**3GPP TSG-RAN2 Meeting # 110-e *R2-200xxxx***

**Electronic meeting, June 1st –12th, 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **36.305** | **CR** | **0088** | **rev** | **1** | **Current version:** | **16.0.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network |  | Core Network | **x** |

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| ***Title:*** | Update B1I signal ICD file to v3.0 in BDS system in A-GNSS | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CATT, CAICT, Huawei, ZTE Corporation | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2020-6-3 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) Rel-12 (Release 12) Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
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| ***Reason for change:*** | | Update B1I signal ICD file from v2.0 to v3.0 in the network-assisted BDS System, as part of A-GNSS positioning methods in LTE and NR. The modification of B1I ICD, BDS-SIS-ICD-B1I-3.0 includes:  - an increase in the number of satellite vehicles supported,  - Identification of Expanded BDS Integrity and differential correction information (BDEpID)  - the No. of some tables and sections are changed which are the editor modification. | | | | | | | | |
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| ***Summary of change:*** | | 1. ICD specification of B1I signal in BDS is updated to v3.0 in section 2 as reference. | | | | | | | | |
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| ***Consequences if not approved:*** | | The assistance data of B1I signal in A-BDS won’t support the SV-ID larger than 37, but the real satellite system already supports SV-ID more than 37 in B1I signal. | | | | | | | | |
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| ***Clauses affected:*** | | 2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **x** |  | Other core specifications | | | | TS38.305 CR0024  TS37.355 CR0259 | | |
| ***affected:*** | |  | **x** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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| **Start of change** |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document.*

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 23.271: "Functional stage 2 description of Location Services (LCS)"

[3] 3GPP TS 22.071: "Location Services (LCS); Service description, Stage 1".

[4] 3GPP TS 23.032: "Universal Geographical Area Description (GAD)".

[5] 3GPP TS 36.306: "Evolved Universal Terrestrial Radio Access (E-UTRA); "User Equipment (UE) radio access capabilities".

[6] IS-GPS-200, Revision D, Navstar GPS Space Segment/Navigation User Interfaces, March 7th, 2006.

[7] IS-GPS-705, Navstar GPS Space Segment/User Segment L5 Interfaces, September 22, 2005.

[8] IS-GPS-800, Navstar GPS Space Segment/User Segment L1C Interfaces, September 4, 2008.

[9] Galileo OS Signal in Space ICD (OS SIS ICD), Draft 0, Galileo Joint Undertaking, May 23rd, 2006.

[10] Global Navigation Satellite System GLONASS Interface Control Document, Version 5, 2002.

[11] IS-QZSS, Quasi Zenith Satellite System Navigation Service Interface Specifications for QZSS, Ver.1.0, June 17, 2008.

[12] Specification for the Wide Area Augmentation System (WAAS), US Department of Transportation, Federal Aviation Administration, DTFA01-96-C-00025, 2001.

[13] RTCM 10402.3, RTCM Recommended Standards for Differential GNSS Service (v.2.3), August 20, 2001.

[14] 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA); "Radio Resource Control (RRC); Protocol specification".

[15] 3GPP TS 25.331: " Radio Resource Control (RRC); Protocol Specification".

[16] 3GPP TS 44.031: "Location Services (LCS); Mobile Station (MS) - Serving Mobile Location Centre (SMLC) Radio Resource LCS Protocol (RRLP)".

[17] OMA-AD-SUPL-V2\_0: "Secure User Plane Location Architecture Approved Version 2.0".

[18] OMA-TS-ULP-V2\_0\_3: "UserPlane Location Protocol Approved Version 2.0.3".

[19] 3GPP TS 23.401: "General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access".

[20] 3GPP TS 36.214: "Evolved Universal Terrestrial Radio Access (E-UTRA); "Physical layer – Measurements".

[21] 3GPP TS 36.302: "Evolved Universal Terrestrial Radio Access (E-UTRA); "Services provided by the physical layer ".

[22] 3GPP TS 25.305: "Stage 2 functional specification of User Equipment (UE) positioning in UTRAN".

[23] 3GPP TS 43.059: "Functional stage 2 description of Location Services in GERAN".

[24] 3GPP TR 23.891: "Evaluation of LCS Control Plane Solutions for EPS".

[25] 3GPP TS 36.355: "Evolved Universal Terrestrial Radio Access (E-UTRA); LTE Positioning Protocol (LPP)".

[26] 3GPP TS 24.171: "Control Plane Location Services (LCS) procedures in the Evolved Packet System (EPS)".

[27] 3GPP TS 29.171: "Location Services (LCS); LCS Application Protocol (LCS-AP) between the Mobile Management Entity (MME) and Evolved Serving Mobile Location Centre (E-SMLC); SLs interface".

[28] BDS-SIS-ICD-B1I-3.0: "BeiDou Navigation Satellite System Signal In Space Interface Control Document Open Service Signal B1I (Version 3.0)", February, 2019.

[29] IEEE 802.11: "Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications".

[30] Bluetooth Special Interest Group: "Bluetooth Core Specification v4.2", December 2014.

[31] ATIS-0500027: "Recommendations for Establishing Wide Scale Indoor Location Performance", May 2015.

[32] 3GPP TS 36.211: "Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation".

[33] RTCM 10403.3, RTCM Recommended Standards for Differential GNSS Services (v.3.3), October 7, 2016.

[34] BDS-SIS-ICD-B1C-1.0: "BeiDou Navigation Satellite System Signal In Space Interface Control Document Open Service Signal B1C (Version 1.0)", December, 2017.

[35] IRNSS Signal-In-Space (SPS) Interface Control Document (ICD) for standard positioning service version 1.1, August 2017.

[36] IS-QZSS-L6-001, Quasi-Zenith Satellite System Interface Specification – Centimetre Level Augmentation Service, Cabinet Office, November 5, 2018.

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| **The end** |