**3GPP TSG CT WG1 Meeting#123-e** ***C1-202003***

**Electronic meeting, 16-24 April 2020**

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| Meeting documents by agenda item  Meeting: Meeting #123-e  Electronic meeting  16 - 24 April 2020  **All indicated times are CEST** | | | | | | | | | | |
| Cyan background means allocated but not available. | | | | | Yellow background means available but not yet treated document. | Green background means this document was agreed at a revious meeting in this plenary cycle. | | | | White background means that the document has been handled in the meeting and a decision has been made. |
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|  | | Additional Colour coding for Tdocs in the 1st row | | | | | | | | |
|  | | Late Papers | | | | | | | | |
|  | | Easy and uncontroversial papers – can be presented within 2 minutes | | | | | | | | |
|  | | Papers for common sessions | | | | | | | | |
|  | | Low Priority | | | | | | | | |
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| Agenda item | Agenda item title | | Tdoc | Title | | | Source | Spec | Result | |
|  | Opening & welcome | | Tdoc | Title | | | Source | Spec | Result | |
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|  |  | | **IPR Policy** Reminder to Individual Members and the persons making the technical proposals about their obligations under their respective Organizational Partners IPR Policy:    I draw your attention to your obligations under the 3GPP Partner Organizations' IPR policies. Every Individual Member organization is obliged to declare to the Partner Organization or Organizations of which it is a member any IPR owned by the Individual Member or any other organization which is or is likely to become essential to the work of 3GPP. | | | | | | | |
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|  |  | | **Antitrust & Competition** I also draw your attention to the fact that 3GPP acti ities are subject to all applicable antitrust and competition laws and that compliance with said laws is therefore required of any participant of this TSG/WG meeting including the Chairman and Vice Chairman. In case of question I recommend that you contact your legal counsel.  The leadership shall conduct the present meeting with impartiality and in the interests of 3GPP.  Furthermore, I would like to remind you that timely submission of work items in advance of TSG/WG meetings is important to allow for full and fair consideration of such matters. | | | | | | | |
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|  |  | | **Usage if WiFi**  During 3GPP meetings, IT support staff have noticed an increasing amount of RF pollution from private, ad hoc, wireless networks (Wi-Fi Direct, hot-spots hosted on mobile phones, …), and this gives rise to reduced throughput capability of the 3GPP WLAN. I would like to remind delegates to disable all such non-3GPP Wi-Fi networks while they are in the meeting rooms or adjacent areas. This will allow the quality of connection to the 3GPP Wi-Fi network which delegates have a right to expect. | | | | | | | |
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|  |  | | **Statement Regarding Engagement with Companies Added to the**  **U.S. Export Administration Regulations (EAR) Entity List in 3GPP Activities**  1. Public Information is Not Subject to EAR  3GPP is an open platform where all contributions (including technology protected or not by patent) made by the different Individual Members under the membership of each respective Organizational Partner are publicly available. Indeed, contributions by all and any Individual Members are uploaded to a public file server when received and then the documents are effectively in the public domain.  In addition, since membership of email distribution lists is open to all, documents and emails distributed by that means are considered to be publicly available.  As a result, information contained in 3GPP contributions, documents, and emails distributed at 3GPP meetings or by 3GPP email distribution lists, because it is made available to the public without restrictions upon its further dissemination, is not subject to the export restrictions of the EAR.  Meeting minutes are maintained for 3GPP meetings. Such meeting minutes for 3GPP meetings are made available to the public without restrictions upon its further dissemination. As a result, information, including information conveyed orally, contained in 3GPP meetings is not subject to the export restriction of the EAR; this would include information conveyed during side meetings that may occur during the main meetings, if these meetings are open to any participants and the results of all said meetings are publicly available without restrictions upon their further dissemination.  2. Non-Public Information  Non-public information refers to the information not contained or not intended to be contained in 3GPP contributions, documents or emails. Such non-public information may be disclosed during informal meetings, exchanges, discussions or any form of other communication outside the 3GPP meetings and email distribution lists, and may be subject to the EAR.  3. Other Information  Certain encryption software controlled under the International Traffic in Arms Regulations (ITAR), even if publicly available, may still be subject to US export controls other than the EAR.  4. Conduct of Meetings  The situation should be considered as "business as usual" during all the meetings called by 3GPP.  5. Responsibility of Individual Members  It should be remembered that contributions, meetings, exchanges, discussions or any form of other communication in or outside the 3GPP meetings are of the accountability, integrity and the responsibility of each Individual Member. In addition, Individual Members remain responsible for ensuring their compliance with all applicable export control regulations, including but not limited to EAR.  Individual Members with questions regarding the impact of laws and regulations on their participation in 3GPP should contact their companies’ legal counsels. | | | | | | | |
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|  |  | | Please remember:  - to perform the electronic registration before end-of-meeting  - to wear your badge | | | | | | | |
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|  | Agenda & Reports | | Tdoc | Title | | | Source | Doctype | Result & comments | |
|  |  | | C1-202048 | 3GPP TSG CT1#123-e – agenda for Tdoc allocation | | | CT1 chairman | agenda | Revision of C1-202000 | |
|  |  | | C1-202001 | 3GPP TSG CT1#123-e – agenda after Tdoc allocation deadline | | | CT1 chairman | agenda |  | |
|  |  | | C1-202002 | 3GPP TSG CT1#123-e – agenda with proposed LS-actions | | | CT1 chairman | agenda |  | |
|  |  | | C1-202003 | 3GPP TSG CT1#123-e – agenda at start of meeting | | | CT1 chairman | agenda |  | |
|  |  | | C1-202004 | 3GPP TSG CT1#123-e – agenda Thursday (23rd April) evening | | | CT1 chairman | agenda |  | |
|  |  | | C1-202005 | 3GPP TSG CT1#123-e – agenda at end of meeting | | | CT1 chairman | agenda |  | |
|  |  | | [C1-202006](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202006.zip) | draft C1-122e report | | | MCC | report |  | |
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|  |  | | **Agenda**  Start of e-meeting: Thursday 16th April 09:00 CEST  Comment Free Time Thursday 23rd April 12:00-16:00 CEST  Last revision upload: Thursday 23th April 16:00 CEST  Last comments: Friday 24th April 16:00 CEST  Chairman’s report of the meeting: Monday 27th April 12:00 CEST  1 Opening  2 Agenda and Reports  3 work organization  4 incoming LS  **Rel-15:**  15.1.1 all work items ()  15.1.2 all work items (2)  15.1.3 all work items (11+3)  **Rel-16:**    **Agenda Items from 16.2**  16.2.2 SINE\_5G (1)  16.2.3 SAES16 (all aspects) (5)  16.2.4 5GProtoc16 (all aspects) (104)  16.2.5 ATSSS (19)  16.2.6 eNS (44)  16.2.7.x vertical-LAN (74)  16.2.8 5G\_CIoT (41)  16.2.9 5WWC (12)  16.2.11 5G\_eLCS (2)  16.2.14 RACS (1)  16.2.15 5G\_SRVCC (3)  16.2.16 xBDT (0)  16.2.17 IAB-CT (0)  16.2.18 5GS\_OTAF (0)  16.2.19 5G\_URLLC (0)  16.2.21 Rel-16 non-IMS issues (27)  16.2.1 ePWS (1)  16.2.10 PARLOS (3)  16.2.12 V2XAPP (18)  16.2.13 eV2XARC (50)  16.2.20 SEAL (44)  **Agenda Items from 16.3**  16.3.1 MCCI\_CT (1)  16.3.2 MCProtoc16 (14)  16.3.5 MCSMI\_CT (0)  16.3.6 eMCDATA2 (16)  16.3.10 MONASTERY2 (8)  16.3.12 enh2MCPTT-CT (0)  16.3.3 MuD (2)  16.3.4 IMSProtoc16 (1)  16.3.7 E2E\_DELAY (0)  16.3.8 VBCLTE (0)  16.3.11 eIMS5G\_SBA (2)  16.3.13 eIMSVideo (3)  16.3.14 IMS/MC TEI16 (8)  18 outgoing LS | | | | | | | |
|  |  | |  | | | | | | | |
|  | Work organisation | | Tdoc | Title | | | Source | To / CC | Result & comments | |
|  | Meeting schedule | |  |  | | | | | | |
|  |  | |  | CT1 and CT plenary meeting dates. | | | | | | |
|  |  | |  | Date | | | Meeting | | Venue | |
|  |  | |  | *13 – 17 January* | | | [*CT1-Potential Ad-Hoc*](https://portal.etsi.org/webapp/MeetingCalendar/MeetingDetails.asp?m_id=36254) | | *cancelled* | |
|  |  | |  | 16 – 22 January | | | CT1#121bis-e | | Electronic Meeting | |
|  |  | |  | *24 – 28 February* | | | *CT1#122* | | *cancelled* | |
|  |  | |  | 20 – 28 February | | | CT1#122-e | | Electronic Meeting | |
|  |  | |  | 16 – 17 March 2020 | | | CT plenary #87 | | Electronic Meeting | |
|  |  | |  | *20 – 24 April* | | | *CT1#123* | | *Cancelled* | |
|  |  | |  | 16 – 24 April | | | CT1#123-e | | Electronic Meeting | |
|  |  | |  | *25 – 29 May* | | | *CT1#124* | | *F2fF cancelled* | |
|  |  | |  | 29 June – 1 July. 2020 | | | CT plenary #88-e | | Electronic Meeting | |
|  |  | |  | 13 – 17 July | | | [CT1-Potential Ad-Hoc](https://portal.etsi.org/webapp/MeetingCalendar/MeetingDetails.asp?m_id=36254) | | TBD | |
|  |  | |  | 24 – 28 August | | | CT1#125 | | US | |
|  |  | |  | 14 – 15 September 2020 | | | CT plenary #89 | | Funchal, Madeira | |
|  |  | |  | 12 – 16 October | | | CT1#126 | | India | |
|  |  | |  | 16 – 20 November | | | CT1#127 | | US | |
|  |  | |  | 7 – 8 December 2020 | | | CT plenary #90 | | NAF | |
|  |  | |  | 25 – 29 January 2021 | | | CT1#127bis | | tbd | |
|  |  | |  | 01- 05 March 2021 | | | CT1#128 | | tbd | |
|  |  | |  | 22 – 23 March 2021 | | | CT plenary #91 | | US | |
|  |  | |  | 19 – 23 April 2021 | | | CT1#129 | | tbd | |
|  |  | |  | 24 – 28 May 2021 | | | CT1#130 | | tbd | |
|  |  | |  | 14 – 15 June 2021 | | | CT plenary #92 | | Japan | |
|  |  | |  |  | | |  | |  | |
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|  | Work Plan and other adm. issues | | Tdoc | Title | | | Source | Spec / doctype | Result & comments | |
|  |  | | [C1-202007](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202007.zip) | CT1#123-e Electronic Meeting – Process and Scope | | | CT1 chairman | other |  | |
|  |  | | [C1-202051](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202051.zip) | work plan | | | MCC | Work Plan |  | |
|  |  | | [C1-202055](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202055.zip) | Decision making during CT1#123e – electronic show of hands | | | CT1 chairman | other |  | |
|  |  | |  |  | | |  |  |  | |
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|  | Input Liaison statements | | Tdoc | Title | | | Source | To / CC | Result & comments | |
|  |  | | [C1-202033](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202033.zip) | Specification of NAS COUNT for 5G (FSAG Doc 78\_002) | | | GSMA FSAG | To | Proposed Noted  Related CR in C1-202089 | |
|  |  | | [C1-202034](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202034.zip) | Mandatory User Plane Integrity for 5G (FSAG Doc 79\_002) | | | GSMA FSAG | To | Proposed Noted  Wait for SA to conclude | |
|  |  | | [C1-202035](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202035.zip) | LS Reply on QoS mapping procedure for FLUS (C3-201460) | | | CT3 | Cc | Proposed Noted | |
|  |  | | [C1-202036](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202036.zip) | LS on Proposal to transfer the study on service-based support for SMS in 5GC to CT WGs (CP-193301) | | | TSG CT | Cc | Proposed Postponed  Rel-17 | |
|  |  | | [C1-202037](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202037.zip) | LS on MO exception data (C4-201003) | | | CT4 | Cc | Proposed Noted | |
|  |  | | [C1-202038](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202038.zip) | SMS and UDM (C4-201045) | | | CT4 | To | Proposed Noted  Wait on next steps from SA2 on 23.501 | |
|  |  | | [C1-202039](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202039.zip) | LS on the Usage of Version ID (C4-2011218) | | | CT4 | Cc | Proposed Noted | |
|  |  | | [C1-202040](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202040.zip) | Reply LS on Further clarifications on GLI/GCI and Line ID/ HFC\_Identifier (C4-201220) | | | CT4 | Cc | Proposed Noted | |
|  |  | | [C1-202041](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202041.zip) | LS on subscribe/notify for 5G Steering of Roaming (C4-201221) | | | CT4 | To | Proposed tbd  Reply LS in C1-202067 and C1-202151  Related CRs in C1-202068, C1-202069, C1-202152 | |
|  |  | | [C1-202042](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202042.zip) | Clarification on encryption requirements for AGF interfaces (N1, N2, N3) [WWC] (LIAISE-382) | | | Broadband Forum | To | Proposed Noted  No action required from CT1 | |
|  |  | | [C1-202043](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202043.zip) | LS on RRC establishment cause value in EPS voice fallback from NR to E-UTRAN (R2-1916530) | | | RAN2 | To | Proposed Noted  Related CR C1-202269 | |
|  |  | | [C1-202044](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202044.zip) | Reply LS on Rel-16 NB-IoT enhancements (R2-2001815) | | | RAN2 | To | Proposed Noted  CT1 questions on values for UE specific DRX cycle in NB-IoT in C1-201024 are not answered, no consensus in RAN2  Related with incoming LS in C1-202049  Related CRs in [C1-202084](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202084.zip) and [C1-202384](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202384.zip) | |
|  |  | | [C1-202045](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202045.zip) | LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs (R2-2002417) | | | RAN2 | To | Proposed tbd  Reply LS in C1-202012, C1-202103, C1-202180, C1-202240, C1-202359  Disc paper C1-202102, C1-202239, C1-202493, C1-202499,  Related CR C1-202397, C1-202015 | |
|  |  | | [C1-202047](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202047.zip) | Reply LS on assistance indication for WUS (R3-201397) | | | RAN3 | Cc | Proposed Noted  Related with incoming LS in [C1-202058](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202058.zip) | |
|  |  | | [C1-202049](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202049.zip) | Reply LS on Rel-16 NB-IoT enhancements (R3-201417) | | | RAN3 | To | Proposed Noted  Related with incoming LS in C1-202044  Related CRs in [C1-202084](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202084.zip) and [C1-202384](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202384.zip) | |
|  |  | | [C1-202050](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202050.zip) | LS on Questions on onboarding requirements (S1-201087) | | | SA1 | Cc | Proposed Postponed  Rel-17 | |
|  |  | | [C1-202052](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202052.zip) | LS on PLMN selection solutions for satellite access (S2-1912551) | | | SA2 | To | Proposed Postponed  Rel-17 | |
|  |  | | [C1-202053](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202053.zip) | Reply LS on clarification on the requirement for steering of roaming (S2-1912764) | | | SA2 | To | Proposed Noted  Are CRs available to the meeting? | |
|  |  | | [C1-202054](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202054.zip) | Reply LS on Dual-registration requirements for EHPLMNs (S2-2001130) | | | SA2 | To | Proposed tbd  related CR in C1-202136  Is a reply LS available? | |
|  |  | | [C1-202056](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202056.zip) | LS on GSMA NG.116 Attribute Area of service and impact on PLMN selection (S2-2001726) | | | SA2 | To | Proposed Postponed  Rel-17  Related with incoming LS in [C1-202065](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202065.zip) | |
|  |  | | [C1-202057](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202057.zip) | Questions on onboarding requirements (S2-2001729) | | | SA2 | Cc | Proposed Postponed  Rel-17 | |
|  |  | | [C1-202058](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202058.zip) | Reply LS on assistance indication for WUS (S2-2001732) | | | SA2 | To | Proposed Noted  Related with incoming LS in [C1-202047](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202047.zip)  Are CRs available to the meeting? | |
|  |  | | [C1-202059](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202059.zip) | Reply LS on IANA assigned values for mission critical (S3-194603) | | | SA3 | To | Proposed Postponed  Reply LS needed, seems not available | |
|  |  | | [C1-202060](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202060.zip) | Reply LS to LS on native 5G NAS security context activation (S3-200529) | | | SA3 | To | Proposed Noted  Are CRs available? | |
|  |  | | [C1-202061](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202061.zip) | Reply on QoE Measurement Collection (S4-200241) | | | SA4 | To | Proposed Postponed  Are CRs available?  Reply LS needed, seems not availalble | |
|  |  | | [C1-202062](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202062.zip) | LS on RTP/RTCP Verification (S4-200340) | | | SA4 | To | Proposed Postponed  Reply LS needed, seems not available | |
|  |  | | [C1-202063](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202063.zip) | Reply LS to Transfer the study on service-based support for SMS in 5GC to CT WGs (SP-191362) | | | TSG SA | To | Proposed Postponed  Rel-17 | |
|  |  | | [C1-202064](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202064.zip) | Reply LS on support for eCall over NR (SP-200287) | | | TSG SA | To | Proposed Noted  CRs available in C1-202081 and C1-202358 | |
|  |  | | [C1-202065](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202065.zip) | LS reply to SA2 on PLMN Selection (5GJA12\_115r3) | | | GSMA 5G Joint-Activity (5GJA) | To | Proposed Postponed  Rel-17  Related with Incoming LS in [C1-202056](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202056.zip)  No action from CT1 required | |
|  |  | | [C1-202591](http://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202591.zip) | Reply LS on QoS mapping procedure (S4-200690) | | | SA4 |  | Proposed Noted  Wait for CT3 to clarify "a=3gpp-qos-hint" usage  Do we have CRs or DISC paper to the meeting? | |
|  |  | | C1-202597 | LS on Concurrent Broadcasting for CMAS (R3-197749) | | | RAN3 | To | Proposed tbd  Reply LS in C1-202232 and C1-202564  Disc paper in C1-202231 and C1-202565  Related CR in C1-202263  Revision of C1-202046  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  2046 had incomplete tdoc number on the cover sheet | |
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|  | void | |  |  | | |  |  | Release 7 is closed | |
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|  | Release 8  work items | | Tdoc | **NOT PART OF THIS MEETING** | | |  |  |  | |
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|  | Release 9  work items | | Tdoc | **NOT PART OF THIS MEETING** | | |  |  |  | |
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|  | Release 10  work items | | Tdoc | **NOT PART OF THIS MEETING** | | |  |  |  | |
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|  | Release 11  work items | | Tdoc | **NOT PART OF THIS MEETING** | | |  |  |  | |
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|  | Release 12  work items | | Tdoc | **NOT PART OF THIS MEETING** | | |  |  |  | |
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|  | Release 13  work items | | Tdoc | **NOT PART OF THIS MEETING** | | |  |  |  | |
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|  | Release 14  work items | | Tdoc | **NOT PART OF THIS MEETING** | | |  |  |  | |
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|  | Release 15  work items | | Tdoc | Title | | | Source | Tdoc info | Result & comments | |
|  | Rel-15 Mission Critical work items and issues:  eMCVideo-CT  eMCDATA-CT  enhMCPTT-CT  MCProtoc15  MONASTERY  MBMS\_MCservices | |  | Jörgen | | |  |  | All work items complete  Enhancements to Mission Critical Video – CT aspects  Enhancements for Mission Critical Data – CT aspects  Enhancements for Mission Critical Push-to-Talk – CT aspects  Protocol enhancements for Mission Critical Services sion Critical Push-to-Talk – CT aspects  Mobile Communication System for Railways  MBMS usage for mission critical communication services | |
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|  | Rel-15 IMS work items and issues  5GS\_Ph1-IMSo5G  eCNAM-CT  FS\_PC\_VBC (CT3)  IMSProtoc9  bSRVCC\_MT  eSPECTRE  PC\_VBC (CT3)  TEI15 (IMS) | |  | Jörgen | | |  |  | All work items complete  IMS impact due to 5GS IP-CAN  CT aspects of Enhanced Calling Name Service  Study on Policy and Charging for Volume Based Charging  IMS Stage-3 IETF Protocol Alignment for Rel-15  SRVCC for terminating call in pre-alerting phase  Enhancements to Call spoofing functionality Policy and Charging for Volume Based Charging | |
|  |  | | [C1-202584](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202584.zip) | Reference update for PASSporT Extension for Diverted Calls | | | Orange / Mariusz | CR 6416 24.229 Rel-15 |  | |
|  |  | | [C1-202585](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202585.zip) | Reference update for PASSporT Extension for Diverted Calls | | | Orange / Mariusz | CR 6417 24.229 Rel-16 |  | |
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|  | Rel-15 non-IMS/non-MC work items and issues  5GS\_Ph1-CT EDCE5-CT ProSe\_WLAN\_DD\_Stage3 VoWLAN-CT PS\_DATA\_OFF2-CT LTE\_LIGHT\_CON-CT AT\_CIoT-Ext SAES6 INOBEAR-CT TEI15 | |  | Peter | | |  |  | All work items complete  CT aspects on 5G System - Phase 1  EPC enhancements to support 5G New Radio via Dual Connectivity Inclusion of WLAN direct discovery technologies as an alternative for ProSe direct discovery Complementary Features for Voice services over WLAN PS Data Off Phase 2 CT aspects of signalling reduction to enable light connection for LTE AT Commands for CIoT-Ext Stage-3 SAE Protocol Development for Rel-15 Increasing the number of EPS bearers Other Rel-15 non-IMS topics | |
|  |  | | [C1-202032](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202032.zip) | Remove the duplicated cause value for announce request procedure not accepted by the ProSe Function | | | CATT | CR 0328 24.334 Rel-15 |  | |
|  |  | | [C1-202092](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202092.zip) | Correct N3AN node selection due to LI | | | BlackBerry Uk Ltd. | CR 0119 24.502 Rel-15 |  | |
|  |  | | [C1-202093](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202093.zip) | Correct N3AN node selection due to LI | | | BlackBerry Uk Ltd. | CR 0120 24.502 Rel-16 |  | |
|  |  | | [C1-202096](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202096.zip) | Correct EPS SRVCC support indication when registering with 5GS | | | BlackBerry Uk Ltd. | CR 1642 24.501 Rel-15 | Revision of C1-198013  Alternative to C1-202133 (is Rel-16 only) | |
|  |  | | [C1-202097](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202097.zip) | Correct EPS SRVCC support indication when registering with 5GS | | | BlackBerry Uk Ltd. | CR 1643 24.501 Rel-16 | Revision of C1-198014  Alternative to C1-202133 (is Rel-16 only) | |
|  |  | | [C1-202227](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202227.zip) | Adding Unstructured type(non-IP) to encoding of UE policy part type URSP(R15) | | | China Telecom Corporation Ltd. | CR 0074 24.526 Rel-15 |  | |
|  |  | | [C1-202231](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202231.zip) | CWMI use in PWS | | | Ericsson / Mikael | discussion Rel-15 |  | |
|  |  | | [C1-202291](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202291.zip) | Remove USE\_TRANSPORT\_MODE in response | | | ZTE / Joy | CR 0124 24.502 Rel-15 |  | |
|  |  | | [C1-202292](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202292.zip) | Remove USE\_TRANSPORT\_MODE in response | | | ZTE / Joy | CR 0125 24.502 Rel-16 |  | |
|  |  | | [C1-202360](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202360.zip) | Remove SUPI in the form of NSI from stage 2(in R15) | | | China Telecom / Michelle | CR 2127 24.501 Rel-15 |  | |
|  |  | | [C1-202361](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202361.zip) | Remove SUPI in the form of NSI from stage 2(in R15) | | | China Telecommunications | CR 0127 24.502 Rel-15 |  | |
|  |  | | [C1-202507](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202507.zip) | Registration at PLMN change at PLMN-SEARCH substate | | | MediaTek Inc. | CR 2189 24.501 Rel-15 |  | |
|  |  | | [C1-202561](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202561.zip) | handling of ePWS message | | | Samsung/ Kyungjoo Grace Suh | CR 0216 23.041 Rel-15 |  | |
|  |  | | [C1-202565](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202565.zip) | Discussion for concurrent broadcast for CMAS | | | Samsung/ Kyungjoo Grace Suh | discussion 23.041 Rel-15 |  | |
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|  | Release 16  work items | | Tdoc | Title | | | Source | Tdoc info | Result & comments | |
|  | Tdocs on Work Items | |  |  | | |  |  | Papers related to Rel-16 Work Items | |
|  | Work Item Descriptions | |  | Peter - Main | | |  |  | New and revised Work Item Descritpions | |
|  |  | | [C1-202166](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202166.zip) | Revised WID on CT aspects of eV2XARC | | | Huawei, HiSilicon /Christian | WID revised Rel-16 | Revision of CP-200291 | |
|  |  | | [C1-202570](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202570.zip) | Updated WID MONASTERY2 | | | Nokia, Nokia Shanghai Bell | WID revised Rel-16 |  | |
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|  | CRs and Discussion Documents related to new or revised Work Items | |  | Peter - Main | | |  |  | CRs and Disc papers related to new Work Items | |
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|  | Status of other Work Items | |  | Peter - Main | | |  |  | Status information on other relevant Rel-16 Work Items | |
|  |  | | [C1-202424](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202424.zip) | 5G\_CIoT WI workplan | | | Qualcomm Incorporated / Amer | Work Plan Rel-16 |  | |
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|  | Release 16 documents for information | |  | Peter - Main | | |  |  | Miscellaneous documents provided for information | |
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|  | WIs for common and SAE/5G | |  |  | | |  |  | WIs mainly targeted for common sessions or the SAE/5G breakout | |
|  | ePWS | |  | Lena – Main | | |  |  | CT aspects of enhancements of Public Warning System | |
|  |  | | [C1-202563](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202563.zip) | handling of ePWS message | | | Samsung/ Kyungjoo Grace Suh | CR 0217 23.041 Rel-16 | Peter S., Thursday, 13:02  You propose to add this sentence:  The Concurrent Warning Message Indicator IE is required based on requirements of some operators or regulations of some countries.  It is a government that chooses ETWS or CMAS (or any equivalent such as EU-Alert of KPAS) and then CWMI follows from that choice: If ETWS is chosen then CWMI is never present; if CMAS is chosen then CWMI is always present.  Hence, the proposed text doesn't help and I can't agree with this CR.  I would be okay with some clarification in clause 9.3.32 on CWMI, that clarifies that CWMI is always present in CMAS.  Lazaros, Thursday, 16:31   1. We do not agree with the added statement. CWM is used by RAN3 so as to be able to differentiate between ETWS and CMAS, so it has to be included in CMAS.   Please see also the [discussion](https://www.3gpp.org/ftp/meetings_3gpp_sync/RAN3/Docs/R3-197494.zip) that happened in RAN3 back in time .   1. Some clarification could be added, e.g. via a NOTE.   Lena, Thursday, 16:41   * The title and WIC on the CR coversheet talk about ePWS but the actual changes seems to be about concurrent message warning * The added text adds no value   Grace, Friday, 2:14  if group do not think this is not for the FASMO,  I would likt to not to make any change for release 15. However, as Peter Sanders and Lazaros pointed out, we might need some clarification for the release 16.  So the correction will be on the mirror CR which is C1-202563. Therefore, I will make revision for release 16 and the work item will be TEI 16 as chairman suggested. | |
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|  | SINE\_5G | |  | Peter – Main | | |  |  | Signalling Improvements for Network Efficiency in 5GS  100% | |
|  |  | | [C1-202581](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202581.zip) | Handling of PDU session authentication | | | Samsung / Kyungjoo Grace Suh | CR 2210 24.501 Rel-16 |  | |
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|  | SAES16 WIs | |  | Peter – Main | | |  |  | Stage-3 SAE protocol pevelopment for Rel-16  100% | |
|  | SAES16 | |  | Peter – Main | | |  |  | General Stage-3 SAE protocol development | |
|  |  | | [C1-202515](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202515.zip) | Correction of EMM initiated TAU procedure in EMM-REGISTERED.ATTEMPTING-TO-UPDATE-MM | | | MediaTek Inc. | CR 3366 24.301 Rel-16 |  | |
|  |  | | [C1-202516](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202516.zip) | Correction to Handling of MO CSFB Emergency call in EMM-REGISTERED.ATTEMPTING-TO-UPDATE-MM | | | MediaTek Inc. | CR 3367 24.301 Rel-16 |  | |
|  |  | | [C1-202517](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202517.zip) | Correction to Handling of #31 | | | MediaTek Inc. | CR 3368 24.301 Rel-16 |  | |
|  |  | | [C1-202519](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202519.zip) | Correction to Handling of #35 | | | MediaTek Inc. | CR 3369 24.301 Rel-16 |  | |
|  |  | | [C1-202542](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202542.zip) | Error handling of precedence value conflict | | | MediaTek Inc. / JJ | CR 3372 24.301 Rel-16 |  | |
|  |  | | [C1-202127](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202127.zip) | Consistent usage of "tracking area updating procedure" | | | Samsung Electronics Polska | CR 3341 24.301 Rel-16 | Shifted from 16.2.21 | |
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|  | SAES16-CSFB | |  | Peter – Main | | |  |  | Stage-3 SAE protocol development related to Circuit Switched Fall Back | |
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|  | SAES16-non3GPP | |  | Peter – Main | | |  |  | Stage-3 SAE protocol development related to non-3GPP access | |
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|  | 5GProtoc16 WIs | |  | Peter – Main | | |  |  | Stage-3 5GS NAS protocol development for Rel-16 | |
|  | 5GProtoc16 | |  |  | | |  |  | General Stage-3 5GS NAS protocol development | |
|  |  | | [C1-202144](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202144.zip) | Clarification on URSP in EPS | | | ZTE / Joy | CR 0073 24.526 Rel-16 |  | |
|  |  | | [C1-202524](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202524.zip) | Handling of allowed NSSAI when the RA includes the TAI belonging to EPLMN | | | SHARP | CR 2198 24.501 Rel-16 |  | |
|  |  | | [C1-202527](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202527.zip) | UE initiating service request over non-3GPP access after stopping T3346 | | | SHARP | CR 2201 24.501 Rel-16 |  | |
|  |  | | [C1-202530](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202530.zip) | Discussion on S-NSSAI based congestion control | | | MediaTek Inc., Qualcomm Incoporated. / JJ | discussion Rel-16 |  | |
|  |  | | [C1-202534](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202534.zip) | Discussion on support of QoS rules/QoS flow descriptions with the length of two octets | | | MediaTek Inc. / JJ | discussion Rel-16 |  | |
|  |  | | [C1-202535](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202535.zip) | Indicate support of ePCO length of two octets parameter when establishing the PDU session – Alt#2 | | | MediaTek Inc. / JJ | CR 2204 24.501 Rel-16 |  | |
|  |  | | [C1-202536](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202536.zip) | Indicate support of ePCO length of two octets parameter in the bearer resource modification procedure – Alt#3 | | | MediaTek Inc. / JJ | CR 3371 24.301 Rel-16 |  | |
|  |  | | [C1-202537](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202537.zip) | Unsupported 5QI values | | | MediaTek Inc. / JJ | CR 0686 27.007 Rel-16 |  | |
|  |  | | [C1-202538](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202538.zip) | Addition of 5GSM cause #59 | | | MediaTek Inc. / JJ | CR 2205 24.501 Rel-16 |  | |
|  |  | | [C1-202541](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202541.zip) | Correction to the URSP coding | | | MediaTek Inc., ZTE / JJ | CR 0068 24.526 Rel-16 | Revision of C1-198970 | |
|  |  | | [C1-202175](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202175.zip) | No allowed NSSAI associated with a registration area | | | vivo | CR 2061 24.501 Rel-16 |  | |
|  |  | | C1-202016 | Manual CAG selection | | | Ericsson / Ivo | CR 0501 23.122 Rel-16 | Withdrawn  Not available on time  Revision of C1-200732 | |
|  |  | | [C1-202017](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202017.zip) | Correction for SoR-AF | | | Ericsson / Ivo | CR 0481 23.122 Rel-16 | Revision of C1-200064 | |
|  |  | | [C1-202068](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202068.zip) | SoR in HPLMN after registration | | | Orange, Ericsson / Mariusz | CR 0508 23.122 Rel-16 | Releated CR in C1-202152 | |
|  |  | | [C1-202069](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202069.zip) | Modification of exchanges between SOR-AF and UDM | | | Orange, Ericsson / Mariusz | CR 0509 23.122 Rel-16 | Releated CR in C1-202152 | |
|  |  | | [C1-202152](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202152.zip) | Correcting the parameter "RAT type" for SOR-AF | | | DOCOMO Communications Lab. | CR 0515 23.122 Rel-16 | Releated CRs in C1-202068, C1-202069 | |
|  |  | | [C1-202070](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202070.zip) | OTAF renamed to SP-AF | | | Orange / Mariusz | CR 0510 23.122 Rel-16 |  | |
|  |  | | [C1-202071](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202071.zip) | Reference correction in URSP encoding | | | Orange / Mariusz | CR 0071 24.526 Rel-16 |  | |
|  |  | | [C1-202073](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202073.zip) | Removal of Duplicate Service Operation Details | | | one2many | CR 0207 23.041 Rel-16 | Revision of C1-200308 | |
|  |  | | [C1-202074](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202074.zip) | Correction to figure | | | one2many B.V. | CR 0212 23.041 Rel-16 |  | |
|  |  | | [C1-202075](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202075.zip) | Corrections to references | | | one2many B.V. | CR 0213 23.041 Rel-16 |  | |
|  |  | | [C1-202076](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202076.zip) | Subscription management in PWS-IWF | | | one2many B.V. | CR 0214 23.041 Rel-16 |  | |
|  |  | | [C1-202089](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202089.zip) | Clarification of NAS COUNT handling in 5G | | | Vodafone GmbH | CR 2036 24.501 Rel-16 |  | |
|  |  | | [C1-202098](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202098.zip) | Correcting order in which connections/sessions are transferred if there is an emergency call | | | BlackBerry Uk Ltd. | CR 1782 24.501 Rel-16 | Revision of C1-200115 | |
|  |  | | [C1-202100](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202100.zip) | Clarification on use of operator-defined access categories | | | Qualcomm Incorporated, Ericsson, Nokia, Nokia Shanghai Bell / Lena | CR 1795 24.501 Rel-16 | Revision of C1ah-200149 | |
|  |  | | [C1-202101](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202101.zip) | Clarification on DL only match-all packet filter | | | Qualcomm Incorporated / Lena | CR 2037 24.501 Rel-16 |  | |
|  |  | | [C1-202110](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202110.zip) | Adding Unstructured type(non-IP) to encoding of UE policy part type URSP | | | China Telecom Corporation Ltd. | CR 0072 24.526 Rel-16 |  | |
|  |  | | [C1-202128](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202128.zip) | Correction of the handling of timer TG | | | Apple, Qualcomm Incorporated, T-Mobile USA | CR 0513 23.122 Rel-16 |  | |
|  |  | | [C1-202129](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202129.zip) | Correction of the handling of 5GMM cause #27 | | | Apple, Qualcomm Incorporated, T-Mobile USA | CR 2047 24.501 Rel-16 |  | |
|  |  | | [C1-202136](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202136.zip) | Dual-registration requirements for EHPLMNs | | | Intel, Qualcomm Incorporated / Vivek | CR 1974 24.501 Rel-16 | Revision of C1-200620 | |
|  |  | | [C1-202141](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202141.zip) | Additional condition to start T3540 | | | Samsung/Anikethan | CR 2050 24.501 Rel-16 |  | |
|  |  | | [C1-202145](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202145.zip) | Specify UE behaviour for NOTIFICATION message for additional state/sub-states | | | Samsung/Anikethan | CR 2051 24.501 Rel-16 |  | |
|  |  | | [C1-202146](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202146.zip) | Additional abnormal case handling for NOTIFICATION message | | | Samsung/Anikethan | CR 1791 24.501 Rel-16 | Revision of C1ah-200199 | |
|  |  | | [C1-202149](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202149.zip) | Restricting handling of cause #9 to the access on which it was received | | | Samsung/Anikethan | CR 1792 24.501 Rel-16 | Revision of C1ah-200031 | |
|  |  | | [C1-202153](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202153.zip) | Correcting the case when the AMF does not need to provide SOR-info to the UE | | | DOCOMO Communications Lab. | CR 0516 23.122 Rel-16 |  | |
|  |  | | [C1-202158](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202158.zip) | Adding new IMSDoPS indication bits in “EPS network feature support” IE for network to indicate support for “IMS Data over PS” services | | | MediaTek Inc., Apple | CR 2054 24.501 Rel-16 |  | |
|  |  | | [C1-202200](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202200.zip) | storage of counters for UE in PLMN | | | vivo | CR 2071 24.501 Rel-16 |  | |
|  |  | | [C1-202201](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202201.zip) | Clarification of the figure of registration procedure | | | vivo | CR 2072 24.501 Rel-16 |  | |
|  |  | | [C1-202203](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202203.zip) | Addition of Test Flag | | | one2many B.V. | CR 0215 23.041 Rel-16 |  | |
|  |  | | [C1-202218](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202218.zip) | Editorial corrections | | | Ericsson / Mikael | CR 2074 24.501 Rel-16 |  | |
|  |  | | [C1-202219](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202219.zip) | UAC for MO-IMS registration related signalling EN resolution | | | NTT DOCOMO INC. | CR 6413 24.229 Rel-16 | Revision of C1-200684 | |
|  |  | | C1-202228 | Possible KSI types in EPS | | | Ericsson / Mikael | CR 2076 24.501 Rel-16 | Withdrawn | |
|  |  | | [C1-202229](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202229.zip) | Possible KSI types in EPS | | | Ericsson / Mikael | CR 3346 24.301 Rel-16 |  | |
|  |  | | [C1-202244](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202244.zip) | Notification over non-3GPP access when UE is deregistered over 3GPP access | | | Ericsson /kaj | CR 2082 24.501 Rel-16 |  | |
|  |  | | [C1-202254](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202254.zip) | No available S-NSSAIs at handover with emergency PDU session established | | | Ericsson /kaj | discussion Rel-16 |  | |
|  |  | | [C1-202255](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202255.zip) | No available S-NSSAIs and emergency PDU session at handover | | | Ericsson /kaj | CR 2088 24.501 Rel-16 |  | |
|  |  | | [C1-202268](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202268.zip) | Add handling for parameter set to “value is not used” in 5GS | | | Qualcomm Incorporated | CR 2093 24.501 Rel-16 |  | |
|  |  | | [C1-202272](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202272.zip) | Correct parameters included by AMF during inter-system change from S1 mode to N1 mode in 5GMM-CONNECTED mode | | | Qualcomm Incorporated | CR 2095 24.501 Rel-16 |  | |
|  |  | | [C1-202275](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202275.zip) | Remove invalid cases in error handling for QoS rule operation and TFT operation | | | Qualcomm Incorporated | CR 2096 24.501 Rel-16 |  | |
|  |  | | [C1-202276](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202276.zip) | Clarify PAP/CHAP usage in PCO for 5GS | | | Qualcomm Incorporated | CR 3215 24.008 Rel-16 |  | |
|  |  | | C1-202277 | Add handling for UE configured to use timer T3245 in 5GS via 3GPP access | | | Qualcomm Incorporated | CR 2097 24.501 Rel-16 | Withdrawn | |
|  |  | | [C1-202278](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202278.zip) | Add handling for UE configured to use timer T3245 in 5GS via 3GPP access | | | Qualcomm Incorporated | CR 1803 24.501 Rel-16 | Revision of C1ah-200178 | |
|  |  | | [C1-202280](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202280.zip) | Applicable URSP is not optional for a UE | | | Motorola Mobility, Lenovo | CR 2098 24.501 Rel-16 |  | |
|  |  | | [C1-202285](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202285.zip) | Additional QoS error handling related to mapped EBI | | | Qualcomm Incorporated / Lena | CR 2101 24.501 Rel-16 |  | |
|  |  | | [C1-202289](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202289.zip) | PS Data Off status report for non-3GPP access | | | LG Electronics, Ericsson / SangMin | CR 2102 24.501 Rel-16 | Partially overlaps with C1-202120 | |
|  |  | | [C1-202295](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202295.zip) | Unify terms network-initiated and network-requested | | | Huawei, HiSilicon / Cristina | CR 2103 24.501 Rel-16 |  | |
|  |  | | [C1-202324](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202324.zip) | NW triggered SR over N3GPP under MM congestion control | | | OPPO / Rae | CR 2104 24.501 Rel-16 |  | |
|  |  | | [C1-202325](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202325.zip) | Initiate 3GPP access associated notification procedure over non-3GPP access | | | Huawei, HiSilicon / Cristina | CR 2105 24.501 Rel-16 |  | |
|  |  | | [C1-202331](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202331.zip) | Consider PDU session type IE set by UE in IP address allocation | | | Huawei, HiSilicon / Cristina | CR 2110 24.501 Rel-16 |  | |
|  |  | | C1-202339 | Add MFBR as mandatory parameter in GBR QoS flow | | | Huawei, HiSilicon / Cristina | CR 2116 24.501 Rel-16 | Withdrawn | |
|  |  | | C1-202341 | Add MFBR as mandatory parameter in GBR QoS flow | | | Huawei, HiSilicon / Cristina | CR 2117 24.501 Rel-16 | Withdrawn | |
|  |  | | [C1-202342](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202342.zip) | Fixing a reference in the service request procedure | | | BEIJING SAMSUNG TELECOM R&D | CR 2118 24.501 Rel-16 |  | |
|  |  | | C1-202343 | Add MFBR as mandatory parameter in GBR QoS flow | | | Huawei, HiSilicon / Cristina | CR 2119 24.501 Rel-16 | Withdrawn | |
|  |  | | [C1-202344](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202344.zip) | Add MFBR as mandatory parameter in GBR QoS flow | | | Huawei, HiSilicon / Cristina | CR 2120 24.501 Rel-16 |  | |
|  |  | | [C1-202347](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202347.zip) | Correcting length of extended emergency number list IE | | | Huawei, HiSilicon / Cristina | CR 3352 24.301 Rel-16 |  | |
|  |  | | [C1-202348](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202348.zip) | Initial registration for initiating emergency PDU session | | | Huawei, HiSilicon / Cristina | CR 2121 24.501 Rel-16 |  | |
|  |  | | [C1-202349](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202349.zip) | Missing QoS flow description parameters for GBR QoS flows in 5GSM and ESM coordination | | | Huawei, HiSilicon / Cristina | CR 2122 24.501 Rel-16 |  | |
|  |  | | [C1-202358](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202358.zip) | Support for eCall over IMS over NR | | | Huawei, HiSilicon / Cristina | CR 0521 23.122 Rel-16 |  | |
|  |  | | [C1-202375](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202375.zip) | Initial NAS message protection on inter-system change from EPS to 5GS | | | Samsung/Kundan | CR 2136 24.501 Rel-16 |  | |
|  |  | | [C1-202376](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202376.zip) | Handling of MCS data in various 5GMM states | | | Samsung | CR 1415 24.501 Rel-16 | Revision of C1-194530 | |
|  |  | | [C1-202377](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202377.zip) | No messages without integrity protection processed after security activation | | | Nokia, Nokia Shanghai Bell | CR 2137 24.501 Rel-16 |  | |
|  |  | | [C1-202378](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202378.zip) | Clarification on the AMF behaviour after security activation in case of integrity check failure | | | Nokia, Nokia Shanghai Bell | CR 2138 24.501 Rel-16 |  | |
|  |  | | [C1-202379](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202379.zip) | Discarding a SECURITY MODE COMMAND message which fails integrity check | | | Nokia, Nokia Shanghai Bell | CR 2139 24.501 Rel-16 |  | |
|  |  | | [C1-202380](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202380.zip) | Initiation of ESFB by a UE in the state 5GMM-REGISTERED.ATTEMPTING-REGISTRATION-UPDATE | | | Nokia, Nokia Shanghai Bell | CR 2140 24.501 Rel-16 |  | |
|  |  | | [C1-202381](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202381.zip) | No emergency session transfer after ESFB | | | Nokia, Nokia Shanghai Bell | CR 2141 24.501 Rel-16 |  | |
|  |  | | [C1-202382](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202382.zip) | Indication that the emergency services fallback attempt failed | | | Nokia, Nokia Shanghai Bell | CR 2142 24.501 Rel-16 |  | |
|  |  | | [C1-202390](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202390.zip) | Inclusion of ATTACH REQUEST message in REGISTRATION REQUEST message during initial registration when 5G-GUTI mapped from 4G-GUTI is used | | | Nokia, Nokia Shanghai Bell, Ericsson, Qualcomm Incorporated | CR 0793 24.501 Rel-16 | Revision of C1ah-200179 | |
|  |  | | [C1-202391](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202391.zip) | Attach request message for N1 mode | | | Nokia, Nokia Shanghai Bell, Ericsson | CR 3150 24.301 Rel-16 | Revision of C1ah-200180 | |
|  |  | | [C1-202392](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202392.zip) | Paging with two valid 5G-GUTIs | | | Nokia, Nokia Shanghai Bell | CR 1841 24.501 Rel-16 | Revision of C1ah-200213 | |
|  |  | | [C1-202394](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202394.zip) | PDU session release for an inactive UE with RAN paging failure | | | Nokia, Nokia Shanghai Bell | CR 1833 24.501 Rel-16 | Revision of C1ah-200089 | |
|  |  | | C1-202417 | Handling of correction to UE configuration update procedure conditions for re-registration | | | LG Electronics France | CR 2160 24.501 Rel-16 | Withdrawn  Not available on time | |
|  |  | | [C1-202418](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202418.zip) | Correction to conditions for including the S-NSSAI(s) from default NSSAI in the requested NSSAI | | | Qualcomm Incorporated / Amer | CR 2161 24.501 Rel-16 |  | |
|  |  | | [C1-202420](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202420.zip) | Definition of current PLMN and serving PLMN | | | Qualcomm Incorporated / Amer | CR 2163 24.501 Rel-16 |  | |
|  |  | | [C1-202436](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202436.zip) | Discussion on the selected EPS NAS security algorithms | | | BEIJING SAMSUNG TELECOM R&D | discussion |  | |
|  |  | | [C1-202437](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202437.zip) | Condition for setting the Selected EPS NAS algorithm IE to NULL | | | BEIJING SAMSUNG TELECOM R&D | CR 2171 24.501 Rel-16 |  | |
|  |  | | [C1-202476](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202476.zip) | Corrections on the abnormal cases of registration procedure for initial registration | | | Huawei, HiSilicon/Lin | CR 1379 24.501 Rel-16 | Revision of C1-199032 | |
|  |  | | [C1-202477](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202477.zip) | Correction on UE behaviour for service area restriction | | | Huawei, HiSilicon/Lin | CR 1823 24.501 Rel-16 | Revision of C1ah-200161 | |
|  |  | | [C1-202478](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202478.zip) | Single-registration mode without N26 | | | Huawei, HiSilicon/Lin | CR 2182 24.501 Rel-16 |  | |
|  |  | | [C1-202479](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202479.zip) | Single-registration mode without N26 | | | Huawei, HiSilicon/Lin | CR 3358 24.301 Rel-16 |  | |
|  |  | | [C1-202480](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202480.zip) | Service reject for emergency EPS fallback | | | Huawei, HiSilicon/Lin | CR 3359 24.301 Rel-16 | Withdrawn  Used CR number against 24.301 although targeted for 24.501 | |
|  |  | | [C1-202592](http://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202592.zip) | Service reject for emergency EPS fallback | | | Huawei, HiSilicon/Lin | CR 2213 24.501 Rel-16 |  | |
|  |  | | [C1-202481](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202481.zip) | Handling of mapped EPS bearer contexts | | | Huawei, HiSilicon/Lin | CR 3360 24.301 Rel-16 | Withdrawn  Used CR number against 24.301 although targeted for 24.501 | |
|  |  | | [C1-202593](http://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202593.zip) | Handling of mapped EPS bearer contexts | | | Huawei, HiSilicon/Lin | CR 2214 24.501 Rel-16 |  | |
|  |  | | [C1-202482](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202482.zip) | Integrity check interworking in 5GMM-CONNECTED mode | | | Huawei, HiSilicon/Lin | CR 3361 24.301 Rel-16 | Withdrawn  Used CR number against 24.301 although targeted for 24.501 | |
|  |  | | [C1-202594](http://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202594.zip) | Integrity check interworking in 5GMM-CONNECTED mode | | | Huawei, HiSilicon/Lin | CR 2215 24.501 Rel-16 |  | |
|  |  | | [C1-202483](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202483.zip) | Correction on LADN DNN based congestion control | | | Huawei, HiSilicon/Lin | CR 3362 24.301 Rel-16 | Withdrawn  Used CR number against 24.301 although targeted for 24.501 | |
|  |  | | [C1-202595](http://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202595.zip) | Correction on LADN DNN based congestion control | | | Huawei, HiSilicon/Lin | CR 2216 24.501 Rel-16 |  | |
|  |  | | [C1-202491](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202491.zip) | Allowed SSC mode for association between an application and a PDU session | | | OPPO / Rae | CR 0075 24.526 Rel-16 |  | |
|  |  | | [C1-202492](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202492.zip) | Handling of unallowed SSC mode | | | OPPO / Rae | CR 2183 24.501 Rel-16 |  | |
|  |  | | [C1-202501](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202501.zip) | UAC exception for emergency | | | MediaTek Inc. | CR 2184 24.501 Rel-16 |  | |
|  |  | | [C1-202503](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202503.zip) | MRU after SR for ESFB aborted | | | MediaTek Inc. | CR 2185 24.501 Rel-16 |  | |
|  |  | | [C1-202504](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202504.zip) | MRU failed due to RRC signalling connection release in restricted service area | | | MediaTek Inc. | CR 2186 24.501 Rel-16 |  | |
|  |  | | [C1-202505](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202505.zip) | Correction to criteria to enter 5GMM-REGISTERED.UPDATE-NEEDED substate after resumption failure | | | MediaTek Inc. | CR 2187 24.501 Rel-16 |  | |
|  |  | | [C1-202508](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202508.zip) | T3346 handling when the UE is registered to different PLMNs over 3GPP and non-3GPP | | | MediaTek Inc. | CR 2190 24.501 Rel-16 |  | |
|  |  | | [C1-202509](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202509.zip) | Correction to 5G-GUTI handling when received at REGISTRATION ACCEPT | | | MediaTek Inc. | CR 2191 24.501 Rel-16 |  | |
|  |  | | [C1-202510](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202510.zip) | Correcting that 5G NAS integrity key is one of the input parameters for integrity protection algorithm | | | MediaTek Inc. | CR 2192 24.501 Rel-16 |  | |
|  |  | | [C1-202514](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202514.zip) | Correction to Handling of T3521 timer | | | MediaTek Inc. | CR 2193 24.501 Rel-16 |  | |
|  |  | | [C1-202518](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202518.zip) | Correction to Handling of #31 | | | MediaTek Inc. | CR 2194 24.501 Rel-16 |  | |
|  |  | | [C1-202523](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202523.zip) | De-registration before initial registration for Emergency Services | | | MediaTek Inc. | CR 2197 24.501 Rel-16 |  | |
|  |  | | [C1-202525](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202525.zip) | Handling of rejected NSSAI for the current RA when the RA includes the TAI belonging to EPLMN | | | SHARP | CR 2199 24.501 Rel-16 |  | |
|  |  | | [C1-202526](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202526.zip) | Correction to deletion of Allowed NSSAI | | | Huawei, HiSilicon / Vishnu | CR 2200 24.501 Rel-16 |  | |
|  |  | | [C1-202528](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202528.zip) | UE behaviour when the UE receives the rejected NSSAI for the current RA in the registration reject message and the RA is not stored | | | SHARP | CR 2202 24.501 Rel-16 |  | |
|  |  | | C1-202583 | Security handling | | | Samsung/ Kyungjo Grace Suh | CR 2211 24.501 Rel-16 | Withdrawn | |
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|  | 5GProtoc16-non3GPP | |  | Peter – Main | | |  |  | Stage-3 5GS NAS protocol development related to non-3GPP access | |
|  |  | | [C1-202279](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202279.zip) | Add handling for UE configured to use timer T3245 in 5GS for non-3GPP access | | | Qualcomm Incorporated | CR 0121 24.502 Rel-16 |  | |
|  |  | | [C1-202578](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202578.zip) | Extending congestion notification to capture ePDG overload | | | Nokia, Nokia Shanghai Bell, Charter Communications | CR 0718 24.302 Rel-16 |  | |
|  |  | | [C1-202579](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202579.zip) | Extending congestion notification to capture N3IWF or TNGF overload | | | Nokia, Nokia Shanghai Bell, Charter Communications | CR 0130 24.502 Rel-16 |  | |
|  |  | | [C1-202580](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202580.zip) | Enable N3IWF to initiate TCP connection establishment upon failure | | | Nokia, Nokia Shanghai Bell | CR 0131 24.502 Rel-16 |  | |
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|  | ATSSS | |  | Peter – Main | | |  |  | CT aspects of Access Traffic Steering, Switch and Splitting support in 5G system  Is TS 24.193 sufficiently stable to be sent to CT#88 for approval? | |
|  |  | | [C1-202009](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202009.zip) | EPS interworking of MA PDU session of 5G-RG when N26 is not supported | | | Ericsson / Ivo | CR 2027 24.501 Rel-16 |  | |
|  |  | | [C1-202019](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202019.zip) | Performance management function protocol | | | Ericsson / Ivo | pCR 24.193 Rel-16 | Revision of C1-200314 | |
|  |  | | [C1-202021](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202021.zip) | Comparison of solutions for performance measurement function (PMF) protocol | | | Ericsson / Ivo | discussion Rel-16 | Revision of C1-200313 | |
|  |  | | [C1-202031](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202031.zip) | EPS interworking of MA PDU session of 5G-RG when N26 is supported | | | Ericsson / Ivo | CR 2029 24.501 Rel-16 |  | |
|  |  | | [C1-202120](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202120.zip) | Applicability of PS data off to MA PDU | | | OPPO / Rae | CR 2042 24.501 Rel-16 | Partially overlaps with C1-202289 | |
|  |  | | [C1-202142](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202142.zip) | Correction on network steering functionalities information | | | ZTE / Joy | pCR 24.193 Rel-16 |  | |
|  |  | | [C1-202143](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202143.zip) | Correction on EPS interworking | | | ZTE / Joy | pCR 24.193 Rel-16 |  | |
|  |  | | [C1-202266](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202266.zip) | ATSSS Performance Measurement Function Protocols and Procedures | | | Apple, Deutsche Telekom, Charter Communications, Ruckus, Commscope | pCR 24.193 Rel-16 | Revision of C1-200655 | |
|  |  | | [C1-202294](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202294.zip) | Discussion on handling of clause 5.2 in TS 24.193 | | | ZTE / Joy | discussion Rel-16 |  | |
|  |  | | [C1-202371](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202371.zip) | Clarification of UE behavior on receiving ATSSS support indicator | | | SHARP | CR 2133 24.501 Rel-16 |  | |
|  |  | | [C1-202372](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202372.zip) | Clarification of SMF and UE behavior in 5GS to EPS mobility without N26 interface | | | SHARP | pCR 24.193 Rel-16 |  | |
|  |  | | [C1-202431](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202431.zip) | Editorial fix in 9.11.4 | | | Apple | CR 2169 24.501 Rel-16 |  | |
|  |  | | [C1-202531](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202531.zip) | Handlings of MA PDU session when deregistration from an access | | | MediaTek Inc. / JJ | CR 2203 24.501 Rel-16 |  | |
|  |  | | [C1-202532](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202532.zip) | Considering allowed NSSAI when requesting MA PDU session upgrade | | | MediaTek Inc. / JJ | pCR 24.193 Rel-16 |  | |
|  |  | | [C1-202533](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202533.zip) | Correction to the steering modes | | | MediaTek Inc. / JJ | pCR 24.193 Rel-16 |  | |
|  |  | | [C1-202575](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202575.zip) | PMF protocol alternatives analysis | | | Nokia, Nokia Shanghai Bell | discussion Rel-16 |  | |
|  |  | | C1-202576 | Minor clarification for ATSSS-LL support | | | Nokia, Nokia Shanghai Bell | CR 2209 24.501 Rel-16 | Withdrawn | |
|  |  | | C1-202577 | Clarification on MAI | | | Nokia, Nokia Shanghai Bell | pCR 24.193 Rel-16 | Withdrawn | |
|  |  | | [C1-202582](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202582.zip) | Service Request for Multiple access PDU session | | | Samsung / Kyungjoo Grace Suh | pCR 24.193 Rel-16 |  | |
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|  | eNS | |  | Peter – Main | | |  |  | CT aspects on enhancement of network slicing | |
|  |  | | [C1-202111](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202111.zip) | Clarification S-NSSAI status in AMF for NSSAA | | | China Telecom Corporation Ltd. | CR 2038 24.501 Rel-16 | Overlaps with C1-202454 | |
|  |  | | [C1-202112](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202112.zip) | Update description on whether UE indicate supporting NSSAA | | | China Telecom Corporation Ltd. | CR 2039 24.501 Rel-16 |  | |
|  |  | | [C1-202113](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202113.zip) | Pending NSSAI update for the configured NSSAI in the CUC message | | | China Telecom Corporation Ltd. | CR 2040 24.501 Rel-16 |  | |
|  |  | | [C1-202114](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202114.zip) | Adding the referenced subclause 4.6.2.2 for the UE stored Pending NSSAI. | | | China Telecom Corporation Ltd. | CR 2041 24.501 Rel-16 |  | |
|  |  | | [C1-202121](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202121.zip) | Missing condition for inclusion of “NSSAA to be performed” indicator | | | Samsung Electronics Polska | CR 2043 24.501 Rel-16 |  | |
|  |  | | [C1-202122](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202122.zip) | AMF triggers PDU session release | | | Samsung Electronics Polska | CR 2044 24.501 Rel-16 |  | |
|  |  | | [C1-202123](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202123.zip) | Allowed NSSAI was formed from contents of the requested NSSAI and all default S-NSSAI(s) require network slice-specific authentication and authorisation | | | Samsung Electronics Polska | discussion | EN#11 & Task #4  See also C1-202123, 2124,2243, 2252 | |
|  |  | | [C1-202124](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202124.zip) | All default S-NSSAI(s) require network slice-specific authentication and authorisation (solution 1) | | | Samsung Electronics Polska | CR 2045 24.501 Rel-16 | EN#11 & Task #4  See also C1-202123, 2124,2243, 2252 | |
|  |  | | [C1-202134](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202134.zip) | Stopping of T3346 after receiving the NSSA Command message | | | BEIJING SAMSUNG TELECOM R&D | CR 2049 24.501 Rel-16 |  | |
|  |  | | [C1-202150](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202150.zip) | Inclusion of Rejected NSSAI in Registration reject with cause #62 | | | Samsung/Anikethan | CR 2052 24.501 Rel-16 |  | |
|  |  | | [C1-202157](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202157.zip) | Clarification on the rejected S-NSSAI included in requested NSSAI in registration procedure. | | | China Telecom Corporation Ltd. | CR 2053 24.501 Rel-16 |  | |
|  |  | | [C1-202170](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202170.zip) | The handling of N1 SM information during re-authentication and re-authorization for an S-NSSAI | | | China Mobile | CR 2057 24.501 Rel-16 | EN#10 & Task#1  See also C1-202170, 2345, 2351, 2352. | |
|  |  | | [C1-202171](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202171.zip) | Updating descriptions of NS for NSSAA | | | China Mobile | CR 2058 24.501 Rel-16 |  | |
|  |  | | [C1-202172](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202172.zip) | Discussion paper on the impact of non-standard S-NSSAI mapping to NSSAA and NSSAI storage | | | China Mobile | discussion 24.501 Rel-16 |  | |
|  |  | | [C1-202173](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202173.zip) | Updating requirements of NSSAA for roaming scenerios | | | China Mobile | CR 2059 24.501 Rel-16 |  | |
|  |  | | [C1-202224](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202224.zip) | T3540 is not started if the Registration Accept includes a pending NSSAI | | | BEIJING SAMSUNG TELECOM R&D | CR 2075 24.501 Rel-16 |  | |
|  |  | | [C1-202234](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202234.zip) | Clarify that NSSAA can occur during periodic registration or mobility updating for NB-N1 mode UEs | | | BEIJING SAMSUNG TELECOM R&D | CR 2079 24.501 Rel-16 |  | |
|  |  | | [C1-202241](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202241.zip) | Fixing typo related to eNS | | | BEIJING SAMSUNG TELECOM R&D | CR 2080 24.501 Rel-16 |  | |
|  |  | | [C1-202243](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202243.zip) | All default S-NSSAI(s) require network slice-specific authentication and authorisation (solution 2B) | | | Samsung Electronics Polska | CR 2081 24.501 Rel-16 | EN#11 & Task #4  See also C1-202123, 2124,2243, 2252 | |
|  |  | | C1-202246 | S-NSSAI in rejected NSSAI for the failed or revoked NSSAA not to be requested | | | Ericsson /kaj | CR 2083 24.501 Rel-16 | Withdrawn | |
|  |  | | [C1-202247](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202247.zip) | S-NSSAI in rejected NSSAI for the failed or revoked NSSAA not to be requested | | | Ericsson /kaj | CR 1734 24.501 Rel-16 | Revision of C1-198417 | |
|  |  | | [C1-202248](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202248.zip) | Alignment of UE actions of rejected NSSAI for the failed or revoked NSSAA | | | Ericsson /kaj | CR 2084 24.501 Rel-16 |  | |
|  |  | | [C1-202250](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202250.zip) | Request S-NSSAI pending the NW slice-specific authentication and authorization | | | Ericsson /kaj | CR 2004 24.501 Rel-16 | Revision of C1-200724  Task#3, See also C1-202250, 2472, 2473 | |
|  |  | | [C1-202252](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202252.zip) | S-NSSAIs always selected from allowed NSSAI by AMF | | | Ericsson /kaj | CR 2086 24.501 Rel-16 | EN#11 & Task #4  See also C1-202123, 2124,2243, 2252 | |
|  |  | | [C1-202257](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202257.zip) | Exception to initiate the service request procedure during NSSAA when there is no allowed NSSAI | | | BEIJING SAMSUNG TELECOM R&D | CR 2089 24.501 Rel-16 |  | |
|  |  | | [C1-202259](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202259.zip) | NSSAA for UEs that roam across 5GS VPLMNs | | | BEIJING SAMSUNG TELECOM R&D | CR 2090 24.501 Rel-16 |  | |
|  |  | | [C1-202261](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202261.zip) | Missing condition at registration reject due to no available slices | | | Ericsson /kaj | CR 2091 24.501 Rel-16 |  | |
|  |  | | [C1-202282](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202282.zip) | Network-requested PDU session release due to failed or revoked NSSAA | | | Motorola Mobility, Lenovo | CR 2099 24.501 Rel-16 |  | |
|  |  | | [C1-202329](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202329.zip) | Updating Rejeted NSSAI IE for failed NSSAA case in roaming scenerios | | | China Mobile | CR 2108 24.501 Rel-16 |  | |
|  |  | | C1-202330 | Abnormal case about missing EAP result for NSSAA | | | China Mobile | CR 2109 24.501 Rel-16 | Withdrawn  Not available on time | |
|  |  | | [C1-202332](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202332.zip) | Work Plan for eNS in CT1 | | | ZTE | Work Plan Rel-16 |  | |
|  |  | | [C1-202340](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202340.zip) | Deleting Editors note regarding indefinite wait at the UE for NSSAA completion | | | ZTE | CR 1912 24.501 Rel-16 | Revision of C1-201051  EN#1 & Task #2 | |
|  |  | | [C1-202345](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202345.zip) | Discussion on re-initiation of NSSAA | | | BEIJING SAMSUNG TELECOM R&D | discussion | EN#10 & Task#1  See also C1-202170, 2345,   2351, 2352 | |
|  |  | | [C1-202346](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202346.zip) | EPS selection when the UE is deregistered due to NSSAA failure | | | Samsung/Kundan | CR 1950 24.501 Rel-16 | Revision of C1-200572 | |
|  |  | | [C1-202351](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202351.zip) | Re-initiation of NSSAA (solution #1) | | | BEIJING SAMSUNG TELECOM R&D | CR 2124 24.501 Rel-16 | EN#10 & Task#1  See also C1-202170, 2345, 2351, 2352. | |
|  |  | | [C1-202352](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202352.zip) | Re-initiation of NSSAA (solution #2) | | | BEIJING SAMSUNG TELECOM R&D | CR 2125 24.501 Rel-16 | EN#10 & Task#1  See also C1-202170, 2345, 2351, 2352 | |
|  |  | | [C1-202374](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202374.zip) | NSSAA in an SNPN | | | Nokia, Nokia Shanghai Bell | CR 2135 24.501 Rel-16 |  | |
|  |  | | [C1-202383](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202383.zip) | Clarification to NSSAA procedure | | | Samsung/Kundan | CR 2143 24.501 Rel-16 |  | |
|  |  | | [C1-202385](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202385.zip) | Handling of Pending S-NSSAI | | | Samsung/Kundan | CR 2144 24.501 Rel-16 |  | |
|  |  | | [C1-202430](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202430.zip) | Release PDU sessions due to revocation from AAA server , re-auth failure | | | LG Electronics France | CR 2168 24.501 Rel-16 |  | |
|  |  | | [C1-202454](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202454.zip) | Updating NSSAI status in AMF | | | NEC | CR 1990 24.501 Rel-16 | Revision of C1-200691  Overlaps with C1-202111 | |
|  |  | | [C1-202472](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202472.zip) | Discussion on including pending S-NSSAI(s) in the requested NSSAI | | | Huawei, HiSilicon/Lin | discussion Rel-16 | Task#3  See also C1-202250, 2472, 2473 | |
|  |  | | [C1-202473](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202473.zip) | Inclusion of pending S-NSSAI(s) in the requested NSSAI | | | Huawei, HiSilicon, China Telecom/Lin | CR 2180 24.501 Rel-16 | Task#3,  See also C1-202250, 2472, 2473 | |
|  |  | | [C1-202475](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202475.zip) | Term on rejected NSSAI for the failed or revoked NSSAA | | | Huawei, HiSilicon/Lin | CR 2181 24.501 Rel-16 |  | |
|  |  | | [C1-202543](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202543.zip) | Clarification to NW slice-specific re-authentication and re-authorization | | | Ericsson /kaj | CR 2206 24.501 Rel-16 |  | |
|  |  | | C1-202587 | Update Handing EAP Result for NSSAA | | | China Mobile | CR 2212 24.501 Rel-16 | Withdrawn  Not available on time | |
|  |  | | [C1-202589](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202589.zip) | eNS – way forward for indefinite wait for NSSAA | | | InterDigital / Atle | Discussion | EN#1 & Task #2 | |
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|  | Vertical\_LAN | |  | Peter – Main | | |  |  | CT aspects of 5GS enhanced support of vertical and LAN services | |
|  |  | |  |  | | |  |  | Stand-alone NPN | |
|  |  | | [C1-202350](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202350.zip) | TSN working domain terminology | | | Huawei, HiSilicon / Cristina | CR 2123 24.501 Rel-16 |  | |
|  |  | | [C1-202353](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202353.zip) | TSN working domain terminology | | | Huawei, HiSilicon / Cristina | CR 0001 24.535 Rel-16 |  | |
|  |  | | [C1-202354](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202354.zip) | Trigger for Initial Registration procedure | | | Samsung/Kundan | CR 2126 24.501 Rel-16 |  | |
|  |  | | C1-202365 | DISC Configuring UE to enable manual CAG selection procedure | | | Samsung | discussion Rel-16 | Withdrawn  Not available on time | |
|  |  | | [C1-202395](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202395.zip) | Work plan for Vertical\_LAN | | | Nokia, Nokia Shanghai Bell | discussion Rel-16 |  | |
|  |  | | [C1-202399](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202399.zip) | non-3GPP access not supported in SNPN | | | Intel /Thomas | CR 2148 24.501 Rel-16 |  | |
|  |  | | [C1-202013](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202013.zip) | Configured HRNN for SNPN selection | | | Ericsson / Ivo | CR 0505 23.122 Rel-16 |  | |
|  |  | | C1-202020 | Configured N3IWF identity for SNPN access via PLMN | | | Ericsson / Ivo | CR 0507 23.122 Rel-16 | Withdrawn  Not available on time | |
|  |  | | [C1-202086](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202086.zip) | Management of forbidden SNPNs list upon receipt of a non-integrity protected reject message | | | Nokia, Nokia Shanghai Bell | CR 0511 23.122 Rel-16 |  | |
|  |  | | [C1-202087](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202087.zip) | Correction in UE behavior upon receipt of 5GMM cause value #74 or #75 via a non-integrity protected NAS message | | | Nokia, Nokia Shanghai Bell | CR 2010 24.501 Rel-16 | Revision of C1-200970 | |
|  |  | | [C1-202130](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202130.zip) | Correction of the handling of timer TG for SNPNs | | | Apple | CR 0514 23.122 Rel-16 |  | |
|  |  | | [C1-202131](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202131.zip) | Correction of the UE requirements for expiry of T3247 | | | Apple | CR 2048 24.501 Rel-16 |  | |
|  |  | | [C1-202174](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202174.zip) | Definition of registered SNPN | | | Intel /Thomas | CR 2060 24.501 Rel-16 |  | |
|  |  | | [C1-202193](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202193.zip) | update of the counter for SNPN | | | vivo | CR 2064 24.501 Rel-16 |  | |
|  |  | | [C1-202194](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202194.zip) | temporarily and permanently forbidden SNPNs lists per access type | | | vivo | CR 2065 24.501 Rel-16 |  | |
|  |  | | [C1-202195](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202195.zip) | storage of counters for UE in SNPN | | | vivo | CR 2066 24.501 Rel-16 |  | |
|  |  | | [C1-202196](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202196.zip) | 5G GUTI of SNPN | | | vivo | CR 2067 24.501 Rel-16 |  | |
|  |  | | [C1-202197](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202197.zip) | 5GMM cause value #74 in an SNPN with a globally-unique SNPN identity | | | vivo | CR 2068 24.501 Rel-16 |  | |
|  |  | | [C1-202198](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202198.zip) | 5GMM cause value #13 not supporting roaming for SNPN | | | vivo | CR 2069 24.501 Rel-16 |  | |
|  |  | | [C1-202366](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202366.zip) | Condition for access to SNPN | | | SHARP | CR 2129 24.501 Rel-16 |  | |
|  |  | | C1-202389 | Clarification to SNPN to SNPN selection procedure | | | Samsung/Kundan | CR 2146 24.501 Rel-16 | Withdrawn  Not available on time | |
|  |  | | [C1-202393](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202393.zip) | figures 1, 2a, 2b, 3 and table 2 not applicable in SNPN | | | Intel /Thomas | CR 0524 23.122 Rel-16 |  | |
|  |  | | [C1-202396](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202396.zip) | Subscription update in case of SNPN | | | Intel /Thomas | CR 2147 24.501 Rel-16 |  | |
|  |  | | [C1-202401](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202401.zip) | NB-IoT not applicable for SNPN | | | Nokia, Nokia Shanghai Bell | CR 2149 24.501 Rel-16 |  | |
|  |  | | [C1-202402](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202402.zip) | Introduction of SNPN-specific N1 mode attempt counters | | | Nokia, Nokia Shanghai Bell | CR 2011 24.501 Rel-16 | Revision of C1-201032 | |
|  |  | | [C1-202406](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202406.zip) | Handling of a UE not allowed to access SNPN services via a PLMN by subscription with 5GMM cause value #72 | | | Nokia, Nokia Shanghai Bell | CR 2151 24.501 Rel-16 |  | |
|  |  | | [C1-202407](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202407.zip) | Human readable network name for SNPN | | | Nokia, Nokia Shanghai Bell | CR 0527 23.122 Rel-16 |  | |
|  |  | | [C1-202408](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202408.zip) | Miscellaneous clean-up for SNPN | | | Nokia, Nokia Shanghai Bell | CR 2152 24.501 Rel-16 |  | |
|  |  | | [C1-202409](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202409.zip) | Service area restrictions in an SNPN | | | Nokia, Nokia Shanghai Bell | CR 2153 24.501 Rel-16 |  | |
|  |  | | [C1-202410](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202410.zip) | MICO in an SNPN | | | Nokia, Nokia Shanghai Bell | CR 2154 24.501 Rel-16 |  | |
|  |  | | [C1-202411](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202411.zip) | 5GMM CC in an SNPN | | | Nokia, Nokia Shanghai Bell | CR 2155 24.501 Rel-16 |  | |
|  |  | | [C1-202412](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202412.zip) | 5GSM back-off mechanisms in an SNPN | | | Nokia, Nokia Shanghai Bell | CR 2156 24.501 Rel-16 |  | |
|  |  | | [C1-202413](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202413.zip) | UE in the 5GMM-REGISTERED.ATTEMPTING-REGISTRATION-UPDATE substate operating in SNPN access mode | | | Nokia, Nokia Shanghai Bell | CR 2157 24.501 Rel-16 |  | |
|  |  | | [C1-202414](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202414.zip) | Routing indicator update in an SNPN | | | Nokia, Nokia Shanghai Bell | CR 2158 24.501 Rel-16 |  | |
|  |  | | [C1-202415](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202415.zip) | 3GPP PS data off in an SNPN | | | Nokia, Nokia Shanghai Bell | CR 2159 24.501 Rel-16 |  | |
|  |  | | C1-202428 | correction to network selection in case of multiple subscribed SNPNs | | | Intel /Thomas | CR 2167 24.501 Rel-16 | Withdrawn | |
|  |  | | [C1-202432](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202432.zip) | correction to network selection in case of multiple subscribed SNPNs | | | Intel /Thomas | CR 0528 23.122 Rel-16 |  | |
|  |  | | [C1-202469](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202469.zip) | Non-3GPP access for PLMN and SNPN | | | Huawei, HiSilicon/Lin | CR 2177 24.501 Rel-16 |  | |
|  |  | | [C1-202506](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202506.zip) | 5GS forbidden tracking areas for roaming for SNPN | | | MediaTek Inc. | CR 2188 24.501 Rel-16 |  | |
|  |  | | [C1-202522](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202522.zip) | Correct "theregistration" | | | MediaTek Inc. | CR 2196 24.501 Rel-16 |  | |
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|  |  | |  |  | | |  |  | Public network integrated NPN | |
|  |  | | [C1-202008](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202008.zip) | CAG-ID not provided to lower layers during NAS signalling connection establishment | | | Ericsson / Ivo | CR 1880 24.501 Rel-16 | Revision of C1-200937 | |
|  |  | | [C1-202014](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202014.zip) | Configured HRNN for CAG selection | | | Ericsson / Ivo | CR 0506 23.122 Rel-16 |  | |
|  |  | | [C1-202015](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202015.zip) | Providing configured HRNN for CAG selection | | | Ericsson / Ivo | CR 2009 24.501 Rel-16 | Revision of C1-200733 | |
|  |  | | [C1-202091](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202091.zip) | CAG information list provided to lower layers after manual CAG selection | | | Ericsson / Ivo | CR 0512 23.122 Rel-16 |  | |
|  |  | | [C1-202102](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202102.zip) | Discussion on RAN2’s questions on CAG in LS R2-2002417 | | | Qualcomm Incorporated / Lena | discussion Rel-16 |  | |
|  |  | | [C1-202179](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202179.zip) | Correction on no suitable cell | | | Vivo | CR 0517 23.122 Rel-16 |  | |
|  |  | | [C1-202199](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202199.zip) | Clarification of the cause of start of T3550 | | | Vivo | CR 2070 24.501 Rel-16 |  | |
|  |  | | [C1-202239](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202239.zip) | Discussion on reply LS to RAN2 manual CAG selection | | | Huawei, HiSilicon/Vishnu | discussion 23.122 Rel-16 |  | |
|  |  | | [C1-202242](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202242.zip) | Discussion on protecting CAG list against man in middle attack | | | Huawei, HiSilicon/ Vishnu | discussion 24.501 Rel-16 |  | |
|  |  | | [C1-202249](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202249.zip) | Protection of Allowed CAG list against man in middle attack | | | Huawei, HiSilicon / Vishnu | CR 2085 24.501 Rel-16 |  | |
|  |  | | [C1-202251](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202251.zip) | Discussion on including CAG Information list in reject messages | | | Huawei, HiSilicon / Vishnu | discussion 24.501 Rel-16 |  | |
|  |  | | [C1-202253](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202253.zip) | Provision of CAG information list in reject messages | | | Huawei, HiSilicon/ Vishnu | CR 2087 24.501 Rel-16 |  | |
|  |  | | [C1-202256](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202256.zip) | Handling of HRNN information in a CAG cell | | | Huawei, HiSilicon / Vishnu | CR 0518 23.122 Rel-16 |  | |
|  |  | | [C1-202258](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202258.zip) | Indication to user about allowed CAG IDs for manual CAG selection | | | Huawei, HiSilicon / Vishnu | CR 0519 23.122 Rel-16 |  | |
|  |  | | [C1-202397](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202397.zip) | Selected CAG-ID from the NAS layer to the AS layer | | | Nokia, Nokia Shanghai Bell, vivo, Qualcomm Incorporated, Samsung, Huawei, HiSilicon | CR 0525 23.122 Rel-16 |  | |
|  |  | | [C1-202398](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202398.zip) | Manual CAG selection | | | Nokia, Nokia Shanghai Bel | CR 0499 23.122 Rel-16 | Revision of C1-201052 | |
|  |  | | [C1-202405](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202405.zip) | CAG selection is optional in the manual network selection mode | | | Nokia, Nokia Shanghai Bell | CR 0526 23.122 Rel-16 |  | |
|  |  | | [C1-202470](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202470.zip) | No CAG in non-3GPP access | | | Huawei, HiSilicon/Lin | CR 2178 24.501 Rel-16 |  | |
|  |  | | [C1-202471](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202471.zip) | Correction on 5GMM #27 for CAG | | | Huawei, HiSilicon/Lin | CR 2179 24.501 Rel-16 |  | |
|  |  | | [C1-202493](file:///C:\\Users\\dems1ce9\\OneDrive%20-%20Nokia\\3gpp\\cn1\\meetings\\123-e_electronic_0420\\docs\\C1-202493.zip) | Discussion to RAN2 LS R2-2002417 | | | Ericsson / Ivo | discussion Rel-16 |  | |
|  |  | | [C1-202499](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202499.zip) | Discussion paper – Considerations for CAG ID in Unified Access Control | | | Chengdu OPPO Mobile Com. corp. | discussion Rel-16 |  | |
|  |  | | [C1-202588](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202588.zip) | CAG Information in Registration Reject | | | InterDigital, Samsung / Atle | CR 1886 24.501 Rel-16 |  | |
|  |  | | [C1-202355](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202355.zip) | Clarification to Manual CAG selection procedure | | | Samsung/Kundan | CR 0520 23.122 Rel-16 |  | |
|  |  | | [C1-202357](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202357.zip) | Discussion paper on RAN2 LS regarding Manual CAG and URC for PNI-NPN | | | Samsung | discussion Rel-16 |  | |
|  |  | | [C1-202362](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202362.zip) | Sending CAG information list | | | Samsung/Kundan | CR 2128 24.501 Rel-16 |  | |
|  |  | | [C1-202363](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202363.zip) | Sending CAG information list | | | Samsun/Kundan | CR 0522 23.122 Rel-16 |  | |
|  |  | | [C1-202364](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202364.zip) | Handling of a CAG UE at non supporting AMF | | | Samsung/Kundan | CR 1964 24.501 Rel-16 | Revision of C1-200589 | |
|  |  | | [C1-202368](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202368.zip) | Configuring UE to enable manual CAG selection procedure (24.501) | | | Samsung/Kundan | CR 2131 24.501 Rel-16 |  | |
|  |  | | [C1-202370](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202370.zip) | Configuring UE to enable manual CAG selection procedure (23.122) | | | Samsung/Kundan | CR 0523 23.122 Rel-16 |  | |
|  |  | | [C1-202495](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202495.zip) | Correction to Manual CAG selection procedure | | | Samsung/Kundan | CR 0529 23.122 Rel-16 |  | |
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|  |  | |  |  | | |  |  | Time sensitive communication | |
|  |  | | [C1-202191](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202191.zip) | Correction of the abnormal case in NW-TT-initiated Ethernet port management procedure | | | vivo | CR 0001 24.519 Rel-16 |  | |
|  |  | | [C1-202192](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202192.zip) | Abbreviation correction | | | vivo | CR 0002 24.519 Rel-16 |  | |
|  |  | | [C1-202429](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202429.zip) | IEEE Std 802.1Qbv-2016 rolled into IEEE Std 802.1Q-2018 | | | Nokia, Nokia Shanghai Bell | CR 0003 24.519 Rel-16 |  | |
|  |  | | [C1-202433](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202433.zip) | TSN working domain | | | Nokia, Nokia Shanghai Bell | CR 0002 24.535 Rel-16 |  | |
|  |  | | [C1-202435](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202435.zip) | TSN working domain | | | Nokia, Nokia Shanghai Bell | CR 2170 24.501 Rel-16 |  | |
|  |  | | [C1-202350](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202350.zip) | TSN working domain terminology | | | Huawei, HiSilicon / Cristina | CR 2123 24.501 Rel-16 |  | |
|  |  | | [C1-202353](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202353.zip) | TSN working domain terminology | | | Huawei, HiSilicon / Cristina | CR 0001 24.535 Rel-16 |  | |
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|  | 5G\_CIoT | |  | Peter – Main | | |  |  | CT aspects of Cellular IoT support and evolution for the 5G System | |
|  |  | | [C1-202077](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202077.zip) | Indication of change in the use of enhanced coverage | | | Samsung, InterDigital, Huawei, HiSilicon | CR 2030 24.501 Rel-16 | Overlaps with [C1-202230](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202230.zip) | |
|  |  | | [C1-202078](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202078.zip) | Discussion on the mandatory Integrity protection maximum data rate field for UEs that support control plane only | | | Samsung | discussion Rel-16 |  | |
|  |  | | [C1-202079](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202079.zip) | Integrity protection data rate for UEs that don’t support N3 data transfer | | | Samsung | CR 2031 24.501 Rel-16 |  | |
|  |  | | [C1-202082](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202082.zip) | Addition of Control Plane Service Request in the abnormal cases for service request procedure | | | InterDigital Communications | CR 2032 24.501 Rel-16 |  | |
|  |  | | [C1-202084](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202084.zip) | DRX parameters for NB-IoT | | | InterDigital Communications | CR 2034 24.501 Rel-16 |  | |
|  |  | | [C1-202085](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202085.zip) | Correcting a wrong reference | | | InterDigital Communications | CR 2035 24.501 Rel-16 |  | |
|  |  | | [C1-202169](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202169.zip) | Adding new abnormal cases on the network side for CPSR | | | China Mobile, InterDigital | CR 2056 24.501 Rel-16 | Overlaps with [C1-202245](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202245.zip), [C1-202337](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202337.zip), [C1-202461](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202461.zip) | |
|  |  | | [C1-202176](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202176.zip) | Correction of SGC | | | vivo | CR 2062 24.501 Rel-16 |  | |
|  |  | | [C1-202177](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202177.zip) | Emergency PDU sesseion established after WUS negotiation | | | vivo | CR 2063 24.501 Rel-16 |  | |
|  |  | | [C1-202202](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202202.zip) | subclause of Negotiated WUS assistance information | | | vivo | CR 2073 24.501 Rel-16 |  | |
|  |  | | [C1-202230](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202230.zip) | Generic UE configuration update trigger for registration and EC Restriction change | | | Ericsson / Mikael | CR 2077 24.501 Rel-16 | Overlaps with [C1-202077](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202077.zip) | |
|  |  | | [C1-202245](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202245.zip) | CIoT user data container in CPSR message not forwarded | | | Ericsson /kaj | CR 1743 24.501 Rel-16 | Revision of C1-200675  [C1-202169](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202169.zip), [C1-202337](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202337.zip), [C1-202461](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202461.zip) | |
|  |  | | [C1-202270](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202270.zip) | Correct handling of receiving EMM cause #31 in EPS | | | Qualcomm Incorporated | CR 3349 24.301 Rel-16 |  | |
|  |  | | [C1-202271](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202271.zip) | Correct UE behavior for receiving 5GMM cause #31 in 5GS | | | Qualcomm Incorporated | CR 2094 24.501 Rel-16 |  | |
|  |  | | [C1-202326](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202326.zip) | Avoid repeated redirection for NB-IoT | | | OPPO / Rae | CR 2106 24.501 Rel-16 |  | |
|  |  | | [C1-202328](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202328.zip) | PDU session release due to CP only revocation | | | OPPO / Rae | CR 2107 24.501 Rel-16 |  | |
|  |  | | [C1-202335](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202335.zip) | Clarification on the UE behaviour when receiving T3448 | | | ZTE | CR 2112 24.501 Rel-16 |  | |
|  |  | | [C1-202336](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202336.zip) | Connection Resumption for Notification | | | ZTE, vivo | CR 2113 24.501 Rel-16 |  | |
|  |  | | [C1-202337](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202337.zip) | CIoT user or small data container in CPSR message not forwarded | | | ZTE | CR 2114 24.501 Rel-16 | [C1-202169](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202169.zip), [C1-202245](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202245.zip), [C1-202461](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202461.zip) | |
|  |  | | [C1-202367](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202367.zip) | Correction on terminology for the Control plane CIoT 5GS optimization | | | SHARP | CR 2130 24.501 Rel-16 |  | |
|  |  | | [C1-202369](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202369.zip) | Handling of PDU session and PDN connection associated with Control plane only indication in case of N26 based interworking procedures | | | SHARP | CR 2132 24.501 Rel-16 |  | |
|  |  | | [C1-202373](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202373.zip) | Non-integrity protected REGISTRATION REJECT message including 5GMM cause #31 or #76 | | | Nokia, Nokia Shanghai Bell | CR 2134 24.501 Rel-16 |  | |
|  |  | | [C1-202384](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202384.zip) | UE specific DRX for NB-S1 mode | | | Vodafone GmbH | CR 3353 24.301 Rel-16 |  | |
|  |  | | [C1-202387](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202387.zip) | Discussion on errors on QoS parameter operations in NB-IoT | | | BEIJING SAMSUNG TELECOM R&D | discussion |  | |
|  |  | | [C1-202388](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202388.zip) | QoS error checks for UEs in NB-N1 mode | | | BEIJING SAMSUNG TELECOM R&D | CR 2145 24.501 Rel-16 |  | |
|  |  | | [C1-202403](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202403.zip) | Discussion on integrity check failure on the Control Plane Service Request message for WB-N1 mode UEs | | | BEIJING SAMSUNG TELECOM R&D | discussion |  | |
|  |  | | [C1-202404](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202404.zip) | Retransmission of a CPSR message after integrity check failure at the AMF | | | BEIJING SAMSUNG TELECOM R&D | CR 2150 24.501 Rel-16 |  | |
|  |  | | [C1-202419](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202419.zip) | Corrections to CR#1907 | | | Qualcomm Incorporated / Amer | CR 2162 24.501 Rel-16 | Overalaps with [C1-202465](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202465.zip) | |
|  |  | | [C1-202422](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202422.zip) | Initial APN rate control parameters | | | Qualcomm Incorporated / Amer | CR 3216 24.008 Rel-16 |  | |
|  |  | | [C1-202423](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202423.zip) | Signalling of EPS APN rate control parameters during PDU session establishment | | | Qualcomm Incorporated / Amer | CR 2164 24.501 Rel-16 |  | |
|  |  | | [C1-202425](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202425.zip) | Ethernet header compression for CP CIoT – 5GMM aspects | | | Qualcomm Incorporated / Amer | CR 2165 24.501 Rel-16 |  | |
|  |  | | [C1-202426](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202426.zip) | Ethernet header compression for CP CIoT – 5GSM aspects | | | Qualcomm Incorporated / Amer | CR 2166 24.501 Rel-16 |  | |
|  |  | | [C1-202459](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202459.zip) | Enhancement on CPSR for CIoT CP data transport | | | Huawei, HiSilicon, Vodafone, ZTE, China Mobile, China Telecom, CATT/Lin | CR 1701 24.501 Rel-16 | Revision of C1-200893 | |
|  |  | | [C1-202460](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202460.zip) | Discussion on routing failure of CPSR | | | Huawei, HiSilicon, China Mobile/Lin | discussion Rel-16 |  | |
|  |  | | [C1-202461](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202461.zip) | Routing failure handling of CPSR | | | Huawei, HiSilicon, China Mobile/Lin | CR 2172 24.501 Rel-16 | [C1-202169](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202169.zip), [C1-202245](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202245.zip), [C1-202337](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202337.zip) | |
|  |  | | [C1-202462](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202462.zip) | Acknowledgement of truncated 5G-S-TMSI configuration | | | Huawei, HiSilicon/Lin | CR 2173 24.501 Rel-16 |  | |
|  |  | | [C1-202463](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202463.zip) | NAS-MAC calculation for RRC connection reestablishment for NB-IoT CP optimisation | | | Huawei, HiSilicon/Lin | CR 2174 24.501 Rel-16 |  | |
|  |  | | [C1-202464](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202464.zip) | Removal of Editor’s Note for CP congestion control | | | Huawei, HiSilicon/Lin | CR 2175 24.501 Rel-16 |  | |
|  |  | | [C1-202465](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202465.zip) | Correction on WUS assistance | | | Huawei, HiSilicon/Lin | CR 2176 24.501 Rel-16 | Overlaps with [C1-202419](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_123e/Docs/C1-202419.zip) | |
|  |  | | [C1-202521](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202521.zip) | Correction to handling of T3447 timer | | | MediaTek Inc. | CR 2195 24.501 Rel-16 |  | |
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|  | 5WWC | |  | Peter – Main | | |  |  | CT aspects on wireless and wireline convergence for the 5G system architecture | |
|  |  | | [C1-202018](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202018.zip) | Secondary authentication and W-AGF acting on behalf of N5GC | | | Ericsson / Ivo | CR 2028 24.501 Rel-16 |  | |
|  |  | | [C1-202168](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202168.zip) | ANDSP is not supported by 5G-RG and W-AGF | | | ZTE / Joy | CR 2055 24.501 Rel-16 |  | |
|  |  | | [C1-202207](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202207.zip) | Work plan for the CT1 part of 5WWC | | | Huswei, HiSilicon /Christian | discussion Rel-16 |  | |
|  |  | | [C1-202283](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202283.zip) | Inclusion of NSSAI in AN Parameters for non-3GPP access | | | Motorola Mobility, Lenovo | CR 2100 24.501 Rel-16 |  | |
|  |  | | [C1-202284](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202284.zip) | Inclusion of requested NSSAI in AN parameters | | | Motorola Mobility, Lenovo | CR 0122 24.502 Rel-16 |  | |
|  |  | | [C1-202290](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202290.zip) | Removal of editor’s notes | | | Motorola Mobility, Lenovo | CR 0123 24.502 Rel-16 |  | |
|  |  | | [C1-202293](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202293.zip) | Error type on failure of reserving QoS resources over non-3GPP access | | | ZTE / Joy | CR 0126 24.502 Rel-16 |  | |
|  |  | | [C1-202486](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202486.zip) | Discussion on 3GPP based access authentication for untrusted non-3GPP access to 5GCN | | | Ericsson, BlackBerry UK Ltd., Motorola Mobility, Lenovo / Ivo | discussion Rel-16 |  | |
|  |  | | C1-202571 | EAP details for N5GC | | | Nokia, Nokia Shanghai Bell | CR 2207 24.501 Rel-16 | Withdrawn | |
|  |  | | C1-202572 | Corrections on N5GC SUPI SUCI | | | Nokia, Nokia Shanghai Bell | CR 0128 24.502 Rel-16 | Withdrawn | |
|  |  | | C1-202573 | NAS impacts supporting IPTV | | | Nokia, Nokia Shanghai Bell | CR 2208 24.501 Rel-16 | Withdrawn | |
|  |  | | C1-202574 | Support IPTV via wireline access | | | Nokia, Nokia Shanghai Bell | CR 0129 24.502 Rel-16 | Withdrawn | |
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|  | PARLOS | |  | Lena – Breakout | | |  |  | CT aspects of System enhancements for Provision of Access to Restricted Local Operator Services by Unauthenticated UEs  100% | |
|  |  | | C1-202125 | Miscellaneous editorial corrections | | | Samsung Electronics Polska | CR 2046 24.501 Rel-16 | Withdrawn | |
|  |  | | [C1-202147](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202147.zip) | Clarify UE behaviour for reject cause #9 and #10 received when attached for RLOS | | | Samsung/Anikethan | CR 3342 24.301 Rel-16 | Lena, Friday, 01:52   1. The changes for TAU reject seem ok but the text does not read well. I suggest instead “Then if the UE is in the same selected PLMN where the last tracking area updating procedure was attempted, the tracking area updating procedure was rejected with an EMM cause value other than #9, #10 and #40, and timer T3346 is not running, the UE shall:” 2. For the  service reject, changes for causes #10 and 40 seem ok but same wording comment applies. About cause #9, according to subclause 4.4.4.3, the network will reject a service request with cause #9 if the UE is not attached for access to RLOS:   “If a SERVICE REQUEST, EXTENDED SERVICE REQUEST or CONTROL PLANE SERVICE REQUEST message fails the integrity check and the UE has only PDN connections for non-emergency bearer services established and the PDN connections are not for RLOS, the MME shall send the SERVICE REJECT message with EMM cause #9 "UE identity cannot be derived by the network" and keep the EMM-context and EPS security context unchanged.”  So changes for cause #9 for the service reject case do not seem justified  Anikethan, Saturday, 19:51   1. -> I think the text proposed in the CR is more clear since it brings out the association between attempt and reject. A comma separated text would end up opening up an interpretation of both these conditions being separate (OR sort of condition). That is how we read many comma separated text formulations in the specification 2. -> I think the text proposed in the CR is more clear since it brings out the association between attempt and reject. A comma separated text would end up opening up an interpretation of both these conditions being separate (OR sort of condition). That is how we read many comma separated text formulations in the specification | |
|  |  | | [C1-202154](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202154.zip) | Condition to ensure that UE does not keep reattempting RLOS attach on a PLMN which has rejected the request | | | Samsung/Anikethan | CR 3343 24.301 Rel-16 | Postponed  Mariusz, Thursday, 14:10  In the 2nd change, (new dot + new line sign) are not needed.  Lena, Friday, 2:31   1. Currently the CR does not say for how long the UE shall not try on those PLMNs. Until a timer expires? Until switch-off? There needs to be a list that the UE maintains, with an associated timer upon expiration of which the list is cleared (similar to the list of PLMNs where E-UTRA capability was disabled as PLMNs where voice service was not possible in E-UTRAN and timer TD, or the “list of "PLMNs with E-UTRAN not allowed" and timer TE, specified in TS 23.122 subclause 3.1). This will require a CR to TS 23.122. 2. This should be limited to specific cause values for the TAU reject. Also it should be limited to the case when the Attach/TAU reject is integrity-protected, otherwise you open up the door for attacks based on non-integrity protected reject messages that would prevent the UE from having access to RLOS on a legit PLMN   Anikethan, Saturday, 13:20  About Lena’s comments:   1. -> All these should simply be up to implementation. It is better not to get into the specifics of these since there are multiple ways to implement this and there are already implementation specific handlings available for other similar use cases. Similar logic can be extended here to this use case as well. I shall add a clarification that this part will be upto implementation. Please let me know if you are fine with this approach. 2. -> No. My understanding is that it is not possible to limit it to specific values since by requirement RLOS is NOT supposed to be rejected. So the specific reject cause values do not really tell us as to why the network is rejecting the request. We simply need to go by the assumption, wherever possible, that it is because the network does not want the UE to register for RLOS. Additionally integrity check etc is not possible since RLOS registrations are also for unauthenticated UE’s. In fact going by the Stage 2 requirements, in most cases in most cases one cannot expect any security to be setup as part of RLOS   Anikethan, Saturday, 21:42  About Mariusz’s comments:  Thank you for pointing out the additional dot and new line characters. Have rectified it in a draft revision.  Lena, Monday, 20:45  Regarding whether I am ok with leaving this up to UE implementation: no, I am not fine with this approach. For other types of lists (PLMNs where E-UTRA capability was disabled, etc) we do have some text in TS 23.122 defining the list, an associated timer, and the conditions for clearing the list. The same is needed here, we can’t have a requirement on the UE to not select a PLMN, without specifying for how long. As commented before, this will require a CR to TS 23.122.  About your statement the “RLOS is NOT supposed to be rejected”, That is not correct. TS 24.301 actually does specify specific rejection cases for RLOS. Also, SA2 has clarified in reply LS [C1-200248](https://www.3gpp.org/ftp/tsg_ct/WG1_mm-cc-sm_ex-CN1/TSGC1_122e/Docs/C1-200248.zip) that the network can reject the UE attached for RLOS with timer T3346.  About your statement that “Additionally integrity check etc is not possible since RLOS”, The network may or may not run authentication with UEs attaching for RLOS, it’s up to the network, And the UE attached for RLOS is supposed to apply the same protection mechanisms against DoS attacks based on non-integrity protected NAS messages as a normally attached UE.  Anikethan, Tuesday, 3:09  We are not in favour of introducing a new list and related timers/conditions in the specification for the RLOS use cases. So I shall not be pursuing this CR further.  Request chairman to mark this as noted/withdrawn.  Lena (as vice-chair), Tuesday, 20:06  since the document has been discussed, I am not sure we can mark it as “withdrawn”, and since it is a CR, I also don’t think it can be marked as “noted”. So I propose that we mark it as “postponed”. Would this be ok for you?  Anikethan, Wednesday, 2:31  Sure. ‘Postponed’ would be fine. | |
|  |  | | C1-202601 | Miscellaneous editorial corrections | | | Samsung Electronics Polska | CR 3340 24.301 Rel-16 | Revision of C1-202126  ------------------------------------------  Ivo, Thursday, 11:55  - "Attached for access to RLOS" definition: "requessted" -> "requested" | |
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|  | 5G\_eLCS (CT4) | |  | Peter – Main | | |  |  | CT aspects of Enhancement to the 5GC LoCation Services | |
|  |  | | [C1-202548](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202548.zip) | Adding Location Privacy Setting operation | | | CATT | CR 0001 24.571 Rel-16 |  | |
|  |  | | [C1-202549](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202549.zip) | Addition of new AT command for 5G Location Services testing | | | CATT | CR 0689 27.007 Rel-16 |  | |
|  |  | | C1-202562 | Supplementary LCS Service Operations | | | CATT | draftCR 24.080 Rel-16 | Withdrawn  24.080 is a CT4 spec | |
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|  | V2XAPP | |  | Lena – Breakout | | |  |  | CT aspects of V2XAPP  Is TS 24.486 sufficiently stable to be sent to CT#88 for approval | |
|  |  | | [C1-202206](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202206.zip) | Work plan for the CT1 part of V2XAPP | | | Huawei, HiSilicon /Christian | discussion Rel-16 |  | |
|  |  | | [C1-202208](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202208.zip) | Latest reference version of draft TS 24.486 | | | Huawei, HiSilicon /Christian | draft TS 24.486 Rel-16 |  | |
|  |  | | [C1-202212](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202212.zip) | Miscellaneous corrections | | | Huawei, HiSilicon /Christian | pCR 24.486 Rel-16 |  | |
|  |  | | [C1-202235](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202235.zip) | V2X UE registration procedure corrections | | | Ericsson / Mikael | pCR 24.486 Rel-16 | Sapan, Friday, 16:41  Please revert correction related to MIME type as those corrections are already done in CR C1-202490 – which is proper.  Mikael, Monday, 10:57  The MIME type alignments were included as current spec included the more specific types. We do however fully support and prefer the proposal to be more generic as in C1-202490. I will update my CRs accordingly.  Mikael, Tuesday, 14:33  A draft revision is available.  Sapan, Wednesday, 7:39  I am fine with the draft revision.  Christian, Wednesday, 11:59  I am ok with the draft revision. I would like to co-sign it.  Mikael, Wednesday, 12:23  I will add Huawei and HiSilicon as co-signers. | |
|  |  | | [C1-202236](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202236.zip) | V2X UE de-registration procedure corrections | | | Ericsson / Mikael | pCR 24.486 Rel-16 | Sapan, Friday, 16:41  Please revert correction related to MIME type as those corrections are already done in CR C1-202490 – which is proper.  Mikael, Monday, 10:57  The MIME type alignments were included as current spec included the more specific types. We do however fully support and prefer the proposal to be more generic as in C1-202490. I will update my CRs accordingly.  Mikael, Tuesday, 14:33  A draft revision is available.  Sapan, Wednesday, 7:39  I am fine with the draft revision.  Christian, Wednesday, 11:59  I am ok with the draft revision. I would like to co-sign it.  Mikael, Wednesday, 12:23  I will add Huawei and HiSilicon as co-signers. | |
|  |  | | [C1-202237](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202237.zip) | V2X service discovery procedure corrections | | | Ericsson / Mikael | pCR 24.486 Rel-16 | Sapan, Friday, 16:41  Please revert correction related to MIME type as those corrections are already done in CR C1-202490 – which is proper.  In clause 6.6.2 – an element <service-discovery-data> is used but in clause 8.3 a <service-discovery-info> is defined. Please make is consistent.  Mikael, Monday, 10:57  The MIME type alignments were included as current spec included the more specific types. We do however fully support and prefer the proposal to be more generic as in C1-202490. I will update my CRs accordingly.  On elements in C1-202237, I do not fully understand your comment. In 6.6.2 both <service-discovery-info> and <service-discovery-data> are used. The <service-discovery-data> element may be included in a <service-discovery-info> element. This is reflected in 8.3:  The <service-discovery-info> element shall include a <result> element and may include a <service-discovery-data> element.  There is no definition of <service-discovery-data> in 8.3. Is that what you want to add?  Sapan, Monday, 13:09  Yes, I was referring definition of <service-discovery-data> element only.  Mikael, Tuesday, 14:33  A draft revision is available.  Sapan, Wednesday, 7:39  I am fine with the draft revision.  Christian, Wednesday, 11:59  I am ok with the draft revision. I would like to co-sign it.  Mikael, Wednesday, 12:23  I will add Huawei and HiSilicon as co-signers. | |
|  |  | | [C1-202238](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202238.zip) | V2X service continuity procedure corrections | | | Ericsson / Mikael | pCR 24.486 Rel-16 | Sapan, Friday, 16:41  Please revert correction related to MIME type as those corrections are already done in CR C1-202490 – which is proper.  Mikael, Monday, 10:57  The MIME type alignments were included as current spec included the more specific types. We do however fully support and prefer the proposal to be more generic as in C1-202490. I will update my CRs accordingly.  Mikael, Tuesday, 14:33  A draft revision is available.  Sapan, Wednesday, 7:39  I am fine with the draft revision.  Christian, Wednesday, 11:59  I am ok with the draft revision. I would like to co-sign it.  Mikael, Wednesday, 12:23  I will add Huawei and HiSilicon as co-signers. | |
|  |  | | [C1-202458](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202458.zip) | Application unique IDs for the VAE layer | | | Huawei , HiSilicon /Christian | pCR 24.486 Rel-16 |  | |
|  |  | | C1-202489 | Network monitoring by the V2X UE procedure | | | Huawei, HiSilicon /Christian | pCR 24.486 Rel-16 | Withdrawn | |
|  |  | | [C1-202546](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202546.zip) | Structure and data semantics for V2X application resource management procedure | | | Huawei, HiSilicon / Chen | pCR 24.486 Rel-16 |  | |
|  |  | | C1-202728 | XML scheme declaration for V2XAPP | | | Huawei, HiSilicon / Chen | pCR 24.486 Rel-16 | Revision of C1-202544  -------------------------------------------------  Sapan, Friday, 17:00  Editor’s note should not be removed as actual XML schema is not provided yet.  Chen, Saturday, 3:12  OK with me. The complete xml scheme will be provided next meeting. The draft revision with the editor’s note unremoved is now available.  Sapan, Sunday, 19:13  I am fine with the draft revision. | |
|  |  | | C1-202729 | V2X application resource management procedure | | | Huawei, HiSilicon / Chen | pCR 24.486 Rel-16 | Revision of C1-202545  -----------------------------------------------------  Sapan, Friday, 17:07  1)     Two references has same number: IETF RFC 4825 [12] (used in clause 6.8.1) and IETF RFC 2616 [12] (used in clause 6.8.2). Please correct it.  2)     Also, RFC 4825 is for XCAP operations. Does VAE supports XCAP operations?  3)     In clause 6.8.2- clear how server will authorize the sender? Please clarify.  Chen, Saturday, 10:54   1. -> OK 2. -> After some further thinking of the authorization, the step with the reference is removed to be aligned with other procedures 3. -> The VAE layer is over SEAL layer, and clause 5 and stage 2 of TS 23.286 clause 9.1 indicates that the VAE capabilities (VAE client and VAE server) utilizes identity management service procedures (e.g. authentication and authorization of UEs) of SEAL to support V2X services. Therefore, to be aligned with other procedures, the authorization steps were removed   A draft revision is available.  Sapan, Monday, 11:21  I am ok with the draft revision. | |
|  |  | | C1-202762 | V2X USD provisioning | | | Huawei, HiSilicon /Christian | pCR 24.486 Rel-16 | Revision of C1-202213  ---------------------------------------------  Sapan, Friday, 15:33  1)     In clause 7.2.3 – step a) – “the identity of theVAE-C” is used. As per my understanding – such identify is not defined. Which identify we are referring here?  2)     Also for client to listen and accept HTTP connection – notification channel needs to be created.  Christian, Tuesday, 17:29  To answer your comment 2) on notification channel. I wrote my CR based on stage 2, i.e. TS 23.286. the VAE server sends a request to the VAE client (V2X USD announcement). As we know, HTTP is a stateless protocol with request-response mechanism, and therefore there is not notification channel for HTTP (polling?).  Christian, Wednesday, 10:42  I have produced a draft revision which addresses Sapan’s comment 1). | |
|  |  | | C1-202763 | PC5 parameters provisioning | | | Huawei, HiSilicon /Christian | pCR 24.486 Rel-16 | Revision of C1-202214  ------------------------------------------------  Sapan, Friday, 15:38  1)     In clause 7.3.3 – step a) – “the identity of theVAE-C” is used. As per my understanding – such identify is not defined. Which identify we are referring here?  2)     Also for client to listen and accept HTTP connection – notification channel needs to be created.  Christian, Tuesday, 17:24  To answer your comment 2 on notification channel. I wrote my CR based on stage 2, i.e. TS 23.286. the VAE server sends a request to the VAE client. As we know, HTTP is a stateless protocol with request-response mechanism, and therefore there is not notification channel for HTTP (polling?).  Christian, Wednesday, 10:42  I have produced a draft revision which addresses Sapan’s comment 1). | |
|  |  | | C1-202764 | Structure and data semantics for V2X USD provisioning | | | Huawei, HiSilicon /Christian | pCR 24.486 Rel-16 | Revision of C1-202215  -------------------------------------------------  Sapan, Friday, 16:05  1)     In clause 8.5 – multiple references are used but not added in clause 2.  2)     In clause 8.5 – “<frequency> is n optional element encoded as specified in 3GPP TS 29.468 [r29468].” => should be “an”.  Christian, Tuesday, 15:36  A draft revision is available. | |
|  |  | | C1-202765 | Structure and data semantics for PC5 parameters provisioning | | | Huawei, HiSilicon /Christian | pCR 24.486 Rel-16 | Revision of C1-202216  --------------------------------------------------  Sapan, Friday, 4:55  1)     In clause 8.3 multiple new elements are defined but their data semantics are not defined in clause 8.5 (for ex: <authorized-when-not-served-by-E-UTRAN>, <radio-parameters-content>, <geographical-identifier>, etc)  2)     In clause 8.5 – new references are used. Need to add references in reference clause 2.  Christian, Tuesday, 15:55  A draft revision is available. | |
|  |  | | C1-202766 | MIME types | | | Huawei, HiSilicon /Christian | pCR 24.486 Rel-16 | Revision of C1-202490  ----------------------------------------------  Sapan, Friday, 16:49  1)     Clause 6.5.2.4 is defined twice – please correct the numbers.  2)     In clause 6.2.1 - There is an extra ‘-‘ => VAE—info. Please remove it.  Mikael, Tuesday, 14:14  Clause 6.7 is not included in the pCR but would need corresponding changes. I have 6.7 included in my C1-202238 and could do the changes, but I think it would be better to include in your C1-202490 to have all related corrections in the same paper.  Christian, Tuesday, 15:08  I agree that it is better to keep the changes in C1-202490, so I’m revising the CR and add clause 6.7 to do the corresponding changes so all corrections are included in the same document. I will indicate when the revision is available on the 3GPP server.  Christian, Tuesday, 15:26  A draft revision addressing Sapan and Mikael’s comments is available.  Sapan, Wednesday, 9:42  I am fine with the draft revision.  Mikael, Wednesday, 10:36  Draft revision looks good. | |
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|  | eV2XARC | |  | Lena – Breakout | | |  |  | CT aspects of eV2XARC | |
|  |  | | [C1-202010](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202010.zip) | Additional transport over Uu for V2X messages of V2X services identified by V2X service identifiers | | | Ericsson / Ivo | CR 0023 24.386 Rel-16 | Christian, Monday, 8:41   1. the cover sheet has some issue; the reason for change indicates, quote “\*\*A method\*\* for uplink and downlink transport of V2X messages over TCP and unicast downlink transport of V2X messages over UDP are specified”. The CR should not introduce any new \*\*method\*\* but should align with stage 2 requirements (TS 23.285). Hope you agree. 2. we agree with the need of changes to TS 24.386 but again those have to be aligned with stage 2 which just add the support for TCP/IP packet to the existing UDP/IP. The reason for change indicates, quote “Furthermore, given that V2X communication over Uu in 5GS in TS 24.587 specified unicast downlink transport over UDP too, \*it is proposed to also enable unicast downlink transport over UDP in TS 24.386.\*". But TS 24.386 already states in clause 4.1 "can use unicast transport (**in uplink, downlink or both of them**)". I am confused. I also fail to see the mandatory distinction of UDP port for uplink and downlink in stage 2 spec (TS 23.285) being added in Rel-16. Additionally, implementations based on TS 24.386 already work well for UDP for uplink and downlink traffic. We do wonder whether you considered backwards compatibility when defining the new method for UDP port handling. 3. Now, you would say that TS 24.587 the mandatory distinction exists. True, but this first of all this is for 5GS and not EPS but now more important, it seems not to be backed up in stage 2 (TS 23.287). We fail to find the requirement for the mandatory distinction of UDP ports for uplink or downlink so we might have gone too far in TS 24.587 with the \*\*method\*\* and this needs to be rethought. 4. In short, initially, only the updates backed up by stage 2 (i.e., TS 23.285) are acceptable to us, i.e., support of TCP/IP packet.   Ivo, Tuesday, 0:40   1. I can work on the cover page 2. You raise several aspects above.   Regarding downlink V2X communication over Uu using UDP, transporting a V2X message of a V2X service identified by a V2X service identifier:  - In 24.386, the downlink V2X communication over Uu using UDP for such V2X messages is specified solely using MBMS bearer (see 24.386 subclause 6.2.4 last paragraph). I.e. there is no downlink V2X communication over Uu using UDP using unicast bearers for such V2X messages.  - In 24.587, there is no MBMS yet. Thus, we agreed that downlink V2X communication over Uu using UDP for such V2X messages can use unicast bearers. Else, we would only have uplink transport and no downlink transport, for such V2X messages.  - given that the UE can move between EPS and 5GS, the CR proposes to specify the downlink V2X communication over Uu using UDP using unicast bearers for such V2X messages also in 24.386, in the same way as specified in 24.587. As the same functionality would be defined both in EPS and 5GS, the same transport for such V2X messages would be used in EPS and 5GS.  In 24.386, the text you quoted above is true only for V2X message of a V2X service \*NOT\* identified by a V2X service identifier, where the application in the UE just uses regular IP routing.  The port is different in uplink and downlink V2X communication over Uu using UDP, transporting a V2X message of a V2X service identified by a V2X service identifier: - to ensure backward compatibility with uplink V2X communication over Uu using UDP for such V2X messages, a specified in 24.386.  - to enable the V2X application server to distinguish uplink V2X messages from the UE and UE's requests for reception of downlink V2X messages, of such V2X service.  - to inform the UE whether the V2X application server supports the added downlink V2X communication over Uu using UDP using unicast bearers.  I indeed considered the backward compatibity - if the UE is NOT configured with the UDP port for downlink transport for a V2X service identified by a V2X service identifier, then the UE does not use the procedures for downlink V2X communication over Uu using UDP using unicast bearers for V2X messages of the V2X service identified by the V2X service identifier.  Does this address your comment?   1. The port is different in uplink and downlink V2X communication over Uu using UDP, transporting a V2X message of a V2X service identified by a V2X service identifier, due to the reasons identified in the previous answer. 2. Disadvantage of the above is that the UE will need to adjust its behaviour in Uu depending whether the UE is in EPS or in 5GS.   However, if you insist that you only want to focus on TCP, then this is of course possible.  Christian, Tuesday, 16:51  I fail to see justification in your comments for the proposed new method of introducing mandatory separation and support of UDP ports for downlink and uplink in V2X for EPS; can you please share the requirements at stage 2 level to back your proposal to TS 24.386 and 24.385 (in C1-202010 and 2011)?  As I already said in my initial e-mail, yes, they were added to TS 24.587 (V2X for 5GS) but again can you share the stage 2 requirements also for 5GS? I may miss something but I cannot find them. I believe that all this of mandatory separation of UDP ports for downlink and uplink needs to be re-considered actually. Again, in my view, a single UDP port can be used for both uplink and downlink. I still don’t understand why the 3GPP-based UE implementation has to be limited and be forced to have separate UDP ports. This actually has an impact on the upper layers.  Frankly, we seem to have gone too far about the Uu data transmission in TS 24.587 in specifying a number of details, for example, mandatory UDP ports for downlink and uplink as in our view, the need of defining all this should lie on upper layers which are out-of-scope of 3GPP (e.g., WAVE in North America, GeoNetworking protocol for the EU –ETSI-, DSMP protocol for China, whatever protocol used in India, etc). The 3GPP-based UE implementation should follow the way used by upper layers on how to configure the use of UDP and TCP port(s). CT1 should not introduce duplication or conflictive requirements actually.  Again, please your CRs should align with stage 2, i.e., support of TCP/IP packet. Nothing else.  Ivo, Tuesday, 19:53  A draft revision is available. Main changes:  - downlink transport of V2X messages over UDP was removed from the scope of the CR.  - related configuration parameters were also removed from the scope of the CR. | |
|  |  | | [C1-202011](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202011.zip) | Configuration parameters for additional transport over Uu for V2X messages of V2X services identified by V2X service identifiers | | | Ericsson / Ivo | CR 0020 24.385 Rel-16 | Christian, Monday, 8:41   1. The CR should not introduce any new \*\*method\*\* but should align with stage 2 requirements (TS 23.285); 2. we agree with the need of changes to TS 24.385 but again those have to be aligned with stage 2 which just add the support for TCP/IP packet to the existing UDP/IP; 3. we do wonder whether you considered backwards compatibility when defining the new method for UDP port handling. Note that you take the existing MO leaf for the UDP port (UDPPort) and change the meaning of it; 4. initially, only the updates backed up by TS 23.285 are acceptable to us, i.e., support of TCP/IP packet.   Ivo, Tuesday, 0:43  The comments above are similar to those raised against C1-202010.  I have provided answers to them in the other mail threat.  Let's conclude on C1-202010 first.  I will update C1-202011 based on the conclusions of C1-202010.  Ivo, Tuesday, 19:53  A draft revision is available. Main changes:  - downlink transport of V2X messages over UDP was removed from the scope of the CR.  - related configuration parameters were also removed from the scope of the CR. | |
|  |  | | [C1-202022](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202022.zip) | Incorrect reference | | | Ericsson / Ivo | CR 0001 24.587 Rel-16 |  | |
|  |  | | [C1-202104](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202104.zip) | PC5 unicast link security establishment | | | Qualcomm Incorporated / Lena | CR 0002 24.587 Rel-16 | Yanchao, Thursday, 15:55   1. In 6.1.2.6.3, “the initiating UE” should be “the target UE”   a)      during a PC5 unicast link establishment procedure, the initiating UE shall pass an indication to the lower layers that the PC5 signalling message is for security establishment; and  b)      during a PC5 unicast link re-keying procedure, the initiating UE shall pass an indication to the lower layers that the PC5 signalling message is protected.   1. In 6.1.2.6.5, “the initiating UE” should be “the target UE”   a)       during a PC5 unicast link establishment procedure, the initiating UE shall pass an indication to the lower layers that the PC5 signalling message is for security establishment; and  b)       during a PC5 unicast link re-keying procedure, the initiating UE shall pass an indication to the lower layers that the PC5 signalling message is protected  Sanpan, Thursday, 16:01   1. The terms (5G-EA and 5G-IA) defined in clause 3.1 doesn’t look like definitions. You can add them in clause 3.2 and the text after the abbreviation can be moved to clause 8.4.c as NOTE. 2. In clause 6.1.2.6.2 – in step a) 1) - For precondition related to DIRECT LINK ESTABLISHMENT REQUEST message seems not proper. – the precondition should be   “if KNRP ID is not included in the DIRECT LINK ESTABLISHMENT REQUEST message, the target UE does not have an existing KNRP for the KNRP ID included in DIRECT LINK ESTABLISHMENT REQUEST message or the target UE wishes to derive a new KNRP” (Same condition added in clause 6.1.2.2.3).   1. In clause 6.1.2.6.2 – in step b) - For precondition related to DIRECT LINK REKEYING REQUEST – ReAuth flag needs to be checked. 2. In clause 6.1.2.6.2 – “The target UE shall start timer T5aaa” -> it should be initiator UE. 3. In clause 6.1.2.6.5 – “ the initiating UE shall pass an indication to the lower layers” -> it should be target UE (2 instances) 4. In clause 6.1.2.6.5 – “The target UE shall abort the ongoing procedure” – I do not see abort procedure defined anywhere? What should be done to abort the procedure? 5. In clause 6.1.2.6.6.1 – Same comment as above for aborting procedure 6. In clause 6.1.2.7.1 – “The PC5 unicast link security mode control procedure is used to establish a security ~~association~~ between two UEs during …..” (Terminology used from clause 5.3.3.1.4.3 of TS 33.536) 7. In clause 6.1.2.7.3 – steps to “derive KNRP-sess from KNRP” and “derive NRPEK and NRPIK from KNRP-sess” should be move after step e) – as we need to derive keys only after checking whether message can be accepted or not. 8. In clause 6.1.2.7.5 – if DIRECT LINK SECURITY MODE COMMAND message is rejected due to cause specified in step d) of clause 6.1.2.7.3  OR step e) of clause 6.1.2.7.3 – then what will be values of PC5 signalling protocol cause IE value? 9. Table 8.4.1.1 and in Table 8.4.9.1– Why 9 bits are used?   Rae, Friday, 7:44  The indication from PC5-S to AS layer to indicate whether PC-S message is protected or not is not necessary, with the following reasons:   * RAN2 has determined the value of LCIDs corresponding to the different PC5-S message. I copy the table from the agreed RAN2 CR R2-2001969 as below. * The new indication cannot be handled in the existing AS layer, which will impact AS layer e.g. a new layer such as SDAP should be added. * Actually the same mechanism is also in ProSe without the proposed indication and there is no issue.   Fei, Friday, 10:45  The term 5G-EA and 5G-IA can be referred to 24.501.  In the subclause 8.4.g, the EEA/EIA should be changed to 5G-EA/IA;  I have a question, why the the Knrp ID is defined for 32 bits. I have not found clear statement that the Knrp id should be 32bits. And since the Knrp\_sess id is 16bits, whether 16 bits are sufficient for the Knrp id.  Lena, Monday, 3:08  To Yanchao:  I have uploaded a draft revision with the following changes (also incorporated comments from other companies):   * Referred to the definition of 5G-EA and 5G-IA in TS 24.501 rather than adding the same definition in TS 24.587, and removed the addition of the reference to TS 33.501 which as a result is no longer needed * Replaced “initiating UE” by “target UE” in 2 places in 6.1.2.3 * Replaced initiating UE” by “target UE” in 2 places in 6.1.2.5 * In clause 6.1.2.6.2, for the preconditions related to the case when the authentication procedure is triggered by a direct link establishment procedure, added a condition that “the KNRP ID is not included in the DIRECT LINK ESTABLISHMENT REQUEST message or the initiating UE does not have an existing KNRP for the KNRP ID included in DIRECT LINK ESTABLISHMENT REQUEST message or the initiating UE wishes to derive a new KNRP, derive a new KNRP” * In clause 6.1.2.6.2, for the preconditions related to the case when the authentication procedure is triggered by a direct link re-keying procedure, added a condition that the DIRECT LINK REKEYING REQUEST message includes a Re-authentication indication * Replaced “target UE” by “initiating UE” in 6.1.2.6.2 * Changed “to establish a security association between two UEs" to “to establish security between two UEs” during In subclause 6.1.2.7.1 * In clause 6.1.2.7.5, clarified that if DIRECT LINK SECURITY MODE COMMAND message is rejected due to cause specified in step d) of clause 6.1.2.7.3  orstep e) of clause 6.1.2.7.3, the UE shall use PC5 signalling protocol cause #d "UE PC5 unicast signalling security policy mismatch" in the SECURITY MODE REJECT message * Fixed the number of bits used from 9 to 8 in 8.4.1.1 and 8.4.9.1 * In subclause 8.4.g, changed EEA/EIA to 5G-EA/IA   Lena, Monday, 3:09  To Sapan:   1. -> They are actually defined in TS 24.501. Fei suggested just referring to the definitions in TS 24.501, which is what I have done in the draft revision 2. -> OK 3. -> OK 4. -> OK 5. -> OK 6. -> Aborting the procedure means no longer pursing it, no longer sending any related signalling and cleaning up all related timers. We have this terminology also in TS 24.008, TS 24.301 and TS 24.501, without any specific definition of what aborting the procedure means, and I see no need to start defining it now. 7. -> See 6) 8. -> OK 9. -> No because the first check to see whether the message can be accepted it to check the integrity protection of the message, which requires NRPIK 10. -> The UE shall use PC5 signalling protocol cause #d "UE PC5 unicast signalling security policy mismatch" in the SECURITY MODE REJECT message,  I have clarified this in the revision 11. -> That was a mistake, thanks for pointing it out. I have fixed it in the draft revision   Lena, Monday, 3:12  To Fei: I agree with your suggestion to refer to TS 24.501, and I also agree with the comment about changing EEA/EIA to 5G-EA/IA. I have taken both comments onboard, as well as comments from Yanchao and Sapan in a draft revision available.  Regarding the length of KNRP ID, although TS 33.536 does not explicitly define the length of KNRP ID (probably an oversight), the rationale section of S3-200501 explains that the security for the PC5 unicast link “is based on the ProSe text [2] and the conclusion of the TR but includes at least the following changes: (…) Renaming the KD (…) to KNRP”. For ProSe, KD ID is 32 bits long, so I have used the same length. If some companies think this value is not appropriate, we can always send an LS to SA3 to ask them how long it should be.  Sapan, Monday, 8:17  Thanks for considering my comments and taking it on board. While reviewing the draft revision, I found few more issues and here are the comments:   1. In clause 6.1.2.6.3 – after step b), please mention about deriving KNRP as follows -   “Upon sending the DIRECT LINK AUTHENTICATION RESPONSE message, the target UE shall derive a new KNRP as specified in 3GPP TS 33.536 [yy]. “   1. In clause 6.1.2.6.4 – please add below text at end of the first paragraph.   “and derive a new KNRP as specified in 3GPP TS 33.536 [yy]”   1. In clause 6.1.2.7.3 – reference number for TS 33.536 is used as [x] => it should be [yy] as specified in reference clause 2.   I am fine with changes done for previous comments.  Lena, Monday, 23:44  To Sapan:   1. -> Adding this statement would not be correct, because it might take several authentication procedures (ie several authentication request/response exchanges) to derive the K\_NRP depending on the authentication method used, see TS 33.536 subclause 5.3.3.1.3.2.   Also, some authentication methods might require some info in the DIRECT SECURITY MODE COMMAND message to complete the K\_NPR derivation (see in TS 33.536 figure 5.3.3.1.3.2-1 that the Direct Security Mode Command message optionally includes a Key establishment info IE) . So we can have text saying the UE derives the new K\_NRP only in the security mode control procedure, not in the authentication procedure   1. -> Same as above 2. Thanks for pointing this out, I have fixed it in v2 of the draft revision   Lena, Tuesday, 7:28  To Rae:  I do think this indication from the V2X layer to the AS layer of whether a PC5 signalling message is unprotected, for security establishment, or protected, would be useful. We already have in the spec a lot of info passed from the V2X layer to the AS (destination layer-2ID, etc). Yes it can be handled in implementation, but having it in the spec makes the interactions between the layers easier to understanding in my view.  That said, if I am the only who think the indication is useful, I am ok to remove it. I would be interest to hear other companies’ view.  Sapan, Tuesday, 7:43   1. -> ok 2. -> I agree that there could be multiple authentication request/response exchanges occur but I would like to add clarification on exactly when a new KNRP has been derived by the initiating UE. So, my proposal is to add below text in clause 6.1.2.6.4: “Upon completion of final link authentication request/response exchange, the initiating UE shall derive KNRP as specified in 3GPP TS 33.536 [yy].” 3. -> Thanks   Fei, Tuesday, 13:34  Thanks for your clarification.  I am fine with the length of Kd ID and the revision is Ok to me.  Christian, Tuesday, 16:18  We would like to proceed with the CR but we believe that some parts of the proposal are still under discussion at stage 2 level and we would like to propose some updates:   * 1. under clause 6.1.2.2.2, we would like to remove bullet item g) from now and replace it by an editor’s note, for example, whether the PC5 unicast signaling security policy is needed to be included is FFS waiting for SA3 conclusion;   2. also under clause 6.1.2.2.2, we do not see need of indication of inter-layer interaction about providing an indication to lower layers about the PC5 signalling message is unprotected. Firstly, it seems not settled whether the PC5 signalling would be sent unprotected for signalling in the end (wait for SA3 conclusion). Even if so, there is no need of this interaction defined in TS 24.334 (in ProSe) where your proposal seems to be based on;   3. under clause 6.1.2.7.1, the proposal removes both editor’s note given the impression that all is fixed by SA3 but this is not understanding as discussions are ongoing there;   4. under clause 6.1.2.7.2, we think that at this moment in time we should not add the text quote:   The initiating UE shall select security algorithms in accordance with its UE PC5 unicast signalling security policy and the target UE’s PC5 unicast signalling security policy. If the PC5 unicast link security mode control procedure was triggered during a PC5 unicast link establishment procedure, the initiating UE shall not select the null integrity protection algorithm if the initiating UE or the target UE’s PC5 unicast signalling integrity protection policy is set to "signalling integrity protection required".  in our understanding there are still SA3 discussion on this aspect. Editor’s note;   * 1. also under clause 6.1.2.7.2, similarly as above, we would like to remove the bullet item 7. Editor’s note instead, if necessary;   2. under clause 6.1.2.7.3, we would like to remove bullet items c and d, and add an editor’s notes instead;   3. under clause 6.1.2.7.5, 8.4.9, we would like not add yet the proposed new value “#d UE PC5 unicast signalling security policy mismatch“;   4. under clause 7.3.1.1, 7.3.d.1, 7.3.e.1, we would like not to add the UE PC5 unicast signalling security policy IE so new 8.4.d and 8.4.k are not acceptable to us yet;   Lena, Wednesday, 2:23  To Christian:  a. -> UE signalling security policy is in SA3 spec. ongoing discussions abou UE user plane security policy, ok to remove that one  b. -> ok  c. -> reverted deletion of EN on user plane security policy, kept removal of the other one  d. -> CR is aligned with SA3 spec  e. -> CR is aligned with SA3 spec  f. -> CR is aligned with SA3 spec  g. -> ok to moreve items related to user plane security policy  A draft revision is available.  Lena, Wednesday, 2:53  To Sapan:  Regarding “I would like to add clarification on exactly when a new KNRP has been derived by the initiating UE”, it is actually not possible to put a statement on exactly when the UE does this in the PC5 unicast link authentication procedure because it will depend on the authentication method in use: how many times the procedure itself is performed to derive a new K\_NRP depends on the authentication method in use. Also depending on the method in use, the derivation of K\_NRP might be performed in successive steps. So I would prefer to only list the fact that K\_NRP has been derived as pre-condition for the start of the security mode control procedure, without specifying exactly when the initiating UE has derived K\_NRP (since it can’t be pin-pointed).  A draft revision is available, addressing also comments from Christian and Rae.  Lena, Wednesday, 2:55  To Rae:  I have removed the iindication from UE to AS layer of whether a PC5-signalling message is unprotected, for security establishment or protected. A draft revision is available.  Sapan, Wednesday, 10:34  I completely agree with you on the fact that link authentication procedure may run multiple times depending on the authentication method used. But in TS 33.536 - clause 5.3.3.1.3.2 – it is clearly mentioned that KNRP shall be calculated after step#2 and before UE\_2 sends Direct Security Mode Command message. So here is my new proposal: If Qualcomm do not want to add normative text in clause 6.1.2.6.4, then Can you add NOTE in clause 6.1.2.6.4 to specify that initiating UE derives KNRP during link authentication procedure at any time depending on authentication method use?  Yanchao, Wednesday, 10:35  I have checked with my RAN2 colleague,  our view on “whether the indication from UE to AS layer of whether a PC5-signalling message is unprotected is needed or not” is needed.  AS layer cannot tell  whether the a PC5-signalling message is unprotected based on existing information, therefore an explicit indication is needed from upper layer by AS layer. | |
|  |  | | [C1-202105](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202105.zip) | NR PC5 unicast security policy provisioning | | | Qualcomm Incorporated / Lena | CR 0003 24.587 Rel-16 | Postponed  Christian, Monday, 8:41   1. the term defined under 3.1 is “NR-PC5”. Can you replace “NR PC5” then?; 2. the text of the new bullet item “vi)” seems to imply that there are several policies but each entry in the list should provide one security policy so what about “vi) one or more geographical areas where the security policy entry applies”?; and 3. with those changes we would like to co-sign the CR as we support it.   Christian, Monday, 14:23   1. we agree that SA3 CRs have been agreed adding that, quote of TS 33.536 under clause 5.3.3.1.4.2.1:   Security policy for PC5 link shall be provisioned for NR PC5 V2X communication as well.  However, there are two editor’s notes and a NOTE under clause 5.3.3.1.4.2.3 on “Security policy handling” which I have now paid attention since they are not shown on the cover sheet of the CT1 CRs, quote:  The list of V2X services, e.g. PSIDs or ITS-AIDs of the V2X applications, with Geographical Area(s) and their security policy which indicates the following:  •       Signalling integrity protection: REQUIRED/PREFERRED/OFF  •       Signalling confidentiality protection: REQUIRED/PREFERRED/OFF  •       User plane integrity protection: REQUIRED/PREFERRED/OFF  •       User plane confidentiality protection: REQUIRED/PREFERRED/OFF  NOTE 1: No integrity protection on signalling traffic enables services that do not require security, e.g. emergency services.  Editor’s note: Whether policy is OFF or NOT NEEDED is FFS  Editor’s note: The security policy handling related part needs to be clearly defined. It is FFS that how the initiating UE and the receiving UE deal with the security policy, e.g., whether to accept the communication or not with their security policy and local policy   1. in our understanding, the security requirements regarding security policy provisioning and handling are not crystal clear yet. This is obvious looking at the stage 2 specification on security (TS 33.536) which version is v1.0.0 so not approved yet and discussions and CRs are still ongoing. Now, I have found p-CRs from several companies (including Huawei) proposing to modify those initially added requirements to the draft version of TS 33.536 for example, updating the security policies and how they are handling, challenging NOTE1, and resolving the editor’s notes in different ways. Furthermore, I see that there are also discussion about (at least one related CR) this week in SA2 (#138E) on the impacts to the architecture and procedures because of the draft version 1.0.0 of TS 33.536; 2. since the situation in both SA3 and SA2 is not crystal clear yet, TS 33.536 is not stable enough and CT1 are meeting in May, I would like to postpone the two CRs in C1-202105 and 2106 till the dust settles in both SA3 and SA2 so we know exactly what we need to do at stage 3 level in CT1.   Andrew H, Monday, 15:09  Agree with Christian, It would probably be a good idea to postpone these CRs until it is clear what decisions have been taken by SA3.  Lena, Tuesday, 9:00  The good news is that SA3 has made some agreements on UE security policy last week, and my understanding is that this should enable us to make progress at this meeting without necessarily waiting for the May meeting. Specifically:  About (1)   * The Editor’s note stating “The security policy handling …” is no longer in the latest version of TS 33.536 (v0.3.0, available in S3-200528) * The Editor’s note stating “Whether policy is OFF or NOT NEEDED is FFS” has been removed by S3-200690 agreed in SA3 last week (SA3 decided to change “OFF” to “NOT NEEDED”)   About (2)   * Several agreements in SA3 on UE security policy were made last week and our understanding is that C1-202105 and C1-202106 are inline with these agreement.  We are not aware of any open items regarding the UE security policy parameters provisioning and their values. If there are any issues which are still unclear, it would be very beneficial if you could point at what these are. Then we could consider addressing them with Editor’s notes.   About (3)   * C1-202105 and C1-202106 are not about what the UE does with the UE security policy, but about what parameters are in the policy and how they are encoded. I believe the SA3 aspects for these are finalized (the last remaining open item was this “OFF” vs “NOT NEED” question which was settled last week as mentioned above). So I do not really what will change between now and the May meeting, and my preference would be to proceed with the CRs.   In light of the above, I have prepared the following draft revisions with the following changes:   * Updated reason for change with latest SA3 agreement * Changed “NR PC5” to “NR-PC5” * Changed “where the policies apply” to “where the NR-PC5 unicast security policy applies”   Christian, Wednesday, 14:57  Agree that progress was achieved but the thing is that I have checked TS 33.536 v1.0.0 (yes, which is v.0.3.0 sent for information) together with a number of p-CRs submitted and discussed last SA3 meeting (#98-bis-e) which challenge requirements under clause 5.3.3.1.4.2 on “Security policy” (e.g., S3-20072, S3-200790). The p-CR from us was noted so the discussions seem to be continued next meeting. There are further discussion this week at the SA2 meeting also on security policy and its impacts on architecture as you may be aware of. I am sorry but it seems that the requirements are not carved in stone on security policy yet. Furthermore, not only does security policy impact the UE but also the PCF, all this also might need to be checked with CT3 experts too.  I believe that it is sensible for us, stage 3 (CT1), to wait for stable requirements and the group will benefit on waiting for the next meeting.  Lena, Wednesday, 16:37  Thanks for your additional feedback. I checked again with my SA3 colleague and the p-CR from Huawei proposing to mandate security for the PC5 unicast link was noted in SA3 last week because there was no support for the proposal. There is no expectation that the discussion will continue in SA3 next meeting, and the requirements on security policy provisioning remain in TS 33.536. Hence C1-202105 & C1-202106 are fully aligned with the current SA3 requirements.  Based on the above, I don’t think anything will change between now and May. That said, since SA3 meets well ahead of CT1 (SA3#99e takes place May 11-15), I can reluctantly accept to postpone C1-202105 & C1-202106 to see if anything changes in SA3 during their May meeting.  To enable C1-202104 to progress, I will update the draft revision of C1-202104 to remove items related to UE signaling security policy and replace them by Editor’s notes. | |
|  |  | | [C1-202106](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202106.zip) | NR PC5 unicast security policy provisioning | | | Qualcomm Incorporated / Lena | CR 0001 24.588 Rel-16 | Postponed  Ivo, Friday, 15:39  We need to specify how the UE treats the spare values  Christian, Monday, 8:50   1. we support the CR as the related one in C1-202105 but as we add the “NR-PC5”, which is defined by TS 24.587, this has to be indicated under clause 3.1; 2. with that change we would like to co-sign the CR so that the NR-PC5 unicast link security policies can be provisioned to the UE by means of TS 24.588 so that the stage 2 requirements on security are added to stage 3 by CT1.   Christian, Monday, 14:23   1. we agree that SA3 CRs have been agreed adding that, quote of TS 33.536 under clause 5.3.3.1.4.2.1:   Security policy for PC5 link shall be provisioned for NR PC5 V2X communication as well.  However, there are two editor’s notes and a NOTE under clause 5.3.3.1.4.2.3 on “Security policy handling” which I have now paid attention since they are not shown on the cover sheet of the CT1 CRs, quote:  The list of V2X services, e.g. PSIDs or ITS-AIDs of the V2X applications, with Geographical Area(s) and their security policy which indicates the following:  •       Signalling integrity protection: REQUIRED/PREFERRED/OFF  •       Signalling confidentiality protection: REQUIRED/PREFERRED/OFF  •       User plane integrity protection: REQUIRED/PREFERRED/OFF  •       User plane confidentiality protection: REQUIRED/PREFERRED/OFF  NOTE 1: No integrity protection on signalling traffic enables services that do not require security, e.g. emergency services.  Editor’s note: Whether policy is OFF or NOT NEEDED is FFS  Editor’s note: The security policy handling related part needs to be clearly defined. It is FFS that how the initiating UE and the receiving UE deal with the security policy, e.g., whether to accept the communication or not with their security policy and local policy   1. in our understanding, the security requirements regarding security policy provisioning and handling are not crystal clear yet. This is obvious looking at the stage 2 specification on security (TS 33.536) which version is v1.0.0 so not approved yet and discussions and CRs are still ongoing. Now, I have found p-CRs from several companies (including Huawei) proposing to modify those initially added requirements to the draft version of TS 33.536 for example, updating the security policies and how they are handling, challenging NOTE1, and resolving the editor’s notes in different ways. Furthermore, I see that there are also discussion about (at least one related CR) this week in SA2 (#138E) on the impacts to the architecture and procedures because of the draft version 1.0.0 of TS 33.536; 2. since the situation in both SA3 and SA2 is not crystal clear yet, TS 33.536 is not stable enough and CT1 are meeting in May, I would like to postpone the two CRs in C1-202105 and 2106 till the dust settles in both SA3 and SA2 so we know exactly what we need to do at stage 3 level in CT1.   Lena, Tuesday, 9:00  The good news is that SA3 has made some agreements on UE security policy last week, and my understanding is that this should enable us to make progress at this meeting without necessarily waiting for the May meeting. Specifically:  About (1)   * The Editor’s note stating “The security policy handling …” is no longer in the latest version of TS 33.536 (v0.3.0, available in S3-200528) * The Editor’s note stating “Whether policy is OFF or NOT NEEDED is FFS” has been removed by S3-200690 agreed in SA3 last week (SA3 decided to change “OFF” to “NOT NEEDED”)   About (2)   * Several agreements in SA3 on UE security policy were made last week and our understanding is that C1-202105 and C1-202106 are inline with these agreement.  We are not aware of any open items regarding the UE security policy parameters provisioning and their values. If there are any issues which are still unclear, it would be very beneficial if you could point at what these are. Then we could consider addressing them with Editor’s notes.   About (3)   * C1-202105 and C1-202106 are not about what the UE does with the UE security policy, but about what parameters are in the policy and how they are encoded. I believe the SA3 aspects for these are finalized (the last remaining open item was this “OFF” vs “NOT NEED” question which was settled last week as mentioned above). So I do not really what will change between now and the May meeting, and my preference would be to proceed with the CRs.   In light of the above, I have prepared the following draft revisions with the following changes:   * Updated reason for change with latest SA3 agreement * Added reference to definition of NR-PC5 in TS 24.587 in subclause 3.1 * Changed “NR PC5” to “NR-PC5” * Changed “off” to “not required” for security policy code points * Added a description of how the UE handle spare values   Lena, Tuesday, 9:02  I have taken onboard Ivo’s comments in a draft revision.  Christian, Wednesday, 14:57  Agree that progress was achieved but the thing is that I have checked TS 33.536 v1.0.0 (yes, which is v.0.3.0 sent for information) together with a number of p-CRs submitted and discussed last SA3 meeting (#98-bis-e) which challenge requirements under clause 5.3.3.1.4.2 on “Security policy” (e.g., S3-20072, S3-200790). The p-CR from us was noted so the discussions seem to be continued next meeting. There are further discussion this week at the SA2 meeting also on security policy and its impacts on architecture as you may be aware of. I am sorry but it seems that the requirements are not carved in stone on security policy yet. Furthermore, not only does security policy impact the UE but also the PCF, all this also might need to be checked with CT3 experts too.  I believe that it is sensible for us, stage 3 (CT1), to wait for stable requirements and the group will benefit on waiting for the next meeting.  Lena, Wednesday, 16:37  Thanks for your additional feedback. I checked again with my SA3 colleague and the p-CR from Huawei proposing to mandate security for the PC5 unicast link was noted in SA3 last week because there was no support for the proposal. There is no expectation that the discussion will continue in SA3 next meeting, and the requirements on security policy provisioning remain in TS 33.536. Hence C1-202105 & C1-202106 are fully aligned with the current SA3 requirements.  Based on the above, I don’t think anything will change between now and May. That said, since SA3 meets well ahead of CT1 (SA3#99e takes place May 11-15), I can reluctantly accept to postpone C1-202105 & C1-202106 to see if anything changes in SA3 during their May meeting.  To enable C1-202104 to progress, I will update the draft revision of C1-202104 to remove items related to UE signaling security policy and replace them by Editor’s notes. | |
|  |  | | [C1-202107](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202107.zip) | PC5 unicast link re-keying procedure | | | Qualcomm Incorporated / Lena | CR 0004 24.587 Rel-16 | Ivo, Thursday, 13:54  We need to specify how the UE treats the spare values.  Yanchao, Thursday, 15:58  Is it possible that the target UE does not accept the PC5 unicast link re-keying procedure?  Sapan, Thursday, 16:30   1. In clause 6.1.2.x.2 – Need to add below NOTE. (Similar NOTE added in C1-202104)   “In order to ensure successful PC5 unicast link re-keying, T5ccc should be set to a value larger than the sum of T5aaa and T5bbb”   1. Table 8.4.1.1 – 9 bits are used.   Fei, Friday, 11:00  My preference would be that the target UE sends the Rekey response using the existing security context before triggering the re-authentication procedure.  After sending the rekey response to the initial UE, the target UE will trigger the authentication procedure as in the CR 2104.  Ivo, Friday, 15:43  I withdraw my comment on this document, it was related to C1-202106.  Lena, Tuesday, 7:42  To Fei: the reason for having the Rekeying response is so that the initiating UE can consider the procedure complete. If you send it before authentication and security mod control are performed then you do not know whether the rekeying of the link will actually succeed. Hence we would prefer to keep the Rekeying response at the end of the procedure (as was done for ProSe in TS 24.334).  Lena, Tuesday, 7:43  To Yanchao: I do not think the target UE has the option of not accepting the PC5 unicast link re-keying procedure. Note that for ProSe in TS 24.334, there is also no way for the target UE to reject the rekeying request.  Lena, Tuesday, 7:51  To Sapan: I have taken your comments onboard in a draft revision.  Sapan, Tuesday, 8:13  I am fine with the draft revision.  Fei, Tuesday, 8:16  Thanks for your clarification. I am fine with the CR. | |
|  |  | | [C1-202108](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202108.zip) | Adding general subclause on security of PC5 signalling messages | | | Qualcomm Incorporated / Lena | CR 0005 24.587 Rel-16 | Ivo, Friday, 3:51  Please do not use "and/or"  Christian, Monday, 16:06   1. we support the CR in order to have a general clause on PC5 unicast security into TS 24.587 in a similar way as TS 24.501 or TS 24.301 (i.e., a clause on “NAS security” exists); 2. there are a number of aspects which seems not to be crystal clear at stage 2 as there are p-CRs tabled at the last meeting and the specification is not approved yet (TS 33.536). Hence, we would like to propose some updates and clarify some questions from my side:    1. I would like to remove the word “possible” in front of “integrity protection and ciphering of PC5 user-plane data” and add an editor’s note instead till this is settled in SA3;    2. I would like to remove the NOTE under clause 6.1.2.1a.1 at this moment in time and see how all this ends up in stage 2. Also, in my view, I find strange that at least integrity protection is not used by default;    3. I would like to know how many security contexts can exist in the UE, e.g., clause 6.1.2.1a.2 reads “[..] PC5 unicast security contextS” but the text under the clause is not clear to me. When checking the draft version of TS 33.536, I am unsure how many PC5 unicast security contexts you think of. I see that the initiating UE can establish different PC5 unicast security contexts for each peer UEs during the PC5 unicast link establishment procedure but that is not clear in your proposal and get further confused by the use of “current” later one. If needed, and editor’s note could be added; and    4. I fail to see the concept of “current” PC5 unicast security context at stage 2 level (draft TS 33.536). The introduction of the concept of “current” PC5 unicast security context seems to imply that there is also “non-current” one or? Though existing in EPS and 5GS for NAS security in TS 24.301 and 24.501, I fail to see those two concepts at stage 2 level at this moment in time. Editor’s notes or clarification?   Lena, Wednesday, 5:22  Due to comments from Christian, the NOTE with this “and/or” is gone. I have also made the following additional changes based on his comments:   * Removed “possible” in front of “integrity protection and ciphering of PC5 user-plane data” and added an Editor’s note instead * Updated wording to remove the use of “current” to avoid giving the impression that the UE maintains multiple security contexts a given PC5 unicast link (there is only one, except for a short time during the re-keying procedure)   A draft revision is available.  Lena, Wednesday, 5:32  A draft revision addressing Christian’s comments is available. | |
|  |  | | C1-202109 | Introducing new messages for the Link Identifier Update procedure | | | InterDigital Communications | CR 0006 24.587 Rel-16 | Merged into C1-202186 and its revisions  Tdoc was not available on time  Lena, Friday, 2:34   1. Subclauses to describe when optional IEs are included are missing in clause 7 2. The corresponding procedure in subclause 6.1.2.5 needs to be updated to align with the actual message contents. For instance, subclause 6.1.2.5.2 says the UE shall include “the new security information” in the DIRECT LINK IDENTIFIER UPDATE REQUEST message. It should be replaced with “the MSB of KNRP-sess ID” 3. The LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE ACCEPT message should not be optional, according to TS 33.536 subclause 5.3.3.2.2, the target UE shall include them. 4. The LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE ACK message should not be optional, according to TS 33.536 subclause 5.3.3.2.2, the initiating UE shall include them 5. The definition of the DIRECT LINK IDENTIFIER UPDATE REJECT message is missing 6. Subclause 8.4.1 also needs to be modified 7. Overlaps with vivo’s C1-202186 8. Overlaps with CATT’s C1-202547   Behrouz, Friday, 3:01  Answers to Lena’s comments in red:   1. Subclauses to describe when optional IEs are included are missing in clause 7 [BA: I left them out on purpose as w are awaiting agreements in SA2] 2. The corresponding procedure in subclause 6.1.2.5 needs to be updated to align with the actual message contents. For instance, subclause 6.1.2.5.2 says the UE shall include “the new security information” in the DIRECT LINK IDENTIFIER UPDATE REQUEST message. It should be replaced with “the MSB of KNRP-sess ID” [BA: I know, but those are all defined in my other CR, 2596] 3. The LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE ACCEPT message should not be optional, according to TS 33.536 subclause 5.3.3.2.2, the target UE shall include them. [BA: In fact, I wanted to make it Mandatory, but the ongoing discussions in SA2 seem to make it optional!] 4. The LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE ACK message should not be optional, according to TS 33.536 subclause 5.3.3.2.2, the initiating UE shall include them [BA: Same comment as above] 5. The definition of the DIRECT LINK IDENTIFIER UPDATE REJECT message is missing [BA: See below] 6. Subclause 8.4.1 also needs to be modified [BA: CATT’s CR has it so we can import that from there] 7. Overlaps with vivo’s C1-202186 [BA: Yes, and it seems that Yanchao has defined the Reject message, so we will probably merge at some point. However, there are issues with other messages in her CR. Therefore, I prefer to just incorporate the Reject message from her CR into my revision] 8. Overlaps with CATT’s C1-202547 [BA: Yes, but I have spotted several issues with CATT’s CR and will soon send out my comments!]   Yanchao, Saturday, 10:58   1. The encoding of layer-2 ID is missing 2. The definition of the DIRECT LINK IDENTIFIER UPDATE REJECT message is missing 3. The PC5 signalling message types for the  Link Identifier Update procedure are missing in clause 8.4.1 4. What is the reason for adding the following IEs in the link identifier update accept message  * New Source Layer 2 ID * New Source user info * New Source Link local IPv6 address   And this paper conflicts with C1-202186 from vivo, which captures more aspects.  Behrouz, Saturday, 21:00  Some of Yanchao’s comments are covered by my answers to Lena. The reject message from Yanchao’s CR can be incorporated in my CR.  Behrouz, Tuesday, 2:48  I am ok to merge this CR into C1-202186 and co-sign the revision. | |
|  |  | | [C1-202116](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202116.zip) | L2 ID of target UE used in the direct link establishment request | | | OPPO / Rae | CR 0008 24.587 Rel-16 | Ivo, Thursday, 13:54  - "follwoing" - 6.1.2.2.2 - linkage between bullet 2) and bullets i) and ii) is not clear.  Yanchao, Thursday, 16:09  What is the difference between C-2) and “known via prior V2X communication” in C-1?  Lena, Friday, 2:39   1. Typo in 6.1.2.2.2: “follwoing" 2. In 6.1.2.2.2, I don’t understand the combination of the condition “if the application layer provides the target UE's application layer ID and the link layer identifier for the target UE is valid” followed by bullet i) and ii). This needs to be clarified. 3. In 6.1.2.2.2, “does not expire” should probably be “has not expired” 4. The stage 2 requirement “When unicast Layer-2 ID is used, the Target User Info shall be included in the Direct Communication Request message” quoted in the CR coversheet is not covered in the changes 5. I don’t think the text added in 6.1.2.2.4 adds any value. If the purpose is to mention that the pair of L2 ID for the link can be changed, I suggest just adding “until the pair of layer-2 IDs is changed during a PC5 unicast link identifier update procedure as specified in subclause 6.1.2.5” after “This pair of layer-2 IDs shall be associated with a PC5 unicast link context”.   Rae, Monday, 5:24  I took all comments on board in a draft revision.  Ivo, Monday, 23:00  my comment:  - 6.1.2.2.2 - linkage between bullet 2) and bullets i) and ii) is not clear. is still not fully addressed.  The revision now refers to "valid" without it being used anywhere.  2)   the link layer identifier for the target UE is available to the initiating UE (e.g. via prior V2X communication, or obtained from the application layer). The link layer identifier for the target UE is considered as valid:  i)    if the link layer identifier for the target UE is also provided from the upper layers; or  ii)   if the validity timer of the link layer identifier for the target UE has not expired;  is the intention to state the following?  2)   a valid link layer identifier for the target UE is available to the initiating UE (e.g. via prior V2X communication, or obtained from the application layer). The link layer identifier for the target UE is considered as valid:  i)    if the link layer identifier for the target UE is also provided from the upper layers; or  ii)   if the validity timer of the link layer identifier for the target UE has not expired;  and use "valid" also in later text?  After the DIRECT LINK ESTABLISHMENT REQUEST message is generated, the initiating UE shall pass this message to the lower layers for transmission along with the initiating UE's Layer 2 ID for unicast communication and either the destination layer 2 ID used for unicast initial signaling or the valid target UE's destination layer 2 ID, and start timer T5000. The UE shall not send a new DIRECT LINK ESTABLISHMENT REQUEST message to the same target UE identified by the same application layer ID while timer T5000 is running.  Chen, Tuesday, 4:31   * There is no need to add a valid timer for the destination layer 2 ID. If the destination layer 2 ID is not valid, the direct communication would not be established and it is difficult to get the validity timer of the link layer identifier for the UE. And it conflicts the clause 6.1.2.5 PC5 unicast link identifier update procedure, the Layer 2 ID can be changed at any time based on the application layer. * There are confusions between c)1) and c)2):   The current specification statement “the link layer identifier for the unicast initial signaling (i.e. destination layer 2 ID used for unicast initial signaling) is available to the initiating UE (e.g. pre-configured,  obtained as specified in clause 5.2.3 or known via prior V2X communication)”  has included what the bullet c)2) states “the link layer identifier for the target UE is available to the initiating UE (e.g. via prior V2X communication, or obtained from the application layer)”.  And in my understanding, “available” means the link layer identifier is already valid at least the initiating UE supposed.   * There is no need to add the words in this bullet c) : may include the target user info set to the target UE’s application layer ID if received from upper layers or shall include the the target user info set to the target UE’s application layer ID if received from upper layers and the link layer identifier for the target UE is used; please see C1-202316 * About the last changes, I do share the same view with Lena that I don’t think the text added in 6.1.2.2.4 adds any value even if adding the words Lena suggested, which should not appear in the link establishment procedure.   Rae, Tuesday, 5:16  About Chen’s comments:   * I think checking the L2 ID is valid or not by the initiating UE is useful under the case that “the link layer identifier for the target UE is available to the initiating UE (e.g. via prior V2X communication”.   In the case, it is possible that the stored L2 ID has been abandoned or not valid in the perspective of the target UE while the initiating UE has no idea. If the initiating UE still uses the invalid L2 ID, the link establishment will fail. In my understanding, this also align with the intention of designing the PC5 unicast link identifier update procedure. And maybe the timer of updating L2 ID can be reused here. In addition, checking the L2 ID does not conflict with the PC5 unicast link identifier update procedure because this checking happens when UE wants to establish a new PC5 link with the same target UE.   * in my understanding, “available” just means the L2 ID is stored in the initiating UE while “valid” means the L2 ID can be used * OK to not touch this bullet. * for this change, I do not have a strong position. I just think the existing “onward” will give a view that L2 ID will not change. But if people think the change is not needed. I can live with not touching this subclause.   Rae, Tuesday, 5:30  I will take Ivo’s suggestions on board.  Chen, Tuesday, 6:04  - It is very difficult to get the validity timer of the layer 2 ID for the UE due to the privacy policy, and there is even no validity timer of the Layer-2 ID, according to clause 6.1.2.5.2.the upper layer can change the layer 2 ID at any time, quote:  - There is not this validity timer in TS 23.287.  - More comments inline.  Rae, Tuesday, 8:55  I agree that if the L2 ID for target UE is not valid, the initiating UE will delete this L2 ID. But I think the issue is still there if the storage of the L2 ID on peer UEs does not match, which results the initiating UE cannot receive the response from the target UE and the establishment will be delayed. So I propose an FFS:  Editor's note: how long the initiating UE stores the link layer identifier for target UE obtained via prior V2X communication is FFS.  In my understanding, the existing L2 ID is associated with the unicast initial signaling and may associated with V2X service(s), but not with a specific UE. For the green highlighted part, the cases that the initiating UE gets the L2 ID for target UE is different from the cases for the existing LS ID. So the green highlighted is needed. If you still think it is confused, some suggested wording is very welcomed.  Chen, Tuesday, 9:19   * The Main problem is, adding the validity timer will destroy the privacy of the target UE, since stage 2 states the Layer 2 ID shall be changed over time so that the UE cannot be tracked. And there is no requirement for the validity timer in Stage 2. * destination layer 2 ID used for unicast initial signaling has included the link layer identifier for the target UE.   Rae, Tuesday, 9:52   * For getting the L2 ID via prior communication, please note not for the existing communication, it is useful to specify how long the initiating UE stores the L2 ID. It does not destroy the privacy of the target UE and not impact the link identifier update procedure. Every time the initiating UE gets the new L2 ID, the timer will be reset. After the link is released and a new link is to be established, the target UE following the privacy may have deleted the L2 ID. In this case, the initiating UE cannot find the target UE when it still uses the stored L2 ID. * It depends on how to understand “destination layer 2 ID used for unicast initial signaling”. I think there is no harm to make things (i.e. two kinds of L2 IDs) clear. This also aligns with stage 2.   Chen, Tuesday, 10:05   * Initiating UE can find the target UE during the valid time even if the unicast link is not needed. And the validity timer should not be added because there is no requirement in stage 2. * TS 23.287 states explicitly on the destination layer 2 ID used for unicast initial signaling, quote clause 5.6.1.4:   The initial signalling for the establishment of the PC5 unicast link may use the known Layer-2 ID of the communication peer, or a default destination Layer-2 ID associated with the V2X service type (e.g. PSID/ITS-AID) configured for PC5 unicast link establishment, as specified in clause 5.1.2.1 | |
|  |  | | [C1-202119](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202119.zip) | Group size and menber ID from application layer for groupcast | | | OPPO / Rae | CR 0011 24.587 Rel-16 | Ivo, Thursday, 16:39  - "optianl" -> "optional" - "optianlly" -> "optionally " - "whichi" -> "which"  Lena, Friday, 2:47   1. Stage 2 says “NOTE:   The mechanism for converting the V2X application layer provided group identifier to the destination Layer-2 ID is defined in Stage 3” but subclause 6.1.4.2.1.2 does not address that. It says “if group identifier information is provided and there is no context for the group identifier information, then UE shall use the destination layer-2 ID as specified in clause 6.1.4.2.1” but there is not text in subclause 6.1.4.2.1 (subclause 6.1.4.2.1 is just a header for subclauses 6.1.4.2.1.1 and 6.2.4.2.1.2). How does the UE determine the destination layer 2 ID if there is no context for the group identifier information? 2. Typo in 6.1.4.2.1.1: “optianlly” 3. Typo in 6.1.4.2.1.2: “optianl” 4. Overlaps with vivo’s C1-202190   Chen, Friday, 9:55  “the request from the upper layers may include” overlaps with “which is optionally provided in the request from upper layers” in the sub-bullet;  Rae, Monday, 5:33  I took all comments on board in a draft revision. For the first comment from Lena, for the case  “if group identifier information is provided and there is no context for the group identifier information”,  I think the v2x service identifier with L2 ID mapping rule should be used. | |
|  |  | | [C1-202159](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202159.zip) | Introducing NR PC5 functionality for EPC | | | LG Electronics / SangMin | discussion Rel-16 |  | |
|  |  | | [C1-202160](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202160.zip) | Introducing V2X communications over NR PC5 in EPC | | | LG Electronics / SangMin | CR 0024 24.386 Rel-16 | Lena, Friday, 2:49   1. About the terminology, TS 24.587 defined “NR-PC5” but also uses “NR based PC5”, while TS 23.287 uses “NR PC5”. To be consistent it would be good to use what is defined in TS 24.587 ie “NR-PC5” 2. Typo in clause 1: “speicifies” 3. In clause 1, rather than adding a paragraph below the bulleted list, why not just modify the existing bullet on PC5, as in “for V2X communication among the UEs (over the LTE PC5 interface and over the NR PC5 interface)”? 4. In 5.2.4, “and” the end of bullet j) should be deleted and the “.” at the end of bullet h) should be replaced by a “;” 5. In 5.2.4 bullet l), “for a V2X communication” should be “for V2X communication”   SangMin, Monday, 10:00   1. -> OK 2. -> OK 3. -> OK 4. -> the last comment seems to be on bullet k). Anyhow, I fixed all the editorial errors on bullets in 5.2.4. 5. -> OK   A draft revision is available.  SangMin, Wednesday, 10:33  Updated draft revision is available. Changes:  - Proposed to use the terminology "NR-PC5" for the consistency  - In clause 1, modified existing bullets for specifying the scope of NR-PC5 instead of adding new paragraph.  - Bullet 7) in clause 5.2.4 is aligned with the change proposed in CR0012 against TS 24.587.  - Fixed vaious editorial errors | |
|  |  | | [C1-202161](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202161.zip) | V2X MO update for V2X over NR PC5 | | | LG Electronics / SangMin | CR 0021 24.385 Rel-16 | Lena, Friday, 2:50   1. The DDF needs to be updated. 2. About the terminology, TS 24.587 defined “NR-PC5” but also uses “NR based PC5”, while TS 23.287 uses “NR PC5”. To be consistent it would be good to use what is defined in TS 24.587 ie “NR-PC5”   Rae, Friday, 7:59  I Suggest changing “UnicastDestinationLayer2ID”->“UnicastInitialSignallingDestinationLayer2ID”to avoid misunderstanding  SangMin, Friday, 11:26  To Lena: regarding the DDF, the ddfclient tool didn’t work so I could not finish the xml coding in time. If if it is okay, I would like to submit the ddf update in the next meeting, based on the agreements of each nodes in this meeting. At least it should be clear on each parameters, nodes and their hierarchy in order to avoid re-writing the code. L  Regarding the wording issue, I think “NR-PC5” seems to be a good way forward. So I’ll update all related papers with the terminology “NR-PC5” in the revisions (I’ll provide the draft after gathering some more comments).  SangMin, Friday, 11:28  To Rae: changing the name of the node is okay for us. I’ll update it in the revision  Lena, Saturday, 0:24  SangMin’s proposal to address my comments is ok.  SangMin, Monday, 10:32 A draft revision is available taking all comments from Rae and lena onboard. | |
|  |  | | [C1-202162](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202162.zip) | Indicating support of V2X over NR-PC5 | | | LG Electronics / SangMin | CR 3344 24.301 Rel-16 | Lena, Friday, 2:51  About the terminology, TS 24.587 defined “NR-PC5” but also uses “NR based PC5”, while TS 23.287 uses “NR PC5”. To be consistent it would be good to use what is defined in TS 24.587 ie “NR-PC5”.  SangMin, Monday, 10:38  I’m fine with using “NR-PC5” for consistency. A draft revision is available.  Chen, Tuesday, 8:45  There seems to be confusion between the new added V2X NR-PC5 and the current V2X PC5. In my understanding, V2X PC5 is general and includes E-UTRAN PC5 and NR PC5.  SangMin, Tuesday, 8:58  Changing an existing terminology “V2X PC5” to “E-UTRAN PC5” or “LTE PC5” would bring more confusion since it has been there since Rel-13.  How about adding a definition for “V2X PC5” saying such as “V2X PC5 in this specification only refers V2X communication over LTE-PC5 interface,” or similar things?  SangMin, Wednesday, 10:27  A draft revision is available. Change:   * cleaned up the use of “NR-PC5” terminology. * clarified the condition of indicating “V2X PC5 bit” by adding “E-UTRA-“ to the condition and the descriptions of values. As I said changing the name of the bit is not desirable so the name of the bit is still “V2X PC5 bit”. | |
|  |  | | [C1-202163](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202163.zip) | Clarifications on configuration parameters for the PC5 QoS profile | | | LG Electronics / SangMin | CR 0012 24.587 Rel-16 | Yanchao, Thursday, 16:12  The following change is strange, should the default value be used as last?  v)    the PC5 QoS profile can contain the priority level, the averaging window, and/or the maximum data burst volume if the default value for the corresponding parameter is not used  Ivo, Thursday, 18:05  Bullet 7) - NOT OK to add "e.g." in "an AS configuration, e.g. a list of SLRB mapping rules" - adding "e.g." is OK for stage-2 but 24.587 is a stage-3 specification and we need to be precise what the AS configuration consists of.  Lena, Friday, 2:55  The text in bullet v) of 5.2.3 seems ok as it is, the change is not needed.  SangMin, Tuesday, 8:05  I’m not sure if I understand Yanchao’s concerns correctly. You are right that the default value should be used at last but it depends on the NW policy. If the NW decided to use the default value, these parameter values will not be included in this PC5 QoS profile. If the NW decided not to use them, then the values will be included. So the condition “if the default value for the corresponding parameter is not used” indicates when the NW should include these values. I hope this answers to your concerns.  SangMin, Tuesday, 8:07  Ivo are you okay if I update the change bullet 7 using “including” instead of “e.g.”?  7)  an AS configuration, including a list of SLRB mapping rules applicable when the UE is not served by E-UTRA and is not served by NR. Each SLRB mapping rule contains a PC5 QoS profile and an SLRB. The PC5 QoS profile contains the following parameters:  SangMin, Tuesday, 8:17  To Lena:  1) about the first and second changes in the reason for change (regarding PC5 Link Aggregated Bit Rates and Range), there is no limitation described in TS 24.587 that these parameters should be only used in specific communication mode. Clause 5.2.3 is the only place where range and PC5 Link Aggregated Bit Rates is mentioned. So if we don’t describe any limitation in stage 3, the readers will assume that these parameters can be used regardless of the communication mode.  2) about the third change, as I responded to Yanchao, this is a condition to include these parameters in PC5 QoS profile by the network, so without this, stage 3 will be incomplete.  3) currently the AS configuration only has “SLRB mapping rules”, so the change might not be needed as is. However, SA2 updated the terminology for future use, so I guess using more generic name where other AS parameter than SLRB rule can be added in the future would be more beneficial and futureproof  Ivo, Tuesday, 8:57  Yes, this would address my comments.  Christian, Tuesday, 17:11  Can you please consider converting the new text you propose to add, quote “, which is only used for unicast mode communications over PC5” to a NOTE?  Lena, Tuesday, 22:45  I only commented on the last change in the CR (to bullet v)). I have no problem with the other changes in the CR.  About the change to bullet v), I basically see no difference between the existing text, and what you are proposing, plus I think the existing text is clearer. It already says that if the PC5 QoS profile does not contain a value for certain parameters, the default value is used. What more is needed?  SangMin, Wednesday, 8:55  To Christian: OK to convert the quoted text into a NOTE, i.e.  NOTE: PC5 Link Aggregated Bit Rate is only used for unicast mode communications over PC5  SangMin, Wednesday, 9:09  To Lena: I still believe that current text is not clear. However since you (and also Yanchao) are not so happy about the proposed change in bullet v), I can live without the change. So I will remove the change. A draft revision is available. | |
|  |  | | [C1-202164](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202164.zip) | Clarifications on the V2X policies regarding QoS | | | LG Electronics / SangMin | CR 0002 24.588 Rel-16 | Ivo, Thursday, 18:05  Not aligned with C1-202163 which still refers to "SLRB mapping rules". Either keep "SLRB mapping rules" here or align C1-202163 to refer to "AS configuration mapping rules"  SangMin, Tuesday, 8:21  To Ivo: if C1-202163 cannot survive, then I have to revert the “SLRB” related changes and only an editorial fix will remain. But anyhow I’ll align the terminologies in two CRs in the revision.  Sang Min, Wednesday, 9:35  I found the reason for the inconsistency in terminology. I see 2 options: 1) reverting changes on “SLRB mapping rule” from this CR and leaving it as is, or 2) changing the structure of SLRB mapping rules to be nested in new intermediate clause for “AS configuration”. Which one is preferred? | |
|  |  | | [C1-202165](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202165.zip) | Update to the V2X policies regarding RAN parameters | | | LG Electronics / SangMin | CR 0003 24.588 Rel-16 |  | |
|  |  | | [C1-202186](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202186.zip) | Encoding of link identifier update messages and parameters | | | vivo | CR 0018 24.587 Rel-16 | Lena, Friday, 3:03   1. Overlaps with InterDigital’s C1-202109 2. Overlaps with CATT’s C1-202537 3. Is more complete than C1-202109 since its includes the DIRECT LINK IDENTIFIER UPDATE REJECT message, and the changes to subclause 8.4.1 4. Is missing subclauses describing when optional IEs are included in subclause 7 5. The security information should not be TBD, SA3 has already agreed that the initiating UE sends the new MSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE REQUEST message, that the target UE sends back the MSB of KNRP-sess ID and the LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE ACCEPT message, and that the initiating UE sends the LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER ACK message, see TS 33.536 subclause 5.3.3.2.2 6. except when referring to the new IE, “Layer-2 ID” should be “layer-2 ID” to be consistent with the changes proposed in Huawei’s C1-202453   Behrouz, Friday, 3:58   1. At a high level, I think we should merge your CR with my 2109 2. In the **Request** Message:    1. Security Establishment Info should be “MSB…” [See 2109]    2. IP Address Configuration is not needed 3. In the **Accept** Message:    1. Security Establishment Info: Which one is this? The MSB is Mandatory and the LSB is Optional in this message    2. Layer-2 ID: Is this Source or Target? Target should be Mandatory!    3. IP Address Configuration is not needed    4. Link Local IPv6 address: There should be 2 of these; Source and Target 4. In the **Ack** message    1. Security Info should be the LSB    2. Layer-2 ID should be Target    3. IP Address Configuration is not needed   Yanchao, Monday, 17:12  A draft revision is available with the following changes:   1. Add missing subclauses describing when optional IEs are included in subclause 7； 2. Add The security information IEs; 3. Correct “Layer-2 ID” to “layer-2 ID” where needed; 4. Delete IP Address Configuration, based on Behrouz’s comments   About Behrouz’s comments I did not take onboard:   * I cannot agree to merge my CR in C1-202109 * I don’t agree that the target layer-2 ID should be mandatory, I think the Target is optional based on current SA2 agreement * I don't understand why the source IP is needed in the accept message * only one layer 2-ID is included in each message(request, accept, ACK), it belongs to the UE who send the message, hence no need to mention “target” or “source”   Behrouz, Tuesday, 2:48   1. When two CRs overlap (or 3 in this case), it is very customary to merge them. Unlike others, I do not have a very strong preference on “who merges with whom”. What matters is to complete the work and try to finalize the specification. Therefore, hoping that you are OK with this approach, I can merge my CR with yours and co-sign yours. 2. As for certain IEs whether they should be optional or mandatory, this is what Lena commented on your (and my) CR:   “The security information should not be TBD, SA3 has already agreed that the initiating UE sends the new MSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE REQUEST message, that the target UE sends back the MSB of KNRP-sess ID and the LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE ACCEPT message, and that the initiating UE sends the LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER ACK message, see TS 33.536 subclause 5.3.3.2.2”  The LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE ACCEPT message should not be optional, according to TS 33.536 subclause 5.3.3.2.2, the target UE shall include them.  The LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE ACK message should not be optional, according to TS 33.536 subclause 5.3.3.2.2, the initiating UE shall include them  So, do you still believe they should be optional?   1. I guess, we will have to wait 1-2 days to decide exactly what IEs should be there in both Accept and ACK messages. Meanwhile, for the IEs that are optional, but are supposed to be included according to the procedure, I don’t think it is a good idea to say e.g. “This IE is included when the target UE decides to change its identifiers based on the privacy configuration…”. Instead, we should say something like “The UE shall include IE this to change its identifiers …” 2. In 7.3.C:    1. Change “acknowledgement” to “ack”    2. I don’t think it is a good idea to use “initiating” and “target” UE in the message definition. Please use the same terminology as you have done for the Request and Accept messages.   Yanchao, Tuesday, 16:23   1. -> Thank you 2. -> My bad, fixed in draft revision 3. Agree, I chose to use the wording “This IE is included when the target UE changes its layer-2 ID.”   4-a) OK  4-b) your question made me re-think this procedure:   1. The initiating UE send its ID and info in the request message; 2. The target UE respond with the ACCEPT message with the target UE’s ID and info; 3. The initiating UE can just send an ‘empty’ ACK message for acknowledgement, why include any ID or info here in ACK message, they already shared information needed in the REQUEST message and ACCEPT message.   So I updated the definition for the ACK message.  A draft revision is available.  Lena, Tuesday, 19:44  Regarding the new definition of the ACK message, it is not aligned with the latest version of TS 33.536 (v0.3.0, available in [S3-200528](https://www.3gpp.org/ftp/tsg_sa/WG3_Security/TSGS3_98e/Docs/S3-200528.zip)): per TS 33.536 subclause 5.3.3.2.2, the ACK message includes both the LSB of K\_NRP-sess ID and the target UE’s new layer-2 ID. So the target’s UE new layer-2 ID needs to be kept in the message.  Yanchao, Wednesday, 10:27  Yes in TS 33.536 figure 5.3.3.2.2-1, the ACK message includes both the LSB of K\_NRP-sess ID and the target UE’s new layer-2 ID. But the step 3 only describes the UE\_1 shall send the Link Identifier Update Ack message to UE\_2 including the LSB of KNRP-sess ID, not mention anything about the target UE’s new layer-2 ID. So my question is what is the purpose of including target UE’s new layer-2 ID in the Ack message? I will gather people’s opinion on the definition of the ACK message and will follow what most people want. | |
|  |  | | [C1-202188](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202188.zip) | Handling of PC5 unicast QoS flow match and establishment | | | vivo | CR 0020 24.587 Rel-16 | Ivo, Thursday, 18:06  - bullet c: "UE" -> "the UE" - shouldn't the text be normative? If informative, it is not required to be implemented.  Lena, Friday, 3:06   1. “and perform the following” -> “and performs the following” 2. “with following operations” -> “by performing the following operations” 3. “set up a new PC5 QoS rule, the PC5 QoS rule contains” -> “create a new PC5  QoS rule which contains” 4. “to lower layers” -> “to the lower layers” 5. “.” at the end of bullet a-4-iv) should be an “;’. 6. “.” at the end of bullet b) should be “; and” 7. In bullet c), “UE uses” -> “the UE uses” 8. In bullet c), “the new created PC5 QoS flow as bullet a)” -> “the new PC5 QoS flow created as described in bullet a)” 9. In bullet c), “as bullet b)” -> “as described in bullet b)” 10. Overlaps with Huawei’s C1-202434. I have a preference for this CR as it does not mix matching of QoS flows with the signalling procedure between the UEs.   Yanchao, Monday, 16:41  I took onboard all of Ivo and Lena’s comments in a draft revision.  Ivo, Monday, 23:10  Nearly ok - "The UE" should be "the UE" in bullet c).  Vishnu, Tuesday, 10:25  We agree in principle (about PC5 QoS flow establishment) to this CR but we have some concerns.  We understand that we have such a common sub clause in 23.287 for the QoS flow establishment, but when we come to stage 3, we need to define each procedure and the PCQ QoS flow establishment is not the same for each. So we don’t think a common sub clause can be used.  Eg: As proposed in our CR, for the link establishment procedure, the QoS flow establishment is part of the link establishment. Target UE and destination UE exchange the QoS parameters and then establish the QoS flow when they are successful. For the Link modification procedure , if the service data or request don’t have a matching PQFI, then the Flow is created. So in the new sub clause you added, when we say “if service data or request” it is more applicable for the link modification procedure and cannot be directly referred to in the link establishment procedure.  Another reason is that in the new sub clause it says: “If there is no PC5 QoS rules for the existing PC5 QoS flow(s) matching the service data or request, the UE derives PC5 QoS parameters based on the V2X application requirements provided by the upper layers (if available) and the V2X service type (e.g. PSID or ITS-AID) according to the PC5 QoS mapping rules defined in clause 5.2.3 and perform the following:”  This is not correct, because if there is no unicast link existing, then the UE needs to establish a unicast link first and then PC5 QoS flow. So we believe that we will have to change this sub clause for each link procedure.  Considering this , we like to keep C1-202434 to clarify PC5 QoS flow establishment during direct link establishment procedure.  Yanchao, Tuesday, 16:39  A draft revision is available with “The UE" changed to "the UE" in bullet c).  Yanchao, Tuesday, 17:07  To Vishnu: we believe the matching of QoS flows and the PC5 signalling procedure should be specified separately, which will construct a TS with clear logic and structure.  Secondly, I don’t agree with what you said “*when we say “if service data or request” it is more applicable for the link modification procedure and cannot be directly referred to in the link establishment procedure.*” It doesn’t make sense.  It is a general scenario describing there is service data or request from upper layer.  3rd, the UE can create a PC5 QoS flow via either the PC5 link modification procedure or the PC5 link establishment procedure, which procedure to choose depends on where the PC5 link that the UE needs exists or not.  4th, the following statement is not correct, and you have an misunderstanding here. “If there is no PC5 QoS rules for the existing PC5 QoS flow(s)”, the UE may choose to establish a new PC5 unicast link, or the UE may choose to create an PC5 QoS flow in the existing PC5 unicast link. That is exactly the reason why the match of QoS flows should be specified as a generic subclause.  Yanchao, Wednesday, 16:28  A draft revision is available.  Vishnu, Wednesday, 17:06  The revision has not captured our CR well.   1. We need to add the following statement as last paragraph to 6.1.2.2.3   If the target UE accepts the PC5 unicast link establishment request, then the target UE may establish the negotiated PC5 QoS flow(s) as specified in 6.1.2.X.   1. Also we need to add the following statement as last paragraph in 6.1.2.2.4   In addition, the initiating UE may establish the negotiated PC5 QoS flow(s) as specified in 6.1.2.X | |
|  |  | | [C1-202190](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202190.zip) | Requirements for groupcast over PC5 | | | vivo | CR 0022 24.587 Rel-16 | Merged into C1-202119 and its revision  Ivo, Thursday, 18:06  It would be more logical to have each parameter on a separate bullet, i.e. split bullet 2 to two bullets  Lena, Friday, 3:08  This CR overlaps with OPPO’s C1-202119.  Yanchao, Monday, 5:43  We are fine to merge C1-202190 into C1-202119. | |
|  |  | | [C1-202205](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202205.zip) | Work plan for the CT1 part of eV2XARC | | | Huawei, HiSilicon /Christian | discussion Rel-16 |  | |
|  |  | | [C1-202416](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202416.zip) | Discussion on maximum nbr of PC5 unicast links | | | Huawei, HiSilicon / Vishnu | discussion 24.587 Rel-16 |  | |
|  |  | | [C1-202427](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202427.zip) | Maximum number of NR PC5 unicast links for a UE | | | Huawei, HiSilicon / Vishnu | CR 0029 24.587 Rel-16 | Ivo, Thursday, 13:55  6.1.2.2.5 - superfluous "or" and inconsistent usage of "due to ".  Rae, Friday, 7:37  Based on the discussion paper related to this CR, the reason why V2X layer limits the number of unicast links is to follow the limitation over Uu interface.  However, PC5 is different because:   1. For PC5, the number of DRB is per PC5 link, not shared by all the links of one UE; 2. In RAN2, it is determined that the 5-bits link identifier is included in the RRC signaling for UE requesting PC5 resources to RAN. This is already a limitation actually. Whether it is necessary to do the limitation duplicated in V2X layer and AS layer.   Vishnu, Sunday, 11:49  To Ivo: I will fix it.  To Rae: the main reason is not to follow the limitation in Uu interface. Main reason is that we need hardware storage for ( Eg: storing the security keys) which is limited in the UE. Why we quoted comparison to Uu interface is as an example. E.g we have limited the number of QoS rules in the UE before because of storage limitation of storing packet filters. So in CT1, we have taken care of such situations where the resources in the UE is limited.  Rae, Monday, 11:16  I still want to have response to the following comment: In RAN2, it is determined that the 5-bits link identifier is included in the RRC signaling for UE requesting PC5 resources to RAN. This is already a limitation actually. Whether it is necessary to do the limitation duplicated in V2X layer and AS layer.  Vishnu, Monday, 15:17  When we define the bit size of IDs it will always be a higher number due to backward compatibility issues. It will be very difficult to change it in the future otherwise. What we are trying to define here on NAS level considering the storage aspect of the security keys and also packet filters. In reality most of the V2X communication will be done by group cast and broad cast, only 2-3 unicast links will be there at a time. So 8 is a reasonable number. It can also be changed in NAS spec without backward compatibility issues. So we hope you can support this.  Rae, Tuesday, 9:57  Thanks for the clarification. It is OK for me.  Vishnu, Tuesday, 10:34  A draft revision is available.  Lena, Tuesday, 23:07  This limitation to 8 simultaneous link seems arbitrary. Our view is that the maximum number of links supported by a UE should be left to UE implementation. If a UE has reached its maximum number of supported links, it can always reject new requests for direct link establishment from other UEs. | |
|  |  | | [C1-202434](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202434.zip) | PC5 QoS flow establishment during the PC5 unicast link establishment procedure | | | Huawei, HiSIlicon / Vishnu | CR 0030 24.587 Rel-16 | Ivo, Thursday, 18:07   * 6.1.2.2.4 - bullet c) iv contains full stop (instead of semicolon) before "and" - why is creation of the PC5 QoS flow(s) optional? Shouldn't it be mandatory on a condition as in the 1st quote in the reason for change?   Lena, Friday, 4:30  This CR overlaps with vivo’s C1-202188 which puts the text in a different subclause. I prefer vivo’s version as it does not mix matching of QoS flows with the signalling procedure between the UEs.  Yanchao, Saturday, 11:10  Same opinion as Lena. The change here is the general description for creating PC5 QoS flows which can be applied after the completion of many other procedures, such as link establishment and modification. It would be better to use a separate subclause.  Also please see the following detailed comments:   1. clause 6.1.2.2.4, for the bullet d), the PC5 unicast link ID as one of parameters to lower layers is missing 2. clause 6.1.2.2.4, for the bullet d), PQFI->PQFI(s)   Vishnu, Tuesday, 10:39  We agree in principle (about PC5 QoS flow establishment) to this CR but we have some concerns.  We understand that we have such a common sub clause in 23.287 for the QoS flow establishment, but when we come to stage 3, we need to define each procedure and the PCQ QoS flow establishment is not the same for each. So we don’t think a common sub clause can be used.  Eg: As proposed in our CR, for the link establishment procedure, the QoS flow establishment is part of the link establishment. Target UE and destination UE exchange the QoS parameters and then establish the QoS flow when they are successful. For the Link modification procedure , if the service data or request don’t have a matching PQFI, then the Flow is created. So in the new sub clause you added, when we say “if service data or request” it is more applicable for the link modification procedure and cannot be directly referred to in the link establishment procedure.  Another reason is that in the new sub clause it says: “If there is no PC5 QoS rules for the existing PC5 QoS flow(s) matching the service data or request, the UE derives PC5 QoS parameters based on the V2X application requirements provided by the upper layers (if available) and the V2X service type (e.g. PSID or ITS-AID) according to the PC5 QoS mapping rules defined in clause 5.2.3 and perform the following:”  This is not correct, because if there is no unicast link existing, then the UE needs to establish a unicast link first and then PC5 QoS flow. So we believe that we will have to change this sub clause for each link procedure.  Considering this , we like to keep C1-202434 to clarify PC5 QoS flow establishment during direct link establishment procedure.  Yanchao, Tuesday, 17:09  To Vishnu: we believe the matching of QoS flows and the PC5 signalling procedure should be specified separately, which will construct a TS with clear logic and structure.  Secondly, I don’t agree with what you said “*when we say “if service data or request” it is more applicable for the link modification procedure and cannot be directly referred to in the link establishment procedure.*” It doesn’t make sense.  It is a general scenario describing there is service data or request from upper layer.  3rd, the UE can create a PC5 QoS flow via either the PC5 link modification procedure or the PC5 link establishment procedure, which procedure to choose depends on where the PC5 link that the UE needs exists or not.  4th, the following statement is not correct, and you have an misunderstanding here. “If there is no PC5 QoS rules for the existing PC5 QoS flow(s)”, the UE may choose to establish a new PC5 unicast link, or the UE may choose to create an PC5 QoS flow in the existing PC5 unicast link. That is exactly the reason why the match of QoS flows should be specified as a generic subclause.  There we think C1-202434 is not needed.  Vishnu, Tuesday, 17:40  To Yanchao: we are not against you CR, but with the current wordings in the subclause it will be difficult to refer it from various procedures.  As a way forward, we like to propose to you: You update the new subclause as suggested below, then QoS flow match (if needed) can be done in the respective procedures. Then we can use this subclause in our CR. 6.1.2.X         PC5 QoS ~~flow match and~~ establishment over PC5 unicast link ~~When service data or request from the upper layers is received, the UE determines if there is any existing PC5 QoS flow(s) matching the service data or request, i.e. based on the PC5 QoS rules for the existing PC5 QoS flow(s).~~  ~~If there is no PC5 QoS rules for the existing PC5 QoS flow(s) matching the service data or request,~~ the UE derives PC5 QoS parameters based on the V2X application requirements provided by the upper layers (if available) and the V2X service type (e.g. PSID or ITS-AID) according to the PC5 QoS mapping rules defined in clause 5.2.3 and perform the following:  Yanchao, Wednesday, 11:25   1. The change only describes the initiating UE’s behavior. The target UE could also use the established PC5 link and PC5 QoS flows to transmit V2X service data. (By the way, this is another reason why a generic subclause is more approapirate) 2. Bullet a) and bullet b) is about constructing a PC5 unicast link context, which has already been cover by our paper in C1-202181(2181 covers both the initiating UE and the target UE); 3. Bullet c) is about setting up a PC5 QoS rule, which has been covered about our paper in C1-202188 in bullet a-3) 4. Bullet d) is about passing parameters to lower layer, however :    1. the “source layer-2 ID and the destination layer-2 ID” has already been covered by Lena’s paper in C1-202104, see “After the DIRECT LINK ESTABLISHMENT ACCEPT message is generated, the initiating UE shall pass this message to the lower layers for transmission along with the initiating UE's layer 2 ID for unicast communication, the target UE's layer 2 ID for unicast communication and an indication that the PC5 signalling message is protected”    2. the PQFI and the PC5 QoS parameters is has already been covered by our paper in C1-202181 (2181 covers both the initiating UE and the target UE)   Therefore I think C1-202434 can be merged into C1-202181/ C1-202104.  Vishnu, Wednesday, 12:46  To Yanchao: we are fine to merge our CR into yours. What about my comments on editing the text in your CR?  Yanchao, Wednesday, 13:21  I am a little confused about Vishnu’s comment.  The last paragraph of the change in C1-202188 described the UE behavior when UE found a match between the existing PC5 QoS flow and the service data or request. So I don’t understand why you propose to delete the text?  Vishnu, Wednesday, 14:49  Looks like you have a  misunderstanding about what our CR is doing.  Our CR intends to clarify that the QoS Flows can be established as part of the Unicast link establishment procedure without doing a QoS flow match based on incoming request/data one more time.  So in the new subclause the QoS flow matching is not needed. Otherwise it gives a feeling that after the unicast link is established , the QoS flow is established with additional request/data from upper layer. This is not the intention of our CR.  If you cannot agree to this, I am afraid, we cannot agree to your CR and to the merging.  Yanchao, Wednesday, 14:59  How about this:  I split the change in my CR into two subclause:  One subclause is “PC5 QoS flow match”  One subclause is “PC5 QoS flow establishment over PC5 unicast link”  Vishnu, Wednesday, 15:12  That is fine with us and use the subclause “PC5 QoS flow establishment over PC5 unicast link” for our changes. | |
|  |  | | [C1-202438](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202438.zip) | Resolution of editor's note under 5.2.3 | | | Huawei, HiSilicon /Christian | CR 0031 24.587 Rel-16 |  | |
|  |  | | [C1-202439](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202439.zip) | Resolution of editor's note under 6.1.2.5.2 | | | Huawei, HiSilicon /Christian | CR 0032 24.587 Rel-16 |  | |
|  |  | | [C1-202453](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202453.zip) | Miscellaneous corrections | | | Huawei, HiSilicon /Christian | CR 0033 24.587 Rel-16 |  | |
|  |  | | [C1-202457](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202457.zip) | Correction on conditions to initiate a PC5 unciast link establishment procedure | | | Huawei, HiSilicon / Vishnu | CR 0036 24.587 Rel-16 | Ivo, Thursday, 13:55  The sentence does not seem to be an English sentence. Not clear what "are" in "are not identical" relates to.  Vishnu, Sunday, 12:09  Agree that the ‘are’ does not make sense. How about the following modification:  "e)    there is no existing PC5 unicast link for the pair of peer application layer IDs, or there is an existing PC5 unicast link for the pair of peer application layer IDs and the network layer protocol of the existing PC5 unicast link is not identical to the network layer protocol required by the upper layer in the initiating UE for this V2X service."  Ivo, Monday, 23:14  Proposed text seems OK.  Vishnu, Tuesday, 10:47  A draft revision is available.  Frederic, Tuesday, 12:42  Could you please restore the styles in your revision? Everything is in “normal”.  Vishnu, Tuesday, 14:37  An updated draft revision fixing the styles is available. | |
|  |  | | [C1-202485](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202485.zip) | Packet filter for PC5 QoS flows | | | Huawei, HiSilicon / Vishnu | CR 0037 24.587 Rel-16 | Ivo, Thursday, 18:07  "The IP packet filter set is defined in TS 23.501 [X] clause 5.7.6.2." - it would be more appropriate to refer to stage-3 specification.  Vishnu, Sunday, 13:01  IP packet filter set is defined in 23.501 5.7.6.2. Not sure the contents of IP packet filter set is in the scope of stage-3. If you know any stage-3 specification with this definition, kindly let us know.  Lena, Monday, 0:54  Regarding the proposal on the contents of the V2X packet filter:  We are ok with all proposed components except the TC field of GeoNetworking Common header: filtering based on this field would require deep inspection of the packet at the UE since the UE would first need to determine that this is the GeoNeworking format in the non-IP header, and then the UE would need to read into the GeoNetworking headers – which may still have a few variants in realization.  Also, there is no stable implementable specification for the GeoNetworking yet. So we would prefer not to have this component in Rel-16.  Ivo, Monday, 23:18  24.501 Figure 9.11.4.13.4 Packet filter contents field specifies packet filter in a QoS rule.  Vishnu, Tuesday, 11:04  To Lena: we have a different view on the Geonetworking TC field.   1. The protocol format of the non-IP header is fixed when the UE can locate itself (e.g. GeoNetWorking in Europe, WAVE in USA and DSMP in China), and the  request from upper layer to transfer a packet also indicates to UE’s 3GPP layer in which protocol format this packet is, thus no specific procedure to determine the protocol format. 2. It is specified in SA2 that if V2X Application Requirements is provided by the V2X application layer, the UE determines the QoS parameters for the V2X services based on the V2X Application Requirements and the V2X service type (e.g. PSID or ITS-AID). When GeoNetworking is used, TC field is where the application layer provides the V2X Application Requirements, thus it is a must-do for UE to read into the GeoNetworking headers to get the TC field, and then the UE can determine the QoS parameters for the packet or V2X services. If the UE cannot or does not read into the GeoNetworking headers, then the UE will fail to meet the application layer’s requirements and SA2’s design.    Also in our understanding, the GeoNetworking is the most stable Non-IP type specification for V2X, if GeoNetworking  Vishnu, Tuesday, 11:10  To Ivo: 24.501 Figure 9.11.4.13.4 specifies a QoS rule and packet filter set is only a parameter in it. It could be confusing to use it as a reference to IP packet filter set. But if you insist, we can change the reference to the stage-3 QoS rule figure.  Vishnu Wednesday, 17:25  A draft revision addressing Ivo’s comment is available.  @Lena, will you be ok with the Geonetworking TC field based on below explanation? | |
|  |  | | [C1-202547](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202547.zip) | Direct link identifier update procedure messages definition and IEs coding | | | CATT | CR 0038 24.587 Rel-16 | Merged into C1-202186 and its revisions.  Ivo, Thuesday, 18:07  "SL-DestinationIdentity clause 6.3.5 of 3GPP TS 38.331 [11]" - IMO, SL-DestinationIdentity defined in clause 6.3.5 of 3GPP TS 38.331 [11] is not a IE according to 24.007. IMO, it would be better to define a type-3 IE with V format in 24.587, with value containing SL-DestinationIdentity according to clause 6.3.5 of 3GPP TS 38.331 [11]. it would be clearer definition from 24.007 point of view.  Lena, Friday, 4:35   1. Overlaps with InterDigital’s C1-202109 and vivo’s C1-202 2. Is missing subclauses describing when optional IEs are included in clause 7 3. The security information should not be TBD, SA3 has already agreed that the initiating UE sends the new MSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE REQUEST message, that the target UE sends back the MSB of KNRP-sess ID and the LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER UPDATE ACCEPT message, and that the initiating UE sends the LSB of KNRP-sess ID in the DIRECT LINK IDENTIFIER ACK message, see TS 33.536 subclause 5.3.3.2.2 4. except when referring to the new IE, “Layer-2 ID” should be “layer-2 ID” to be consistent with the changes proposed in Huawei’s C1-202453   Behrouz, Friday, 4:58   1. High level comment: This CR should be merged with vivo’s 2186 and our 2109 2. For the **Request** message    1. The names of several IEs are wrong; also Security info should be LSB as defined in SA3    2. For the New Layer-2 ID, you cannot refer to 38.331 in the Type/Reference column 3. For the **Accept** message    1. Several IEs are missing    2. The new target security info should be the MSB    3. The word “UE” in New Target UE info should be “user”    4. Same comment as above for Type/Reference column 4. For the **ACK** message    1. The word “Acknowledgment” should change to “ack” in 7.3.Z    2. All IEs after the Sequence Number should be “Optional” (awaiting ongoing SA2 discussions and decisions)    3. Security Info should be LSB    4. Address/Prefix should be removed from the last IE   Yanchao, Saturday, 11:03   1. in table 7.3.x.1.1, I prefer to define our own NAS IE for Layer 2 ID, not just refer to RAN specs for a NAS IE coding . 2. in Table 7.3.x.1.1, the presence of New initiating UE info should be O 3. in Table 7.3.y.1.1, the presence of New target UE Layer 2 ID and New target UE security information should be O 4. in Table 7.3.z.1.1, the presence of New target UE Layer 2 ID and New target UE security information should be O 5. no definition of the DIRECT LINK IDENTIFIER UPDATE REJECT message | |
|  |  | | C1-202596 | Defining new parameters needed for the Link Identifier Update procedure | | | InterDigital Communications | CR 0028 24.587 Rel-16 | Revision of C1-202327  Ivo, Thursday, 18:07  "MSB" and "LSB" indicate a single bit. Is it intentional?  Behrouz, Thursday, 19:59  SA3 has defined both of them as “bytes” and not bits.  Ivo, Friday, 11:07  I cannot find such statement in 33.536 - there is no "byte" in 33.536. 33.526 refers to 21.905 for abbreviations and 21.905 defines MSB and LSB as follows:  LSB                       Least Significant Bit  MSB                      Most Significant Bit  Or do I miss anything?  Furthermore, at least in CT1, we normally use "octet" rather than "byte" so if SA3 really meant most/least significant byte, "most/least significant octet" would be more appropriate in CT1.  Behrouz, Friday, 19:41  I was trying to mimic the same terminology as used in 24.334 (ProSe spec). Here is what I “actually” meant:  From 24.334  an MSB of KD-sess ID IE set to the most significant 8 bits of the KD-sess ID; and  the LSB of KD-sess ID IE set to indicate the least significant 8-bits of KD-sess ID  Yanchao, Saturday, 10:53   1. In clause 6.1.2.5.3, deleting ‘UE decides to change its identifier’ is not aligned with TS 23.287. The first change also means target UE needs to check whether the privacy configuration requires privacy protection 2. Clause 6.1.2.5.3, for the bullet f), why add the source UE’s new layer 2 ID in the link identifier update accept message? 3. Clause 6.1.2.5.3, same question as above, for the bullet g) why add the source UE’s new application layer ID in the link identifier update accept message? 4. Clause 6.1.2.5.3, the added bullet h) is coverd by the existing bullet c) 5. Clause 6.1.2.5.4，the existing “shall” is correct.   Ivo, Monday, 23:22  If the field is meant to keep 8 bits then the field should be called "MSBs of KD-sess ID" / "LSBs of KD-sess ID".  If it just kept singular, it is very confusing.  Behrouz, Tuesday, 0:48  We could add the “s” but just for me to understand; how come it was not deemed “confusing” when it was defined in 24.334 for ProSe? All we need to do is defining the LSB and MSB as the “8 bits…” in the beginning of the spec.  Ivo, Tuesday, 9:03  I do not know why it was not confusing in 24.334 for ProSe. Likely, it was not detected.  Behrouz, Tuesday, 16:28  Do you plan on changing the Prose spec as well? May I remind you that 24.334 was specified in Rel-12 and up to now nobody has shown any issues whatsoever with these definitions that have been used in that spec. These two MSB/LSB were defined in the body of 24.334 and will also be defined the same way in 24.587, so why is this a major problem now? | |
|  |  | | C1-202639 | Add the missing figure for UE-requested V2X policy provisioning procedure | | | OPPO / Rae | CR 0007 24.587 Rel-16 | Revision of C1-202115  Ivo, Tuesday, 13:52  I am ok with C1-202639. If you revise it again, could you please add Ericsson as co-signer?  -------------------------------------------------------------  Ivo, Thursday, 13:54  The figure needs to be referenced from the text - e.g. "(see example in figure xxxxx)"  Lena, Friday, 2:36  The changes in the CR are ok but the CR should be Cat F, not Cat D.  Rae, Monday, 5:21  I have taken comments from both Ivo and Lena on board in a draft revision.  Ivo, Monday, 22:53  I suggest to add the reference to the figure in "In order to initiate the UE-requested V2X policy provisioning procedure, the UE shall create a UE POLICY PROVISIONING REQUEST message (see example in figure 5.3.2.2.1)." rather than to the bullet d). Reason: this sentence is start of the procedure.  Chen, Tuesday, 3:51  In the Summary of change of the cover page, “In” -> “in”  Rae, Tuesday, 4:26  I will reflect all the comments in a revision of this CR. | |
|  |  | | C1-202703 | Remove FFS on GFBR and MFBR for UL and DL | | | OPPO / Rae | CR 0010 24.587 Rel-16 | Revision of C1-202118  ---------------------------------------------------  Ivo, Thursday, 13:54  Sending the same value twice is waste of radio resources.  Lena, Friday, 2:43  We don’t think it makes sense to keep two values ie one value for UL and one value for DL, given that this is PC5 (no UL/DL, only SL). One singe value is sufficient.  Rae, Monday, 5:26  I have no strong view on whether use GFBR and MFBR for UL and DL separately. If the majority agree to use one value for both UL and DL, I am also OK. A draft revision is available.  Ivo, Monday, 23:03  Nearly OK: the reason for change needs to be aligned with the changes. Please add Ericsson as co-signer.  Chen, Tuesday, 4:54  Cover sheet not good enough as the reason for change fails to quote the stage 2 requirements which are in fact crystal clear, quote "For PC5 communication, the same GFBR and MFBR are used for both directions.". Then, the removal of the editor's notes only is not sufficient. Either we have only one code point for GFBR and another one for MFBR or we keep two for each (uplink and downlink) BUT it has to be specified that the value of uplink and downlink shall be the same in this version of the protocol.  Rae, Tuesday, 5:26  A draft revision addressing Chen’s comments is available. I will also update the change. | |
|  |  | | C1-202704 | Non-standadized QoS characteristics over PC5-S | | | OPPO / Rae | CR 0009 24.587 Rel-16 | Revision of C1-202117  ------------------------------------------------  SangMin, Friday, 5:27  Intent of the CR is okay, but Default averaging window (0DH, newly added) and Averaging window (06H, existing) seem redundant, so default averaging window seems not needed to be added.  I also think that some spare values would be beneficial.  Also what is the reason for removing the following text?  ~~The network shall consider all other values not explicitly defined in this version of the protocol as unsupported.~~  Lena, Sunday, 20:05  For the Resource type and Default priority level, it would be beneficial to make some of the unused code points spare, instead of making them all reserved (just in case new Resource types or Default priority levels are defined in future releases).  Rae, Monday, 4:07  @Lena  I will change “Reserved” to “Spare” except the value "00000000”.  @Sangmin  I will remove the “Default averaging window”.  For the removed sentence, since the parameters are transmitted over PC5-S, then there is no “network”.  After a second thinking, how about changing “network” to “UE”?  Chen, Tuesday, 4:49  In principle, it aligns with the PC5 QoS characteristics defined by TS 23.287 so it is needed. But I do not understand the removal of "The network shall consider all other values not explicitly defined in this version of the protocol as unsupported".  Rae, Tuesday, 4:53  For the removed sentence, since the parameters are transmitted over PC5-S, then there is no “network”.  After a second thinking, how about changing “network” to “UE”?  Rae, Wednesday, 4:10  A draft revision is available. Changes:   * Change “Reserved” to “Spare” except the value "00000000” * Remove default averaging window; * "The ~~network~~ UE shall consider all other values not explicitly defined in this version of the protocol as unsupported". * Change the value of new parameters to align with the revision of C1-202118 where some values are removed.   SangMin, Wednesday, 5:24  This revision addresses my previous comment on averaging window. And also not I understand the reason for removing texts, and I agree to replace “network” to “UE”. SO I’m okay with this draft revision. | |
|  |  | | C1-202730 | Corection for the target user info in the DIRECT LINK ESTABLISHMENT REQUEST message | | | Huawei, HiSilicon / Chen | CR 0025 24.587 Rel-16 | Revision of C1-202316  ------------------------------------------------  Lena, Friday, 3:11  Subclause 7.3.1.2 also needs to be modified in a similar way.  Chen, Friday  Thanks Lena for your feedback. The draft revision with the modified subclause7.3.1.2 is available in the drafts folder. | |
|  |  | | C1-202731 | Correction for the IP address configuration IE in the DIRECT LINK ESTABLISHMENT ACCEPT message | | | Huawei, HiSilicon / Chen | CR 0026 24.587 Rel-16 | Revision of C1-202317  -------------------------------------------------  Ivo, Thursday, 13:55  The conditions in the bullets are not opposite and in some situation, this might result into impossibility to select a value. Please remove "only" in c) 1).  Chen, Friday, 5:33  Thanks Ivo for your advice. I agree with you that the “only” should be removed. Please see the draft revision in the drafts folder.  Ivo, Friday, 2:11  I am ok with the draft revision and Ericsson would like to co-sign. | |
|  |  | | C1-202732 | Correction for the link local IPv6 address IE in the DIRECT LINK ESTABLISHMENT ACCEPT message | | | Huawei, HiSilicon / Chen | CR 0027 24.587 Rel-16 | Revision of C1-202318  --------------------------------------------------- | |
|  |  | | C1-202738 | Handling of link establishment accept | | | vivo | CR 0013 24.587 Rel-16 | Revision of C1-202181  ---------------------------------------  Ivo, Thursday, 18:05  - 6.1.2.2.3 - storage of this assigned layer-2 ID and the source layer 2 ID used in the transport of this message provided by the lower layers in the PC5 unicast link context, should be normative. - 6.1.2.2.4 - the source layer-2 ID and the destination Layer-2 ID used in the transport of this message provided by the lower layers, should be normative.  Lena, Friday, 2:54   1. Some overlap with the changes in C1-202140 in subclause 6.1.2.2.3 2. The changes to 6.1.2.2.3 in the CR miss mentioning that the UE passes the DIRECT LINK ESTABSLISHMENT ACCEPT message to the lower layers for transmission (which is covered in C1-202140, see “After the DIRECT LINK ESTABLISHMENT ACCEPT message is generated, the initiating UE shall pass this message to the lower layers for transmission along with the initiating UE's layer 2 ID for unicast communication, the target UE's layer 2 ID for unicast communication and an indication that the PC5 signalling message is protected”) 3. The changes in 6.1.2.2.3 have the UE pass the source and destination L2 ID to the lower layers “after sending the DIRECT LINK ESTABSLISHMENT ACCEPT message”. This is not ok, the lower layers need this info along with the message itself, to be able to send it 4. In 6.1.2.2.4, “After receiving the DIRECT LINK ESTABLISHMENT ACCEPT message, the target UE” should be “After receiving the DIRECT LINK ESTABLISHMENT ACCEPT message, the initiating UE” 5. Bullet c) in 6.1.2.2.4 is not needed, the source and destination layer 2 ID pair is already known to the lower layers from the time the initiating UE send the DIRECT LINK AUTHENICATION RESPONSE message or the DIRECT LINK SECURITY MODE COMPLETE message.   Behrouz, Friday, 3:44  Please see my comments below. The Green text is from your CR and the Blue is my comment. 6.1.2.2.3              PC5 unicast link establishment procedure accepted by the target UE Upon receipt of a DIRECT LINK ESTABLISHMENT REQUEST message, if the target UE accepts this request, it [Change to “the target UE”] shall uniquely assign a PC5 unicast link identifier, create a PC5 unicast link context [What are these two?] and assign a layer-2 ID for this PC5 unicast link. Then the target UE stores this assigned layer-2 ID and the source layer 2 ID used in the transport of this message provided by the lower layers in the PC5 unicast link context. This pair of layer-2 IDs is associated with a PC5 unicast link context.  Yanchao, Tuesday, 4:58  I have changed “the UE does xx” to “the UE shall do” based on Ivo’s comments. A draft revision is available.  Yanchao, Tuesday, 5:03  I have taken onboard Lena’s comments. A draft revision is available.  Chen, Tuesday, 5:19   * The CR should be Cat B, not F. * In the Summary of change, wording "accpets" -> "accepts"; * In clause 6.1.2.2.3, the title has indicated the target UE accepts this request, therefore there is no need to add the sentence "if the target UE accepts this request"; * As clause 6.1.2.5 described the unicast link identifier for unicast, which conceptually conflicts with the unicast link identifier proposed by the CR; * The current specification has already the indication in clause 6.1.2.2.4 "with a PC5 unicast link context"; * In TS23.287 clause 6.3.3.1 bullet 5, there are no PQFI(s) and its corresponding PC5 QoS parameters from the V2X layer to the AS layer in the PC5 unicast link establishment procedure, quote:   *The V2X layer of the UE that established PC5 unicast link passes the PC5 Link Identifier assigned for the unicast link and the PC5 unicast link related information down to the AS layer. The PC5 unicast link related information includes Layer-2 ID information (i.e. source Layer-2 ID and destination Layer-2 ID). This enables the AS layer to maintain the PC5 Link Identifier together with the PC5 unicast link related information.*   * It seems to conflict with existing requirements under thePC5 unicast link identifier update procedure (i.e., .PC5 unicast link identifier update procedure (6.1.2.5.4) where is stated, quote   Yanchao, Tuesday, 15:25  A draft revision with the following changes is available:   * it is changed to “the target UE”,done; * “PC5 unicast link context” is changed to “PC5 link context”   Yanchao, Tuesday, 15:35  To Chen: a draft revision is available. I did not take onboard the following comments:   * I don’t agree CR should be Cat B, this CR just propose correction to existing procedure, not add a new feature * About “no need to add the sentence "if the target UE accepts this request";”, that is the common for stage 3 specification. If you check TS24.587 and TS24.501, you will find dozens of instances in the accept subclause, which specifies”if the UE/NW accepts…… , the UE/NW shall do * About “no PQFI(s) and its corresponding PC5 QoS parameters from the V2X layer to the AS layer in the PC5 unicast link establishment procedure”, see requirements in 23.287 * About “conflict with existing requirements under thePC5 unicast link identifier update procedure”, there is no conflict, the paper propose changes to the PC5 unicast link establishment procedure, not the  PC5 unicast link establishment [should be identifier update instead?] procedure   Behrouz, Tuesday, 15:42  The revision looks ok and InterDigital would like to co-sign. | |
|  |  | | C1-202739 | Handling of link modification accept | | | vivo | CR 0014 24.587 Rel-16 | Revision of C1-202182  ---------------------------------------------  Chen, Tuesday, 8:31  It is true that NAS needs to pass some information to AS when sending messages but I fail to understand why new paragraphs are added under clause 6.1.2.3.3. A new sentence needs to be added to the existing paragraph saying "The target UE shall provide the <xx> to lower layers". Having said that, I do not understand why the PC5 unicast link identifier(s) needs to be provided during PC5 unicast link modification procedure to lower layers as there is procedure for it defined, i.e., PC5 unicast link identifier update procedure. Also, note that in that procedure already are requirements of passing information to AS.  Yanchao, Tuesday, 15:48  I can’t understand Chen’s comment. The paper is for PC5 link modification accept procedure, what he refers to is a different procedure. The PC5 QoS parameters are changed via the PC5 link modification accept procedure, shouldn’t the UE provide the added or modified PQFI(s) and corresponding PC5 QoS parameters to the lower layer. Please note that it is the PQFI(s) and corresponding PC5 QoS parameters provided to the lower layer, “provide xx along with PC5 link identifier” is just to identify which PC5 link that xx is related to.  Chen, Wednesday, 4:25  I suggest to be aligned with TS 23.287, using “PC5 Link Identifier” with the first letter capitalized.  Yanchao, Wednesday, 5:54  I check TS24.587, “PC5 link identifier” is used in subclause 6.1.2.9 without the first letter capitalized. Also please check Huawei’s paper C1-202453, wherein it changes “Layer-2 ID” to “layer-2 ID”.  Chen, Wednesday, 6:06  OK with me. Please make sure these words aligned in all your related contributions, e.g., C1-202181, C1-202188, and etc. | |
|  |  | | C1-202740 | ENs resolving in modification pocedure | | | vivo | CR 0015 24.587 Rel-16 | Revision of C1-202183  -----------------------------------------------  Ivo, Thursday, 18:06  - "For other reasons that causing the failure of link modification." ->  "For other reasons that cause the failure of link modification." or "For other reasons causing the failure of link modification." - there should be some minimum value for the timer T (else the UE might set it to zero which voids the requirement on not attempting to start PC5 unicast link modification with the same target UE)  Lena, Friday, 2:56   1. In 6.1.2.3.5, “For other reasons that causing” should be “For other reasons causing” 2. In 6.2.1.3.5, I don’t think “If the PC5 signalling protocol cause value in the DIRECT LINK MODIFICATION REJECT message is #X "required service not allowed" or #5 "lack of resources for proposed link", then the initiating UE shall not attempt to start PC5 unicast link modification with the same target UE at least for a time period T” is justified. The restriction should be limited to the same kind of modification, as in “If the PC5 signalling protocol cause value in the DIRECT LINK MODIFICATION REJECT message is #X "required service not allowed" or #5 "lack of resources for proposed link", then the initiating UE shall not initiate a PC5 unicast link modification procedure with the target UE to add or remove the same V2X service, or to add, modify or remove the same PC5 QoS flow(s) at least for a time period T”   Rae, Friday, 8:43  How the target UE can determine which service is allowed or not? There is no such configuration in 5.2.3.  Yanchao, Tuesday, 5:36  I have taken Ivo’s comments onboard, for the second comment, I added “The length of time period T is not less than 30 minutes.” in the note. A draft revision is available.  Yanchao, Tuesday, 5:49  All of Lena’s comments have been taken on board. For the second one, I added “to add the same V2X service, or to add or modify the same PC5 QoS flow(s)”, because I think the UE can’t reject a request to remove a V2X service or a PC5 QoS flow. A draft revision is available.  Yanchao, Tuesday, 5:52  To Rae: Our understanding is the V2X service is not allowed if there is no corresponding service authorisation provisioning for this V2X service. Please see the draft revision.  Rae, Tuesday, 8:08  I understand Yanchao used the same wording as in TS 24.334. But the configuration for V2X is different from ProSe and there is no such “service authorisation provisioning”. Meanwhile I found there is also such word under the subclause 6.1.2.2.5. In my understanding “service authorisation provisioning” should be changed to “Configuration parameters for V2X communication over PC5” and the subclause 5.2.3 is referred.  Chen, Tuesday, 8:37  Glad to see that editor's notes are resolved but I do not agree with just removing the one about multiple modification operation under clause 6.1.2.3.2. TS 23.287 indicates that the UE can establish multiple PC5 unicast links so it is natural that the UE could also modify multiple PC5 unicast links.  Yanchao, Tuesday, 15:55  I have taken Rae’s comments onboard in a draft revision.  Yanchao, Tuesday, 15:58  To Chen: I think you have a misunderstanding here, the PC5 unicast link modification procedure is used to modify one existing PC5 unicast link. If the UE want to modify multiple PC5 unicast links, the UE has to initiate multiple the PC5 unicast link modification procedures, one procedure for one PC5 unicast link. | |
|  |  | | C1-202741 | Updates to link release procedure | | | vivo | CR 0016 24.587 Rel-16 | Revision of C1-202184  --------------------------------------------------  Lena, Friday, 2:58  “Proposed” is not ok in “lack of resources for proposed link” since in this case the link is already established. I suggest changing it to “lack of resources for PC5 unicast link”.  Yanchao, Tuesday, 5:59  The name of cause#5 is updated to “lack of resources for PC5 unicast link” in 6.1.2.4.2.  The name of cause#5 is aligned in the table 8.4.9.1: PC5 signalling protocol cause information element as well. (new change in this revision)  We also plan to submit a paper to align the name of cause#5 used in other procedures in next meeting.  A draft revision is available. | |
|  |  | | C1-202742 | Correction of the timers of link identifier update procedure | | | vivo | CR 0017 24.587 Rel-16 | Revision of C1-202185  ----------------------------------------------  Lena, Friday, 3:01  We are fine with changes in the CR, but it would be good to take this opportunity to correct the style of second bullet d) in 6.1.2.5.2.  Yanchao, Tuesday, 6:03  I fixed the style of the bullet, a draft revision is available. | |
|  |  | | C1-202744 | Handling of link identifier update not accept | | | vivo | CR 0019 24.587 Rel-16 | Revision of C1-202187  -------------------------------------------  Ivo, Thursday, 18:06  - NOTE 2 without NOTE 1. - "For other reasons that causing the failure of link establishment, " -> "For other reasons that cause the failure of link establishment, " or "For other reasons causing the failure of link establishment, "  Lena, Friday, 3:04   1. “Layer 2 ID” should be “layer-2 ID” to be consistent with the changes proposed in Huawei’s C1-202453 2. NOTE 2 should be NOTE (only one note) 3. “For other reasons that causing” should be “For other reasons causing   Chen, Friday, 10:00  In “For other reasons that causing the failure of link establishment, the target UE shall send a DIRECT LINK ESTABLISHMENT REJECT message with PC5 signalling protocol cause value #111 "protocol error, unspecified",  DIRECT LINK ESTABLISHMENT REJECT should be DIRECT LINK  IDENTIFIER UPDATE REJECT  Yanchao, Tuesday, 6:12  I have taken the comments onboard, a draft revision is available. | |
|  |  | | C1-202746 | Handling of PC5 broadcast QoS flow match and establishment | | | vivo | CR 0021 24.587 Rel-16 | Revision of C1-202189  ---------------------------------------  Ivo, Thursday, 18:06  - "there is no existing PC5 QoS rules" -> "there is no existing PC5 QoS rule" - shouldnt bullet d) and its sub-bullets be normative? - bullet 3): "UE" -> "the UE"  Lena, Friday, 3:09   1. “.” at the end of bullet c-3) should be “;” 2. “and perform the following” -> “and performs the following” 3. “with following operations” -> “by performing the following operations” 4. “set up a new PC5 QoS rule, the PC5 QoS rule contains” -> “create a new PC5  QoS rule which contains” 5. “to lower layers” -> “to the lower layers” 6. “a precedence value.” Should be “a precedence value; and” 7. “source and destination layer-2 IDs.” Should be “source and destination layer-2 IDs;” 8. “.” at the end of bullets d-2) should be an “;’. 9. “.” at the end of bullets d-3) should be an “; and”. 10. “.” at the end of bullet b) should be “; and” 11. In bullet d-3), “UE uses” -> “the UE uses” 12. In bullet d-3), “the new created PC5 QoS flow as bullet a)” -> “the new PC5 QoS flow created as described in bullet 1)” 13. In bullet d-3), “as bullet 2)” -> “as described in bullet 2)”   Yanchao, Tuesday, 6:37  I took onboard Lena’s comment in a draft revision.  I also added ‘and’ at the end of bullet d-2);  Not sure why “.” at the end of bullet b) should be “; and”. But if so, should I add ‘and’ at end of bullet c)? | |
|  |  | | C1-202767 | Correction to the privacy timer | | | Huawei, HiSilicon /Christian | CR 0024 24.587 Rel-16 | Revision of C1-202226  -----------------------------------------------  Yanchao, Thursday, 16:21  Two while in the change in the table:  “Upon T5020 expiration while while”  Lena, Friday, 3:10  The CR is fine except for “while while” in table 10.4.1.  Christian, Tuesday, 14:40  A draft revision addressing the comments is available. | |
|  |  | | C1-202768 | Resolution of editor's note under 6.1.2.3.6 | | | Huawei, HiSilicon /Christian | CR 0034 24.587 Rel-16 | Revision of C1-202455  ----------------------------------------------  Ivo, Thursday, 13:55  For good interoperability, the handling should not be implementation specific.  Lena, Friday, 4:32   1. typo (“initiaing”) 2. “during the initiating UE-requested PC5 unicast link modification procedure” should be “during the PC5 unicast link modification procedure” (there is no “UE-requested PC5 unicast link modification procedure”)   Christian, Tuesday, 10:40  A draft revision is available. About Ivo’s comment, I believe that there is some misunderstanding about what the proposal actually is. Please, note that this is a very rare abnormal case (race condition) and the proposal is in fact not left to implementation but it is solved, i.e. “the initiating UE shall abort the PC5 unicast link modification procedure”. What we propose to leave to implementation is “the following handling” and we provide an example of what the UE could do but all depends on the current situation in the UE after the procedure is aborted | |
|  |  | | C1-202769 | Resolution of the editor's note under 6.1.2.5.7.2 | | | Huawei, HiSilicon /Christian | CR 0035 24.587 Rel-16 | Revision of C1-202456  -------------------------------------------  Ivo, Thursday, 13:55  For good interoperability, the handling should not be implementation specific.  Lena, Friday, 4:33   1. Coversheet needs update as it refers to link modification procedure but the abnormal case handling is added for the link identifier update procedure 2. “procedure procedure” in 6.1.2.5.7.1 3. “initiaing” in 6.1.2.5.7.1 4. “a new PC5 unicast link update procedure” should be “a new PC5 unicast link identifier update procedure”   Christian, Tuesday, 14:22  A draft revision is available. About Ivo’s comments, I believe that there is some misunderstanding about what the proposal actually is. Please, note that this is a very rare abnormal case (race condition) and the proposal is in fact not left to implementation but it is solved, i.e. “the initiating UE shall abort the PC5 unicast link identifier update procedure”. What we propose to leave to implementation is “the following handling” and we provide an example of what the initiating UE could do but all depends on the current situation in the initiating UE after the procedure is aborted. | |
|  |  | | C1-202773 | Timer values for timers of PC5 unicast link management procedures | | | Huawei, HiSilicon /Christian | CR 0023 24.587 Rel-16 | Revision of C1-202598  ------------------------------------------------------  Revision of C1-202225  Lena, Monday, 0:49  We are ok with setting the timer values to 5 sec for timers other than T5005.  Regarding T5005, 2 hrs as default (which is the same as the default TCP keep-alive timer) seems too long for a dynamic environment such as V2X. Would it be possible to set it to something in the order of minutes, for instance 10 min?  Christian, Wednesday, 10:42  We agree that T5005 should be set in the order of minutes for V2X. A draft revision is available. | |
|  |  | | C1-202780 | T3540 for service request for V2X communications | | | ZTE | CR 2111 24.501 Rel-16 | Revision of C1-202333  -----------------------------------------  Rae, Friday, 9:08  Service type “signaling” seems more appropriate under the case that UE only wants to get resources for PC5 from RAN without pending UL data.  Fei, Friday, 11:14  I am fine to change the service type to "signalling" for this case.  Fei, Saturday, 9:11  A draft revision is available. The changes are:  1) service type is changed from data to signalling.  2) the summary of change is also updated.  Lena, Sunday, 20:08  Having the service request type set to “signalling” rather than “data” makes more sense since no DBR will be set up. | |
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|  | RACS (CT4 lead) | |  | Peter – Main | | |  |  | CT aspects of optimizations on UE radio capability signalling  100% | |
|  |  | | [C1-202233](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202233.zip) | RACS parameters in generic UE configuration procedure | | | Ericsson / Mikael | CR 2078 24.501 Rel-16 |  | |
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|  | 5G\_SRVCC (CT4 lead) | |  | Peter – Main | | |  |  | CT aspects of single radio voice continuity from 5GS to 3G  100% | |
|  |  | | [C1-202094](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202094.zip) | Introduce support for 5G SRVCC support indication when registering with EPS | | | BlackBerry Uk Ltd. | CR 3213 24.008 Rel-16 | Alternative to C1-202133 | |
|  |  | | [C1-202095](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202095.zip) | Introduce support for 5G SRVCC support indication when registering with EPS | | | BlackBerry Uk Ltd. | CR 3290 24.301 Rel-16 | Revision of C1-198012  Alternative to C1-202133 | |
|  |  | | [C1-202529](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202529.zip) | Initial Registration after 5G-SRVCC | | | ZTE, China Unicom | CR 2115 24.501 Rel-16 | Revision of C1-202338 | |
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|  | xBDT (CT3 lead) | |  | Peter – Main | | |  |  | CT aspects on 5GS Transfer of Policies for Background Data  100% | |
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|  | IAB-CT (CT4 lead) | |  | Peter – Main | | |  |  | CT aspects of support for integrated access and backhaul (IAB)  CT1 no longer affected by this work item | |
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|  | 5GS\_OTAF (CT4 lead) | |  | Peter – Main | | |  |  | 5GS Enhanced support of OTA mechanism for UICC configuration parameter update | |
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|  | 5G\_URLLC (CT4 lead) | |  | Peter – Main | | |  |  | CT aspects of CT Aspects of 5G URLLC | |
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|  | SEAL | |  | Lena – Breakout | | |  |  | CT aspects of Service Enabler Architecture Layer for Verticals  Is TS 24.548 sufficiently stable to be sent to CT#88 for approval? | |
|  |  | | [C1-202137](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202137.zip) | Updates to User Authentication Client (SIM-C) procedure | | | Intel / Vivek | CR 0001 24.547 Rel-16 |  | |
|  |  | | [C1-202138](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202138.zip) | Updates to User Authentication Server (SIM-S) procedure | | | Intel / Vivek | CR 0002 24.547 Rel-16 |  | |
|  |  | | [C1-202139](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202139.zip) | Updates to Token Exchange Client (SIM-C) procedure | | | Intel / Vivek | CR 0003 24.547 Rel-16 | Sapan, Monday, 14:49  I believe editor’s note should not be removed as token exchange procedure is not yet defined in SA3. Either we go ahead with this contribution by keeping editor’s note OR alternatively we may also postpone the contribution and we can align the procedure with SA3 once it is available in SA3 specification. I am fine with both options. | |
|  |  | | [C1-202140](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202140.zip) | Updates to Token Exchange Server (SIM-S) procedure | | | Intel / Vivek | CR 0004 24.547 Rel-16 | Chen, Thursday, 13:40  The editor’s note should be deleted too.  Sapan, Monday, 14:43  I think Editor’s note should not be removed. As I understand, this contribution is trying to align procedure with other user authentication procedure (in C1-202138). But the token exchange procedure is not defined in SA3 yet.  I am fine with changes but I prefer not to remove Editor’s note.  Either we go ahead with this contribution by keeping editor’s note OR alternatively we may also postpone the contribution and we can align the procedure with SA3 once it is available in SA3 specification. I am fine with both options.  Chen, Wednesday, 11:23  I agree with you that the Editor’s note should not be removed. Therefore, @Vivek, the Summary of change should be corrected too. | |
|  |  | | [C1-202209](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202209.zip) | Latest reference version of draft TS 24.548 | | | Huawei, HiSilicon /Christian | draft TS 24.548 Rel-16 |  | |
|  |  | | [C1-202297](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202297.zip) | Updates to structure and data semantics for request for unicast resource at VAL service communication establishment procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 |  | |
|  |  | | [C1-202299](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202299.zip) | Structure and data semantics for request for modification of unicast resources procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Sapan, Friday, 10:31   * New elements defined in this pCR i.e. <modification> and <modification-result> elements, are exactly same as elements defined in another pCR C1-202297 (<request> and <request-result> elements) * I do not see need to define new elements in this pCR. We can reuse elements defined in C1-202297 by adding request type within <request> element.   Chen. Saturday, 11:13  This p-CR just followed the requirements of stage 2 of TS 23.434 clause 14.3.2.6, clause 14.3.2.7, clause 14.3.2.8 and clause 14.3.2.9. And as described in TS 23.434 clause 14.3.3.2, there are differences between the request for unicast resources procedure and the request for modification of unicast procedure.  Sapan, Monday, 11:27  Thanks for the clarification, I am ok with the changes. | |
|  |  | | [C1-202301](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202301.zip) | Structure and data semantics for network resource adaptation procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 |  | |
|  |  | | [C1-202305](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202305.zip) | Use of pre-established MBMS bearers procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 |  | |
|  |  | | [C1-202312](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202312.zip) | MBMS bearer event notification procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 |  | |
|  |  | | [C1-202313](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202313.zip) | Switching between MBMS bearer bearer and unicast bearer procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 |  | |
|  |  | | [C1-202314](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202314.zip) | Resolution of editor's note on application unique ID | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 |  | |
|  |  | | [C1-202319](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202319.zip) | IANA registration template of SEAL location management | | | Huawei, HiSilicon / Chen | CR 0001 24.545 Rel-16 |  | |
|  |  | | [C1-202320](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202320.zip) | Removal of editor’s note on MIME types | | | Huawei, HiSilicon / Chen | CR 0002 24.545 Rel-16 |  | |
|  |  | | [C1-202321](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202321.zip) | Resolution of editor's note on application unique ID | | | Huawei, HiSilicon / Chen | CR 0003 24.545 Rel-16 |  | |
|  |  | | [C1-202322](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202322.zip) | Structure and data semantics for query list of users based on location procedure | | | Huawei, HiSilicon / Chen | CR 0004 24.545 Rel-16 |  | |
|  |  | | [C1-202440](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202440.zip) | Create SIP based subscription for SLM | | | Samsung, Huawei, HiSilicon / Sapan | CR 0006 24.545 Rel-16 |  | |
|  |  | | [C1-202441](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202441.zip) | Modify SIP based subscription for SLM | | | Samsung / Sapan | CR 0007 24.545 Rel-16 | Frederic, Thursday, 12:54  Incorrect clauses affected: 6.2.6.1.1.1 (NEW) should be 6.2.6.1.1.2 (NEW)  Sapan, Monday, 14:04  A draft revision is available. | |
|  |  | | [C1-202442](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202442.zip) | Delete SIP based subscription for SLM | | | Samsung / Sapan | CR 0008 24.545 Rel-16 |  | |
|  |  | | [C1-202443](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202443.zip) | Handling of abnormal cases for SIP based subscription in SLM | | | Samsung / Sapan | CR 0009 24.545 Rel-16 |  | |
|  |  | | [C1-202444](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202444.zip) | Message Formats for location management subscription | | | Samsung / Sapan | CR 0010 24.545 Rel-16 |  | |
|  |  | | [C1-202445](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202445.zip) | Timers used in location management | | | Samsung / Sapan | CR 0011 24.545 Rel-16 |  | |
|  |  | | [C1-202446](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202446.zip) | Annex for registering ICSI and MIME for SLM | | | Samsung / Sapan | CR 0012 24.545 Rel-16 |  | |
|  |  | | [C1-202447](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202447.zip) | SIP based subscribe/notify procedures for SEAL group management | | | Samsung / Sapan | CR 0001 24.544 Rel-16 |  | |
|  |  | | [C1-202448](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202448.zip) | Removal of Editor’s notes | | | Samsung / Sapan | CR 0002 24.544 Rel-16 | Chen, Friday, 9:40  In the Reason of change, TS 33.434 states that access tokens shall be communicated from the SIM-C to VAL resource servers, not SGM-C/SCM-C. Therefore, the reason of change needs to be enhanced  Sapan, Monday, 16:32  Although the annex describes about SIM-C, the general description of SEAL service authorization (in clause 6.2.2) and authorization framework (in clause 6.2.5) clearly mention that each SEAL client shall present access-token to SEAL server for authorization. I will update the reason for change accordingly. A draft revision is available.  Chen, Tuesday, 11:00  I’m fine with the revision. As we discussed before, the header will be changed in SEAL location management in next meeting too. | |
|  |  | | [C1-202449](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202449.zip) | Indication from SGM-S to SGM-C about group join required | | | Samsung / Sapan | CR 0003 24.544 Rel-16 |  | |
|  |  | | [C1-202450](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202450.zip) | SIP based subscribe/notify procedures for configuration management | | | Samsung / Sapan | CR 0001 24.546 Rel-16 |  | |
|  |  | | [C1-202451](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202451.zip) | Removal of Editor’s notes. | | | Samsung / Sapan | CR 0002 24.546 Rel-16 | Chen, Friday, 9:40  In the Reason of change, TS 33.434 states that access tokens shall be communicated from the SIM-C to VAL resource servers, not SGM-C/SCM-C. Therefore, the reason of change needs to be enhanced  Sapan, Monday, 16:32  Although the annex describes about SIM-C, the general description of SEAL service authorization (in clause 6.2.2) and authorization framework (in clause 6.2.5) clearly mention that each SEAL client shall present access-token to SEAL server for authorization. I will update the reason for change accordingly. A draft revision is available.  Chen, Tuesday, 11:00  I’m fine with the revision. As we discussed before, the header will be changed in SEAL location management in next meeting too. | |
|  |  | | C1-202715 | Updates to request for unicast resource at VAL service communication establishment procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202296  -------------------------------------------  Sapan, Thursday, 21:32  The only concern with me for this CR is that – server is sending HTTP 200 OK, only after receiving SIP 200 OK. I believe server should not wait till SIP based procedures are completed.  Server can send HTTP 200 OK if HTTP POST request from VAL server is authorized. And once resources are reserved (i.e. SIP 200 OK is received) – server can send another HTTP message to notify about the success.  Chen, Friday, 5:33  I understand Sapan’s concern, but it needs SA6’s requirement. This p-CR just followed the procedure description of TS 23.434 clause 14.3.3.2.1.2.  Sapan, Friday, 8:45  I do understand that the contribution is based on SA6 specification. The problem here is that the SIP procedure can take longer time to respond  (at times more than 32 seconds) and I do not think HTTP client can wait for such long time.  My proposal is: - On receiving HTTP POST request, the server will sends HTTP 202 Accepted as intermediate response and once SIP procedure is completed, the server will send actual response in form of new HTTP message (for this client should have opened notification channel);  Chen, Saturday, 9:47  Thanks for your explanation. In my understanding,   1. It is the VAL server not the client that requests for unicast resources; 2. It is only the 3GPP system that provides the unicast resources and the VAL server needs the unicast resources ASAP. If HTTP 202 response message is sent, the connection between the VAL server and the SNRM-S might be dropped; 3. HTTP is a stateless protocol with request-response mechanism. If HTTP 202 response message is sent, the VAL server should do polling (long polling or periodic polling?). In my point of view, the 32s is not long for the persistent connection, which could ensure the VAL server can get the resources ASAP.   With the above consideration, it’s better to keep the current status and align with TS 23.434.  Sapan, Monday, 10:04  I understand that Huawei do not want to send HTTP 202 Accepted response to VAL server due to reasons mentioned in your below email, but I will atleast prefer to add clarification in VAL serve side procedure about terminating the connection.  I propose to add following NOTE as compromise solution in VAL server side procedure:  NOTE 1: Before terminating connection due to no response from SRM-S, the VAL server allows sufficient time for SRN-S to reserve resources and respond. It is up to implementation to decide how long the VAL server waits for receiving response.  I hope you can agree to add above NOTE.  Chen, Monday, 11:12  The NOTE is OK with me. The draft revision with the NOTE and wording fixed is now available.  Sapan, Monday, 13:33  I am OK with the draft revision. | |
|  |  | | C1-202716 | Request for modification of unicast resources procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202298  ------------------------------------------------  Sapan, Friday, 9:00   1. In clause 6.2.2.3.1, step b) – How server determines whether bearer modification is required or not? 2. In clause 6.2.2.3.1, step b) 3) i) – the value “failure” is not giving enough information to VAL server. The <modification-result> element can also be used to provide reason for the failure. My suggestion is to change the value to “Modification not required” – to indicate VAL server about the actual result. 3. Same concern as described in previous CR - HTTP 200 OK is sent after receiving SIP 200 OK.   Chen, Saturday, 11:28   1. -> In my understanding, the decision mechanism is NRM-S implementation specific 2. -> The p-CR just followed the requirement of stage 2 of TS 23.434, clause 14.3.2.9 3. -> Please see my replies on C1-202296   Sapan, Monday, 13:43  I am fine with reply for comment 1) and 2).  For comment 3) – can you add similar NOTE as we decided to add in C1-202296.  Chen, Tuesday, 11:07  I’m OK with the NOTE added and the draft revision is available.  Frederic, Tuesday, 12:46  The pCR introduces two subclauses 6.2.2.3.1. While this can be fixed at the implementation, it would be better to have it corrected now.  Chen, Wednesday, 3:39  Thanks Frederic, it is fixed now and I have also fixed clauses affected.  Sapan, Wednesday, 7:34  I am fine with the NOTE added in draft revision. | |
|  |  | | C1-202717 | Network resource adaptation procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revsision of C1-202300  ---------------------------------------------  Sapan, Friday, 9:45   1. In clause 6.2.2.4.1 – “In order to request request unicast resources or modify already……” – The word “request” is written twice. 2. In clause 6.2.2.4.1 – At end of Step d) 1) ii) A) – it should be “or” instead of “and”. 3. In clause 6.2.2.4.2 – same concern as previous CRs – HTTP 200 OK is sent after SIP 200 OK.   Chen, Friday, 10:44   1. -> OK 2. -> OK 3. -> In the adaptation procedure, the NRM server interacts with 3GPP system using HTTP as described in TS 29.514/TS 29.214. The HTTP 200 OK is sent after HTTP 200 OK. Let me know your thinking.   Sapan, Friday, 11:17  For 3), Ok. I am fine with explanation as it is HTTP based procedure.  Chen, Saturday, 9:53  Thanks for your feedback, a draft revision is available.  Sapan, Monday, 11:03  I am ok with the draft revision. | |
|  |  | | C1-202718 | Structure and data semantics for MBMS bearer announcement over MBMS bearer procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202302  ---------------------------------------------  Sapan, Friday, 11:54  All 5 pCRs (C1-202302, C1-202304, C1-202306, C1-202309, C1-202311) defines new clause 7.3.3 “MBMSInfo document” (for data structure) and 7.5.3 “MBMSInfo document” (for data semantics). Also, each pCRs define <mbms-info> as root element in the document with different child elements.  It is difficult to understand how all pCRs will be implemented in the specification. I request to merge all pCRs and define both clauses 7.3.3 and 7.5.3 only once with all required child elements in it – this will help us to understand exactly how clause 7.3.3 and clause 7.5.3 will be implemented in specification.   * 1. I do not understand <monitoring-state> element. Can you please clarify its usage? What is the meaning of value “monitoring” for the client when it receives this from server?   2. In clause 7.5.3 - Step h) mentions about element <mcptt-mbms-rohc> - It should be < announcement-acknowlegement> element.   3. Change possible values for <unicast-status> element to “required” and “not-required”.   4. In clause 7.5.3 – Step a) – all references are used with soft space – change it to hard space   Chen, Saturday, 8:57  Acturally, the new clause 7.3.3 and clause 7.5.3 has only one “header” repectively.  Every pCR is corresponding to the related procedures as we did before in other SEAL Ts. Therefore, I merged these overlapped headers into revised C1-202302 and keep only child elements in other pCRs. I will coordinate with the rapporteur Christian to implement these pCRs according to the sequence of procedures (i.e. the apearance sequence of the elements).   * 1. -> As replied to C1-202210, the monitoring state is used to control if the client is actively monitoring the MBMS bearer quality or not. Therefore, the “monitoring” means the client start to monitor the MBMS bearer quality, and “not-monitoring” means the client stops monitoring the MBMS bearer quality. And this is updated in the draft revision   2. -> OK   3. -> As replied to C1-202210,  if the <unicast-status> element is present, the client shall include the <unicast-listening-status> element in the MBMS listening status report message. And this is updated in the draft revision   4. -> ok   A draft revision is available.  Sapan, Monday, 9:40  Although you have merged all headers in to revised C1-202302 but new clauses are still defined in other pCRs. I will prefer to have everything merged to have single description of new clauses. But with your proposed approach, the clarity is improved to some extent and I understand your intention to break into different pCRs due to separate procedures and so as a compromise I am fine with your proposed approach.  To align with your description, I request you to remove “ing” from the value as shown below.  -     The value “monitor~~ing~~” indicates that the SNRM-C shall monitor the MBMS bearer quality; and  -     The value “not-monitor~~ing~~” indicates that the SNRM-C shall not monitor the MBMS bearer quality;  Also:   1. Kindly change the values of <monitoring-state> as specified in above comment – “monitor” and “not-monitor”. 2. Can you add possible values for <unicast-status> to “required” and “not-required” 3. In step j) – element <mcptt-mbms-rohc> is used – it should be <seal-mbms-rohc>.   Chen, Monday, 11:02  I am ok with Sapan’s additional comments except the following: about adding possible values for <unicast-status> to “required” and “not-required”, there is a little difference between the <monitoring-state> and the <unicast-status>. <monitoring-state> is to control the client to monitor or not to monitor no matter what is the client doing. But <unicast-status> is to report a unicast listening status that already exists. Therefore, from my side, the presence of the <unicast-status> is enough to indicate the listening status of the unicast bearer is requested and aligned with the TS 23.434.  A draft revision is available.  Sapan, Monday, 13:04  I am OK with the draft revision. | |
|  |  | | C1-202719 | Updates to MBMS bearer quality detection procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202303  --------------------------------------------------  Sapan, Friday, 12:47   1. In clause 6.2.3.4.1 – NOTEs are not in proper style. 2. Need to add condition in step a) 5) –   if MBMS announcement message contained <unicast-status> with value “required”, shall ~~may~~ include an <unicast-listening-status> element set to "listening" or "not-listening" indicating the unicast listening status.  Chen, Saturday, 3:35  Both comments are OK with me. The second point I revised in the following:  If the <unicast-status> element is present in the MBMS announcement message, shall…  The draft revision is available.  Sapan, Sunday, 19:18  I am fine with the draft revision. | |
|  |  | | C1-202720 | Structure and data semantics for MBMS bearer quality detection procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202304  ------------------------------------------------  Sapan, Friday, 11:54  All 5 pCRs (C1-202302, C1-202304, C1-202306, C1-202309, C1-202311) defines new clause 7.3.3 “MBMSInfo document” (for data structure) and 7.5.3 “MBMSInfo document” (for data semantics). Also, each pCRs define <mbms-info> as root element in the document with different child elements.  It is difficult to understand how all pCRs will be implemented in the specification. I request to merge all pCRs and define both clauses 7.3.3 and 7.5.3 only once with all required child elements in it – this will help us to understand exactly how clause 7.3.3 and clause 7.5.3 will be implemented in specification.  In clause 7.5.3 – Step b) – all references are used with soft space – change it to hard space  Chen, Saturday, 8:57  Acturally, the new clause 7.3.3 and clause 7.5.3 has only one “header” repectively.  Every pCR is corresponding to the related procedures as we did before in other SEAL Ts. Therefore, I merged these overlapped headers into revised C1-202302 and keep only child elements in other pCRs. I will coordinate with the rapporteur Christian to implement these pCRs according to the sequence of procedures (i.e. the apearance sequence of the elements).  Ok for the comment on clause 7.5.3. A draft revision is available.  Sapan, Monday, 9:40  Although you have merged all headers in to revised C1-202302 but new clauses are still defined in other pCRs. I will prefer to have everything merged to have single description of new clauses. But with your proposed approach, the clarity is improved to some extent and I understand your intention to break into different pCRs due to separate procedures and so as a compromise I am fine with your proposed approach.  I am ok with the draft revision. | |
|  |  | | C1-202721 | Structure and data semantics for use of pre-established MBMS bearers procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202306  ------------------------------------------------  Sapan, Friday, 11:54  All 5 pCRs (C1-202302, C1-202304, C1-202306, C1-202309, C1-202311) defines new clause 7.3.3 “MBMSInfo document” (for data structure) and 7.5.3 “MBMSInfo document” (for data semantics). Also, each pCRs define <mbms-info> as root element in the document with different child elements.  It is difficult to understand how all pCRs will be implemented in the specification. I request to merge all pCRs and define both clauses 7.3.3 and 7.5.3 only once with all required child elements in it – this will help us to understand exactly how clause 7.3.3 and clause 7.5.3 will be implemented in specification.  In clause 7.5.3 – Under <mbms-bearers> element – In Step b) – all references are used with soft space – change it to hard space.  Chen, Saturday, 8:57  Acturally, the new clause 7.3.3 and clause 7.5.3 has only one “header” repectively.  Every pCR is corresponding to the related procedures as we did before in other SEAL Ts. Therefore, I merged these overlapped headers into revised C1-202302 and keep only child elements in other pCRs. I will coordinate with the rapporteur Christian to implement these pCRs according to the sequence of procedures (i.e. the apearance sequence of the elements).  Ok for the comment on clause 7.5.3. A draft revision is available.  Sapan, Monday, 9:40  Although you have merged all headers in to revised C1-202302 but new clauses are still defined in other pCRs. I will prefer to have everything merged to have single description of new clauses. But with your proposed approach, the clarity is improved to some extent and I understand your intention to break into different pCRs due to separate procedures and so as a compromise I am fine with your proposed approach.  I am ok with the draft revision. | |
|  |  | | C1-202722 | Use of dynamic MBMS bearers procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202307  ---------------------------------------------------  Sapan, Friday, 13:06   1. Following 3 statements refer to same procedure (clause 6.2.3.2.2 ) to perform difference tasks – please check if reference to the procedure are correct or not.    1. In clause 6.2.3.X.2 - send an MBMS bearer announcement message as described in clause 6.2.3.2.2 towards the SNRM-C    2. In clause 6.2.3.X.2 - shall send an MBMS bearers response message as decribed in clause 6.2.3.2.2 towards the VAL server    3. In clause 6.2.3.X.3 - an MBMS bearer listening status report as described in clause 6.2.3.2.2 towards the SNRM-S   Chen, Saturday, 5:19  Thanks for pointing this out. I checked and the last clause 6.2.3.2.2 should be 6.2.3.2.3. The draft revision is now available.  Sapan, Sunday, 20:00  I am fine with the draft revision | |
|  |  | | C1-202723 | Service continuity in MBMS scenarios procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202308  --------------------------------------------  Sapan, Friday, 13:26  In clause 6.2.2.4.2 – step c) “shall send the HTTP POST request towards the SNRM-S according to IETF RFC 2616 [r2616].” => It should be towards VAL server.  Chen, Saturday, 5:05  Thanks for pointing this out. The draft revision is now available.  Sapan, Sunday, 19:29  I am fine with the draft revision. | |
|  |  | | C1-202724 | Structure and data semantics for service continuity in MBMS scenarios procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202309  --------------------------------------------  Sapan, Friday, 11:54  All 5 pCRs (C1-202302, C1-202304, C1-202306, C1-202309, C1-202311) defines new clause 7.3.3 “MBMSInfo document” (for data structure) and 7.5.3 “MBMSInfo document” (for data semantics). Also, each pCRs define <mbms-info> as root element in the document with different child elements.  It is difficult to understand how all pCRs will be implemented in the specification. I request to merge all pCRs and define both clauses 7.3.3 and 7.5.3 only once with all required child elements in it – this will help us to understand exactly how clause 7.3.3 and clause 7.5.3 will be implemented in specification.  Chen, Saturday, 8:57  Acturally, the new clause 7.3.3 and clause 7.5.3 has only one “header” repectively.  Every pCR is corresponding to the related procedures as we did before in other SEAL Ts. Therefore, I merged these overlapped headers into revised C1-202302 and keep only child elements in other pCRs. I will coordinate with the rapporteur Christian to implement these pCRs according to the sequence of procedures (i.e. the apearance sequence of the elements).  A draft revision is available.  Sapan, Monday, 9:40  Although you have merged all headers in to revised C1-202302 but new clauses are still defined in other pCRs. I will prefer to have everything merged to have single description of new clauses. But with your proposed approach, the clarity is improved to some extent and I understand your intention to break into different pCRs due to separate procedures and so as a compromise I am fine with your proposed approach.  I am ok with the draft revision. | |
|  |  | | C1-202725 | MBMS suspension notification procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202310  ----------------------------------------------  Sapan, Friday, 2:36  1)     Clause 6.2.3.6.2 – Need to do proper heading style  2)     Client needs to send HTP response back to server before generating HTTP POST request.  Chen, Saturday, 4:58  Both comments are accepted. The draft revision is available.  Note that Client sends an HTTP 204 response back to server before generating HTTP POST request.  Sapan, Sunday, 19:26  Minor editorial correction required – kindly use hardspace while referring to IETF RFC 2616 [r2616]. Other than that, I am fine with the draft revision.  Chen, Tuesday, 11:20  Thanks for pointing this out. All the related space will be changed to hard space in the final revision. | |
|  |  | | C1-202726 | Structure and data semantics for MBMS suspension notification procedure | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202311  -------------------------------------------------  Sapan, Friday, 11:54  All 5 pCRs (C1-202302, C1-202304, C1-202306, C1-202309, C1-202311) defines new clause 7.3.3 “MBMSInfo document” (for data structure) and 7.5.3 “MBMSInfo document” (for data semantics). Also, each pCRs define <mbms-info> as root element in the document with different child elements.  It is difficult to understand how all pCRs will be implemented in the specification. I request to merge all pCRs and define both clauses 7.3.3 and 7.5.3 only once with all required child elements in it – this will help us to understand exactly how clause 7.3.3 and clause 7.5.3 will be implemented in specification.  In clause 7.5.2 - <suspension-reporting-client-subset> - It is not clear how subset of clients will be specified.  Chen, Saturday, 8:57  Acturally, the new clause 7.3.3 and clause 7.5.3 has only one “header” repectively.  Every pCR is corresponding to the related procedures as we did before in other SEAL Ts. Therefore, I merged these overlapped headers into revised C1-202302 and keep only child elements in other pCRs. I will coordinate with the rapporteur Christian to implement these pCRs according to the sequence of procedures (i.e. the apearance sequence of the elements).  About clause 7.5.2, the subset is further specified using one or more <NRM-client-id> elements. A draft revision is available.  Sapan, Monday, 9:40  Although you have merged all headers in to revised C1-202302 but new clauses are still defined in other pCRs. I will prefer to have everything merged to have single description of new clauses. But with your proposed approach, the clarity is improved to some extent and I understand your intention to break into different pCRs due to separate procedures and so as a compromise I am fine with your proposed approach.  I am ok with the draft revision. | |
|  |  | | C1-202727 | XML scheme declaration for SEAL network resource management | | | Huawei, HiSilicon / Chen | pCR 24.548 Rel-16 | Revision of C1-202315  ----------------------------------------------  Sapan, Friday, 15:09  Adding schema for 3rd document also (may be in next meeting?).  Chen, Saturday, 3:05  OK with me. Yes, for the 3rd document I will think it further and the complete xml scheme will be provided next meeting. The draft revision with the editor’s note unremoved is now available.  Sapan, Sunday, 19:12  I am fine with the draft revision. | |
|  |  | | C1-202733 | XML scheme declaration for SEAL location management | | | Huawei, HiSilicon / Chen | CR 0005 24.545 Rel-16 | Revision of C1-202323  ----------------------------------------------  Sapan, Friday, 15:21  Editor’s note should not be removed as actual schema is not provided yet.  Chen, Saturday, 2:54  OK with me. The complete xml scheme will be provided next meeting. The draft revision with the editor’s note unremoved is now available.  Sapan, Sunday, 19:06  I am fine with the draft revision. | |
|  |  | | C1-202770 | Wrong implementation of agreed p-CR C1-200881 | | | Huawei, HiSilicon /Christian | pCR 24.548 Rel-16 | Revision of C1-202210  -------------------------------------------------  Sapan, Thursday, 21:02  I am fine with the contribution but some clarifications are required. Also, I have some minor comments to improve clarity for the procedures.   1. In clause 6.2.3.3.2.1, Server may add <monitoring-state> element in announcement message to client. How client will interpret this element? What is the meaning of "monitoring" value for client and also meaning of "not-monitoring"  value for client – when it receives announcement message including <monitoring-state> element? 2. In clause 6.2.3.3.2.1, Server may add <unicast-status> element in announcement message to client. How client will interpret value in this element? 3. Rename clause 6.2.3.3.2.1 to “Generate announcement message” 4. In clause 6.2.3.3.2.1.1 – Need to add reference to clause 6.2.3.3.2.1 to construct application/vnd.3gpp.seal-mbms-usage-info +xml MIME body. 5. In clause 6.2.3.3.2.1.2 – Need to add reference to clause 6.2.3.3.2.1 to construct application/vnd.3gpp.seal-mbms-usage-info +xml MIME body.   Chen, Saturday, 2:54   1. -> As TS 23.434 states, the monitoring state is used to control if the client is actively monitoring the MBMS bearer quality or not. Therefore, the “monitoring” means the client start to monitor the MBMS bearer quality, and “not-monitoring” means the client stops monitoring the MBMS bearer quality. The further description is added in the client procedure. And this will be further detailed in the revision of C1-202302 “Structure and data semantics for MBMS bearer announcement over MBMS bearer procedure”. 2. -> If the <unicast-status> element is present, the client shall include the <unicast-listening-status> element in the MBMS listening status report message.      The further description is added in the client procedure. And this will be further detailed in the revision of C1-202302 “Structure and data semantics for MBMS bearer announcement over MBMS bearer procedure”.   1. -> OK 2. -> OK, add the words ”according to clause 6.2.3.3.2.1”. 3. -> OK, add the words ”according to clause 6.2.3.3.2.1”.   A corresponding draft revision is available.  Sapan, Sunday, 19:03  I am fine with provided changes – make sure to use hardspace while referencing clause 6.2.3.3.2.1.  Also, regarding comment 1) and 2), I will check your revision C1-202302 and let you know if I have any comment or not. | |
|  |  | | C1-202772 | Wrong implementation of agreed p-CR C1-200882 | | | Huawei, HiSilicon /Christian | pCR 24.548 Rel-16 | Revision of C1-202211  -----------------------------------------------  Sapan, Thursday, 21:09   1. On cover sheet, Specification number and Agenda item is wrong. 2. In clause 6.2.3.4.1.1 and in clause 6.2.3.4.1.2- Need to add reference to clause 6.2.3.4.1 to construct application/vnd.3gpp.seal-mbms-usage-info +xml MIME body   Chen, Saturday, 2:54  Ok with both comments. A draft revision is available.  Sapan, Sunday, 18:58  I am fine with the draft revision. | |
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|  | Other Rel-16 non-IMS issues | |  | Peter – Main | | |  |  | Other Rel-16 non-IMS topics | |
|  |  | | [C1-202083](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202083.zip) | Correction of certain erroneous Information Element Identifiers | | | InterDigital Communications | CR 2033 24.501 Rel-16 |  | |
|  |  | | [C1-202088](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202088.zip) | Clarification for the use of enhanced coverage in EPS | | | Samsung, Huawei, HiSilicon, InterDigital | CR 3339 24.301 Rel-16 |  | |
|  |  | | [C1-202148](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202148.zip) | SMS timer extension for the MS using CP CIoT 5GS optimization | | | NTT DOCOMO | CR 0066 24.011 Rel-16 |  | |
|  |  | | [C1-202178](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202178.zip) | Emergency PDN connection established after WUS negotiation | | | vivo | CR 3345 24.301 Rel-16 |  | |
|  |  | | [C1-202217](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202217.zip) | RPDU transfer for 5GS using Control Plane CIoT Optimization | | | NTT DOCOMO INC. | CR 0067 24.011 Rel-16 |  | |
|  |  | | [C1-202263](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202263.zip) | TA change during Authentication procedure in EMM-CONNECTED mode | | | Apple | CR 3347 24.301 Rel-16 |  | |
|  |  | | [C1-202264](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202264.zip) | TA change during Authentication procedure in 5GMM-CONNECTED mode | | | Apple | CR 2092 24.501 Rel-16 |  | |
|  |  | | [C1-202265](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202265.zip) | Considerations for AML over SMS in roaming scenarios | | | Apple | discussion Rel-16 | Revision of C1-200606 | |
|  |  | | [C1-202267](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202267.zip) | Add handling for parameter set to “value is not used” in EPS | | | Qualcomm Incorporated | CR 3348 24.301 Rel-16 |  | |
|  |  | | [C1-202269](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202269.zip) | Allow lower layer to change RRC establishment cause during voice EPS fallback | | | Qualcomm Incorporated, Ericsson | CR 3316 24.301 Rel-16 | Revision of C1ah-200048 | |
|  |  | | [C1-202273](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202273.zip) | Remove invalid cases in error handling for TFT operation | | | Qualcomm Incorporated | CR 3214 24.008 Rel-16 |  | |
|  |  | | [C1-202274](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202274.zip) | Remove invalid cases in error handling for TFT operation in EPS | | | Qualcomm Incorporated | CR 3350 24.301 Rel-16 |  | |
|  |  | | [C1-202334](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202334.zip) | Clarification on the UE behaviour when receiving T3448 | | | ZTE | CR 3351 24.301 Rel-16 |  | |
|  |  | | [C1-202421](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202421.zip) | Definition of current PLMN and serving PLMN | | | Qualcomm Incorporated / Amer | CR 3354 24.301 Rel-16 |  | |
|  |  | | [C1-202466](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202466.zip) | WUS assistance for emergency | | | Huawei, HiSilicon/Lin | CR 3355 24.301 Rel-16 |  | |
|  |  | | [C1-202467](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202467.zip) | WUS assistance for TAU | | | Huawei, HiSilicon/Lin | CR 3356 24.301 Rel-16 |  | |
|  |  | | [C1-202468](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202468.zip) | Retry restriction for NB-IoT UEs due to out of tariff package | | | Huawei, HiSilicon/Lin | CR 3357 24.301 Rel-16 |  | |
|  |  | | [C1-202484](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202484.zip) | Correction on retry restriction for ESM#66 | | | Huawei, HiSilicon/Lin | CR 3363 24.301 Rel-16 |  | |
|  |  | | [C1-202539](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202539.zip) | New AT command for linking packet filters +CGLNKPF | | | MediaTek Inc. / JJ | CR 0687 27.007 Rel-16 |  | |
|  |  | | [C1-202540](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202540.zip) | New AT command for deleting packet filters +CGDELPF | | | MediaTek Inc. / JJ | CR 0688 27.007 Rel-16 |  | |
|  |  | | [C1-202502](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202502.zip) | NAS Message Container 2 for LPP/LCS messages | | | MediaTek Inc., Qualcomm Incorporated | CR 3308 24.301 Rel-16 | Revision of C1-198902 | |
|  |  | | [C1-202511](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202511.zip) | Reset of PLMN-specific attempt counter | | | MediaTek Inc. | CR 3364 24.301 Rel-16 |  | |
|  |  | | [C1-202512](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202512.zip) | Correction to Handling of T3321 timer | | | MediaTek Inc. | CR 3217 24.008 Rel-16 |  | |
|  |  | | [C1-202513](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202513.zip) | Correction to Handling of T3421 timer | | | MediaTek Inc. | CR 3365 24.301 Rel-16 |  | |
|  |  | | [C1-202520](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202520.zip) | Correction to handling of T3447 timer | | | MediaTek Inc. | CR 3370 24.301 Rel-16 |  | |
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|  | WIs for IMS | |  | Jörgen – Breakout | | |  |  |  | |
|  | MCCI\_CT | |  |  | | |  |  | Mission Critical Communication Interworking with Land Mobile Radio Systems  100% | |
|  |  | | [C1-202286](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202286.zip) | Editorial corrections | | | Sepura Ltd, Hytera Communications Corp | CR 0001 29.582 Rel-16 |  | |
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|  | MCProtoc16 | |  | Jörgen – Breakout | | |  |  | Protocol enhancements for Mission Critical Services for Rel-16  100% | |
|  |  | | [C1-202220](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202220.zip) | Check regroup ID | | | FirstNet / Mike | CR 0553 24.379 Rel-16 |  | |
|  |  | | [C1-202221](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202221.zip) | Clarification of 11.1.6.2.1.2 | | | FirstNet / Mike | CR 0554 24.379 Rel-16 |  | |
|  |  | | [C1-202222](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202222.zip) | Update affiliation definition to support preconfigured regroups | | | FirstNet / Mike | CR 0555 24.379 Rel-16 |  | |
|  |  | | [C1-202223](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202223.zip) | Floor Request to Regrouped Group | | | FirstNet / Mike | CR 0229 24.380 Rel-16 |  | |
|  |  | | [C1-202551](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202551.zip) | Authorisation validation for first-to-answer call origination requesting user using pre-established session | | | Samsung | CR 0556 24.379 Rel-16 |  | |
|  |  | | [C1-202552](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202552.zip) | Check for MCPTT ID bindng and validity period of existing binding | | | Samsung | CR 0557 24.379 Rel-16 |  | |
|  |  | | [C1-202553](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202553.zip) | Corrections to location sharing during call setup | | | Samsung | CR 0558 24.379 Rel-16 |  | |
|  |  | | [C1-202554](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202554.zip) | Corrections to current talker location in ambient call | | | Samsung | CR 0559 24.379 Rel-16 |  | |
|  |  | | [C1-202555](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202555.zip) | Corrections to step reference in terminating controlling function | | | Samsung | CR 0560 24.379 Rel-16 |  | |
|  |  | | [C1-202556](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202556.zip) | Corrections to step reference in create a group regroup using preconfigured group | | | Samsung | CR 0561 24.379 Rel-16 |  | |
|  |  | | [C1-202557](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202557.zip) | Corrected the client origination procedure subclause text of 11.1.6.2.1.1 | | | Samsung | CR 0562 24.379 Rel-16 |  | |
|  |  | | [C1-202558](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202558.zip) | Allow an emergency and immenit peril calls during max simultaneous sessions | | | Samsung | CR 0563 24.379 Rel-16 |  | |
|  |  | | [C1-202559](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202559.zip) | Authentication of the MIKEY-SAKKE I\_Message validation in pre-established session | | | Samsung | CR 0230 24.380 Rel-16 |  | |
|  |  | | [C1-202560](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202560.zip) | Talker location sharing in remote ambient call | | | Samsung | CR 0231 24.380 Rel-16 |  | |
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|  | MuD | |  | Jörgen – Breakout | | |  |  | Multi-device and multi-identity  100% | |
|  |  | | [C1-202494](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202494.zip) | Text for empty headings | | | Ericsson /Jörgen | CR 0001 24.174 Rel-16 |  | |
|  |  | | [C1-202586](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202586.zip) | Reference update for PASSporT Extension for Diverted Calls | | | Orange / Mariusz | CR 0002 24.174 Rel-16 |  | |
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|  | IMSProtoc16 | |  | Jörgen – Breakout | | |  |  | IMS Stage-3 IETF Protocol Alignment for Rel-16  100% | |
|  |  | | [C1-202167](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202167.zip) | Adding the definition and criteria for availability of IMS Data Services | | | MediaTek Inc., Apple | CR 6415 24.229 Rel-16 |  | |
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|  | MCSMI\_CT | |  | Jörgen – Breakout | | |  |  | Mission Critical system migration and interconnection | |
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|  | eMCData2 | |  | Jörgen – Breakout | | |  |  | CT aspects of Enhancements to Functional architecture and information flows for Mission Critical Data | |
|  |  | | [C1-202023](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202023.zip) | Deposit an object | | | AT&T | CR 0118 24.282 Rel-16 |  | |
|  |  | | [C1-202024](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202024.zip) | Create a subscription to notifications | | | AT&T | CR 0119 24.282 Rel-16 |  | |
|  |  | | [C1-202025](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202025.zip) | Delete a subscription to notifications | | | AT&T | CR 0120 24.282 Rel-16 |  | |
|  |  | | [C1-202026](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202026.zip) | Update a subscription to notifications | | | AT&T | CR 0121 24.282 Rel-16 |  | |
|  |  | | [C1-202027](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202027.zip) | Synchronization notification | | | AT&T | CR 0122 24.282 Rel-16 |  | |
|  |  | | [C1-202028](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202028.zip) | Search-based Synchronization | | | AT&T | CR 0123 24.282 Rel-16 |  | |
|  |  | | [C1-202029](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202029.zip) | List folder | | | AT&T | CR 0124 24.282 Rel-16 |  | |
|  |  | | [C1-202030](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202030.zip) | Typo fixes | | | AT&T | CR 0125 24.282 Rel-16 |  | |
|  |  | | [C1-202260](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202260.zip) | Support for MCData emergency alert and communications | | | AT&T / Val | CR 0126 24.282 Rel-16 |  | |
|  |  | | [C1-202262](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202262.zip) | Emergency Alerts for MCData – client procedures | | | AT&T / Val | CR 0127 24.282 Rel-16 |  | |
|  |  | | [C1-202281](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202281.zip) | Handling of MCData Emergency Alerts at the MCData participating servers | | | AT&T / Val | CR 0128 24.282 Rel-16 |  | |
|  |  | | [C1-202287](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202287.zip) | Handling of MCData Emergency Alerts at the MCData controlling server | | | AT&T / Val | CR 0129 24.282 Rel-16 |  | |
|  |  | | [C1-202288](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202288.zip) | Auxiliary procedures in support of Emergency Alerts for MCData | | | AT&T / Val | CR 0130 24.282 Rel-16 |  | |
|  |  | | [C1-202386](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202386.zip) | Configuration of resource priority for MCData emergency | | | AT&T / Val | CR 0137 24.484 Rel-16 |  | |
|  |  | | [C1-202452](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202452.zip) | Fix minor issues in MCData pre-etsblished session | | | Samsung / Sapan | CR 0131 24.282 Rel-16 |  | |
|  |  | | [C1-202550](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202550.zip) | Corrections to file upload-download procedure as per stage 2 architecture changes | | | Samsung | CR 0133 24.282 Rel-16 |  | |
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|  | E2E\_DELAY (CT4) | |  | Jörgen – Breakout | | |  |  | CT Aspects of Media Handling for RAN Delay Budget Reporting in MTSI  100% | |
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|  | VBCLTE (CT3 lead) | |  | Jörgen – Breakout | | |  |  | Volume Based Charging Aspects for VoLTE CT | |
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|  | ISAT-MO-WITHDRAW | |  | Jörgen – Breakout | | |  |  | Withdrawal of TS 24.323 from Rel-11, Rel-12, Rel-13  No CRs needed, listed for the sake of completeness  100% | |
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|  | MONASTERY2 | |  | Jörgen – Breakout | | |  |  | Mobile Communication System for Railways Phase 2 | |
|  |  | | [C1-202496](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202496.zip) | IPConnectivity extension to include IP Information | | | Kontron Transportation France | CR 0067 24.483 Rel-16 |  | |
|  |  | | [C1-202497](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202497.zip) | IPConnectivity extension to include IP Information | | | Kontron Transportation France | CR 0138 24.484 Rel-16 |  | |
|  |  | | [C1-202498](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202498.zip) | IPConnectivity extension to include IP Information | | | Kontron Transportation France | CR 0132 24.282 Rel-16 |  | |
|  |  | | [C1-202566](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202566.zip) | Work plan for the CT1 part of MONASTERY2 | | | Nokia, Nokia Shanghai Bell | discussion Rel-16 |  | |
|  |  | | [C1-202567](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202567.zip) | Sub/Notify FA resolution analysis | | | Nokia, Nokia Shanghai Bell | discussion Rel-16 |  | |
|  |  | | [C1-202568](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202568.zip) | Resolution of called functional alias in first-to-answer calls | | | Nokia, Nokia Shanghai Bell | CR 0564 24.379 Rel-16 |  | |
|  |  | | [C1-202569](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202569.zip) | Update service configuration to support limiting the number of authorized clients per MCPTT user | | | Nokia, Nokia Shanghai Bell | CR 0139 24.484 Rel-16 |  | |
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|  | eIMS5G\_SBA | |  | Jörgen – Breakout | | |  |  | CT aspects of SBA interactions between IMS and 5GC | |
|  |  | | [C1-202066](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202066.zip) | No impact from SBA on main body | | | Nokia, Nokia Shanghai Bell, Ericsson | CR 6408 24.229 Rel-16 | Revision of C1-200353 | |
|  |  | | [C1-202099](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202099.zip) | Support scenario where the SCC AS sends a request to the HSS to retrieve the SRVCC data for the UE | | | BlackBerry UK Ltd. | CR 1299 24.237 Rel-16 |  | |
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|  | enh2MCPTT-CT | |  | Jörgen – Breakout | | |  |  | Enhancements for Mission Critical Push-to-Talk CT aspects  100% | |
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|  | eIMSVideo | |  | Jörgen – Breakout | | |  |  | Video enhancement of IMS CAT/CRS/announcement services | |
|  |  | | [C1-202155](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202155.zip) | Use preconditions for CAT when originating UE supports precondition | | | Huawei,China Telecom,China Unicom,HiSilicon /Hongxia | CR 0119 24.182 Rel-16 |  | |
|  |  | | [C1-202156](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202156.zip) | Use preconditions for CRS when terminating UE supports precondition | | | Huawei,China Telecom,China Unicom,HiSilicon /Hongxia | CR 0063 24.183 Rel-16 |  | |
|  |  | | [C1-202356](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202356.zip) | Restrictions of providing video announcement | | | China Telecom,Huawei,China Unicom,HiSilicon / Michelle | CR 0076 24.628 Rel-16 |  | |
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|  | Other Rel-16 IMS & MC issues | |  | Jörgen – Breakout | | |  |  | Other Rel-16 IMS topics | |
|  |  | | [C1-202072](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202072.zip) | Correction in CRS interactions with CDIV | | | Orange / Mariusz | CR 0062 24.183 Rel-16 |  | |
|  |  | | [C1-202080](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202080.zip) | UE must not render local tones in case of call is being forwarded or call is queued | | | Qualcomm Incorporated | CR 0075 24.628 Rel-16 |  | |
|  |  | | [C1-202081](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202081.zip) | NG eCall support over NR connected to the 5GC | | | Qualcomm Incorporated | CR 6414 24.229 Rel-16 |  | |
|  |  | | [C1-202090](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202090.zip) | Correction in IMS\_Registration\_handling policy about how UE should deregister | | | MediaTek Inc. | CR 6404 24.229 Rel-16 | Revision of C1-199028 | |
|  |  | | [C1-202132](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202132.zip) | Discussion on SRVCC from E-UTRAN to GERAN/UTRAN when IMS voice call is initiated in 5GS | | | Ericsson / Ivo | discussion Rel-16 | Revision of C1-200940 | |
|  |  | | [C1-202133](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202133.zip) | SRVCC from E-UTRAN to GERAN/UTRAN when IMS voice call is initiated in 5GS | | | Ericsson / Ivo | CR 1298 24.237 Rel-16 | Revision of C1-200941  Alternative to C1-202094 – C1-202097 | |
|  |  | | [C1-202488](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202488.zip) | Editorial clean-up | | | Ericsson /Jörgen | CR 0064 24.183 Rel-16 |  | |
|  |  | | [C1-202500](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202500.zip) | Correction on rendering local tones | | | Ericsson /Jörgen | CR 0077 24.628 Rel-16 |  | |
|  |  | | C1-202590 | Correction in IMS\_Registration\_handling policy about how UE should deregister | | | MediaTek Inc. | CR 6404  24.229 Rel-16 | Withdrawn  Not provided on time | |
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|  | Release 17  work items | | Tdoc | **NOT PART OF THIS MEETING** | | |  |  |  | |
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|  | Output Liaison Statements | | Tdoc | Title | | | Prepared by | To/CC | Result & comment | |
|  |  | | [C1-202012](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202012.zip) | Reply LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | | | Ericsson / Ivo | LS out Rel-16 | Reply to incoming LS in C1-202045 | |
|  |  | | [C1-202067](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202067.zip) | Reply LS on 5G Steering of Roaming | | | Orange / Mariusz | LS out Rel-16 | Reply to incoming LS in C1-202041 | |
|  |  | | [C1-202103](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202103.zip) | Reply LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | | | Qualcomm Incorporated / Lena | LS out Rel-16 | Reply to incoming LS in C1-202045 | |
|  |  | | [C1-202151](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202151.zip) | LS on subscribe/notify for 5G Steering of Roaming | | | DOCOMO Communications Lab. | LS out Rel-16 | Reply to incoming LS in C1-202041 | |
|  |  | | [C1-202180](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202180.zip) | [draft] Reply LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | | | vivo | LS out Rel-16 | Reply to incoming LS in C1-202045 | |
|  |  | | [C1-202204](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202204.zip) | LS on PWS Test Flag | | | one2many B.V. | LS out Rel-16 |  | |
|  |  | | [C1-202232](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202232.zip) | LS on Concurrent Broadcasting for CMAS | | | Ericsson / Mikael | LS out Rel-15 | Reply to incoming LS in C1-202046/C1-202597 | |
|  |  | | [C1-202400](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202400.zip) | LS on manual CAG selection | | | Nokia, Nokia Shanghai Bell | LS out Rel-16 | Revision of C1-201053 | |
|  |  | | [C1-202474](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202474.zip) | LS on handling pending NSSAI during ongoing NSSAA | | | Huawei, HiSilicon/Lin | LS out Rel-16 |  | |
|  |  | | [C1-202487](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202487.zip) | LS on 3GPP based access authentication for untrusted non-3GPP access to 5GCN | | | Ericsson / Ivo | LS out Rel-16 |  | |
|  |  | | [C1-202564](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202564.zip) | Reply LS on concurrent Broadcasting for CMAS | | | Samsung/ Kyungjoo Grace Suh | LS out Rel-15 | Reply to incoming LS in C1-202046/C1-202597 | |
|  |  | | [C1-202240](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202240.zip) | Reply LS to RAN2 on Manual CAG selection | | | Huawei, HiSilicon / Vishnu | LS out Rel-16 | Shifted from 16.2.7.2  Reply to incoming LS in C1-202045 | |
|  |  | | [C1-202359](file:///C:\Users\dems1ce9\OneDrive%20-%20Nokia\3gpp\cn1\meetings\123-e_electronic_0420\docs\C1-202359.zip) | LS response on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | | | Samsung/Kundan | LS out Rel-16 | Shifted from 16.2.7.1  Reply to incoming LS in C1-202045 | |
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|  | Late and misplaced documents | | Tdoc | Title  Prioritization of documents within this category will be done during the meeting.  Some tdocs are left in the main agenda item, although they are late (e.g. papers reporting IETF progress, which are usually more up to date the later they are submitted) | | | Source | Tdoc info | Result & comments  Late documents and documents which were submitted with erroneous or incomplete information | |
|  |  | | C1-202135 | Discussion on SRVCC and 5G-SRVCC NAS capabilities vs. IMS based solution | | | BlackBerry UK Limited | discussion Rel-15 | Withdrawn  Not available on time | |
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|  | A.O.B. | | Tdoc | Title | | | Source | Tdoc info | Result & comments | |
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|  | Closing  Friday  by 16:00 at the latest | |  | Did you mark your attendance to this meeting? | | |  |  | Any meeting document which is not mentioned in this report or with no recorded decision shall be interpreted as "reserved", i.e. not defined and shall be ignored if received | |
|  |  | |  | **Last upload of revisions:**  **Thursday 23rd April 2020 16:00 CEST**  **Last comments:**  **Friday 24th April 2020 16:00 CEST**  **Chairman Report of the meeting:**  **Monday 27th April 2020** | | |  |  |  | |
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