3GPP TSG-RAN WG2 #118-e R2-22xxxxx

Online Meeting, May 9th – May 20th, 2022

Agenda Item: 6.21.2

Source: Ericsson

Title: [Post118-e][601][TEI17] NMEA GGA sentence info (Ericsson)

Document for: Discussion, Decision

# Introduction

This email discussion will discuss the details of the draft CR that was the converging during the at meeting email discussion 628 about adding NMEA GGA sentence info to HA-GNSS reporting:

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| [R2-2206395](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Inbox/R2-2206395.zip) | [AT118-e][628][POS] NMEA GGA string for HA-GNSS reporting | Ericsson |
| [R2-2206444](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Inbox/R2-2206444.zip) | NMEA GGA sentence info in high accuracy GNSS location estimates [HA-GNSS-NMEA] | ESA, Ericsson, Deutsche Telekom, T-Mobile USA, Swift Navigation, Hexagon, MediaTek Inc., u-blox |

based on the following original contribution

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| [R2-2206329](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Inbox/R2-2206329.zip) (revision of R2-2205845) | Remaining details for high-precision GNSS reporting | ESA, Ericsson, Deutsche Telecom, T-Mobile USA, Swift Navigation, Hexagon, MediaTek Inc., u-blox |

* [Post118-e][601][TEI17] NMEA GGA sentence info (Ericsson)

Scope: Review the CR in R2-2206444 and determine what parts are agreeable.

Intended outcome: Agreed CR

With a short deadline, please comments in consideration the deadline ***Thursday 2022-05-26 1800 UTC.***

# Contact Information

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| --- | --- |
| Company | Contact: Name (E-mail) |
| Ericsson | [fredrik.gunnarsson@ericsson.com](mailto:fredrik.gunnarsson@ericsson.com), [ritesh.shreevastav@ericsson.com](mailto:ritesh.shreevastav@ericsson.com) |
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# Discussion

The draft CR [R2-2206444](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Inbox/R2-2206444.zip) is also provided separately as “R2-22xxxxx\_37.355\_CRnnnn\_(Rel-17)” in the drafts folder.

To structure the comments, consider the following questions:

*Question 1. In the email discussion 628 at the meeting, the following companies ESA, Ericsson, Deutsche Telekom, T-Mobile USA, Swift Navigation, Hexagon, MediaTek Inc., u-blox,,Intel, Huawei, HiSilicon, Apple, CATT and vivo expressed support for adding the remaining NMEA GGA information to location information reports. In addition to those companies, do you support the CR*?

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| Company | Comments |
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*Question 2. Comments to the* nrOfUsedSatellites *field of HA-GNSS-Metrics* IE?

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*Question 3. Comments to the* *dilution of precision fields* hdopi *and* pdopi *of HA-GNSS-Metrics* IE?

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*Question 4. Comments to the* age *field of HA-GNSS-Metrics* IE?

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| Company | Comments |
| Ericsson | It seems some GNSS devices in the industry is reporting age in relation to the most recent used high accuracy and some do not provide age information, possibly by considering this only related to DGNSS messages. Therefore, we suggest that this field should be OPTIONAL and the field description changed to  ***age***  This field, if supported by the device, specifies the age of the most recent used assistance data for high accuracy GNSS, scale factor 0.1 second. |
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*Question 5. Comments to the two new location source alternatives* ha-gnss-float *and* ha-gnss-fix *of field LocationSource-r13 in CommonIEsProvideLocationInformation* IE?

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| Company | Comments |
| Ericsson | At this stage, it seems relevant to start by adding the fix and float alternatives that are in use in the GNSS industry today and discuss later if refinements by adding more alternatives would be recommended. |
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*Question 5. Any other comments*?

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# Conclusion

# References

[1] [R2-2206329](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Inbox/R2-2206329.zip) Remaining details for high-precision GNSS reporting, ESA, Ericsson, Deutsche Telecom, T-Mobile USA, Swift Navigation, Hexagon, MediaTek Inc., u-blox

[2] Draft R2-2206444 CR#0349 NMEA GGA sentence info in high accuracy GNSS location estimates [HR-GNSS-NMEA]

[3] Draft R2-2206444 v2 CR#0349 NMEA GGA sentence info in high accuracy GNSS location estimates [HR-GNSS-NMEA]

[4] R2-2206444 CR#0349 NMEA GGA sentence info in high accuracy GNSS location estimates [HA-GNSS-NMEA]