**3GPP TSG-SA WG1 Meeting #98e**

**Electronic Meeting, 9 – 19 May 2022**

# tdoc list SA1#98e version END OF MEETING

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Order | Ag.Item | Tdoc # | Source | Title | Type | Spec | CR# | r | cat | Versionin | Rel | WI | Summary | Discussion | Conclusion |
| 01 | 1.2 | [S1-221000](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221000.zip) | SA1 Chair | Draft agenda for SA1#98e | agenda |  |  |  |  |  |  |  |  |  | Revised to S1-221001 |
| 02 | 1.2 | [S1-221001](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221001.zip) | SA1 Chair | 2nd Draft agenda for SA1#95e | agenda |  |  |  |  |  |  |  |  |  | Revised to S1-221002 |
| 03 | 1.2 | [S1-221002](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221002.zip) | SA1 Chair | Agenda for SA1#98e with tdoc allocation | agenda |  |  |  |  |  |  |  |  | The Chair reminded the delegate to also check-in, as it used to be for physical meetings. | Approved |
| 02 | 1.4 | [S1-221003](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221003.zip) | ETSI MCC | Draft minutes of SA1#97e | report |  |  |  |  |  |  |  |  |  | Revised to S1-221004 |
| 03 | 1.4 | [S1-221004](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221004.zip) | ETSI MCC | Minutes of SA1#97e | report |  |  |  |  |  |  |  |  |  | Approved |
| 01 | 2 | [S1-221007](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221007.zip) | SA WG1 Chair | SA1-related topics at SA#95e | report |  |  |  |  |  |  |  |  |  | Noted |
| 02 | 2 | [S1-221006](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221006.zip) | SA1 Chair & ETSI MCC | Guidelines for SA1#98e (e-meeting) | other |  |  |  |  |  |  |  |  |  | Noted |
| 03 | 2 | [S1-221005](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221005.zip) | ETSI MCC | Work Plan presentation for SA1#98e | Work Plan |  |  |  |  |  |  |  |  |  | Noted |
| 04 | 2 | [S1-221008](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221008.zip) | ETSI MCC | MCC info on CR Rules | other |  |  |  |  |  |  |  |  |  | Noted |
| 05 | 2 | [S1-221009](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221009.zip) | ETSI MCC | MCC info on WID names | other |  |  |  |  |  |  |  |  |  | Noted |
| 02 | 3 | [S1-221176](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221176.zip) | C1-220816 | LS on MINT and Higher priority PLMN Selection | LS in |  |  |  |  |  |  |  | TO: | Postponed from SA1#97e | Replied into 1144r2 |
| 03 | 3 | [S1-221043](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221043.zip) | Apple | draft LS to CT1 on Reply LS on MINT and Higher priority PLMN Selection | LS out |  |  |  |  |  |  |  | See alternative proposed answer from Samsung. | Apple agree to continue with Samsung's proposal. | Noted |
| 04 | 3 | [S1-221044](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221044.zip) | Apple | MINT and PLMN selection | discussion |  |  |  |  |  |  |  |  |  | Noted |
| 05 | 3 | [S1-221144](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221144.zip) | Samsung | [Draft] Reply LS to CT1 on MINT and Higher priority PLMN Selection | LS out |  |  |  |  |  | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [MINT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850045) | Draft reply to postponed LS C1-220816 | This can be sent on May 12th if no objection by then.  Rev1: the CR are not mentioned, they should be included in rev2.  For Nokia, it is better to simply refer to the CRs rather than re-stating the requirement in the LS.This is the way forward for rev2.  Rev2 agreed | Revised to S1-221208 |
| 06 | 3 | [S1-221208](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221208.zip) | Samsung | Reply LS to CT1 on MINT and Higher priority PLMN Selection | LS out |  |  |  |  |  | Rel-17 | MINT | Replaces S1-221144.  Reply LS to CT1 on MINT and Higher priority PLMN Selection | Revision of S1-221144. Same as 1144r2 | Agreed |
| 07 | 3 | [S1-221143](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221143.zip) | Samsung, LG Uplus, KT Corporation, SK Telecom, China Telecom, LG Electronics | Concerning Reply LS on MINT and Higher priority PLMN Selection | discussion |  |  |  |  |  | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [MINT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850045) | This document considers the issues and proposed resolutions from incoming LS C1-220816 and the draft reply. |  | Noted |
| 08 | 3 | [S1-221152](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221152.zip) | Samsung Electronics GmbH | Clarifications on PLMN search for FPLMN Registered UEs | CR | [22.011](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=566) | 0341 |  | F | 17.5.0 | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [MINT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850036) | Clarifies that the registration in a FPLMN is allowed only when allowed PLMNs are not available to register on. Two NOTES are added and a new requirement. | Rev3: The text has to be clarified, e.g. vivo commented that the periodic attempt is to search for any allowed PLMN and not only high priority PLMN.  The Note can be deleted.  Rev4 agreeable. | Revised to S1-221209 |
| 09 | 3 | [S1-221209](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221209.zip) | Samsung | 22.011v17.5.0 Clarifications on PLMN search for FPLMN Registered UEs |  |  |  |  |  |  |  |  |  | Revision of S1-221152. Same as 1152r4 | Agreed |
| 10 | 3 | [S1-221145](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221145.zip) | Samsung | Clarifications on PLMN search for FPLMN Registered UEs | CR | [22.011](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=566) | 0340 |  | A | 18.2.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [MINT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850045) | A Rel-18 mirror. Clarifies that the registration in a FPLMN is allowed only when allowed PLMNs are not available to register on. | Same comments as 1152r3.  Rev4 agreeable. | Revised to S1-221210 |
| 11 | 3 | [S1-221210](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221210.zip) | Samsung | 22.011v18.2.0 Clarifications on PLMN search for FPLMN Registered UEs |  |  |  |  |  |  |  |  |  | R4 agreed Revision of S1-221145. Same as 1145r4 | Agreed |
| 13 | 3 | [S1-221178](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221178.zip) | C1-221742 | LS on Service Requirement of TS22.011CR0326 | LS in |  |  |  |  |  |  |  | CT1 inform SA1 about their decision:  1. Associated Access Technology using a Shared MCC defined by SA1 is strictly restricted to the satellite NG-RAN access technology defined in 3GPP TS22.261.  2. All shared MCCs assigned by ITU, except for the value of 999, are considered as shared MCC in 3GPP TS23.122. |  | Replied into 1047r1 |
| 14 | 3 | [S1-221047](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221047.zip) | Apple | Draft reply LS to CT1 on Service Requirement of TS22.011CR0326 | LS out |  |  |  |  |  |  |  | To inform backCT1 about SA1's reaction following their LS. | Rev1 agreed. | Revised to S1-221211 |
| 15 | 3 | [S1-221211](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221211.zip) | Apple | Reply LS to CT1 on Service Requirement of TS22.011CR0326 |  |  |  |  |  |  |  |  | Draft reply LS to CT1 on Service Requirement of TS22.011CR0326 | Revision of S1-221047. Same as 1047r1 | Agreed |
| 16 | 3 | [S1-221048](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221048.zip) | Apple | Clarification of Shared MCC definition | CR | [22.011](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=566) | 0335 |  | F | 17.5.0 | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [5GSAT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800048) | The CR adds the definition of Shared MCC based on the Stage 3 implementation, and to streamline text on Shared MCC in clause 3.2.2.5. A new note is introduced on the usage of Shared MCC in PLMN selection for satellite NG-RAN. | Rev1 to include Vodafone's comment in 1138 and 1141 (Note 3).  For Huawei, the SA1's definition should be an exact copy-paste from the CT1, and not slightly rewritten.This will be done in the next version. | Revised to S1-221212 |
| 17 | 3 | [S1-221212](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221212.zip) | Apple | 22.011v17.5.0 Clarification of Shared MCC definition |  |  |  |  |  |  |  |  |  | Revision of S1-221048. Same as 1048r2 | Agreed |
| 18 | 3 | [S1-221050](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221050.zip) | Apple | Clarification of Shared MCC definition | CR | [22.011](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=566) | 0336 |  | A | 18.2.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [5GSAT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800048) |  | Same comment as for 1048. | Revised to S1-221213 |
| 19 | 3 | [S1-221213](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221213.zip) | Apple | 22.011v18.2.0 Clarification of Shared MCC definition |  |  |  |  |  |  |  |  |  | Revision of S1-221050. Same as 1050r2 | Agreed |
| 20 | 3 | [S1-221138](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221138.zip) | Vodafone Italia SpA | Clarification for periodic network selection attempts | CR | [22.011](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=566) | 0338 |  | F | 17.5.0 | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [5GSAT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800048) |  | Merged into 1048r1 | Merged into 1048r1 |
| 21 | 3 | [S1-221141](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221141.zip) | Vodafone Italia SpA | Clarification for periodic network selection attempts | CR | [22.011](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=566) | 0339 |  | A | 18.2.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [5GSAT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800048) |  | Merged into 1051r1 | Merged into 1050r1 |
| 23 | 3 | [S1-221180](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221180.zip) | C1-223045 | Emergency services and UE rejected with ""PLMN not allowed to operate in the country of the UE’s location"" | LS in |  |  |  |  |  |  |  | CT1 ask SA1 to confirm the CT1 understanding that for the case that there is no other cell available besides satellite NG-RAN cell(s) of the PLMN which has provided #78, that there should be no limitations to block request from upper layers to attempt an emergency service.  If SA1 does not agree with the outlined CT1 understanding, CT1 ask SA1 to provide guidance on the indented UE behaviour. | Answered in both 1045/1046 from Apple and in 1080 from Oppo. | Replied in 1045r3 |
| 24 | 3 | [S1-221045](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221045.zip) | Apple | Draft reply LS to CT1, RAN2 (cc SA2, SA3LI) on Emergency services and UE rejected with "PLMN not allowed to operate in the country of the UE’s location" | LS out |  |  |  |  |  |  |  | It is proposed to answer that: For emergency service sessions, if the only network available to the UE is that of a satellite NG-RAN where the PLMN has rejected the UE registration with "PLMN not allowed to operate in the country of the UE’s location" (cause code #78), the UE is allowed to (re)-attempt the emergency service request. | Apple clarified that this comes from earlier discussions, but could not find a TS/TR to quote.  See discussion under Oppo's 1080.  Rev3: agreed (aditorial clean-up compared to rev2) | Agreed |
| 25 | 3 | [S1-221046](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221046.zip) | Apple | Emergency services and UE rejected with "PLMN not allowed to operate in the country of the UE’s location" | discussion |  |  |  |  |  |  |  |  |  | Noted |
| 26 | 3 | [S1-221080](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221080.zip) | OPPO | Reply on 5GSAT emergency support | LS out |  |  |  |  |  | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  | Reply to LS C1-223045 for 5GSAT emergency support.  Proposed answers:  Q1: SA1 confirms SA1’s understanding is correct.  Q2: see the answer in Q1. | Similar answer as Apple's one.  For KPN, both answers (Apple and Oppo) are wrong, and it should be the exact opposite.  For DT, the way the question is formulated is misleading, and they prefer Apple's answer, which is clear and not repeating the question.  Apple also found the question ambiguous and this is why they had this approach.  Qualcomm has the same understanding as Apple and support Apple's answer.  Oppo agree to follow Apple's approach.  No objection. KPN propose to clarify that there is no service requirement that prevents the UE from re-attempting. | Noted |
| 28 | 3 | [S1-221184](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221184.zip) | NRG\_012\_204 | LS reply from NRG to 3GPP on IMS emergency communication improvement - SMS | LS in |  |  |  |  |  |  |  | TO: | Postponed from SA1#97e | Replied into 1216r1 |
| 29 | 3 | [S1-221182](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221182.zip) | EMTEL(22)000042 | LS response to 3GPP SA1 on IMS emergency communication improvement - SMS to emergency centre | LS in |  |  |  |  |  |  |  | TO: |  | Noted |
| 30 | 3 | [S1-221153](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221153.zip) | Orange | SMS to emergency centre | WID new |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | New WI for defining requirements to improve emergency communication.  The WID is to allow the access to emergency services through SMS to the local PSAP. | WID to Rel-18 Minimum 4 supporting companies Moved from 4  Rev1: "over IMS" is missing in the WID's titl.  Target date should be June and not September.  Rev2: section 5: "over IMS" still missing  Rev3 agreed | Revised to S1-221219 |
| 31 | 3 | [S1-221219](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221219.zip) | Orange | SMS to emergency centre |  |  |  |  |  |  |  |  |  | WID to Rel-18 Moved from 4 Same as 1153r3 | Agreed |
| 32 | 3 | [S1-221155](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221155.zip) | Orange | SMS to emergency centre requirement | other |  |  |  |  |  |  |  | It is proposed additional requirements for SMS to emergency centre. | It should have been a CR to 22.101. Use new number instead | Noted |
| 33 | 3 | [S1-221207](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221207.zip) | Orange | 22.101v18.3.0 SMS to emergency centre requirement | CR | 22.101 | 0583 |  |  |  |  |  | Replaces S1-221155 | "rev 1" when it should be rev 0.  Several editorial corrections to be provided, in particular on the cover page.  Rev2: agreed, increment rev counter for final version | Revised to S1-221220 |
| 34 | 3 | [S1-221220](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221220.zip) | Orange | 22.101v18.3.0 SMS to emergency centre requirement |  |  |  |  |  |  |  |  |  | Same as 1207r3 Revision of S1-221207. | Agreed |
| 35 | 3 | [S1-221216](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221216.zip) | Orange | Draft LS to GSMA reply on SMS to Emergency Center | LS |  |  |  |  |  |  |  |  | 1216r1 agreed (Based on GSMA and ETSI requests to support SMS over IMS for emergency service in case of roaming and supported for emergency numbers such as 112 and 911, SA1 updated for Release 18 SA1 TS 22.101 by creating a new section on Short Message Service over IMS to emergency centre which was agreed with the attached Release 18 WID and Change Request. + Attach CR+ CC + Dates+ GSMA NRG) | Revised to S1-221221 |
| 36 | 3 | [S1-221221](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221221.zip) | Orange | Draft LS to GSMA reply on SMS to Emergency Center |  |  |  |  |  |  |  |  |  | Same as 1216r1 Revision of S1-221216. | Agreed |
| 38 | 3 | [S1-221188](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221188.zip) | S2-2203130 | LS on service requirements for emergency service support over ProSe Relays | LS in |  |  |  |  |  |  |  | SA2 asks SA1 to provide feedbacks on a set of questions on service requirements for emergency service over ProSe UE-to-Network Relays. | Two proposed answers: Qualcomm's one in 1029 and Apple's one in 1052. | Replied into 1052r8 |
| 39 | 3 | [S1-221029](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221029.zip) | Qualcomm | Reply LS on emergency service over ProSe Relays | LS out |  |  |  |  |  | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) |  |  |  | Noted |
| 40 | 3 | [S1-221030](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221030.zip) | Qualcomm | Clarification on Emergency support for relay UEs | CR | [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0640 |  | F | 18.6.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | TEI18, FS\_5G\_ProSe\_Ph2 |  | CR0640R- Cat F | Noted |
| 41 | 3 | [S1-221052](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221052.zip) | Apple | Draft Reply LS on service requirements for emergency service support over ProSe Relays | LS out |  |  |  |  |  |  |  | Proposed answers:  Q1: ProSe UE-to-Network Relay offering emergency service support is required to support UEs as per emergency call requirements in TS22.101 clause 10.  Q2: The 5G ProSe UE-to-Network Relay routes emergency calls to a PSAP of the same country as the Remote UE.  Q3: There is no restriction on whether the 5G ProSe UE-to-Network Relay and Remote UE need to belong to the same PLMN.  Q4: The Relay UE is not allowed to initiate its own emergency call until after the Remote UE emergency call has ended. | See related CR in 1051.  Common discussion on Qualcomm and Apple  KPN mentioned that for Q1, the case of a relay UE can be distinguished.  For T-Mobile, several cases are not covered,e.g. dependency on location, and this would create problems in some countries.  Huawei supports Apple's proposed answer since Qualcomm's one is not particularly related to Emergency services. They agree on Q1, Q2 and Q3. For Q4, the question has to be further split into different cases.  China Telecom supports Apple's answer to Q4.  Qualcomm agree to use Apple's answer as a basis.  Off-line discussions needed to continue, on Apple's basis.  Rev4: about CR on TS22.261 or TS22.101: Qualcomm prefers 22.261, Ericsson 22.101.  Q1: Another CR is needed, in addition (or instead) 1051.  More off-line discussions needed.  Q2: OK  Q3: Samsung: text should be removed, no CR needed for this.  Q4: Samsung: it should simply state "SA1 does not have any requirements that preclude the concurrent emergency calls from remote UEs or relay UEs.", not as a note.Further editing while projecting.  Rev8: agreed | Revised to S1-221222 |
| 42 | 3 | [S1-221222](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221222.zip) | Apple | Draft Reply LS on service requirements for emergency service support over ProSe Relays |  |  |  |  |  |  |  |  |  | Same as 1052r8 Revision of S1-221052. | Agreed |
| 43 | 3 | [S1-221163](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221163.zip) | Apple | Emergency service support over ProSe Relays | discussion |  |  |  |  |  |  |  |  |  | Noted |
| 44 | 3 | [S1-221051](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221051.zip) | Apple | Emergency service support over ProSe Relays | CR | [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0641 |  | F | 18.6.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | TEI18, FS\_5G\_ProSe\_Ph2 |  | CR0641R- Cat F  Rev1: | Noted |
| 45 | 3 | [S1-221215](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221215.zip) | Apple | Emergency service support over ProSe Relays | CR | 22.101 | 584 |  | F |  | Rel-18 | TEI18, FS\_5G\_ProSe\_Ph2 | Linked to 1051 | CR584R- Cat F 1215r3 for approval day  Rev3: agreed | Revised to S1-221223 |
| 46r | 3 | [S1-221197](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221197.zip) | S6-220852 | LS on PIN Application Server Discovery | LS in |  |  |  |  |  |  |  | Replaces S1-221193.  As part of SA6’s Rel-18 study on FS\_PINAPP, SA6 has agreed a Key Issue on PIN Application Server Discovery. During the discussions, a question came up on whether an AS related to a PIN could reside both inside the PIN as well as outside the actual PIN, and it was decided to consult SA1 for guidance. | Proposed answer in 1031. |  |
| 46 | 3 | [S1-221223](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221223.zip) | Apple | 22.101v18.6.0 Emergency service support over ProSe Relays |  |  |  |  |  |  |  |  |  | CR584R- Cat F Same as 1215r3 Revision of S1-221215. | Agreed |
| 48 | 3 | [S1-221191](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221191.zip) | S4-220321 | LS on multiparty Real-time Text (RTT) in conference calling | LS in |  |  |  |  |  |  |  | SA4 asks SA1 to clarify if existing SA1 requirements would apply on multiparty RTTor if any new requirement would be necessary, and if SA1 is aware of any other regulatory requirements that should be taken into account. |  | Replied into 1198r1 |
| 49 | 3 | [S1-221198](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221198.zip) | Huawei | Draft Reply LS on multiparty Real-time Text (RTT) in conference calling | LS out |  |  |  |  |  |  |  | Proposed answer to S1-221191/S4-220321, to state that there are existing SA1 requirements captured in TS 22.173 that cover the support of multiparty RTT in conference calling. | Agreed with editorial correction | Revised to S1-221214 |
| 50 | 3 | [S1-221214](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221214.zip) | Huawei | Reply LS to SA4, CT1, CT4, GSMA NG (GSG, UPG, ESTF), ATIS WTSC (cc SA3LI) on multiparty Real-time Text (RTT) in conference calling |  |  |  |  |  |  |  |  |  | Revision of S1-221198. Same as 1198r1 | Agreed |
| 52 | 3 | [S1-221193](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221193.zip) | S6-220852 | LS on PIN Application Server Discovery | LS in |  |  |  |  |  |  |  | TO: |  | Replied into 1031r3 |
| 53 | 3 | [S1-221031](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221031.zip) | InterDigital | Reply LS on PIN Application Server Discovery | LS out |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_PINAPP](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=940021) | Proposed answer: SA1 point out that TS 22.261 includes the following requirement in clause 6.38.2.1 “The 5G system shall support applications on an Application Server connected to a CPN or PIN.” Additionally, TS 22.261 clause 6.38.2.4 includes discovery requirements related to Personal IoT Networks. SA1 would also like to clarify that no requirements preclude an application server discoverable by PIN Elements from also being discoverable by non-PIN Elements. | There is some emergency since SA6 is meeting in parallel with SA1.  Nokia will provide more off-line comments.  Rev2: agreed, revised to 1217 | Revised to S1-221217 |
| 54 | 3 | [S1-221217](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221217.zip) | SA1 | Reply LS to SA6 on PIN Application Server Discovery | LS |  |  |  |  |  |  |  | Rev of 1031, identical to 1031rev3. | Same as 1031r3 Revision of S1-221031. | Agreed |
| 56 | 3 | [S1-221202](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221202.zip) | S6-220975 | LS on Issues Network Slice information delivery to a 3rd party | LS in |  |  |  |  |  |  |  |  | Proposed answer in 1142. | Replied into 1205r10 |
| 57 | 3 | [S1-221142](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221142.zip) | Samsung | Application Enablement Standards in SA6 | discussion |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_NSCALE](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=910022) | Linked to 1202: Application enablement is supported by diverse SA6 standards yet is not widely understood in 3GPP.  See proposed answer in S1-221205. | For Nokia, Slicing is within the network operator – it is a kind of network optimisation. As such, it should not be visible to the user.  KPN has a different view, there is even a slice template defined by GSMA to ease slice discussion.  Samsung agree that everything which is exposed is by operator's policy only. They can chose to expose the slices, as per earlier agreement with the 3rd party. | Noted |
| 58 | 3 | [S1-221205](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221205.zip) | Samsung | Reply LS to SA6 (cc SA5) on Issues Network Slice information delivery to a 3rd party | LS out |  |  |  |  |  |  |  | Proposed answer to S1-221202 | Rev2: see corresponding CR in 1206  Rev9: to SA6, SA5  For Siemens, there is no need for an action to SA5. They should be contacted by SA6 if needed. So SA5 should remain in cc. Other changes made while projecting.  Rev10: agreed | Revised to S1-221224 |
| 59 | 3 | [S1-221224](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221224.zip) | Samsung | LS reply |  |  |  |  |  |  |  |  |  | Same as 1205r10 Revision of S1-221205. | Agreed |
| 60 | 3 | [S1-221206](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221206.zip) | Samsung | CR Issues Network Slice information delivery to a 3rd party | CR | 22.261 | 0642 |  |  |  |  |  | The following requirement is added: "Based on operator policy, a 5G network shall provide suitable APIs to allow a trusted third-party to obtain network slice information pertaining to slices that the third-party is authorized to create, modify or delete." | For Nokia and Huawei, this CR is not needed. | Noted |
| 62 | 3 | [S1-221183](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221183.zip) | ls310-16 | S on a new work item for media transport protocols, signalling information of haptic transmission for Immersive Live Experience (ILE) systems | LS in |  |  |  |  |  |  |  | TO: |  | Noted |
| 63 | 3 | [S1-221177](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221177.zip) | C1-221600 | LS on UAC enhancements and system information extensions for minimization of service interruption | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 64 | 3 | [S1-221179](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221179.zip) | C1-223044 | Reply LS on ""Indication of country of UE location"" | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 65 | 3 | [S1-221186](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221186.zip) | S2-2201844 | Reply LS on Use, if any, of network provided ""Indication of country of UE location"" | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 66 | 3 | [S1-221181](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221181.zip) | C4-222306 | LS on Indication of Network Assisted Positioning method | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 67 | 3 | [S1-221185](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221185.zip) | EUWENA | LS on presentation of EUWENA and involvement in 3GPP on Non Public Network | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 68 | 3 | [S1-221187](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221187.zip) | S2-2201845 | Reply LS on validity of cause value #78 | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 69 | 3 | [S1-221189](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221189.zip) | S2-2203419 | Reply LS on the scope of applying Network Slicing feature in Rel-17 and Rel-16 | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 70 | 3 | [S1-221192](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221192.zip) | S6-220265 | Reply LS on Prioritized Vehicle to Cloud Technical Solutions (Automotive Edge Computing Consortium (AECC)) | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 71 | 3 | [S1-221194](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221194.zip) | S6-220932 | LS on network slice LCM consumption and use cases | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 72 | 3 | [S1-221195](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221195.zip) | SP-220337 | LS on Text Proposal toward ITU-R draft Report ITU-R M.[IMT.INDUSTRY] | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 73 | 3 | [S1-221196](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221196.zip) | SP-220347 | LS on Alignment concerning 5G RG requirements and its remote management | LS in |  |  |  |  |  |  |  | CC: |  | Noted |
| 74 | 3 | [S1-221190](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221190.zip) | S3-214337 | LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT | LS in |  |  |  |  |  |  |  | TO: |  | Noted |
| 02 | 4 | [S1-221032](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221032.zip) | Rapporteur (Oppo) | New SID on AI/ML Model Transfer Phase 2 (FS\_AIML\_Ph2) | SID revised |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AIML\_Ph2](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950008) | Align the termonology in justification to SA1 stype (i.e. direct device connection); Update wording in objective; Clarify the TR22.874 will be reused to continue study of AIML\_Ph2. | Samsung mentioned potential problems in reusing 22.874 for Phase 2: the text on Phase 1 has to be clearly distinguished of the text that will apply to Phase 2.  Rev1: AIML\_MT finally proposed and agreed  Rev2: in the end, it is proposed to create a new TR for this Phase 2, and not to re-use the Phase 1 TR. | Revised to S1-221225 |
| 03 | 4 | [S1-221225](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221225.zip) | OPPO | Revised SID on AI/ML Model Transfer Phase 2 (FS\_AIML\_Ph2) |  |  |  |  |  |  |  |  |  | Same as 1032r2 Revision of S1-221032. | Agreed |
| 04 | 4 | [S1-221199](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221199.zip) | Alibaba | SID on Ambient power-enabled IoT SID | SID |  |  |  |  |  |  |  | It proposes to add a second rapporter to the FS\_AmbientIoT SID. | FS\_AmbientIoT\_RevSID.  This is not based on the version approved at SA. It is missing the Unique ID.  For InterDigital, Sony, Nokia, Telefonica, DT and Vodafone, there is no need to have 2 rapporteurs for this SID, which is relatively simple. | Noted |
| 05 | 4 | [S1-221161](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221161.zip) | Alibaba Group | Discussion on adding Co-Rapporteur for Ambient power-enabled IoT | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | This explains why there should be 2 rapporteurs for this SID. | Moved from 7.3 | Noted |
| 06 | 4 | [S1-221082](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221082.zip) | SA WG1 | Revision of WID on AI/ML model transfer in 5GS | WID revised |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [AMMT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920030) | Update the acronym to AIML in r18 WID | Pre-agreed  Rev1: agreed | Revised to S1-221226 |
| 07 | 4 | [S1-221226](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221226.zip) | OPPO | Revision of WID on AI/ML model transfer in 5GS |  |  |  |  |  |  |  |  |  | Same as 1082r1 Revision of S1-221082. | Agreed |
| 08 | 4 | [S1-221083](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221083.zip) | SA WG1 | Revision of WID on Study on traffic characteristics and performance requirements for AI/ML model transfer in 5GS | SID revised |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_AMMT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=860009) | Update the acronym to FS\_AIML | Pre-agreed  Rev1: agreed | Revised to S1-221227 |
| 09 | 4 | [S1-221227](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221227.zip) | OPPO | Revision of WID on Study on traffic characteristics and performance requirements for AI/ML model transfer in 5GS |  |  |  |  |  |  |  |  |  | Same as 1083r1 Revision of S1-221083 | Agreed |
| 10 | 4 | [S1-221128](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221128.zip) | Union Inter. Chemins de Fer | Revised FS\_eFRMCS SID to align multiple FRMCS stages | SID revised |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_eFRMCS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=900026) |  |  | Agreed |
| 11 | 4 | [S1-221130](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221130.zip) | Union Inter. Chemins de Fer | Revised FS\_FRMCS\_Ph3 SID to align multiple FRMCS stages | SID revised |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_FRMCS\_Ph3](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950007) |  |  | Agreed |
| 13 | 4 | [S1-221059](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221059.zip) | China Mobile Com. Corporation | New WID on 5G enhanced Customized Alerting Tones and Customized Ringing Signal | WID new |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | This WID is to define enhancement of Customized Alerting Tones service, specially:  - Supporting adaptive resolution for playing multi-media CAT  - Supporting CAT and CRS interaction while playing CAT and CRS multimedia. | WID to Rel-18 Minimum 4 supporting companies  For Samsung, this service and proposed use cases are unclear, if not already supported.  Nokia reminded that Rel-18 has been closed for 6 months for SA1, and there is no particular emergency for this, e.g. no regulatory requirement. Rel-19 would be more appropriate.  China Mobile mentioned some possible ongoing work in Stage 2. For CT, work might be expected.  Samsung propose to re-do the WID by including clear new requirements definition, etc. | Noted |
| 14 | 4 | [S1-221060](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221060.zip) | China Mobile Com. Corporation | Motivation of supporting 5G enhanced Customized Alerting Tones (CAT) and Customized Ringing Signal (CRS) | discussion |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | This is an introduction to the following series of CRs and the WID that goes with it in 1059. |  | Noted |
| 15 | 4 | [S1-221061](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221061.zip) | China Mobile Com. Corporation | CRS interaction | CR | [22.183](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=625) | 0004 |  | B | 17.0.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [TEI18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920042) | The interaction capability of CRS service can divert consumers to other service platform(e.g. restaurant, movie platform), through called party’s interaction during playing CRS (e.g. get coupons, reserve a movie, vote for stars). | Orig. for approval day | Noted |
| 16 | 4 | [S1-221063](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221063.zip) | China Mobile Com. Corporation | Adaptive resolution for playing multi-media CAT | CR | [22.182](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=624) | 0024 |  | B | 17.0.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [TEI18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920042) |  | Orig. for approval day | Noted |
| 17 | 4 | [S1-221065](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221065.zip) | China Mobile Com. Corporation | CAT interaction | CR | [22.182](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=624) | 0026 |  | B | 17.0.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [TEI18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920042) |  | 1065r02 for approval day | Noted |
| 18 | 4 | [S1-221094](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221094.zip) | vivo | New WID on enhanced network exposure capability with critical information preserving | WID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 19 | 4 | [S1-221095](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221095.zip) | vivo | Discussion on enhanced network exposure capability with critical information preserving | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 20 | 4 | [S1-221022](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221022.zip) | Saankhya Labs, IIT Bombay | Usage of Non-3GPP NTN for Multicast Broadcast Services (MBS) in 5GS | WID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 21 | 4 | [S1-221023](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221023.zip) | Saankhya Labs, IIT Bombay | Usage of Non-3GPP DTT Broadcast Networks for Multicast/Broadcast Services (MBS) in 5GS | WID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 22 | 4 | [S1-221024](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221024.zip) | Saankhya Labs, IIT Bombay, Ligado Networks, One Media 3.0, Fraunhofer IIS, CEWiT, Tejas Networks, IIT Kanpur, IIT Madras, IIT Hyderabad, IIT Kharagpur | Usage of Non-3GPP NTN (Satellite access network) for Multicast Broadcast Services in 5GS | CR | [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0638 | 2 | B | 18.6.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [5GSAT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800048) |  |  | Noted |
| 23 | 4 | [S1-221025](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221025.zip) | Saankhya Labs, IIT Bombay, Hewlett-Packard Enterprise, Ligado Networks, One Media 3.0, Fraunhofer IIS, CEWiT, Tejas Networks, IIT Kanpur, IIT Madras, IIT Hyderabad, IIT Kharagpur | Usage of Non-3GPP DTT Broadcast Networks for Multicast/Broadcast Services in 5GS | CR | [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) | 0639 | 1 | B | 18.6.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [5MBS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=900038) |  |  | Noted |
| 24 | 4 | S1-221062 | China Mobile Com. Corporation | CAT interaction | CR | [22.183](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=625) | 0005 |  | B | 17.0.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [TEI18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920042) |  |  | Withdrawn |
| 25 | 4 | S1-221064 | China Mobile Com. Corporation | CAT interaction | CR | [22.182](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=624) | 0025 |  | B | 17.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [TEI18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920042) |  |  | Withdrawn |
| 29 | 4 | [S1-221067](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221067.zip) | NICT | Study on Non-Universal Time | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | Study on Non-Universal Time: Local sharing and delivering of common time and frequency. | This seems to be a RAN issue, for T-Mobile.  For Qualcomm, other companies should be supporting before this SID is presented.  For Vivo, this raises some serious technical challenges, like synchronisation down to the nanosecond.  For Nokia, DT and Siemens, the delta (what is missing) compared to the current tools for local time have to be underlined. DT add that UTC might create other problems. | Noted |
| 30 | 4 | [S1-221068](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221068.zip) | NICT | Study on Non-Universal Time | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | Study on Non-Universal Time: Local sharing and delivering of common time and frequency. | Reduce to 4 slides  Rev1: This SID is to  - Study use cases and possible new services made feasible by defining and sharing a local timescale.  - Study technical requirement for the local timescale such as  - Rank the quality of local timescales and determine the criteria of characteristics  such as stability or time error from UTC  See corresponding SID. | Noted |
| 32 | 4 | [S1-221123](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221123.zip) | Ericsson, Deutsche Telekom, Vodafone, KPN | Study on roaming value added services | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | This comes from GSMA. | NTT DOCOMO also support this SID.  For KPN, this is simply to replicate some 4G basic services in 5G roaming.  Rev10: agreed | Revised to S1-221228 |
| 33 | 4 | [S1-221228](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221228.zip) | Ericsson, Deutsche Telekom, Vodafone, KPN | Study on roaming value added services |  |  |  |  |  |  |  |  |  | Same as 1123r10 Revision of S1-221123. | Agreed |
| 34 | 4 | [S1-221124](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221124.zip) | Ericsson | Motivation for SID on roaming value added services | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  | No comment, see actual SID | Noted |
| 36 | 4 | [S1-221036](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221036.zip) | IIT Bombay | New SID on treating (UE) signalling as a user service | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | This SID proposes to handle the signalling as data in the User Plane. | Rev1: For Huawei, Futurwei and KPN, the benefits are unclear. And they wonder if this is not an architural design issue.  For China Telecom, this is not for SA1.  For Samsung, signalling is a system property and should remain as such. There is no benefit of treating the signalling as data.  Rev3: potential benefits of the proposal have been added.  For Samsung and several other companies (TNO, Nokia, Deutsche Telekom, Huawei, etc.), this "how to handle signalling" is a proposal for Stage 3, with potential imnplication on Stage 2, buy definitely not for Stage 1. | Noted |
| 37 | 4 | [S1-221204](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221204.zip) | IIT Bombay, Saankhya Labs, Tejas Networks, IIT Kanpur, CEWiT | treating (UE) signalling as a user service |  |  |  |  |  |  |  |  |  | No comment, see actual SID | Noted |
| 38 | 4 | [S1-221056](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221056.zip) | IIT Bombay | Draft Skeleton for TR for study on treating (UE) signalling as a user service | other |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 40 | 4 | [S1-221167](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221167.zip) | NOVAMINT, TNO, ESA, Avanti, Intelsat, Eutelsat, Sateliot, GateHouse, Hughes Network systems, Viasat, IIIT Hyderabad | New SID on satellite access Phase 3 | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | This is a merge with China Telecom's proposal. | Rev2: Nokia wonder about having 2 rapporteurs. Novamint explain that this is due to the merging of the 2 SIDs.  Thales informed that Traffic re-scheduling might be redundant with Qualcomm's proposal, and it can be removed here.  Rev3: still some points unclear for some companies, e.g. "via CN entities on board " for Deutsche Telekom.  Rev5: agreed, rev marks to be agreed  Rev6: agreed | Revised to S1-221229 |
| 41 | 4 | [S1-221229](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221229.zip) | NOVAMINT, TNO, ESA, Avanti, Intelsat, Eutelsat, Sateliot, GateHouse, Hughes Network systems, Viasat, IIIT Hyderabad | New SID on satellite access Phase 3 |  |  |  |  |  |  |  |  |  | Same as 1167r6 Revision of S1-221167. | Agreed |
| 42 | 4 | [S1-221026](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221026.zip) | THALES | Additional capabilities for Rel-19 | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 43 | 4 | [S1-221168](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221168.zip) | NOVAMINT, TNO, ESA, Avanti, Intelsat, Eutelsat, Sateliot, GateHouse, Hughes Network systems, Viasat, IIIT Hyderabad | Motivation for a SID on Study on satellite access - Phase 3 | other |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 44 | 4 | [S1-221169](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221169.zip) | NOVAMINT | TR skeleton for Study on satellite access - Phase 3 | other |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 45 | 4 | [S1-221127](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221127.zip) | China Telecomunication Corp.,CATT, China Mobile, Xiaomi | New SID on satellite access Phase 3 | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | The objectives of this study are to study for each new capabilities the use cases and related regulatory requirements and identify new service requirements and enhancement for 5G system over satellite |  | Merge into 1167r2 |
| 46 | 4 | [S1-221126](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221126.zip) | China Telecomunication Corp. | 5GSAT\_Ph3 Way-Forward | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | We have proposals on moving 5GSA\_Ph3 SID proposal forward. |  | Noted |
| 47 | 4 | [S1-221203](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221203.zip) | CATT, China Telecom | Discussion on new use cases for FS\_5GSAT\_Ph3 |  |  |  |  |  |  |  |  | it is proposed to consider following use cases in FS\_5GSAT\_Ph3:  Use Case 1: Connectivity of temporary satellite local CN  Use Case 2: Prioritisation of satellite based transport network resources for high priority users | This is to be potentially merged with 1167. | Noted |
| 49 | 4 | [S1-221039](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221039.zip) | China Mobile Com. Corporation | New SID on UAV Phase 3 | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | The objectives of this work item are to identify additional use cases to meet industrial UAV applications in order to derive additional requirements for mobile networks to support drone operations and drone management . | This is converging, even though some further discussions are needed offline.  Rev6: some final editing while projecting.  Rev7 agreed | Revised to S1-221230 |
| 50 | 4 | [S1-221230](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221230.zip) | China Mobile | New SID on UAV Phase 3 |  |  |  |  |  |  |  |  |  | Same as R7 Revision of S1-221039. | Agreed |
| 51 | 4 | [S1-221040](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221040.zip) | China Mobile Com. Corporation | Motivation of UAV Phase 3 | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 52 | 4 | [S1-221057](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221057.zip) | Qualcomm | Proposal on multi-NW connectivity for Drones | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 53 | 4 | [S1-221041](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221041.zip) | China Mobile Com. Corporation | pCR FS\_UAV\_Ph3 Scope | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 54 | 4 | [S1-221042](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221042.zip) | China Mobile Com. Corporation | pCR FS\_UAV\_Ph3 Skeleton | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 57 | 4 | [S1-221017](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221017.zip) | Qualcomm | New SID on ULTRAS | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  | Rev1: new name adopted, some clarifications introduced.  Huawei thank Qualcomm for having clarified the gain, which is mostly the throughput, but wonder if this is still not too architecture-oriented.  Qualcomm pointed out that there are more and more supporting companies, and expect some constructive comments from Huawei.  This will be addressed offline.  Rev5: some further editing while projecting.  Orange asks for 24-hours review.  Rev6: pending Orange's greenlight  Rev7: note 2 added, compromise with Orange. Agreed | Revised to S1-221231 |
| 58 | 4 | [S1-221231](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221231.zip) | Qualcomm | New SID on ULTRAS |  |  |  |  |  |  |  |  |  | Same as 1017r7 Revision of S1-221017. | Agreed |
| 59 | 4 | [S1-221018](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221018.zip) | Qualcomm | ULTRAS - Motivations | other |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | Motivations for the SID in 1017 |  | Noted |
| 60 | 4 | [S1-221101](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221101.zip) | vivo, Charter Communications | Discussion on ULTRAS study with dual 3GPP accesses using dual subscriptions of one operator | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | This document discusses the use case about using dual subscriptions of one operator for Upper Layer TRAffic Steering, switching and split over dual 3GPP accesses. | Several operators object to this change. To be continued off-line. | Noted |
| 62 | 4 | [S1-221121](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221121.zip) | China Telecom | New study on Live Migratable Services in the 5G System | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | The study aims to cover in particular use cases for enhanced 5G system support of the migrating processes between networks for specific communication services. | Rev4: there are still some significant comments. E.g. Samsung indicate that from Rel-14 onwards, SA5 has been covering similar topics.  Last chance on Thursday, knowing that there will be no technical discussions allowed.  Rev4: still no compromise on last day. | Noted |
| 63 | 4 | [S1-221122](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221122.zip) | CTSI | Discussion on Live Migratable Services in the 5G System | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 65 | 4 | [S1-221037](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221037.zip) | China Telecom | New SID on Minimization of Service Interruption Phase 2 | SID new |  |  |  |  |  |  |  | Rev2: Clean-up and clarifications have introduced compared to the version presented at the previous meeting. | For Qualcomm and Nokia, this could be covered by a miniWID.  For Ericsson, there is not much in terms of service requirements: SA1 requirements cover both RAN and Core failure. If something is missing in the solutions then that should be discussed in stage 2/3.  Samsung sees room for a dedicated SID+WID in SA1.  Rev2: for China Telecom, this is a topic that needs a preliminary study. 7 companies think a study is needed (the supporting companies).  3 companies (Nokia, Qualcomm, Ericsson) do not want a study.  SA1 considered that new requirement(s), and gaps, can be proposed and discussed using a dedicated Rel-19 "miniWID".  Samsung has concerns about the implications of this approach if it becomes a general principal: mini-WIDs will take substantial time to 'study.' | Noted |
| 66 | 4 | [S1-221038](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221038.zip) | China Telecom | Discussion on Minimization of Service Interruption Phase 2 | discussion |  |  |  |  |  |  |  | Motivation slides for FS\_MINT\_Ph2. |  | Noted |
| 67 | 4 | [S1-221146](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221146.zip) | Samsuing | Motivation for: New SID on Minimization of Service Interruption Phase 2 | discussion |  |  |  |  |  |  |  | Added information on the motivations for FS\_MINT\_Ph2 |  | Noted |
| 69 | 4 | [S1-221072](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221072.zip) | China Mobile International Ltd | New SID on service enhancement of Energy Efficiency | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | Rev2 | For Nokia, Energy Efficiency is presented as a tradeoff with cost, which is not acceptable for Nokia. China Mobile explained that this is not about cost.  For Sony, the use cases presented do not really fit with the proposal.  Nokia agrees that Energy Efficiency is a key topic, but sees it as mostly a problem of stages 2/3, if not of implementation.  No consensus as it is.  Rev4: Samsung highlighted that Energy has been taken as a criteria since Rel-11, in particular by SA5. The new proposal here is that the approach is system-based (network and UE) and not (only) network-based as it used to be.  3rd bullet of the objective proposed to be deleted.  More off-line discussions needed.  Rev8: "criteria" is to be used as plural of "criterion" (no "criterias" nor "criterion")  Rev9 agreed | Revised to S1-221232 |
| 70 | 4 | [S1-221232](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221232.zip) | China Mobile | New SID on service enhancement of Energy Efficiency |  |  |  |  |  |  |  |  |  | Same as 1072r9 Revision of S1-221072. | Agreed |
| 71 | 4 | [S1-221073](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221073.zip) | China Mobile International Ltd | Motivation of study on service enhancement of Energy Efficiency | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | Motivation slides for FS\_EnergyServ |  | Noted |
| 72 | 4 | [S1-221074](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221074.zip) | China Mobile International Ltd | TR Skeleton of New SID on service enhancement of Energy Efficiency | other |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 73 | 4 | [S1-221075](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221075.zip) | China Mobile International Ltd | pCR FS\_ServiceEE Scope | other |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 75 | 4 | [S1-221107](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221107.zip) | China Telecom | New SID on Multi-hop Multi-path Relay | SID new |  |  |  |  |  |  |  | Two proposals from the previous meeting have been merged. | Two rapporteurs, but with well-defined scope for the secondary one.  For Sony, the "reliability" argument put forward to justify multi Relay is missing KPIs.  Nokia support this, but the justification has to be clarified to tell what is missing. And then maybe this can be covered by a miniWID.  Ericsson is also lacking the view of the added requirements.  Samsung already had concerns about an Apple's contribution to extend the range of local coverage, since it creates some major problems for RAN. This would create the same kind of problems, for Samsung.  For FirstNet, there might be some interesting use cases of multi relay for safety issues, for off-network cases in particular.  SyncTechno sees interesting use cases for maritime.  Rev5: Deutsche Telekom: 3GPP has agreed that direct device-to-device is not allowed for commercial services, this shall not be changed by this SID.  Huawei: an alignment of terminology with previous similar topics is needed.  Sony remain with problems with the intentions, not with the wording. This is a kind of mobility enhancement, hence it is not for SA1. Also KPI for the first bullet are not clear. The "mining use case" and the "shopping mall use case", proposed as main use cases, look like really specific cases to Sony.  FirstNet reiterated their support.  Rev9: still no consensus on last day. | Noted |
| 76 | 4 | [S1-221109](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221109.zip) | ZTE Corporation | SID MMRelay working proposal | discussion |  |  |  |  |  |  |  | It is suggested the working method after the SID is approved, |  | Noted |
| 77 | 4 | [S1-221106](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221106.zip) | ZTE Corporation | Motivations for Multi-hop multi-path relay for direct device connection | discussion |  |  |  |  |  |  |  | It is the discussion paper to propose study Multi-hop multi-path relay for direct device connection |  | Noted |
| 78 | 4 | [S1-221108](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221108.zip) | China Telecom | Discussion on Multi-hop Multi-path Relay | discussion |  |  |  |  |  |  |  |  |  | Noted |
| 79 | 4 | [S1-221150](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221150.zip) | Xiaomi | DP on MMRelay | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 82 | 4 | [S1-221027](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221027.zip) | LG Electronics Inc. | Study on Network of Service Robots with Ambient Intelligence | SID new |  |  |  |  |  |  |  |  | Qualcomm underlined that several "administrative" aspects have to be corrected, e.g. no impact (in section 1), first sentence of the objective is to be reworded.  Rev2: agreed, clean-up needed in rev3. Sony to be added.  Rev3: agreed as such. | Revised to S1-221233 |
| 83 | 4 | [S1-221233](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221233.zip) | LG Electronics | Study on Network of Service Robots with Ambient Intelligence |  |  |  |  |  |  |  |  |  | Same as 1027r4 Revision of S1-221027. No presentation | Agreed |
| 84 | 4 | [S1-221028](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221028.zip) | LG Electronics Inc. | Discussion on Network of Service Robots with Ambient Intelligence | discussion |  |  |  |  |  |  |  | Focus on what SA1 was left at from SA1#97-e: revision points suggested and the response with way-forward proposals/thoughts |  | Noted |
| 86 | 4 | [S1-221020](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221020.zip) | ZTE Corporation, CEPRI, China Telecom, China Unicom | Study on Measurement Data Collection and Integrity | SID new |  |  |  |  |  |  |  |  | For Futurewei, this is not much to be done in SA1. At the maximum, a miniWID would be enough.  For Ericsson, Nokia and Qualcomm, the use cases are not clear. It seems that this is limited to increase the frequency of the control/measurement of the user data.  Huawei and Samsung also do not see service requirements for this. Stages 2/3 groups can increase the frequency of the control if they want.  Rev3: still no consensus. ZTE indicated that a mini-WID can be the way out.  New number to be given for final version. | Revised to S1-221234 |
| 87 | 4 | [S1-221234](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221234.zip) | ZTE, CEPRI, China Telecom, China Unicom | Study on Measurement Data Collection and Integrity |  |  |  |  |  |  |  |  |  | Revision of S1-221020. | Noted |
| 88 | 4 | [S1-221021](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221021.zip) | ZTE Corporation | Discussion paper for Measurement Data Collection and Integrity | other |  |  |  |  |  |  |  | The objective of this study is to analyze use cases and identify potential requirements for network measurement  data collection with high refresh rate to improve QoS monitoring and integrity of network |  | Noted |
| 89 | 4 | [S1-221119](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221119.zip) | ZTE Corporation | FS\_MDataCl: TR 22.XXX skeleton | other |  |  |  |  |  |  |  |  |  | Noted |
| 91 | 4 | [S1-221076](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221076.zip) | China Mobile International Ltd | New SID on supporting computing aware network | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | This study is aiming at identifying use cases, providing gap analysis and defining potential requirements in the following aspects regarding computing aware network.  This was already presented at the previous meeting.  Rev1 includes the resolution of more e-mail comments. | Still several points need more discussions off-line, and it would be better to have just one rapporteur.  Rev3: more discussions needed  Rev4: still several companies think this is not for 3GPP to define. | Noted |
| 92 | 4 | [S1-221077](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221077.zip) | China Mobile International Ltd | Motivation of supporting computing aware network | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 93 | 4 | [S1-221093](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221093.zip) | China Telecom | Study on supporting computing aware network working proposal | discussion |  |  |  |  |  |  |  |  |  | Noted |
| 94 | 4 | [S1-221078](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221078.zip) | China Mobile International Ltd | TR Skeleton of New SID on supporting computing aware network | other |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 95 | 4 | [S1-221079](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221079.zip) | China Mobile International Ltd | pCR FS\_CAN Scope | other |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  |  | Noted |
| 97 | 4 | [S1-221096](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221096.zip) | vivo | Study on Personal IoT Networks phase 2 | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  | For Nokia and Ericsson, the proposed improvements have to be clarified. It seems that no study might be needed – a miniWID would be enough.  This also needs further discussions by e-mail.  A "miniWID" can also be the way to further progress. | Revised to S1-221235 |
| 98 | 4 | [S1-221235](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221235.zip) | vivo | Study on Personal IoT Networks phase 2 |  |  |  |  |  |  |  |  |  | Revision of S1-221096. | Noted |
| 100 | 4 | [S1-221110](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221110.zip) | Beijing Xiaomi Software Tech | New SID on 5GS supporting Mobile User Service | SID new |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | Rev1: name changed to "Study on 5GS supporting Online Mobile Directory" | The scope of this SID is not very clear to several companies. It is wondered if it is to sell users' data, which is not acceptable.  Rev1: several companies (including Nokia, T-Mobile, Ericsson, Samsung, Qualcomm, BMWK) still have concerns, and think this is not for 3GPP to define. Possibly for GSMA. | Noted |
| 101 | 4 | [S1-221112](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221112.zip) | Beijing Xiaomi Software Tech | Discussion for 5GS supporting Mobile User Service (FS\_5GMUS) | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  | The objective of this SID is to identify the potential use cases and requirements for Mobile User Service, including:  Identify the potential contact information that used for Mobile User service, e.g., including, name/alias, phone number, additional information, etc |  | Noted |
| 102 | 4 | S1-221137 | Xiaomi Technology | DP on MMRelay | discussion |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  |  | Document not available and same name than 1150 | Withdrawn |
| 103 | 4 | S1-221139 | Xiaomi | DP on MMRelay | discussion |  |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  |  |  | Withdrawn |
| 01 | 5 | [S1-221140](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221140.zip) | Huawei Technologies R&D UK | Clean-up of the references for quality improvement | CR | [22.101](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=605) | 0582 |  | D | 18.3.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [TEI18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920042) |  | Orig. Pre-agreed | Agreed |
| 01 | 6.1 | [S1-221089](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221089.zip) | ETRI, KT Corp, SK Telecom, LG Uplus | Alignment of KPAS requirements | CR | [22.268](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=639) | 0072 |  | B | 18.0.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [TEI18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920042) | This CR proposes to add some of the additional PWS features already specified in CMAS(Commercial Mobile Alert System) of TS 22.268 as KPAS(Korean Public Alert System) requirements. | Rev1. ETRIclarified they will also bring CRs to CT1, linked to Amber alert.  LGE clarified that this is already in operation in the US.  Date and format to be updated. | Revised to S1-221236 |
| 02 | 6.1 | [S1-221236](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221236.zip) | ETRI, KT Corp, SK Telecom, LG Uplus | 22.268v18.0.0 Alignment of KPAS requirements |  |  |  |  |  |  |  |  |  | Same as 1089r2 Revision of S1-221089. No presentation | Agreed |
| 03 | 6.1 | [S1-221132](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221132.zip) | Union Inter. Chemins de Fer | Call restriction based on subparts of functional identities | CR | [22.989](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3109) | 0015 |  | C | 18.4.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_eFRMCS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=900026) |  | C 132r2 agreed (new WI\_Code) | Revised to S1-221237 |
| 04 | 6.1 | [S1-221237](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221237.zip) | UIC | 22.989v18.4.0 Call restriction based on subparts of functional identities |  |  |  |  |  |  |  |  |  | C Same as 1132r2 Revision of S1-221132. No presentation | Agreed |
| 05 | 6.1 | [S1-221134](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221134.zip) | Union Inter. Chemins de Fer | Call restriction based on subparts/elements of functional alias | CR | [22.280](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3017) | 0152 |  | C | 18.1.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_eFRMCS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=900026) |  | 1134r1 pre-agreed | Revised to S1-221238 |
| 06 | 6.1 | [S1-221238](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221238.zip) | UIC | 22.280v18.1.0 Call restriction based on subparts/elements of functional alias |  |  |  |  |  |  |  |  |  | Same as 1134r1 Revision of S1-221134. No presentation | Agreed |
| 07 | 6.1 | [S1-221135](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221135.zip) | Union Inter. Chemins de Fer | Clarification of Formats for Location Information | CR | [22.280](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3017) | 0153 |  | C | 18.1.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_eFRMCS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=900026) |  | 1135r4 available  Rev4: rev marks on the cover page. Wrong style  Rev5 agreed | Revised to S1-221239 |
| 08 | 6.1 | [S1-221239](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221239.zip) | UIC | 22.280v18.1.0 Clarification of Formats for Location Information |  |  |  |  |  |  |  |  |  | Same as 1135r5 Revision of S1-221135. No presentation | Agreed |
| 09 | 6.1 | [S1-221136](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221136.zip) | Union Inter. Chemins de Fer | Enhanced MCX Service Ad hoc Group Communication to support Railway needs | CR | [22.280](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3017) | 0154 |  | C | 18.1.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_eFRMCS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=900026) |  | 136r1 agreed | Revised to S1-221240 |
| 10 | 6.1 | [S1-221240](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221240.zip) | UIC | 22.280v18.1.0 Enhanced MCX Service Ad hoc Group Communication to support Railway needs |  |  |  |  |  |  |  |  |  | Same as 1136r3 Revision of S1-221136. No presentation | Agreed |
| 01 | 6.2 | [S1-221033](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221033.zip) | Deutsche Telekom | Removal of non-implemented UIA requirements | CR | [22.101](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=605) | 0581 |  | F | 17.4.0 | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [UIA](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800050) |  | 1033r1 is pre-agreed | Revised to S1-221241 |
| 02 | 6.2 | [S1-221241](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221241.zip) | Deutsche Telekom | 22.101v17.4.0 Removal of non-implemented UIA requirements |  |  |  |  |  |  |  |  |  | Same as 1033r1 Revision of S1-221033. No presentation | Agreed |
| 03 | 6.2 | [S1-221019](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221019.zip) | ETRI, KT Corp, SK Telecom, LG Uplus | Addition of KPAS specific requirements | CR | [22.268](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=639) | 0071 |  | B | 18.0.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [TEI18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920042) | This CR proposes to add additional KPAS(Korean Public Alert System) requirements to address the regulatory requirements of Korean Ministry of Interior and Safety. |  | Withdrawn |
| 03 | 6.2 | [S1-221034](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221034.zip) | Deutsche Telekom | Removal of UIA charging requirements | CR | [22.115](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=608) | 0107 |  | F | 17.0.0 | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [UIA](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800050) |  | 1034r1 is pre-agreed | Revised to S1-221242 |
| 04 | 6.2 | S1-221133 | Vodafone Italia SpA | Clarification for periodic network selection attempts | CR | [22.011](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=566) | 0337 |  | F | 18.2.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [5GSAT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800048) |  |  | Withdrawn |
| 04 | 6.2 | [S1-221242](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221242.zip) | Deutsche Telekom | 22.115v17.0.0 Removal of UIA charging requirements |  |  |  |  |  |  |  |  |  | Same as 1034r1 Revision of S1-221034. No presentation | Agreed |
| 01 | 6.3 | [S1-221117](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221117.zip) | TNO, KPN, one2many, MINEA, Netherlands Police | Device based geo-fencing for EU-alert | CR | [22.268](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=639) | 0068 | 3 | B | 17.0.0 | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) | Summary of change: Copy text on device based geofencing from CMAS specific section to the EU-ALERT specific section (with some modifications). Fixing editorial issues in the CMAS specific section. | Rev1. SA accepted this CR as Rel-18. The question was to make it as Rel-17, which is what is requested by the Dutch government. Plus it has to be an ETSI standard and not only a 3GPP standard. CT1 may accept to do it in 23.041 Rel-17 with the condition that this is also done in SA1. 1154 is for information the CR to CT1. CR#0068r2 was discussed at SA.  Qualcomm has concerns about the process. They see it questionable to modify Rel-17 in SA1 just for a procedural issue. They wonder why e.g. either the Dutch government does not use the 3GPP version in Rel-18 or Rel-18 Stage 1 is not transposed as ETSI standard.  TNO explained that the government is constrained to refer only to ETSI standards in regulations. Transposing the Rel-18 TSs is planned for Dec 2023, whilst the new Dutch law should become into force in Jan 2023.  Qualcomm will check internally if they have sustained issue. The 3GPP Spec Manager should be included in the loop if discussions are continued by e-mail.  2nd week: CT1 chair suggested TNO to have the Rel-17 version of the CR, so CT1 can provide the corresponding CR. Qualcomm still has objection to agree the Rel-17 CR. | Noted |
| 02 | 6.3 | [S1-221154](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221154.zip) | TNO, MINEA, Netherlands Police, one2many, SynchTechno Inc | Device based geo-fencing for EU-alert | draftCR | [23.041](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=748) |  |  | F | 17.3.0 | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [TEI17](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850047) | This draft CR shows a 23.041CR to CT1 that is proposed to be approved as a package with the Rel-17 version of 22.268CR0068 (submitted to this meeting) at the June TSGs |  | Noted |
| 03 | 6.3 | [S1-221200](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221200.zip) | Synctechno | Re-introducing eProse supporting emergency | CR | 22.268 | 0073 |  | F | 17.0.0 | Rel-17 | ePWS |  | KPN pointed out that it also has to be checked in which extend "Relaying for PWS" has been implemented. | Noted |
| 04 | 6.3 | [S1-221201](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221201.zip) | Synctechno | Re-introducing eProse supporting emergency | CR | 22.268 | 0074 |  | A | 18.0.0 | Rel-18 | ePWS | Mirror of previous CR |  | Agreed |
| 05 | 6.3 | S1-221015 | ETRI, KT, SKT, LG Uplus | Additional KPAS specific requirements | CR | [22.268](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=639) | 0069 |  | B | 16.4.0 | [Rel-16](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | PWS, ePWS | This CR proposes to add new KPAS specific requirements. |  | Withdrawn |
| 06 | 6.3 | S1-221016 | ETRI | Additional KPAS specific requirements | CR | [22.268](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=639) | 0070 |  | B | 17.0.0 | [Rel-17](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [ePWS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800052) | This CR proposes to add new KPAS specific requirements. |  | Withdrawn |
| 03 | 7.1 | [S1-221170](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221170.zip) | Hansung University, KT, LGUplus, ETRI | Pseudo-CR on suggesting definitions of RAILSS | pCR | [22.890](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3699) |  |  |  | 0.5.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_RAILSS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850044) | This pCR suggests definitions for TR22.890 | 1170r4 available C: UIC  Rev4: edited while projecting "kinf od" to be deleted  Rev5 agreed | Revised to S1-221243 |
| 04 | 7.1 | [S1-221243](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221243.zip) | Hansung University, KT, LGUplus, ETRI | Pseudo-CR on suggesting definitions of RAILSS |  |  |  |  |  |  |  |  |  | Same as 1170r5 Revision of S1-221170. | Approved |
| 05 | 7.1 | [S1-221171](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221171.zip) | Hansung University, LGUplus, KT, ETRI | Pseudo-CR on suggesting contents for overview of TR22.890 | pCR | [22.890](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3699) |  |  |  | 0.5.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_RAILSS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850044) | This pCR suggests contents for overview of TR22.890 | 1171r2 pre-approved | Revised to S1-221244 |
| 06 | 7.1 | [S1-221244](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221244.zip) | Hansung University, LGUplus, KT, ETRI | Pseudo-CR on suggesting contents for overview of TR22.890 |  |  |  |  |  |  |  |  |  | Same as 1171r2 Revision of S1-221171. No presentation | Approved |
| 08 | 7.1 | [S1-221054](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221054.zip) | KRRI | Use case of multiple trains’ stops at the same platform | pCR | [22.890](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3699) |  |  |  | 0.5.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_RAILSS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850044) |  | 1054r8 pre-approved | Revised to S1-221245 |
| 09 | 7.1 | [S1-221245](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221245.zip) | KRRI | Use case of multiple trains stops at the same platform |  |  |  |  |  |  |  |  |  | Same as 1054r8 Revision of S1-221054. No presentation | Agreed |
| 10 | 7.1 | [S1-221157](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221157.zip) | Kyonggi University | Multiple concurrent mobility services | discussion | [22.890](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3699) |  |  |  |  | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) |  | This contribution is to provide a use case for multiple concurrent mobility services with different location accuracy in Section 7. | 1157r5 available Open  Rev5: agreed | Revised to S1-221246 |
| 11 | 7.1 | [S1-221246](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221246.zip) | Kyonggi University | Multiple concurrent mobility services |  |  |  |  |  |  |  |  |  | Same as 1157r5 Revision of S1-221157. | Agreed |
| 12 | 7.1 | [S1-221172](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221172.zip) | Hansung University, LGUplus, KT, ETRI | Pseudo-CR on a use case for the operation of platform screen doors of the smart railway | pCR | [22.890](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3699) |  |  |  | 0.5.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_RAILSS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850044) | A new use case is proposed to operate the platform screen doors of the smart railway station. To operate the screen doors, many devices in the platform including CCTVs are monitored and controlled by the smart railway station system automatically and the train drivers manually via the 5G system. | 1172r1 for approval day | Noted |
| 13 | 7.1 | [S1-221173](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221173.zip) | Hansung University, LGUplus, KT, ETRI | Pseudo-CR on automatic monitoring of smart station | pCR | [22.890](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3699) |  |  |  | 0.5.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_RAILSS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850044) | A new use case is proposed to make automatic monitoring of railway smart station. It is carried out through dozens of CCTVs, a controller staff could not check all the CCTVs at a moment. To assist monitoring CCTV, an AI system gives help to the controller. The system examines dozens of CCTVs, determines an abnormal situation, and sends a warning message to the controller when the situations occurs such as illegal riding, neglected wandering of suspicious object, unauthorized entry, or user falls from the platform | 1173r1 for approval day | Noted |
| 14 | 7.1 | [S1-221174](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221174.zip) | Hansung University, LGUplus, KT, ETRI | Pseudo-CR on a use case of smart kiosk of railway smart station | pCR | [22.890](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3699) |  |  |  | 0.5.0 | [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193) | [FS\_RAILSS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850044) | A new use case is proposed to support passengers by operating the smart kiosk in railway smart station. The smart kiosk provides various information to passengers, such as location information service with 3D or metaverse enabled station map, simple ticketing service, and other information providing services via interfacing smart station devices and systems, e.g. CCTV, sensors. | 1174r1 for approval day  Rev3: | Revised to S1-221247 |
| 15 | 7.1 | [S1-221247](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221247.zip) | Hansung University, LGUplus, KT, ETRI | Pseudo-CR on a use case of smart kiosk of railway smart station |  |  |  |  |  |  |  |  |  | Same as 1174r4 Revision of S1-221174. | Agreed |
| 01 | 7.1.1 | [S1-221248](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221248.zip) | Rapporteur (Hansung University) | TR22.890v0.6.0 Study on Supporting of Railway Smart Station Services |  |  |  |  |  |  |  |  |  | First draft by Monday 23rd 23:00 UTC Comments till Wed 25th 23:00UTC Final version by Thurs 26th 23:00UTC | Agreed |
| 03 | 7.2 | [S1-221014](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221014.zip) | Telekom Deutschland GmbH | Feasibility Study on Integrated Sensing and Communication | draft TR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) | The TR 22.837 skeleton | Some delegations (e.g. Qualcomm) have doubts about the value of having "6Traffic scenarios" and "7 Relation to other standards activities". This is to be discussed by e-mail.  Rev2 agreed | Revised to S1-221249 |
| 04 | 7.2 | [S1-221249](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221249.zip) | Deutsche Telekom | Feasibility Study on Integrated Sensing and Communication |  |  |  |  |  |  |  |  |  | Same as 1014r2 Revision of S1-221014. | Approved |
| 05 | 7.2 | [S1-221114](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221114.zip) | Xiaomi Technology | Sensing Definition and Roles | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) | This document proposes Sensing Definition and Roles to be documented into TR22.837. | 1114r6 for approval day  Rev8: to be cleaned-up  Nokia object to have definitions introduced before the terms are used. Ericsson has the same view. | Noted |
| 06 | 7.2 | [S1-221115](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221115.zip) | Xiaomi Technology | Sensing mode | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) | This document proposes the sensing mode to be documented into TR22.837. | 1115r5 for approval day O: DT, Nokia  Rev5: still objections, in particular from Nokia | Noted |
| 07 | 7.2 | [S1-221147](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221147.zip) | Samsung | pCR 22.837 – Capturing the relationship between Integrated Sensing and Communication and Metaverse Services | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) | This P-CR provides means to develop FS\_Sensing separately from the FS\_Metaverse study, but to capture clearly where there are dependencies and relations. |  | Noted |
| 09 | 7.2 | [S1-221069](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221069.zip) | vivo | Use case of “Contactless sensing in smart health monitoring” | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) | This document provides a Text Proposal for the use of communication assisted sensing service about smart health monitoring. | 1069r8 available O: Siemens, Nokia  Rev9: Nokia had still several questions by e-mail which did not get answered. For vivo, the comments were not received on time. Nokia underlined problems with the mailing list. The fact is that there are still objections on the last day. Issue to be progressed between now and next meeting. | Noted |
| 10 | 7.2 | [S1-221071](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221071.zip) | OPPO | Use case of intelligent monitoring in smart home | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) | This document is to add a new use case of FS\_Sensing into TR22.837 | 1071r4 available C: Nokia (WF)  Rev4: several notes added to say that rewording is needed, KPI table still not stable so to be removed and the same applies to 5.x.6-4 (introducing the table)  Rev5 agreed. | Revised to S1-221250 |
| 11 | 7.2 | [S1-221250](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221250.zip) | OPPO | Use case of intelligent monitoring in smart home |  |  |  |  |  |  |  |  |  | Same as 1071r5 Revision of S1-221071. No presentation | Approved |
| 12 | 7.2 | [S1-221091](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221091.zip) | Qualcomm Austria RFFE GmbH | Ambient IoT devices for Smart Cities | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) |  | 1091r9 for approval day O: DT, Nokia, Vodafone  Still too many objectionson last day | Noted |
| 13 | 7.2 | [S1-221098](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221098.zip) | China Mobile Com. Corporation | New use case\_Sensing for UAV management | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) |  | 1098r5 available O: Qualcomm, Nokia, Vodafone  Rev5: still objections on last day (Vodafone, Nokia) | Noted |
| 14 | 7.2 | [S1-221104](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221104.zip) | Huawei, China Telecom, vivo | New use case: Sensing for Smart Transportation | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) |  | 1104r4 avaiable C: Qualcomm, Nokia (WF)  Rev4: "KPI" to be used instead of "performance requirements", erdior's note to be changed, editor's note to state that "base station" has to be clarified in the terminology  Rev5 agreed | Revised to S1-221251 |
| 15 | 7.2 | [S1-221251](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221251.zip) | Huawei, China Telecom, vivo | New use case: Sensing for Smart Transportation |  |  |  |  |  |  |  |  |  | Same as 1104r5 Revision of S1-221104. No presentation | Approved |
| 16 | 7.2 | [S1-221105](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221105.zip) | China Telecom | FS\_Sensing: Use Case of Weather Monitoring | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) |  | 1105r7 available C: Nokia (WF)  Rev7: same changes as for 1104 ("PR", etc)  Rev8 agreed | Revised to S1-221252 |
| 17 | 7.2 | [S1-221252](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221252.zip) | China Telecom | FS\_Sensing: Use Case of Weather Monitoring |  |  |  |  |  |  |  |  |  | Same as 1105r8 Revision of S1-221105. | Approved |
| 18 | 7.2 | [S1-221111](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221111.zip) | Xiaomi Technology | New use case of sensing for ADAS | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) | This document proposes a new use case about sensing for ADAS to be documented into TR 22.837. | 1111r7 for approval day O: DT  Objections on last day. DT: more information is needed, overall process not clear. | Noted |
| 19 | 7.2 | [S1-221113](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221113.zip) | ZTE Corporation | Network based UAV collision avoidance | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) | This contribution proposes a new use case for FS\_Sensing which is about network based sensing to avoid UAV collision. | 1113r6 available C:Nokia, Qualcomm (WF)  Rev6: [PR 5.1.6 -1] needs some rewording.  Rev7 greed | Noted |
| 20 | 7.2 | [S1-221165](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221165.zip) | Intel K.K. | FS\_Sensing Use Case: Autonomous/Assisted Driving | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) |  | 1165r02 for approval day O:Nokia, DT | Noted |
| 21 | 7.2 | [S1-221175](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221175.zip) | Philips International B.V. | New use case on distributed wireless sensing | pCR | [22.837](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4044) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Sensing](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950003) |  | 1175r4 for approval day O: Nokia | Noted |
| 01 | 7.2.1 | [S1-221253](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221253.zip) | Rapporteur (Deutsche Telekom) | TR 22.837v0.1.0 Study on Integrated Sensing and Communication |  |  |  |  |  |  |  |  |  | First draft by Monday 23rd 23:00 UTC Comments till Wed 25th 23:00UTC Final version by Thurs 26th 23:00UTC | Agreed |
| 03 | 7.3 | [S1-221010](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221010.zip) | OPPO | TR skeleton for New SID on Study on Ambient power-enabled Internet of Things | discussion |  |  |  |  |  | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) |  |  | This is to be discussed by e-mail.  Rev1 approved (no subsections in section 6) | Revised to S1-221254 |
| 04 | 7.3 | [S1-221254](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221254.zip) | OPPO | TR skeleton for New SID on Study on Ambient power-enabled Internet of Things |  |  |  |  |  |  |  |  |  | Skeleton] Same as 1010r1 Revision of S1-221010. | Approved |
| 05 | 7.3 | [S1-221085](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221085.zip) | OPPO | Scope of TR 22.840 on study of ambient power-enabled IoT | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) | Adding scope of TR 22.840 on study of ambient power-enabled IoT | 1085r5 for approval day O: DT | Noted |
| 06 | 7.3 | [S1-221086](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221086.zip) | OPPO | Introduction of TR 22.840 on study of ambient power-enabled IoT | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) | Adding introduction of TR 22.840 on study of ambient power-enabled IoT | 1086r3 for approval day C: Oppo  Rev4 approved | Revised to S1-221255 |
| 07 | 7.3 | [S1-221255](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221255.zip) | OPPO | Introduction of TR 22.840 on study of ambient power-enabled IoT |  |  |  |  |  |  |  |  |  | Same as 1086r4 Revision of S1-221086. | Approved |
| 09 | 7.3 | [S1-221053](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221053.zip) | vivo | Ambient\_IoT in personal belongings finding | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) | This document provides a Text Proposal for the use case about using Ambient\_IoT services for personal belongings finding. | 1053r9 available C: Nokia (WF), DT  Rev10: still no consensus (objection from DT). For DT, this is not stable enough and needs to be further progressed.  Vivo and Oppo complained about comments already discussed via email and all the revisions are made accordingly. But the chair can only note that there is no consensus on the last day.  It was proposed to add a note stating "all these requirements are FFS". This is acceptable for DT but not for Qualcomm, since this can be applied to all documents. Nokia agree with this statement.  Xiaomi has also concerns about a document being noted for one | Noted |
| 10 | 7.3 | [S1-221084](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221084.zip) | OPPO | Usecase of Discovery of personal item at smart home | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) | This document is to add a new usecase of FS\_AmbientIoT into TR22.840 | 1084r3 for approval day O:Ericsson (WF)  Rev3: asked to be merged with 1053 | Merged into 1053r9 |
| 11 | 7.3 | [S1-221090](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221090.zip) | Qualcomm Austria RFFE GmbH | Coordinated Sensing Operations | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) |  | 1090r8 for approval day  Rev8: still no consensus | Noted |
| 12 | 7.3 | [S1-221099](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221099.zip) | China Mobile Com. Corporation | New use case\_Ambient\_IoT for automated warehousing | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) |  | 1099r8 available C: Nokia (WF), Ericsson  Rev8: table in 5.x.6 should be replaced by TBD at this stage (and associated req 2)  Rev9 approved | Revised to S1-221256 |
| 13 | 7.3 | [S1-221256](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221256.zip) | China Mobile | New use case\_Ambient\_IoT for automated warehousing |  |  |  |  |  |  |  |  |  | Same as 1099r9 Revision of S1-221099. | Approved |
| 14 | 7.3 | [S1-221116](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221116.zip) | ZTE Corporation | medical instruments inventory management and positioning use case for Ambient-IoT | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) | This contribution proposes a new use case about medical instruments inventory management and positioning operation for FS\_AmbientIoT | 1116r9 available C: Nokia, Ericsson (WF)  Rev9: same request from Qualcomm to remove the KPI table  Rev10 approved | Revised to S1-221257 |
| 15 | 7.3 | [S1-221257](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221257.zip) | ZTE | medical instruments inventory management and positioning use case for Ambient-IoT |  |  |  |  |  |  |  |  |  | Same as 1116r10 Revision of S1-221116. | Approved |
| 16 | 7.3 | [S1-221118](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221118.zip) | Xiaomi Technology | New use case: Tracking for Ambient IoT | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) | This document proposes a new use case about tracking for Ambient IoT to be documented into TR22.840. | 1118r5 available C: Ericsson, DT (discussion?)  Rev5: the service flows still cannot be related to the requirements | Noted |
| 17 | 7.3 | [S1-221151](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221151.zip) | China Southern Power Grid Co. | pCR on use case of Ambient IoT devices in smart grids | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) |  | 1156r7 available O: Qualcomm, Siemens  Rev7: no requirement left. Use cases should not be introduced if not associated with potential requirements (same rule for all Study items)  The first requirement can be reintroduced.  Rev8 approved (exceptionally, as a compromise, Qualcomm can accept to keep unstable KPIs). | Revised to S1-221258 |
| 18 | 7.3 | [S1-221258](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221258.zip) | China Southern Power Grid Co. | pCR on use case of Ambient IoT devices in smart grids |  |  |  |  |  |  |  |  |  | Same as 1151r8 Revision of S1-221151. | Approved |
| 19 | 7.3 | [S1-221156](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221156.zip) | KPN | AmbientIoT Traffic scenario on flower auction | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) |  | 1059r3 for approval day C: Ericsson (WF)  Rev4: same request from Qualcomm about removing unstable KPIs. KPN have concerns that this type of request comes for first time on the last day when it was available on time.  A compromise is to put all values in the table in between square brackets.  Rev5 approved | Revised to S1-221259 |
| 20 | 7.3 | [S1-221259](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221259.zip) | KPN | AmbientIoT Traffic scenario on flower auction |  |  |  |  |  |  |  |  |  | Same as 1059r5 Revision of S1-221156. | Approved |
| 21 | 7.3 | [S1-221159](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221159.zip) | Alibaba Group | Use cases for supporting Ambient power-enabled IoT in non-public network | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.1.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) |  | 1159r04 available C: Nokia, DT, Siemens  Rev4: more editing  Rev5 approved | Revised to S1-221260 |
| 22 | 7.3 | [S1-221260](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221260.zip) | Alibaba | Use cases for supporting Ambient power-enabled IoT in non-public network |  |  |  |  |  |  |  |  |  | Same as 1159r8 Revision of S1-221159. | Approved |
| 23 | 7.3 | [S1-221160](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221160.zip) | Huawei Technologies France | New Use Case\_Intralogistics in automobile manufacturing | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 19.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) | This document provides a Text Proposal for the use case about using Ambient\_IoT services for intralogistics in automobile manufacturing. | 1160r12 for approval day C: Siemenes, Qualcomm  Rev15: same request from Qualcomm to delete the KPI table in 5.x.6.1. Siemens and DT commented that "AAA" is quite misleading as a name for manufacturer since it means "American Automobile Association". This will be changed next time.  Rev16 approved | Revised to S1-221261 |
| 24 | 7.3 | [S1-221261](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221261.zip) | Huawei | New Use Case\_Intralogistics in automobile manufacturing |  |  |  |  |  |  |  |  |  | Same as 1160r16 Revision of S1-221160. | Approved |
| 25 | 7.3 | [S1-221162](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221162.zip) | China Telecom Corporation Ltd. | New Use Case\_Ambient power-enabled IoT sensors in smart homes | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) |  | 1162r7 for approval day C: Qualcomm (WF)  Rev7: same comment on KPI table  Rev8 approved | Revised to S1-221262 |
| 26 | 7.3 | [S1-221262](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221262.zip) | China Telecom | New Use Case\_Ambient power-enabled IoT sensors in smart homes |  |  |  |  |  |  |  |  |  | Same as 1162r8 Revision of S1-221162. | Approved |
| 27 | 7.3 | [S1-221166](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221166.zip) | Intel K.K. | FS\_AmbientIoT Use Case: Industrial Wireless Sensor Network (IWSN) | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) |  | 1166r04 for approval day C: Qualcomm (WF), DT  Rev5: no consensus | Noted |
| 28 | 7.3 | S1-221049 | Apple | IoT Device Lifecycle Use Case | pCR | [22.840](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4045) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AmbientIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950004) |  |  | Withdrawn |
| 01 | 7.3.1 | [S1-221263](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221263.zip) | Rapporteur (OPPO) | TR 22.840v0.1.0 Study on Ambient power-enabled Internet of Things |  |  |  |  |  |  |  |  |  | First draft by Monday 23rd 23:00 UTC Comments till Wed 25th 23:00UTC Final version by Thurs 26th 23:00UTC | Agreed |
| 03 | 7.4 | [S1-221011](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221011.zip) | Samsung (Rapporteur) | Feasibility Study on Localized Mobile Metaverse Services | draft TR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) | The TR 22.856 skeleton and cover sheet. | skeleton | Revised to S1-221264 |
| 04 | 7.4 | [S1-221264](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221264.zip) | Samsung (Rapporteur) | Feasibility Study on Localized Mobile Metaverse Services |  |  |  |  |  |  |  |  |  | skeleton] Same as 1011r2 Revision of S1-221011. No presentation | Approved |
| 05 | 7.4 | [S1-221012](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221012.zip) | Samsung (Rapporteur) | pCR 22.856 - Scope | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) | This pseudo-CR proposes a scope for the FS\_Metaverse study TR 22.856. | 1012r2 approved | Revised to S1-221265 |
| 06 | 7.4 | [S1-221265](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221265.zip) | Samsung (Rapporteur) | pCR 22.856 - Scope |  |  |  |  |  |  |  |  |  | Same as 1012r2 Revision of S1-221012. No presentation | Approved |
| 07 | 7.4 | [S1-221013](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221013.zip) | Samsung (Rapporteur) | pCR 22.856 – Capturing the relationship between Integrated Sensing and Communication Relationship and Metaverse Services | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) | This pseudo-CR provides an overview and template for capturing dependencies in Metaverse use cases on sensing use cases in TR 22.837. |  | Noted |
| 08 | 7.4 | [S1-221148](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221148.zip) | Samsung | pCR 22.856 – Informative Annex on Avatar Services | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) | This annex provides background information for how Avatars have been used in the past and for what purpose. | 1148r1 approved | Revised to S1-221266 |
| 09 | 7.4 | [S1-221266](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221266.zip) | Samsung | pCR 22.856 Informative Annex on Avatar Services |  |  |  |  |  |  |  |  |  | Same as 1148r1 Revision of S1-221148. No presentation | Approved |
| 11 | 7.4 | [S1-221035](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221035.zip) | Charter Communications, Inc | PCR on Identification of a User and Object | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) | to add a new use case in the TR 22.856 to enable virtual representation of a user and an object | 1035r5 for approval day | Noted |
| 12 | 7.4 | [S1-221081](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221081.zip) | China Mobile International Ltd, Tencent | pCR new use case on supporting multi-application coordination in metaverse | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) |  | 1081r3 for approval day O: Qualcomm, DT  Rev3: still objections | Noted |
| 13 | 7.4 | [S1-221087](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221087.zip) | Tencent,Tencent Cloud, China Telecom, China Mobile, China Unicom | New Use Case for Mobile Metaverse: 5G-enabled Traffic Flow Simulation and Situational Awareness | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) |  | 1087r11 available C: Nokia  Rev11: still ongoing comments, incorporated in r13 (r12 already used by mistake by the author)  Rev13 approved | Revised to S1-221267 |
| 14 | 7.4 | [S1-221267](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221267.zip) | Tencent,Tencent Cloud, China Telecom, China Mobile, China Unicom | New Use Case for Mobile Metaverse: 5G-enabled Traffic Flow Simulation and Situational Awareness |  |  |  |  |  |  |  |  |  | Same as 1087r13 Revision of S1-221087. No presentation | Approved |
| 15 | 7.4 | [S1-221088](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221088.zip) | Tencent, Tencent Cloud | Mobile Metaverse Based Selective Multi-modal Feedback Service | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) |  |  | Noted |
| 16 | 7.4 | [S1-221129](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221129.zip) | Orange | pCR 22.856 – New use case – Access to universes | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) | The contribution proposes to add, in the draft 3GPP TR 22.856, a new use case concerning the access to universes. This includes the choice of a digital representation and interconnection between visited universes of the Metaverse. | 1129r3 for approval day O: Qualcomm  Rev3: still objections | Noted |
| 17 | 7.4 | [S1-221149](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221149.zip) | Samsung | pCR 22.856 – Localized Metaverse Services Use Case | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) | This P-CR provides a use case considering advanced ‘location based services’ for the FS\_Metaverse study. | 1149r3 for approval day C: Qualcomm (WF)  Rev4: first editor's note to be removed  Rev5 approved | Revised to S1-221268 |
| 18 | 7.4 | [S1-221268](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221268.zip) | Samsung | pCR 22.856 Localized Metaverse Services Use Case |  |  |  |  |  |  |  |  |  | Same as 1149r5 Revision of S1-221149. | Approved |
| 19 | 7.4 | [S1-221158](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221158.zip) | Huawei Technologies R&D UK | pCR on “Collaborative and concurrent engineering in product design using metaverse services” | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) |  | 1158r6 available C: Qualcomm (WF)  Rev6: track changes to be simplified  Rev7 approved | Revised to S1-221269 |
| 20 | 7.4 | [S1-221269](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221269.zip) | Huawei | pCR on Collaborative and concurrent engineering in product design using metaverse services |  |  |  |  |  |  |  |  |  | Same as 1158r7 Revision of S1-221158. | Approved |
| 21 | 7.4 | [S1-221164](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221164.zip) | Intel K.K. | FS\_Metaverse Use Case: Immersive Education/Entertainment | pCR | [22.856](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4046) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_Metaverse](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950005) |  | 1164r03 for approval day O: Qualcomm | Noted |
| 01 | 7.4.1 | [S1-221270](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221270.zip) | Rapporteur (Samsung) | TR 22.856v0.1.0 Study on Localized Mobile Metaverse Services |  |  |  |  |  |  |  |  |  | First draft by Monday 23rd 23:00 UTC Comments till Wed 25th 23:00UTC Final version by Thurs 26th 23:00UTC | Agreed |
| 03 | 7.5 | [S1-221092](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221092.zip) | China Unicom | TR22851-skeleton | draft TR | [22.851](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4047) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_NetShare](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950006) | This doc is the skeleton of TR22.851. |  | Approved |
| 04 | 7.5 | [S1-221120](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221120.zip) | China Unicom | Pseudo-CR on Introduction of TR 22.851 | pCR | [22.851](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4047) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_NetShare](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950006) | In order to contribute to the Introduction of TR 22.851, this document describes the most basic content of the TR. With the further work of TR, it would be improved. | 1120r2 approved | Revised to S1-221271 |
| 05 | 7.5 | [S1-221271](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221271.zip) | China Unicom | Pseudo-CR on Introduction of TR 22.851 |  |  |  |  |  |  |  |  |  | Same as 1120r2 Revision of S1-221120. No presentation | Approved |
| 06 | 7.5 | [S1-221125](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221125.zip) | China Unicom | Pseudo-CR on Scope of TR 22.851 | pCR | [22.851](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4047) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_NetShare](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950006) | In order to contribute to the Scope of TR 22.851, this document describes the most basic scope of the TR. When more aspects of the requirements are provided, an additional scope description will be provided. | 1125r4 approved | Approved |
| 08 | 7.5 | [S1-221097](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221097.zip) | ZTE Wistron Telecom AB | Pseudo CR on non-N2 Network Sharing | pCR | [22.851](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4047) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_NetShare](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950006) | Use Case scenario for non-N2 sharing network is described. Potential requirements are defined and the Reference part updated in TR 22.851 | 1097r7 for approval day C:Nokia  Rev7: in the EN: should be "requirementS", since it applies to both  Rev 8 approved | Revised to S1-221272 |
| 09 | 7.5 | [S1-221272](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221272.zip) | ZTE Wistron Telecom AB | Pseudo CR on non-N2 Network Sharing |  |  |  |  |  |  |  |  |  | Same as 1097r8 Revision of S1-221097. No presentation | Approved |
| 10 | 7.5 | [S1-221100](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221100.zip) | CATT, China Unicom | Pseudo-CR on use case of security for non-N2 sharing network | pCR | [22.851](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4047) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_NetShare](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950006) |  | 1100R4 for approval day O: Nokia, Qualcomm  Still objection on last day. | Noted |
| 11 | 7.5 | [S1-221102](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221102.zip) | China Unicom | Pseudo-CR on use case of service for non-N2 sharing network | pCR | [22.851](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4047) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_NetShare](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950006) | The doc introduce the potential service requirements for the non-N2 shared network in TR22.851. | 1102r4 available O: Nokia  Rev4: still objection from Nokia, who prefer to further work on this topic.  China Unicom has concerns that the comments are made late, but wil work offline with Nokia. | Noted |
| 12 | 7.5 | [S1-221103](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221103.zip) | vivo, China Unicom | use case of mobility for non-N2 shared network | pCR | [22.851](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=4047) |  |  |  | 0.0.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_NetShare](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950006) |  |  | Noted |
| 01 | 7.5.1 | [S1-221273](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221273.zip) | Rapporteur (China Unicom) | TR 22.851v0.1.0 Study on Network Sharing Aspects |  |  |  |  |  |  |  |  |  | First draft by Monday 23rd 23:00 UTC Comments till Wed 25th 23:00UTC Final version by Thurs 26th 23:00UTC | Agreed |
| 02 | 7.6 | [S1-221058](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221058.zip) | KRRI | “Virtual Coupling data communication” use case | CR | [22.989](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3109) | 0013 |  | B | 18.4.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_FRMCS\_Ph3](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950007) |  | 1058r3 pre-agreed | Agreed |
| 03 | 7.6 | [S1-221131](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221131.zip) | Union Inter. Chemins de Fer | Real-time automatic translation of languages-related use cases | CR | [22.989](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3109) | 0014 |  | B | 18.4.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_FRMCS\_Ph3](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950007) |  | 1131r1 pre-agreed | Agreed |
| 04 | 7.6 | S1-221055 | KRRI | “Virtual Coupling data communication” use case | CR | [22.889](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3162) | 0171 |  | B | 17.4.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_FRMCS\_Ph3](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950007) |  |  | Withdrawn |
| 02 | 7.7 | [S1-221218](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221218.zip) | Oppo | 22.874v18.2.0 TR index | CR |  |  |  |  |  |  |  | In the end, a new TR will be created and not a continuation of the previous TR. | Orig. for approval day | Approved |
| 03 | 7.7 | [S1-221066](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221066.zip) | CTSI | Use Case of AI model transfer management through direct device connection | CR | [22.874](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3721) | 0008 |  | B | 18.2.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AIML\_Ph2](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950008) |  | 1066r6 for approval day  Rev7: should have been a pCR. Qualcomm does not see the material as being stable enough at this meeting: the 1st requirement has to be clarified.  New tdoc number to be given for pCR, to be noted too. | Noted |
| 04 | 7.7 | [S1-221274](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221274.zip) | CTSI | Use Case of AI model transfer management through direct device connection |  |  |  |  |  |  |  |  |  |  | Noted |
| 05 | 7.7 | [S1-221070](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221070.zip) | OPPO | uUse case of direct device connection assisted Federated Learning | CR | [22.874](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3721) | 0009 |  | B | 18.2.0 | [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194) | [FS\_AIML\_Ph2](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=950008) | Using Direct Device Connection to assist FL (i.e. get more UE members involved for FL task) so that the FL performance can be increased. | 1070r6 available  Rev6: Nokia still has some concerns.  New tdoc number to be given for pCR, to be noted too. | Noted |
| 06 | 7.7 | [S1-221275](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221275.zip) | OPPO | Use Case of direct device connection assisted Federated Learning |  |  |  |  |  |  |  |  |  |  | Noted |
| 01 | 7.7.1 | [S1-221276](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221276.zip) | Rapporteur (OPPO) | TR 22.874v0.1.0 Study on AI/ML Model Transfer\_Phase2 |  |  |  |  |  |  |  |  |  | First draft by Monday 23rd 23:00 UTC Comments till Wed 25th 23:00UTC Final version by Thurs 26th 23:00UTC | Agreed |
| 01 | 10.2 | [S1-221277](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221277.zip) | Hansung University | FS\_RAILSS – Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 02 | 10.2 | [S1-221278](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221278.zip) | Deutsche Telekom | FS\_Sensing – Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 03 | 10.2 | [S1-221279](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221279.zip) | OPPO | FS\_AmbientIoT – Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 04 | 10.2 | [S1-221280](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221280.zip) | Samsung | FS\_Metaverse – Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 05 | 10.2 | [S1-221281](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221281.zip) | China Unicom | FS\_NetShare – Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 06 | 10.2 | [S1-221282](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221282.zip) | UIC | FS\_FRMCS\_Ph3– Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 07 | 10.2 | [S1-221283](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221283.zip) | OPPO | FS\_AIML\_Ph2– Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 08 | 10.2 | [S1-221284](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221284.zip) | Ericsson | FS\_RVAS – Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 09 | 10.2 | [S1-221285](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221285.zip) | Novamint | FS\_ 5GSAT\_Ph3– Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 10 | 10.2 | [S1-221286](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221286.zip) | China Mobile | FS\_UAV\_Ph3– Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 11 | 10.2 | [S1-221287](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221287.zip) | Qualcomm | FS\_DualSteer – Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 12 | 10.2 | [S1-221288](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221288.zip) | China Mobile | FS\_EnergieServ – Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |
| 13 | 10.2 | [S1-221289](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_98e_EM_May2022/Docs/S1-221289.zip) | LGE | FS\_SOBOT – Status report |  |  |  |  |  |  |  |  |  | Expected by by Monday 23rd 23:00 UTC | Noted |