**3GPP TSG-SA WG1 Meeting #90e**

**Electronic Meeting, 18-22 May 2020**

# tdoc list SA1#90e draft list DAY 3

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|  |  | S1-202201 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | S1-202202 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  | S1-202209 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.1 | S1-202000 | Chair | Draft agenda for SA1#90 | agenda |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 1.1 | S1-202001 | Chair | 2nd Draft agenda for SA1#90 | agenda |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 1.1 | S1-202002 | Chair | Agenda for SA1#90 with tdoc allocation | agenda |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 2 | S1-202003 | Chair | SA1-related topics at SA#86 | report |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 2 | S1-202004 | Chair | SA1-related topics at SA#87 | report |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 2 | S1-202005 | MCC | Draft minutes of SA1#88e | report |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 2 | S1-202006 | MCC | Minutes of SA1#88e | report |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 2 | S1-202007 | MCC | Draft minutes of SA1#89e | report |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 2 | S1-202008 | MCC | Minutes of SA1#89e | report |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 2 | S1-202009 | MCC | Workplan presentation for SA1#90 | Work Plan |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 2 | S1-202010 | MCC | TR 21.916 on Rel-16 Summary |  | [21.916](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3493) |  |  |  | 0.5.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [TEI16](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=770050) |  |  | withdrawn |  |
| 1 | 3.01 | [**S1-202021**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202021.zip) | R2-1916345 | LS on CMAS/ETWS and emergency services for SNPNs | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201006.  Question 1) Whether CMAS/ETWS needs to be supported by SNPNs?  Question 2) Whether a UE in SNPN Access Mode without a suitable SNPN serving cell needs to be able to receive CMAS/ETWS notifications in limited service state from (a) a non-suitable SNPN cell or (b) a non SNPN cell? |  | available |  |
| 2 | 3.01 | [**S1-202024**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202024.zip) | S2-2001400 | Reply LS on CMAS/ETWS and emergency services for SNPNs | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201012 |  | available |  |
| 3 | 3.01 | [**S1-202084**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202084.zip) | Nokia, Nokia Shanghai Bell | Reply LS on CMAS/ETWS and emergency services for SNPNs | LS out |  |  |  |  |  |  |  |  |  | Revised | S1-202190 |
| 3r | 3.01 | [S1-202190](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202190.zip) | Nokia, Nokia Shanghai Bell | Reply LS on CMAS/ETWS and emergency services for SNPNs | LS out |  |  |  |  |  |  |  | Replaces S1-202084  Both Nokia and Qualcomm propose (different) answers. | See 2089 on the same topic. | Revised |  |
| 4 | 3.01 | [**S1-202089**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202089.zip) | Qualcomm Incorporated | Draft reply LS on CMAS/ETWS for SNPN | LS out |  |  |  |  |  | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) |  |  | KPN clarified that this is not specified in Rel-16 but can be specified later on. This should be made clearer in the LS. | Noted |  |
| 1 | 3.02 | [**S1-202025**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202025.zip) | S2-2001726 | LS on GSMA NG.116 Attribute Area of service and impact on PLMN selection | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201013 |  | available |  |
| 2 | 3.02 | [**S1-202086**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202086.zip) | Nokia, Nokia Shanghai Bell | reply LS on GSMA NG.116 Attribute Area of service and impact on PLMN | LS out |  |  |  |  |  |  |  |  |  | available |  |
| 1 | 3.03 | [**S1-202026**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202026.zip) | S2-2001728 | LS on 5GC assisted cell selection for accessing network slice | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201014.  One of the requirements documented in GSMA 5GJA NG.116 is to define the Radio Spectrum (clause 3.4.21) supported by the network slice. Specific frequency bands can be used to access a specific network slice(s). As part of the FS\_eNS\_Ph2 study, the combined use of the spectrum bands and the network slices as a possible tool for operators to offer the service isolation/management while allowing the maximum use of the 5G spectrum bands was proposed. The attached document (S2-2001467) provided further details on the key issue for such use case.  SA2 requests SA1, RAN2 and RAN3 colleagues to examine the attached use case and to provide any feedback. | Proposed answers in 2097 (ZTE) and 2132 (Samsung), merged in 2191. | noted |  |
| 2 | 3.03 | [**S1-202072**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202072.zip) | R3-202558 | Response to 5GC assisted cell selection for accessing network slice | LS in |  |  |  |  |  |  |  | RAN3's answer to 2026. |  | Noted |  |
| 3 | 3.03 | [**S1-202097**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202097.zip) | ZTE Corporation | Draft Reply LS on 5GC assisted cell selection for accessing network slice | LS out |  |  |  |  |  |  |  |  | ZTE and Samsung proposed answers are merged in 2191. | Revised | S1-202191 |
| 3r | 3.03 | [S1-202191](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202191.zip) | ZTE Corporation | Draft Reply LS on 5GC assisted cell selection for accessing network slice | LS out |  |  |  |  |  |  |  | Replaces S1-202097.  SA1 thanks SA2 for their LS on 5GC assisted cell selection for accessing network slice (S1-201014/S2-2001728).  SA2 asks SA1 for feedback on the use case provided in S2-2001467. From stage 1 perspective, it is required.  SA1 also would like to direct SA2 to requirements in TS 22.261 clause 6.1 where SA1 has defined that Network Slices can be further customised for operators to provide the optimal functionality of a complete network. Hence, an operator is always allowed to define specific capabilities and deployment configuration in network slices, this includes dedicated specific radio frequency to specific network slices. | Merging of ZTE and Samsung proposal.  Ericsson and Apple mentioned that this is not the latest version proposed by e-mail. | Revised | S1-202193 |
| 3rr | 3.03 | S1-202193 | ZTE Corporation | Draft Reply LS on 5GC assisted cell selection for accessing network slice | LS out |  |  |  |  |  |  |  | Replaces S1-202191 (equals 2097r2\_E+Samsung.zip) | The text is still not agreeable and needs further off-line work (KPN not supporting the use case, wording issues, etc.) | Revised |  |
| 4 | 3.03 | [**S1-202132**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202132.zip) | Samsung Electronics GmbH | [DRAFT] LS on 5GC assisted cell selection for accessing network slice | LS out |  |  |  |  |  | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  | Replies to SA2 that FS\_eNS\_Ph2 KI#7 is fine to pursue. | ZTE and Samsung proposed answers are merged in 2191. | noted |  |
| 5 | 3.03 | [**S1-202130**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202130.zip) | Samsung Electronics GmbH, AT&T | CR22.261v17.1.0 Operators dedicate resources for network slices | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0434 | 1 | F | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) | Adds radio aspects managed by operators to achieve network slice objectives. Actual work item code used: TEI17, SMARTER. |  | available |  |
| 1 | 3.04 | [**S1-202036**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202036.zip) | R2-2002417 | LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | LS in |  |  |  |  |  |  |  | Question 2.1; TO: SA1:  Is there a requirement to enable PNI-NPN (CAG ID) specific access control in cells that are shared among PNI-NPNs belonging to the same PLMN?  Question 2.2; TO: CT1, SA1:  If there is a requirement to enable PNI-NPN (CAG ID) specific access control in cells that are shared among PNI-NPNs belonging to the same PLMN, then is it sufficient to broadcast the Unified Access Control (UAC) parameters per PLMN (assuming that using the operator-defined access categories with access category criteria type set to the S-NSSAI used for PNI-NPN is sufficient to provide CAG specific UAC) or there is need to enable the broadcast of CAG ID specific configuration of UAC parameters? | See CT1 answer in 2070. Proposed SA1's answer in 2188, 2159 and 2068. | Noted |  |
| 10 | 3.04 | [**S1-202159**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202159.zip) | Nanjing Ericsson Panda Com Ltd | Discussion paper related to Reply-LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | discussion |  |  |  |  |  | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) |  |  |  | available |  |
| 11 | 3.04 | S1-202068 | China Mobile Com. Corporation | Clarification on Manual CAG selection | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0444 |  | F | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [NG\_RAN\_PRN-Core](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830181) |  |  | withdrawn |  |
| 2 | 3.04 | [**S1-202070**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202070.zip) | C1-202846 | Reply LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | LS in |  |  |  |  |  |  |  |  |  | available |  |
| 3 | 3.04 | [**S1-202047**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202047.zip) | OPPO | [DRAFT] Reply LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | LS out |  |  |  |  |  | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) |  |  |  | Revised | S1-202188 |
| 5 | 3.04 | [S1-202188](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202188.zip) | OPPO | [DRAFT] Reply LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | LS out |  |  |  |  |  | Rel-16 |  | Replaces S1-202047.  Answer to 2.1: SA1 currently does not have a requirement to enable PNI-NPN (CAG ID) specific access control in cells that are shared among PNI-NPNs belonging to the same PLMN. SA1 has discussed this issue and agreed to clarify that a new requirement to enable PNI-NPN (CAG ID) specific access control in cells that are shared among PNI-NPNs belonging to the same PLMN is needed.  Answer to 2.2: From SA1’s point of view, there is a requirement to enable PNI-NPN (CAG ID) specific access control in cells that are shared among PNI-NPNs belonging to the same PLMN. SA1 believes that solutions for addressing this requirement is required and should be identified by CT1. | 2194 is to be used as a basis for future revisions. | Noted. |  |
| 6 | 3.04 | [**S1-202065**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202065.zip) | China Mobile Com. Corporation | Reply LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | LS out |  |  |  |  |  |  |  |  |  | Revised | S1-202194 |
| 6r | 3.04 | [S1-202194](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202194.zip) | China Mobile Com. Corporation | Reply LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | LS out |  |  |  |  |  |  |  | Replaces S1-202065(r1).  A 2.1: SA1 currently does not have a specific requirement to enable PNI-NPN specific access control in cells that are shared among PNI-NPNs belonging to the same PLMN. SA1 agreed a CR to clarify NPN requirements in TS 22.261, by explicitly adding the requirement: “The 5G system shall support a mechanism for a PLMN to control the access of a UE in a specific geographic area (e.g. a cell or a group of cells) shared among non-public networks hosted by the same PLMN.”  A2.2: SA1 thinks there is need to enable the broadcast of CAG ID specific configuration of UAC parameters. The reason is that the non-public networks hosted by the same PLMN may have different UAC configuration. | See companion CR in 2067.  For Vodafone, there is still a need to clarify the wording ,e.g. for " The 5G system shall support a mechanism for a PLMN to control the access of a UE in a specific geographic area (e.g. a cell or a group of cells) shared among non-public networks hosted by the same PLMN.”  This is the version to be used for future revision. | Revised |  |
| 7 | 3.04 | [**S1-202067**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202067.zip) | China Mobile Com. Corporation | Clarification on Manual CAG selection | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0443 |  | F | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [NG\_RAN\_PRN-Core](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830181) |  |  | available |  |
| 8 | 3.04 | [**S1-202090**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202090.zip) | Qualcomm Incorporated | Draft reply LS on CAG ID and UAC | LS out |  |  |  |  |  | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) |  |  | Covered by other answers.  2194 is to be used as a basis for future revisions. | Noted |  |
| 9 | 3.04 | [**S1-202113**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202113.zip) | Ericsson | Reply to LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs | LS out |  |  |  |  |  | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) |  |  | Covered by other answers. Ericsson supports China Mobile's proposal.  Also Deutsche Telekom.  2194 is to be used as a basis for future revisions. | Noted. |  |
| 1 | 3.05 | [**S1-202033**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202033.zip) | C1-200994 | LS on the applicability of LADN in an SNPN | LS in |  |  |  |  |  |  |  | CT1 would like to ask SA2 to provide guidance on whether an SNPN can provide LADN service as well.  Question. Can LADN service be provided by an SNPN? | Copied to SA1 but there is still a proposed answer in 2040. | Noted. |  |
| 2 | 3.05 | [**S1-202040**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202040.zip) | LG Electronics Polska | Reply LS on the applicability of LADN in an SNPN | LS out |  |  |  |  |  |  |  | Regarding the question raised by the LS, i.e. Can LADN service be provided by an SNPN?:  (Alt.1)  Answer 1: There is no requirement. I.e., there is no need to support LADN for SNPN. SNPN itself is available in some specific geographical region. The purpose of LADN overlaps the purpose of a SNPN deployment.  (Alt.2)  Answer 1: There is no need to restrict the use of LADN by SNPN. Though the purpose overlaps and complexity increases, because support of LADN is optional, use of LADN in SNPN should not be precluded. | Different alternatives are supported by different companies, no consensus.  Vodafone propose not to answer, this is Stage 2 and 3's terminology, nothing for SA1.  KPN share this view, who added that the 2 alternatives have in comment that there is no requirement. This can be the answer – if any answer at all.  Deutsche Telekom supports Alternative 1. They propose to introduce a definition to "LAD".  Sheinheiser and BBC supports altrenative 2.  LG agrees not to answer, at least not at this stage (maybe after CT1 has answered). | Noted. |  |
| 3 | 3.05 | [**S1-202041**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202041.zip) | LG Electronics Polska | correction on the applicability of LADN in an SNPN | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0440 |  | F | 16.11.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [Vertical\_LAN](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830035) | related to incoming LS S1-202033 |  | noted |  |
| 1 | 3.06 | [**S1-202069**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202069.zip) | C1-202819 | LS on limiting the number of simultaneous log ins of an MCX user | LS in |  |  |  |  |  |  |  |  |  | available |  |
| 2 | 3.06 | [**S1-202060**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202060.zip) | Nokia Solutions & Networks (I) | Reply LS on limiting the number of simultaneous log ins of an MCX user | LS out |  |  |  |  |  | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [MONASTERY2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=760054) | From operational perspective the limit of simultaneous logins has to allow to be set differently on a per MCX User basis to cater for different operational needs. The MCX Administrator might limit certain MCX Users to a low number of simultaneous logins down to just one, while others might be allowed to login on a higher number of MCX UEs. |  | available |  |
| 3 | 3.06 | [**S1-202061**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202061.zip) | Nokia Solutions & Networks (I) | Clarification on the maximum number limit of simultaneous log ins of an MCX user | CR | [22.280](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3017) | 0139 |  | F | 16.7.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [MONASTERY2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=760054) | While implementing the login mechanism CT1 spotted an ambiguity on how to interpret the maximum number of simultaneous logins specified in 22.280 [R-5.10-001a]. This CR clarifies that the limit is on a per MCX User basis and thus might be different from MCX User to MCX User |  | available |  |
| 4 | 3.06 | [**S1-202062**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202062.zip) | Nokia Solutions & Networks (I) | Clarification on the maximum number limit of simultaneous log ins of an MCX user | CR | [22.280](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3017) | 0140 |  | A | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [MONASTERY2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=760054) | While implementing the login mechanism CT1 spotted an ambiguity on how to interpret the maximum number of simultaneous logins specified in 22.280 [R-5.10-001a]. This CR clarifies that the limit is on a per MCX User basis and thus might be different from MCX User to MCX User |  | available |  |
| 1 | 3.07 | [**S1-202073**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202073.zip) | S2-2003216 | Reply LS on Questions on onboarding requirements | LS in |  |  |  |  |  |  |  | Q2)SA2 would like to verify with SA1 whether the above-quoted requirement applies to PNI-NPN, which is the NPN “hosted by a PLMN” as described in TS 22.261 clause 6.25.1, or not, and what would be the corresponding use cases.  Q3) If SA1 confirm the above-quoted requirement applies to PNI-NPN in Q2, SA2 have further Q3 as below. | Deutsche Telekom clarified that there were ambiguities in a first version of the SA2's LS, and these ambiguities were later solved, hence the odd format of this LS.  Proposed answers in 2087, 2088 and 2109/2200. | noted |  |
| 2 | 3.07 | [**S1-202087**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202087.zip) | Nokia, Nokia Shanghai Bell | reply LS on Questions on onboarding requirements | LS out |  |  |  |  |  |  |  |  | Nokia supports other proposed answers and can withdraw theirs. | Noted |  |
| 3 | 3.07 | [**S1-202088**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202088.zip) | Qualcomm Incorporated | Draft reply LS on NPN onboarding requirements | LS out |  |  |  |  |  | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  | Qc proposes to answer: "2 and 3: there is no requirement" |  | Open |  |
| 4 | 3.07 | [**S1-202109**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202109.zip) | China Mobile Com. Corporation | [DRAFT] Reply LS on Questions on onboarding requirements | LS out |  |  |  |  |  |  |  |  |  | Revised | S1-202200 |
| 4r | 3.07 | [S1-202200](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202200.zip) | China Mobile Com. Corporation | [DRAFT] Reply LS on Questions on onboarding requirements | LS out |  |  |  |  |  |  |  | Replaces S1-202109.  It is proposed to answer:  A2 from SA1) Since PNI-NPN is a type of NPN, the above-quoted requirement applies to PNI-NPN.  A3 from SA1) Yes, the case when 3rdparty identities and credentials are provisioned to be used for secondary authentication is a service requirement for onboarding and remote provisioning. | Huawei, Futurewei, Ericsson, ZTE and Nokia support the China Mobile's proposal.  LG supports Qualcomm's answer.  For Ericsson and KPN, there is a misunderstanding from LG and Qualcomm, as underlined by e-mail.  Qualcomm and Vodafone would like some indication on where in SA1 documentation there are use case and/or requirement on secondary authentication.  E-mail discussions to be continued. | Open |  |
| 1 | 3.08 | [**S1-202075**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202075.zip) | S6-200544 | LS on Clarification of the definition of a UAS | LS in |  |  |  |  |  |  |  |  |  | available |  |
| 2 | 3.08 | [**S1-202059**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202059.zip) | InterDigital, Tencent | Reply to LS on Clarification of the definition of a UAS | LS out |  |  |  |  |  | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  |  |  | available |  |
| 3 | 3.08 | [**S1-202057**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202057.zip) | InterDigital, Tencent | Discussion on clarification on the definition of UAS | discussion |  |  |  |  |  | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  |  |  | available |  |
| 4 | 3.08 | [**S1-202058**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202058.zip) | InterDigital, Tencent | Clarification of the definition of a UAS | CR | [22.125](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3545) | 0028 |  | F | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [ID\_UAS](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=810013) |  |  | available |  |
| 5 | 3.08 | [**S1-202117**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202117.zip) | Airbus | Clarification to the definition of UAS, new requirements and numbering of requirements | CR | [22.125](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3545) | 0029 |  | F | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) | In response to the incoming LS S6-200544, clarifications, corrections and new requirements are proposed. In addition, numbering of non-numbered requirements and editorial corrections. |  | available |  |
| 1 | 3.09 | [**S1-202076**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202076.zip) | S6-200580 | LS on requirement for 5GMSG in broadcast scenario | LS in |  |  |  |  |  |  |  |  |  | available |  |
| 2 | 3.09 | S1-202169 | One2many | Reply to LS on 5GMSG in broadcast scenario |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 3.10 | [**S1-202077**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202077.zip) | S6-200620 | LS on Clarification of requirements for UAS application enablement | LS in |  |  |  |  |  |  |  | SA6 asks SA1 to kindly guide SA6 on the requirements for some use cases on UAS application enablement and also the necessity to explicitly refer to application-aware parameters. SA6 asks SA1 to update their specification if necessary. | Proposed answers in 2138, 2154 | noted |  |
| 2 | 3.10 | [**S1-202138**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202138.zip) | Deutsche Telekom AG | reply LS on Clarification of requirements for UAS application enablement | LS out |  |  |  |  |  | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  | reply LS on Clarification of requirements for UAS application enablement.  Some use cases for initial authorization to operate are proposed, extracted from TR 22.825.  SA6 discussions on potential key issues described are outside the scope of the service requirements for UAS support in 3GPP. |  | Revised |  |
| 3 | 3.10 | [**S1-202137**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202137.zip) | Deutsche Telekom AG | Discussion on SA6 LS Clarification of requirements for UAS | CR | [22.125](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3545) |  |  |  |  | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [ID\_UAS](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=810013) | Discussion paper gives clarification on SA1 requirements on UAS remote Identification |  | noted |  |
| 4 | 3.10 | [**S1-202154**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202154.zip) | InterDigital | Reply to LS on Clarification of requirements for UAS application enablement | LS out |  |  |  |  |  | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  | InterDigital also think it is out of scope, but some clarifications might be introduced. | An alignment of the 2 docs is possible since they are quite aligned.  Propsoed answer to be based on 2138. | Noted |  |
| 5 | 3.10 | [**S1-202152**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202152.zip) | InterDigital | Discussion on clarification of requirements for UAS application enablement | discussion |  |  |  |  |  | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  |  |  | Noted. |  |
| 6 | 3.10 | [**S1-202153**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202153.zip) | InterDigital | Clarification of requirements for UAS application enablement | CR | [22.125](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3545) | 0031 |  | F | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [ID\_UAS](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=810013) |  | InterDigital can "live with no CR". | Noted. |  |
| 7 | 3.10 | [**S1-202119**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202119.zip) | Airbus | Clarifications to Requirements for Remote Identification of UAS | CR | [22.125](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3545) | 0030 |  | F | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) | In response to the incoming LS S6-200620, clarifications to requirements on clause 5.1 are necessary. | Airbus can also "live with no CR".  For Nokia and Futurewei, it might still be usefull to introduce some further clarifications in the requirements, but this can be done at a future meeting. | Noted. |  |
| 1 | 3.11 | [S1-202166](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202166.zip) | R2- 2003941 | LS on UAC applicability to IABs |  |  |  |  |  |  |  |  | RAN2 made the following agreement for IAB WI:  "IAB-MTs are not under UAC control."  The agreement means that IAB-MT, being part of an IAB node which is a network node, does not perform access barring check for its access attempts to a cell. RAN2 thinks that SA1/CT1 should be aware of this agreement as it might have some impact on their specifications. |  |  |  |
| 2 | 3.11 | [**S1-202162**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202162.zip) | Nokia, Nokia Shanghai Bell | reply LS on UAC applicability to IABs | LS out |  |  |  |  |  |  |  | SA1 thanks RAN2 for the LS noted in the header.  In concurrence with the RAN2 agreement that IAB-MTs are not under UAC control, SA1 has agreed the attached CR. | This is referring to the CR in 2163. | revised |  |
| 3 | 3.11 | [**S1-202163**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202163.zip) | Nokia, Nokia Shanghai Bell | UAC enhancement for IAB | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0448 |  | F | 16.11.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [SMARTER\_Ph2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=790001) | The CR adds an Access Identity for a UE configured for IAB to avoid barring while enabling UAC procedures to set the appropriate RRC establishement cause. | Too late for Rel-16. | noted |  |
| 4 | 3.11 | [**S1-202164**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202164.zip) | Nokia, Nokia Shanghai Bell | UAC enhancement for IAB | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0449 |  | A | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [SMARTER\_Ph2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=790001) |  |  | open |  |
| 5 | 3.11 | [S1-202170](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202170.zip) | Ericsson | Clarify that IAB does not follow UAC | CR | 22.261 | 0450 |  | F | 16.11.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [SMARTER\_Ph2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=790001) | The CR adds a note saying that "IAB Nodes are not subject to unified access control" | This is another way to take into account the LS from RAN2 in 2166, which is more in line with what they are expecting, according to Ericsson. They point out that it is late to provide a Rel-16 CR.  Qualcomm and Vodafone support the Ericsson's view: there is no need to introduce a new Access Identity number, the note is sufficient. Also Samsung, underlying that it is too late to add requirements for Rel-16.  LG and Futurewei prefer the Nokia's approach, considering the evolution of the work in RAN in Rel-17. They see it more future-proof. | Open |  |
| 6 | 3.11 | S1-202171 | Ericsson | Clarify that IAB does not follow UAC | CR | 22.261 | 0451 |  | A | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [SMARTER\_Ph2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=790001) | Mirror CR of 2170. |  | Open |  |
| 7 | 3.11 | S1-202168 | Qualcomm | Proposed answer to S1-202166/ R2- 2003941 on UAC applicability to IABs |  |  |  |  |  |  |  |  |  |  | Withdrawn |  |
| 1 | 3.12 | [**S1-202165**](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202165.zip) | R2-2003870 | Reply LS on manual CAG selection |  |  |  |  |  |  |  |  | RAN2 respectfully asks SA1 whether the indication that the PLMN allows a user to manually select a CAG-ID supported by the CAG cell but outside the UE’s allowed CAG list is per PLMN or per CAG ID. | Proposed answer in 2167, 2178 |  |  |
| 2 | 3.12 | [**S1-202071**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202071.zip) | C1-202927 | LS on manual CAG selection | LS in |  |  |  |  |  |  |  |  |  | available |  |
| 3 | 3.12 | [S1-202167](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202167.zip) | Qualcomm | Proposed answer to S1-202165/ R2-2003870 on manual CAG selection |  |  |  |  |  |  |  |  | Proposed answer:  SA1 would like to clarify that current relevant requirement (copied below, from TS 22.261) is based on the assumption that the control/indication is per PLMN, i.e. applies to “any” NPN hosted by the PLMN.  The 5G system shall support a mechanism for a PLMN to control whether a user of a UE can manually select a non-public network hosted by this PLMN that the UE is not authorized to select automatically. | Fro Qualcomm, this should be closed for Rel-16. For Rel-17, discussions should be possible.  For Nokia, this should be clarified as early as Rel-16.  For KPN, for Rel-17 for sure, it should be on a pre non-public network basis. As for Rel-16, it depends on the progress of the other groups: better if it can be included, but not necessary.  Ericsson supports the Qualcomm's view.  KPN proposes a compromise, saying that the aim is to have it for Rel-17.  This is acceptable by Qualcomm.  For Vodafone, they would prefer to have it in Rel-16, but it is acceptable to have it only in Rel-17.  For Nokia, this is acceptable too.  Ericsson and Qualcomm do not agree to have the Rel-17 CR agreed yet though.  For Vodafone, the Rel-17 Nokia's CR is actually a correction, since the other groups did not follow the SA1 requirement, probably because of lack of clarity of the CR.  It is agreed not to have it for Rel-16 but further discussions are requested for having it or not for Rel-17.  The LS answer should be based on the Qualcomm's proposal in 2167. | Revised |  |
| 4 | 3.12 | [S1-202178](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202178.zip) | Nokia | Reply LS on manual CAG selection |  |  |  |  |  |  |  |  | Proposed to clarify RAN2's concern with the CR in 2179. |  | Noted |  |
| 5 | 3.12 | [S1-202179](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202179.zip) | Nokia | Manual Selection clarification | CR | 22.261 | 0452 |  | F | 16.11.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [SMARTER\_Ph2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=790001) | A requirement is clarified to state that the control of manual selection is done on a per non-public network basis. |  | Noted |  |
| 6 | 3.12 | [S1-202180](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202180.zip) | Nokia | Manual Selection clarification | CR | 22.261 | 0453 |  | A | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [SMARTER\_Ph2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=790001) |  |  | Open |  |
| 1 | 3.13 | [**S1-202022**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202022.zip) | S2-1912417 | Reply LS on SUCI computation from an NSI | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201009 |  | available |  |
| 10 | 3.13 | [**S1-202037**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202037.zip) | R3-201372 | Reply LS on QoS monitoring for URLLC | LS in |  |  |  |  |  |  |  | CC: |  | available |  |
| 11 | 3.13 | [**S1-202038**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202038.zip) | SP-200287 | Reply LS on support for eCall over NR | LS in |  |  |  |  |  |  |  | CC: |  | available |  |
| 12 | 3.13 | [**S1-202074**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202074.zip) | S2-2003308 | Reply LS on support for eCall over NR | LS in |  |  |  |  |  |  |  |  |  | available |  |
| 13 | 3.13 | [**S1-202035**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202035.zip) | R2-2001815 | Reply LS on Rel-16 NB-IoT enhancements | LS in |  |  |  |  |  |  |  | TO: |  | withdrawn |  |
| 2 | 3.13 | [**S1-202027**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202027.zip) | S3-194548 | Reply LS on SUCI computation from an NSI | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201016 |  | available |  |
| 3 | 3.13 | [**S1-202023**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202023.zip) | S2-2001398 | LS reply on NPN network sharing | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201011 |  | available |  |
| 4 | 3.13 | [**S1-202028**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202028.zip) | S5-197805 | LS on NPN network sharing | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201017 |  | available |  |
| 5 | 3.13 | [**S1-202029**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202029.zip) | S5-197853 | LS on analysis of GSMA GST attributes | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201018 |  | available |  |
| 6 | 3.13 | [**S1-202030**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202030.zip) | ITU T FGVM-LS014 | LS on technical reports on use cases and requirements as well as architecture for vehicular multimedia | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201021 |  | available |  |
| 7 | 3.13 | [**S1-202031**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202031.zip) | SP-191379 | Reply LS to extend the scope of eV2X | LS in |  |  |  |  |  |  |  | Postponed from previous meeting. Was S1-201022 |  | available |  |
| 8 | 3.13 | [**S1-202032**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202032.zip) | 5GJA12\_115r3 | LS reply to SA2 on PLMN Selection | LS in |  |  |  |  |  |  |  | TO: |  | available |  |
| 9 | 3.13 | [**S1-202034**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202034.zip) | TCCA | LS on Generic Slice Template with Public Safety Feedback | LS in |  |  |  |  |  |  |  | CC: |  | available |  |
| 03 | 4 | [**S1-202085**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202085.zip) | Nokia, Nokia Shanghai Bell | Use Case for FS\_EANS: Roaming Access to NS | discussion |  |  |  |  |  |  |  |  |  | noted |  |
| 10 | 4 | [**S1-202063**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202063.zip) | China Mobile Com. Corporation | New SID on Study on supporting tactile Internet in 5GS | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | The objective of this study item is to investigate new use cases and service requirements for supporting tactile network in 5G network. | Sony explained that CAV is on the same topic and is not mentioned here.  For Intel and BBC, this is strongly linked to the proposal on haptics.  For Qualcomm and Intel, the bullet on codec is covered by SA4.  For Nokia and several other companies, the gap analysis is missing: at least part of what is proposed here -if not everything- is already covered in 3GPP. | presented |  |
| 11 | 4 | [**S1-202079**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202079.zip) | Union Inter. Chemins de Fer | Motivation for Rel-18 SID proposal on Study on Off-Network for Rail | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation slides for the SID in the next document. |  | noted |  |
| 12 | 4 | [**S1-202078**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202078.zip) | Union Inter. Chemins de Fer | New SID on Study on Off-Network for Rail | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | The objectives of this study are:  - Collect all Off-Network use cases from TR 22.889 into a single TR in order to refine them,  - Remove the similar Off-Network use cases from TR 22.889 (e.g. On-Network use cases only),  - If needed, study new use cases for FRMCS to support Off-Network | As a co-author, Nokia explained that this is to clarify in 3GPP documentation what is really needed in terms of "Off-Net" by the railway industry,  "22.889" is internal, so KPN wondered if it is not "22.989" which is meant. This is indeed the intention (to be external).  FirstNet supports it.  Vodafone and Novamint wondered if other verticals can be used than railways. The UIC said it is meant for Railways.  About " UIC will promote the use of Off-Network to replace Direct Mode.", it is clarified that this is referring to the terminology. | Presented |  |
| 13 | 4 | [**S1-202082**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202082.zip) | Nokia, Nokia Shanghai Bell | Feasibility Study on 5G Timing Resiliency System (FS\_5TRS) | discussion |  |  |  |  |  |  |  | Presentation slides for the SID in the next document. |  | Noted |  |
| 14 | 4 | [**S1-202083**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202083.zip) | Nokia, Nokia Shanghai Bell, NTT DoCoMo, AT&T, KPN | SID: Feasibility Study on 5G Timing Resiliency System (FS\_5TRS) | SID new |  |  |  |  |  |  |  | The objective of this study item is to identify additional potential requirements on the 5G system to support time-synchronization services in public and vertical domains, including the ability to act as a backup for GNSS timing services. Specific use cases will be provided to motivate the additional potential requirements. | T-Mobile supports this SID.  Huawei has the following quations:  For the first bullet: Integration with fiber should be clarified.  For the 2nd bullet: "the same performance" should be clarified  For the 3rd bullet: it should be clarified it is the timing and not the positionnning. | presented |  |
| 15 | 4 | [**S1-202091**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202091.zip) | Xiaomi | Multi-modality Interaction | discussion |  |  |  |  |  |  |  | Presentation slides for the SID in the next document. |  | noted |  |
| 16 | 4 | [**S1-202092**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202092.zip) | Xiaomi | New SID\_Study on the Support for Multi-modality Interaction | SID new |  |  |  |  |  |  |  | The objective is to study use cases and potential service requirements for multi-modality (Inputs may come from one UE or multiple UEs while outputs may go to one UE or multiple UEs) communication. It includes but is not limited to:  - Studying the use cases and potential service and performance requirements for multi-modality.  - Gap analysis on performance requirements for multi-modality | For Huawei and Sony, this can be combined with the China Mobile's WID.  Sony wonders if this is an enabler or a service by itself.  For Intel, "data fusion" and "multi-dimensional" aspects are the 2 points to be investigated.  For Nokia, here again the gap analysis is missing.  There is some interest and some points to be clarified. The merging with China Mobile's SID should be investigated/ | presented |  |
| 17 | 4 | [**S1-202094**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202094.zip) | Qualcomm Incorporated | Motivations for Study on Network as a Service | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation slides for the SID in the next document. |  | Noted |  |
| 18 | 4 | [**S1-202093**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202093.zip) | Qualcomm Incorporated | New SID: Study on Network as a Service | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | The objectives of this study are:  • Study use cases for enhanced 5G system support of a NaaS network providing users/devices access to specific services, offered by the NaaS network operator, other mobile operator(s) or 3rd party provider(s).  • Investigate potential new service requirements,  • Gap analysis between potential new requirements and existing requirements and functionalities supported by 3GPP, e.g. VIAPA, NPN, slicing, QoS, etc. | Intel has no concerns with the proposal but several suggestions for improvements that they will send by e-mail.  Different cases can be considered, e.g. no PLMN coverage, etc.  For Ericsson and Nokia, the difference to what is going to be in Rel-17 (e.g. in AVPROD context) and what new is proposed for Rel-18 has to be clarified. Qualcomm answered that a possible outcome of the gap analysis is that nothing new is needed.  For Nokia, this cannot be answered until the Reel-17 work is more stable in other groups. | Presented |  |
| 19 | 4 | [**S1-202096**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202096.zip) | Qualcomm Incorporated | Motivations for Study on Vehicle Relays | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation slides for the SID in the next document. |  | noted |  |
| 2 | 4 | [**S1-202108**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202108.zip) | LG Electronics Polska | DP on Study on Enhanced Access to Network Slice | discussion |  |  |  |  |  |  |  | PPT slide for GoToMeeting, related to S1-202042 |  | available |  |
| 20 | 4 | [**S1-202095**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202095.zip) | Qualcomm Incorporated | New SID: Study on Vehicle Relays | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | The aim of this work is to study use cases and potential new service requirements for 5G system support of vehicle-mounted relays (on board base stations) using NR and 5GC. | For Huawei, several cases of Relays have already been investigated by SA1, which could apply to this SID. They wonder if all the use cases are not covered already. This is to be discussed off-line.  For TenCent, the case where the vehicle is moving has to be covered.  FirstNet supports since there are use cases for public safety. Sharp also supports. | presented |  |
| 21 | 4 | [**S1-202099**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202099.zip) | NTT DOCOMO INC. | Presentation for a proposed new Study on Subscriber-aware Northbound API access | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation for a proposed new Study on Subscriber-aware Northbound API access |  | noted |  |
| 22 | 4 | [**S1-202100**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202100.zip) | NTT DOCOMO INC. | New WID on Study on Subscriber-aware Northbound API access | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | The objective of this study is to examine use cases and potential requirements on Subscriber-aware Northbound API access, in particular including the following aspects.  - Authorization and a corresponding authentication for invocation of the northbound API via an AF by a subscriber;  - Related logging and charging aspects. | Samsung supports the idea of this SID and finds it interesting with respect to CAPIF.  For Futurewei, some wording is too SA2-oriented and has to be changed.  For Nokia and Futurwei, the wording has to be improved for clarity.  Deutsche Telekom underlined that this is related to the SA6 CAPIF work. It is not clear for them why the UE also has to support this mechanism.  KPN wonders if a study is needed and this is not the matter of a simple CR.  To be further discussed by e-mail. | presented |  |
| 23 | 4 | [**S1-202102**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202102.zip) | Intel | Feasibility Study on Support for Service Function Chaining in 5G System (FS\_SFCin5GS) | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | This slide is for the presentation of a new SID: FS\_SFCin5GS. |  | noted |  |
| 24 | 4 | [**S1-202101**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202101.zip) | Intel | SID: Feasibility Study on Support for Service Function Chaining in 5G System (FS\_SFCin5GS) | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | It is proposed a new SID to support service function chaining in 5GS.  The aim of this work is to study use cases and potential new service requirements in support of service function chaining in 5G system. | The exact objective of this Work Item remains unclear to Huawei.  Discussions will continue over the e-mail reflector. | presented |  |
| 25 | 4 | [**S1-202106**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202106.zip) | LG Electronics Inc. | DP: Feasibility Study on 5G Support for Service-Oriented Robots with Service-Level Human Interactions | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation material for WID: Feasibility Study on 5G Support for Service-Oriented Robots with Service-Level Human Interactions |  | Revised | S1-202187 |
| 25r | 4 | [S1-202187](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202187.zip) | LG Electronics Inc. | DP: Feasibility Study on 5G Support for Service-Oriented Robots with Service-Level Human Interactions | discussion |  |  |  |  |  | Rel-18 |  | Replaces S1-202106 |  | noted |  |
| 26 | 4 | [**S1-202105**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202105.zip) | LG Electronics Inc. | WID: Feasibility Study on 5G Support for Service-Oriented Robots with Service-Level Human Interactions | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Feasibility Study on 5G Support for Service-Oriented Robots with Service-Level Human Interactions |  | Revised | S1-202186 |
| 26r | 4 | [S1-202186](https://etsihq-my.sharepoint.com/personal/alain_sultan_etsi_org/Documents/Documents/3GPP/SA1/2020/SA1_90e/docs/S1-202186.zip) | LG Electronics Inc. | WID: Feasibility Study on 5G Support for Service-Oriented Robots with Service-Level Human Interactions | SID new |  |  |  |  |  | Rel-18 |  | Replaces S1-202105.  The objective of this study is to identify use cases and the related potential service requirements for 5G system support for communications between service-oriented robots with human interactions | For Nokia, there is yet again a problem of gap analysis: they do not see what is missing in the 5G system to control robots, besides maybe the multi-customers part.  For Huawei, there is also some previous studies in previous Releases which should cover all the needs. Also with respect to new KPIs for connectivity: it is not clear if anything new is needed.  For Sony, this could be merged with the new proposed SID on multi-modality.  For Deutsche Telekom, the multi-identity aspects have to be clarified and checked against what is available.  LG clarified that not everything can be done at the application level: e.g. there might be some impacts on the system's security aspects.  Discussions to be continued over e-mail. | presented |  |
| 27 | 4 | [**S1-202110**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202110.zip) | CATT, China Telecom, InterDigital | New Study on enhancing 5G system over satellite | SID new |  |  |  |  |  |  |  | The objectives of this study are:  - Studying use cases for enhancing 5G system over satellite e.g. considering satellite backhaul and inter-satellite link  - Studying use cases for new service and enhancement based on 5G system over satellite  - Investigating potential new requirements,  - Gap analysis between potential new requirements and existing requirements and functionalities for satellite of 5G already defined by 3GPP. | Sony, Nokia, Novamint and Thales could not clearly see what is proposed on top of what has been defined already.  For T-Mobile, the difference is that this SID might be on Serving the backhaul rather than the previous work was on serving the end-user, but this is their guest.  For the BBC, all the previous work was on a basic service when this is about proposing an advanced satellite service.  CATT clarified that this is indeed for improvements in services.  To be continued by e-mail. | presented |  |
| 28 | 4 | S1-202111 | HiSilicon Technologies Co. Ltd | New SID on enhancements for multimedia service in 5GS | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  |  |  | withdrawn |  |
| 29 | 4 | [**S1-202115**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202115.zip) | China Telecomunication Corp. | Motivation for R18 5G enables Smart Grid SID | discussion |  |  |  |  |  |  |  | Presentation for the SID in 2114. |  | noted |  |
| 30 | 4 | [**S1-202123**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202123.zip) | Samsung Electronics GmbH | Smart Grid Study Considerations | discussion |  |  |  |  |  |  |  | A 3 slide presentation that lays out a rationale, objectives and areas to develop for the Smart Grid Study. The intent is to support the Smart Grid study, emphasizing promising aspects. | Added arguments to support the SID in 2114, on why it is important to specify for aspects to SmartGrid. Some aspects are specific:  Smart Grid services, e.g. IEC standards, generally do not assume a particular transport. Requirements are e.g. Bandwidth, Latency, Availability, Security.  Deployment criteria (whether to invest in one particular technology or another) include Service Lifetime (is it feasible to deploy a terminal for 40 years?), Coverage (ubiquity), Electromagnetic Applicability (e.g. Penetration, ability to operate in high EM environments)  Some additional criteria arise due to operational manageability – e.g. the ability to configure and monitor the real (achieved & up to date) availability of virtual network topologies. | presented |  |
| 31 | 4 | [**S1-202114**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202114.zip) | China Telecomunication Corp. | Study on the 5G Smart Energy and Infrastructure | SID new |  |  |  |  |  |  |  | The aim of this work is to study use cases and potential new service requirements for 5G system to support smart grid, including:  To investigate potential new 5G system service requirements and KPIs to support emerging Smart Grid services required defined in other bodies, e.g. IEC.   To investigate 5G service requirements and KPI to support Smart Grid applications in specific phase or across multiple phases: e.g. on-demand power supply, distributed power supply system,  distribution automation, higher accuracy power load measurement and control, metrology automation, etc.  gap analysis on between potential new requirements and existing requirements and functionalities for smart grid communications supported by 3GPP specs TS22.104/125/261 etc. | For Novamint, there is a huge opportunity for 3GPP here, but 3GPP cannot disappoint this industry.  For Huawei, there is no need to reinvent things which already exist.  For Samsung and Nokia, the objectives have to be made more specific and narrower. Nokia also underlined that the demand has to come from the industry (UTC, EPRI, etc.) and not spontaneously defined by 3GPP. | presented |  |
| 32 | 4 | [**S1-202122**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202122.zip) | Beijing Xiaomi Mobile Software | Study on Ranging-based services | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation for the SID in 2116. |  | Noted |  |
| 33 | 4 | [**S1-202116**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202116.zip) | Beijing Xiaomi Mobile Software | New Study on Ranging-based Services | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Ranging-based applications utilize the distance and angle between two devices to interact with, control or locate a specific device.  The objective of this study item is to study the use cases and potential service requirements for ranging. Aspects to be studied include:  - Identify Use cases and potential requirements to allow ranging.  - Gap analysis with existing mechanisms to enable ranging. | For Sony and Nokia, this has commonalities with other proposed SIDs on positioning presented at this meeting.  Also here, what is expected from the system should be clarified.  To be further discussed by e-mail. | presented |  |
| 34 | 4 | [**S1-202120**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202120.zip) | Huawei | motivation for new SID on enhancement for multimedia services | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation for the SID in 2121. |  | Noted |  |
| 35 | 4 | [**S1-202121**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202121.zip) | Huawei | New SID on enhancements for multimedia serivices | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | The objective of this SID includes:  - Studying the use cases for providing better QoE for various type of consumer-oriented multimedia services (e.g., live and on-demand video streams, Augment Reality (AR) / Virtual Reality (VR) service) in 5GS, in particular, to study how 5GS could cooperate with typical and mostly used mechanisms in multimedia application layer (e.g., DASH, Playback buffer management and FOV/edge rendering) to increase the network capacity and also improve QoE of these multimedia services.  - Identifying potential performance and service requirements based on above use cases.  Note: This study will not cover those use cases discussed in AVPROD/VIAPA. | BBC has already commented off-line that this is to be clarified with respect to what optimisations are needed on the Network layer versus what is needed from the application layer.  For Sony, there is ongoing SA4 on this topic.  For Xiaomi, all the part of the coding is for SA4. Also, most of what is proposed here can already be done, e.g. with MPEG4 capabilities. What is actually proposed to be specified should be clarified.  Intel has the same concerns and explains there is a new SA4 study related to this.  Same for Nokia: no work needed in SA1. | presented |  |
| 4 | 4 | [**S1-202042**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202042.zip) | LG Electronics Polska | WID on Study on Enhanced Access to Network Slice | SID new |  |  |  |  |  |  |  |  | For Samsung, it should be made clearer that these are improvements of existing mechanisms and not new mechanisms.  There is an SA2-related SID that should be mentioned here.  No disagreement, to be further worked upon. | To be revised. |  |
| 43 | 4 | [**S1-202142**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202142.zip) | China Telecom | Motivation for New SID on Holographic-Type Communication Service | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation for the SID in 2140. |  | noted |  |
| 44 | 4 | [**S1-202139**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202139.zip) | China Telecom | New SID on Holographic-Type Communication Service | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  |  |  | withdrawn |  |
| 44 | 4 | [**S1-202140**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202140.zip) | China Telecom | New SID on Holographic-Type Communication Service | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | The objective of this study item is to identify new use cases, potential service requirements for supporting holographic-type communication services in 3GPP network, including:  - Use cases of holographic-type Communication service, including:  • Holographic-type communication service with different hologram technology;  • Holographic-type communication service with multiple concurrent streams;  • Holograms transmission strategy adjustment based on awareness of network status, etc.  - Service performance and KPI requirements for holographic-type Communication service, e.g. latency, bandwidth, multi-dimensional synchronization, support for concurrent flows, etc.  - Gap analysis between the identified requirements and existing 5GS requirements or functionalities. | This has also possible overlaps with other new SIDs, according to Intel. | presented |  |
| 45 | 4 | [**S1-202143**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202143.zip) | KPN | Presentation for new SID for Study on Enhancements for Residential 5G | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation for the SID in 2141 |  | noted |  |
| 46 | 4 | [**S1-202141**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202141.zip) | KPN | New SID on Enhancements for Residential 5G | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | This is a new Rel-18 study item description for a study on enhancements for residential 5G.  The objective of this study is to identify use cases, provide a gap analysis and define potential requirements in the following three areas.  • Enhancements for Wireline Wireless Convergence  • Enhancements for fixed LAN - 5G LAN integration  • Enhancements for indoor small basestations: | T-Mobile US support this Study.  Identification of devices beyond the gateway should also be investigated, according to Deutsche Telekom, which is also supporting.  For Nokia, there is a possibility to merge with the SID on "Personal IoT" (vivo). They would like to see a different approach compared to what happened with Femtocell some years ago.  If/how the concept of "indoor base stations" is applicable is for further study. | Revised | S1-202192 |
| 46r | 4 | S1-202192 | KPN | New SID on Enhancements for Residential 5G | SID new |  |  |  |  |  | Rel-18 |  | Replaces S1-202141 |  |  |  |
| 47 | 4 | [**S1-202144**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202144.zip) | vivo Mobile Communication Co., | Personal IoT Networks | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Discussion paper to support SID on same topic. |  | Noted |  |
| 48 | 4 | [**S1-202161**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202161.zip) | vivo Mobile Communication Co., | Personal IoT Networks Slides | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Slide deck per chairs request for new SID. |  | Noted |  |
| 49 | 4 | [**S1-202145**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202145.zip) | vivo Mobile Communication Ltd, China Telecom, Qualcomm Incorporated, Convida Wireless | New WID on Study of Personal IoT Networks | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | This study is aiming at new use cases and service requirements to enhance 5GS support of Personal IoT networks, including a set of IOT devices communicating between themselves and with a smartphone using ProSe direct communication; the personal IOT network is connected to 5GC, either using Prose indirect communication or other macro network connectivity (e.g. local RAN entities/gateways).  The objectives include:  - Study use cases related to 5GS support of Personal IoT networks and potential new requirements  - Gap analysis between the identified requirements and what is already defined by existing 3GPP requirements, e.g. related to PNM, NB-IoT and eMTC, NPN, REFEC etc. | Deutsche Telekom, although not against the principles, have concerns with the wording of the objectives.  For Huawei, the concern is with the "interworking" part, which has to be clarified.  Sony reminded that the wearables were already studied in Rel-17, in particular in RAN. This has to be considered if not already done.  For Nokia too, several aspects seem to be already covered.  For FirstNet, there might be commonalities with REFEC (multi-hops).  Discussions to be continued by e-mail. | Presented |  |
| 5 | 4 | [**S1-202051**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202051.zip) | Spreadtrum Communications | Motivation for R18 Smart Logistics Management SID proposal | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Motivation for R18 Smart Logistics Management SID proposal |  | Noted |  |
| 6 | 4 | [**S1-202052**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202052.zip) | Spreadtrum Communicationszxcvb | New WID on Study on supporting of the smart logistics management | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | New WID on Study on supporting of the smart logistics management  The objectives include a Study on use cases related to smart logistic management services and deduce potential requirements for 3GPP systems for IoT devices with limited power supply are on/in the transported and delivered package: | For Sony, the additional value of this proposal (compared to what already exists) is not clear. Same concern for Qualcomm and Nokia. No precise wording is used, like "higher accuracy", etc. | Presented |  |
| 7 | 4 | [**S1-202053**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202053.zip) | Spreadtrum Communications | Motivation for R18 SID proposal of Blockchain for mobile communication system | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Motivation for R18 SID proposal of Blockchain for mobile communication system.  Presentation slides for the SID in the next document. |  | Noted |  |
| 8 | 4 | [**S1-202054**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202054.zip) | Spreadtrum Communications | New WID on Study on Blockchain for mobile communication system | SID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | New WID on Study on Blockchain for mobile communication system.  The objectives include following aspects:  1. Studying the use cases, potential service and performance/KPI requirements to support the communication aspect of blockchain applications.  2. Studying the blockchain functionality and the benefits to 3GPP network for integrating some beneficial blockchain functionality into 3GPP network to improve the mobile communication system.  3. Studying the security requirement of Blockchain for mobile communication system.  4. Analysis gaps between the identified requirement and the functionality already provided by 3GPP | Logistics is a first use case, but it is intended to get other ones e.g. finances.  For Sony, this is quite interesting, but think that this can be done at the application level. 3GPP-related lacks should be underlined. Nokia, AT&T, vivo have the same concern. Vivo and Deutsche Telekom explained that SA6 and GSMA have a similar working topic. Relationships between all these groups should be clarified.  Telefonica explained that there is also an ETSI ISG group called "BVL" working on the same topic.  There is some interest but 3GPP work should be clarified. | Presented |  |
| 9 | 4 | [**S1-202064**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202064.zip) | China Mobile Com. Corporation | Motivation for R18 SID proposal on tactile internet in 5GS | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | Presentation slides for the SID in the next document. |  | noted |  |
| 99 | 4 | [**S1-202126**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202126.zip) | Huawei, Huawei Device | Motivation for R18 enhanced Network controlled interactive service | discussion |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  |  |  | Postponed |  |
| 99 | 4 | [**S1-202127**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202127.zip) | Huawei, Huawei Device | New WID on enhancements for network controlled interactive service (eNCIS) | WID new |  |  |  |  |  | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  |  | Document postponed | Postponed |  |
| 99 | 4 | [**S1-202129**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202129.zip) | Huawei,Huawei Device | Complemetary requirements for consumed tethered VR headset services | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0447 |  | B | 17.2.0 | [Rel-18](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [DUMMY](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=699999) |  |  | Postponed |  |
| 99 | 4 | [**S1-202131**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202131.zip) | Samsung Electronics GmbH | Smart Grid and Mobile Telecommunication Opportunities | discussion |  |  |  |  |  |  |  | A study in Smart Grid and telecommunications in SA1 could lead to useful results, as this sector has specific needs that are today only partially served by existing 3GPP standards. | Replaced by 2123 | withdrawn |  |
|  | 5.1 | [**S1-202048**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202048.zip) | VODAFONE Group Plc | Discussion on generic 5G requirements for VIAPA | discussion |  |  |  |  |  |  |  |  |  | available |  |
|  | 5.1 | [**S1-202049**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202049.zip) | VODAFONE Group Plc | On the generic 5G requirements for VIAPA | CR | [22.263](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3648) | 0003 |  | D | 17.0.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [AVPROD](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840031) |  |  | available |  |
|  | 5.1 | [**S1-202050**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202050.zip) | VODAFONE Group Plc | Addition of generic 5G requirements for VIAPA | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0442 |  | D | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [AVPROD](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840031) |  |  | available |  |
|  | 5.1.1 | [**S1-202043**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202043.zip) | LG Electronics Polska | Correction on PER requirement | CR | [22.263](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3648) | 0002 |  | F | 17.0.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [AVPROD](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840031) |  |  | available |  |
|  | 5.1.1 | [**S1-202103**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202103.zip) | Tencent | Clarification on Definition of Media Clock and Uncompressed Video | CR | [22.263](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3648) | 0004 |  | F | 17.0.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [AVPROD](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840031) |  |  | available |  |
|  | 5.1.1 | [**S1-202112**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202112.zip) | Tencent | Clarification on packet error per hour | CR | [22.263](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3648) | 0005 |  | F | 17.0.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [AVPROD](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840031) |  |  | available |  |
|  | 5.2.1 | [**S1-202104**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202104.zip) | Tencent | Alignment and Correction to Change History | CR | [22.832](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3629) | 0022 |  | D | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [FS\_eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830020) |  |  | available |  |
|  | 5.2.1 | [**S1-202107**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202107.zip) | CATT | Delete the editor’s note in 5.14.6 | CR | [22.832](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3629) | 0023 |  | F | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [FS\_eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830020) |  |  | available |  |
|  | 5.2.1 | [**S1-202133**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202133.zip) | Siemens | Use Case for Determination of 5G Time Synchronization Budget | discussion |  |  |  |  |  | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  | Slideset with Use Cases for Determination of 5G Time Synchronization Budget for discussion |  | Revised | S1-202172 |
|  | 5.2.1 | [**S1-202134**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202134.zip) | Siemens | Update Use Case for 5G Time Synchronization Budget in integrated 5G/TSN networks | CR | [22.832](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3629) | 0024 |  | C | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [FS\_eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830020) | Added specific use case scenarios (e.g. manufacturing robots) with relevant detail that allow the derivation of a useful 5G time synchronization budget. A table with three useful levels for the 5G time synchronization budget has been derived. |  | Revised | S1-202173 |
| 9r | 3.04 | [**S1-202151**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202151.zip) | Ericsson | Time synchronization budget for the 5G system | CR | [22.832](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3629) | 0025 |  | F | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [FS\_eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830020) |  | Linked to S1-202113 | Noted. |  |
|  | 5.2.1 | [**S1-202155**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202155.zip) | Siemens | Positioning value for further study and editorial changes | CR | [22.832](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3629) | 0026 |  | D | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [FS\_eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830020) | Clarification of several positioning ffs values and editorial changes. |  | Revised | S1-202176 |
|  | 5.2.1 | [**S1-202156**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202156.zip) | Siemens | Miscellaneous values for further study | CR | [22.832](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3629) | 0027 |  | C | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [FS\_eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830020) | Clarification of several miscellaneous ffs values and editorial corrections. |  | available |  |
|  | 5.2.1 | [**S1-202157**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202157.zip) | Siemens | 22.832 Miscellaneous editorial corrections | CR | [22.832](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3629) | 0028 |  | D | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [FS\_eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830020) | Miscellaneous editorial corrections for TR 22.832. |  | available |  |
|  | 5.2.1 | S1-202172 | Siemens | Use Case for Determination of 5G Time Synchronization Budget | discussion |  |  |  |  |  | Rel-17 |  | Replaces S1-202133 |  |  |  |
|  | 5.2.1 | S1-202173 | Siemens | Update Use Case for 5G Time Synchronization Budget in integrated 5G/TSN networks | CR | 22.832 | 0024 | 1 | C | 17.1.0 | Rel-17 | FS\_eCAV | Replaces S1-202134 |  |  |  |
|  | 5.2.1 | S1-202176 | Siemens | Positioning value for further study and editorial changes | CR | 22.832 | 0026 | 1 | D | 17.1.0 | Rel-17 | FS\_eCAV | Replaces S1-202155 |  |  |  |
|  | 5.2.2 | [**S1-202066**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202066.zip) | VODAFONE Group Plc | Discussion on Communication Service Availability and Communication Service Reliability – take 2 | discussion |  |  |  |  |  |  |  |  |  | available |  |
|  | 5.2.2 | [**S1-202080**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202080.zip) | VODAFONE Group Plc | Clarifications to communication service performance requirements | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0040 |  | F | 16.4.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840041) |  |  | available |  |
|  | 5.2.2 | [**S1-202081**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202081.zip) | VODAFONE Group Plc | Clarifications to communication service performance requirements | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0041 |  | A | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840041) |  |  | available |  |
|  | 5.2.2 | [**S1-202135**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202135.zip) | Siemens | Update Time Synchronization Budget Requirement for 5G System | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0042 |  | A | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840041) | Based on relevant use case scenarios for time synchronization in integrated 5G/TSN networks, different levels of the 5G time synchronization budget requirement are given in 5.6.2. |  | Revised | S1-202174 |
|  | 5.2.2 | [**S1-202136**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202136.zip) | Siemens | Update Time Synchronization Budget Requirement for 5G System | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0043 |  | C | 16.4.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840041) | Based on relevant use case scenarios for time synchronization in integrated 5G/TSN networks, different levels of the 5G time synchronization budget requirement are given in 5.6.2. |  | Revised | S1-202175 |
|  | 5.2.2 | [**S1-202146**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202146.zip) | Ericsson, Orange, Vodafone | Correcting description of communication service status in Clause C.3 | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0044 |  | F | 16.4.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840050) |  |  | available |  |
|  | 5.2.2 | [**S1-202147**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202147.zip) | Ericsson, Orange, Vodafone | Correcting description of communication service status in Clause C.3 | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0045 |  | A | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840050) |  |  | available |  |
|  | 5.2.2 | [**S1-202148**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202148.zip) | Ericsson, Nokia, Nokia Shanghai Bell, Orange, Verizon, Vodafone | Time synchronization budget for the 5G system | discussion |  |  |  |  |  |  |  | This contribution proposes a resolution of the open question on the time synchronization budget for the 5G system. |  | Revised | S1-202185 |
|  | 5.2.2 | [**S1-202149**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202149.zip) | Ericsson, Nokia, Nokia Shanghai Bell, Orange, Verizon, Vodafone | Clock synchronicity budget for the 5G system | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0046 |  | F | 16.4.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840050) |  |  | available |  |
|  | 5.2.2 | [**S1-202150**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202150.zip) | Ericsson, Nokia, Nokia Shanghai Bell, Orange, Verizon, Vodafone | Clock synchronicity budget for the 5G system | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0047 |  | A | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840050) |  |  | available |  |
|  | 5.2.2 | [**S1-202158**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202158.zip) | Siemens | 22.104 Miscellaneous values for further study | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0048 |  | C | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840041) | Clarification of several miscellaneous ffs values and editorial corrections in TS 22.104. |  | Revised | S1-202177 |
|  | 5.2.2 | [**S1-202160**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202160.zip) | Siemens | 22.104 Miscellaneous editorial corrections | CR | [22.104](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) | 0049 |  | D | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [eCAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=840041) | Miscellaneous editorial corrections in TS 22.104. |  | available |  |
|  | 5.2.2 | S1-202174 | Siemens | Update Time Synchronization Budget Requirement for 5G System | CR | 22.104 | 0042 | 1 | A | 17.2.0 | Rel-17 | eCAV | Replaces S1-202135 |  |  |  |
|  | 5.2.2 | S1-202175 | Siemens | Update Time Synchronization Budget Requirement for 5G System | CR | 22.104 | 0043 | 1 | C | 16.4.0 | Rel-16 | eCAV | Replaces S1-202136 |  |  |  |
|  | 5.2.2 | S1-202177 | Siemens | Miscellaneous values for further study | CR | 22.104 | 0048 | 1 | A | 17.2.0 | Rel-17 | eCAV | Replaces S1-202158 | Mirror of S1-202177 |  |  |
|  | 5.2.2 | S1-202184 | Siemens | Miscellaneous values for further study | CR | 22.104 | 0051 |  | F | 16.4.0 | Rel-16 | eCAV | Mirrored in S1-202177 |  |  |  |
|  | 5.2.2 | S1-202185 | Ericsson, Nokia, Nokia Shanghai Bell, Orange, Verizon, Vodafone | Time synchronization budget for the 5G system | discussion |  |  |  |  |  |  |  | Replaces S1-202148 |  |  |  |
|  | 5.3 | [**S1-202045**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202045.zip) | THALES | Embedded UICC correction of reference to 22.101 | [CR](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=605) | [22.101](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=605) | 0566 |  | F | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) | - Clarified that the UICC can be removable or embedded - Clarified that UICC can be a eUICC according to GSMA RSP (independently from its form factor) - Moved the reference to GSMA RSP specifications to the informative references section; - Corrected to the right GSMA RSP specifications (SGP.01 and SGP.21) Reference number is corrected |  | Revised to S1-202055 | S1-202055 |
|  | 5.3 | [**S1-202046**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202046.zip) | THALES | UICC alignment to support Multi-USIM services, Draft CR to 21.905 |  | [21.905](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=558) |  |  | F | 16.0.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) | Change the UICC definition to allow removable and non-removable UICC use cases. |  | revised |  |
|  | 5.3 | [**S1-202055**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202055.zip) | THALES | Correction of UICC definition and references | CR | [22.101](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=605) | 0566 | 1 | F | 17.1.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) | - Clarified UICC definition in sec 11.a - Corrected the GSMA RSP references in sec.2 and 13.2 |  | available |  |
|  | 5.3 | [**S1-202056**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202056.zip) | THALES | UICC definition alignment |  | [21.905](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=558) |  |  | F | 16.0.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) | Clarify the UICC definition to include removable and non-removable options |  | available |  |
|  | 5.3 | [**S1-202098**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202098.zip) | NTT DOCOMO INC. | Discussion on 4G sunset | other |  |  |  |  |  |  |  | For information on discussion on 4G sunset. It is proposed to gather immediate responses, if any, during this meeting and discuss in detail the way forward in the next SA1 meeting in August. |  | available |  |
|  | 5.3 | [**S1-202128**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202128.zip) | TNO, Thales, CATT | Performance requirements for satellite access | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0428 | 3 | B | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) |  |  | available |  |
|  | 5.3 | S1-202181 | b<>com | Correction of CMED KPIs tables | CR | 22.263 | 0006 |  | F | 17.0.0 | Rel-17 | CMED |  |  |  |  |
|  | 5.3 | S1-202182 | b<>com | Update description for medical application in section 4.4 | CR | 22.263 | 0007 |  | F | 17.0.0 | Rel-17 | CMED |  |  |  |  |
|  | 5.3 | S1-202183 | b<>com | Correction of service performance requirements in tables of annex A.6 | CR | 22.104 | 0050 |  | F | 17.2.0 | Rel-17 | CMED |  |  |  |  |
|  | 5.3 | S1-202189 | Nokia Networks | Study on Future Railway Mobile Communication System | SID revised |  |  |  |  |  | Rel-15 | FS\_FRMCS | Replaces S1-202039 |  |  |  |
| 1 | 5.3 | [**S1-202039**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202039.zip) | Nokia Networks | Study on Future Railway Mobile Communication System | SID revised |  |  |  |  |  | [Rel-15](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [FS\_FRMCS](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=720004) | TR 22.889 is considered as a reference document for Railways. UIC FRMCS project is still ongoing with active working groups dealing with functional and non-functional requirements which could ask for amendments to TR 22.889. UIC would like to consider such technical report as external 3GPP document by revising TR 22.889 to TR 22.989. |  | Revised | S1-202189 |
|  | 6 | [**S1-202044**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202044.zip) | LG Electronics Polska | correction to access control for NB-IoT | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0441 |  | F | 16.11.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [5G\_CIoT](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=830043) |  |  | available |  |
|  | 6 | [**S1-202118**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202118.zip) | Siemens | Urgent correction of message size in use case modular, flexible production area | CR | [22.804](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3187) | 0015 |  | F | 16.2.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [FS\_CAV](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=750004) | Changed erronous 25 kbyte (supposed to be 0.25 kbyte) to 256 byte |  | available |  |
|  | 6 | [**S1-202124**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202124.zip) | China Telecom | Private network alignment of TS 22.261 | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0445 |  | F | 16.11.0 | [Rel-16](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [SMARTER\_Ph2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=790001) |  |  | available |  |
|  | 6 | [**S1-202125**](http://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_90e_ElectronicMeeting/Docs/S1-202125.zip) | China Telecomunication Corp. | Private network alignment of TS 22.261 | CR | [22.261](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0446 |  | F | 17.2.0 | [Rel-17](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [SMARTER\_Ph2](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=790001) |  |  | available |  |
|  | 99 | S1-202011 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202012 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202013 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202014 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202015 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202016 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202017 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202018 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202019 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202020 | Chair | Reserved | other |  |  |  |  |  |  |  |  |  | reserved |  |
|  | 99 | S1-202195 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 99 | S1-202196 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 99 | S1-202197 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 99 | S1-202198 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 99 | S1-202199 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Order | Ag.Item | Tdoc # | Source | Title | Type | Spec | CR# | r | cat | Version in | Rel | WI | Summary | Discussion | Conclusion | Rev numb |