meeting are presented.

This document aims to collect any feedback to the draft TR shared in [R1-2210233](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_110b-e/Inbox/R1-2210233.zip).

Please follow the naming convention in this example:

* *Comments to draftTR38859v020-v000.docx*
* *Comments to draftTR38859v020-v001-CompanyA.docx*
* *Comments to draftTR38859v020-v002-CompanyA-CompanyB.docx*
* *Comments to draftTR38859v020-v003-CompanyB-CompanyC.docx*

If needed, you may “lock” a spreadsheet file for 30 minutes by creating a checkout file, as in this example:

* Assume CompanyC wants to update *SLPosScenReq\_FLS-v002-CompanyA-CompanyB.docx*.
* CompanyC uploads an empty file named *SLPosScenReq\_FLS-v003-CompanyB-CompanyC.checkout*
* CompanyC checks that no one else has created a checkout file simultaneously, and if there is a collision, CompanyC tries to coordinate with the company who made the other checkout (see, e.g., contact list below).
* CompanyC then has 30 minutes to upload *SLPosScenReq\_FLS-v003-CompanyB-CompanyC.docx*
* If no update is uploaded in 30 minutes, other companies can ignore the checkout file.
* Note that the file timestamps on the server are in UTC time.

Please note that there is NO need to send an info email to the reflector just to inform that you have uploaded a new version of this document. Companies are invited to enter the contact info in the table below.

# Company views

Please provide any feedback to the draft TR shared in [R1-2210233](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_110b-e/Inbox/R1-2210233.zip) below.

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| --- | --- |
| Company | Comments |
| InterDigital | Thank you very much for capturing and compiling agreements. We may have more comments later but here are some comments related to 6.1.1.* Could we assume that all proposals that are relevant to studies will be removed from the final version of TRP, for example the paragraphs starting with “For timing-based positioning methods, the following error sources are studied:…”.
* Could we assume that error sources with FFS be removed from Table 6.1.1-1 in the final version of TR? These are error sources under the study and only identified error sources should appear in Table 6.1.1-1.
* In Table 6.1.1-2, in the second column first row, could you change “Distribution for error model” to “Candidate(s) for distribution for error source” since more than one distribution were identified as a candidate for some error sources (e.g., inter-TRP sync error)
* Similarly, could you change the heading of Table 6.1.1-2 to “Identified candidates of distributions to model the errors due to different error sources”
* For Table 6.1.1-1, we should differentiate UE-based/assisted DL-TDOA or DL-AoD in the table. For example, for UE-assisted DL-TDOA, RSTD measurement is an error source. For UE-based DL-TDOA, TRP location or inter-TRP sync error are error sources.
* If it helps, in the FL’s summary (R1-2209460 or R1-2210428), Figure 1 illustrated association between error sources, different positioning methods and integrity mode. It can be used instead of Table 6.1.1-1, if the editor prefers.
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