**3GPP TSG-SA WG1 Meeting #102 draft\_S1-231004**

**Berlin, Germany, 22-26 May 2023**

**Draft Minutes of**

**3GPP TSG SA WG1   
Meeting #101**

Athens, Greece

20 – 24 February 2023

Chairman: Jose Almodovar, TNO

Meeting Secretary: Alain Sultan, ETSI/MCC

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# 1 Opening of the meeting

The meeting #101 of 3GPP SA1 took place from the 20th till the 24th of February 2023, at the Intercontinental Hotel in Athens, Greece. It was a hybrid meeting, composed mainly of a physical meeting but also, in addition, a possibility for remote participants to attend electronically.

The SA1 chair, Mr. Jose Almodóvar (KPN), opened the meeting on Monday 20th of February at 9AM local time.

## 1.1 Agenda and scheduling

[**S1-230000**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230000.zip) **from** SA WG1 Chair: ***1st Draft Agenda for SA1#101*** (agenda)

***Conclusion:*** Revised to S1-230001

[**S1-230001**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230001.zip) **from** SA WG1 Chair: ***2nd Draft Agenda for SA1#101*** (agenda)

***Discussion:*** Revision of S1-230000.

***Conclusion:*** Revised to S1-230002

[**S1-230002**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230002.zip) **from** SA WG1 Chair: ***Agenda for SA1#101 with tdoc allocation*** (agenda)

***Discussion:*** Revision of S1-230000. Revision of S1-230001.

This is the last meeting where new use cases are introduced.

***Conclusion:*** Approved

## 1.2 IPR, antitrust and competition laws

IPR call reminder

I draw your attention to your obligations under the 3GPP Partner Organizations’ IPR policies. Every Individual Member organization is obliged to declare to the Partner Organization or Organizations of which it is a member any IPR owned by the Individual Member or any other organization which is or is likely to become essential to the work of 3GPP.

Delegates are asked to take note that they are thereby invited:

• to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP.

• to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Information Statement and the Licensing declaration forms.

Antitrust policy Reminder

I also draw your attention to the fact that 3GPP activities are subject to all applicable antitrust and competition laws and that compliance with said laws is therefore required of any participant of this WG meeting including the Chairman and Vice Chairman. In case of question I recommend that you contact your legal counsel.

The leadership shall conduct the present meeting with impartiality and in the interests of 3GPP.

Furthermore, I would like to remind you that timely submission of work items in advance of TSG/WG meetings is important to allow for full and fair consideration of such matters.

## 1.3 Previous SA1 meeting report

[**S1-230004**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230004.zip) from ETSI MCC: ***Draft minutes of SA1#100*** (report)

***Conclusion:*** Revised to S1-230005

[**S1-230005**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230005.zip) from ETSI MCC: ***Minutes of SA1#100*** (report)

***Discussion:*** Revision of S1-230004.

***Conclusion:*** Approved

## 1.4 Information for delegates

[**S1-230009**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230009.zip) from SA WG1 Chair: ***Planning Stage1 Rel-19*** (other)

***Summary:***  The chair focussed on the Rel-19 timeline, in particular for SA1.

***Discussion:*** The Rel-19 timeline is approved by SA1, i.e. 80% ready by September (i.e. August meeting for SA1) and 100% ready by December.

Nokia has concern with consolidation: some time should be considered for this process.

***Conclusion:*** Agreed

[**S1-230003**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230003.zip) **from** ETSI MCC: ***Extract of the 3GPP Work Plan for SA1#101*** (Work Plan)

***Conclusion:*** Noted

[**S1-230007**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230007.zip) **from** ETSI MCC: ***MCC info on CR Rules*** (other)

***Discussion:*** Document to be considered off-line.

***Conclusion:*** Noted

[**S1-230008**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230008.zip) from ETSI MCC: ***MCC info on WID names*** (other)

***Discussion:*** Document to be considered off-line.

***Conclusion:*** Noted

Other information:

Draft TR/TS to SA plenary for information: delegates are encouraged to send draft TR/TS for information as soon as there is useful content to be reviewed. Draft TR/TS can be sent to SA plenary for information more than once.

Drafting p-CRs:

All changes must be shown as revision marks against existing text in the draft TS/TR, otherwise p-CRs may be Noted

For more info: <ftp://ftp.3gpp.org/tsg_sa/WG1_Serv/Delegate_Guidelines_v10.doc>

All documents for this meeting are stored in:

<https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_100_Toulouse/Docs>

## 1.5 Information for rapporteurs

"Beginner's guide" for writing a new TS/TR is available at <http://www.3gpp.org/specifications-groups/delegates-corner/writing-a-new-spec>

For detailed drafting guidelines, please see TR 21.801

Rapporteurs are expected to produce a work item/study item status report for the end of the meeting under 10.2.

For draft TR/TS, the rapporteur is expected to update the draft TR/TS with all contributions agreed at the meeting before the meeting is closed.

## 1.6 Working agreements

There was no contribution for this agenda item.

# 2 Reports and action items

[**S1-230006**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230006.zip) **from** SA WG1 Chair: ***SA1-related topics at SA#98e*** (report)

***Conclusion:*** Noted

# 3 Liaison Statements (including related contributions)

## 3.1 LSs on Network selection for specific consumer type mobiles

[**S1-230035**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230035.zip) from C1-227136: ***Network selection for specific consumer type mobiles*** (LS in)

***Summary:*** TO:

CT1 request SA1 to consider if any action on SA1’s part is needed

***Discussion:*** See proposed answer in 179

***Conclusion:*** Replied into 0739

[**S1-230179**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230179.zip) from SA1: ***[Draft] Reply LS on Network selection for specific consumer type mobile*** (LS out)

***Summary:***  SA1 thanks CT1 for forwarding the LS from GCF-CAG and would like to provide SA1’s views and answers to the questions raised by GCF-CAG.

SA1 would like to confirm there is no requirement of not mandating the implementation of Manual Network selection mode for any specific type, categories or characteristics of mobile devices and would not like to make exceptions for specific or market consumables.

***Discussion:*** There is a general support for this LS (e.g. KPN, Huawei, Telefonica, etc).

A reference can be added to 22.011.

It is suggested to write the text in a positive way.

The text on exceptions is to be deleted.

***Conclusion:*** Revised to S1-230323

[**S1-230323**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230323.zip) **from** OPPO: ***[Draft] Reply LS on Network selection for specific consumer type mobile*** (LS out)

***Summary:*** Replaces S1-230179

***Discussion:*** Revision of S1-230179.

***Conclusion:*** Revised to S1-230739

[**S1-230739**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230739.zip) **from** SA1: ***LS to CT1, GCF-CAG (cc CT6, RAN5, PTCRB Plenary, PTCRB IoT WG) on reply on Network selection for specific consumer type mobile*** (LS out)

***Summary:*** Replaces S1-230323

***Discussion:*** Revision of S1-230179. Revision of S1-230323.

***Conclusion:*** Agreed

## 3.2 LSs on Emergency service support over ProSe relayNetwork selection for specific consumer type mobiles

[**S1-230040**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230040.zip) from S2-2211410: ***LS on service requirement for emergency service support over ProSe relay*** (LS in)

***Summary:*** TO:

SA2 ask SA1 to confirm that a Relay UE can prioritize its own emergency access and stop relaying the Remote UE’s emergency service if such need arises. SA2 would like to clarify that the scope of the above agreement is Layer-3 only in Rel-18 study.

***Discussion:*** Proposed answer in 0031.

***Conclusion:*** Replied into 0740

[**S1-230031**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230031.zip) from vivo: ***Relay LS on service requirement for emergency service support over ProSe relay*** (LS out)

***Summary:***  Proposed answer to Q4:

Q4: While a Relay UE is providing emergency connectivity services support for a Remote UE, if the Relay UE needs to make emergency access of its own, what if any requirements for the Relay UE to continue to provide emergency access to the Remote UE? SA2 assumes that a Relay UE may provide emergency service access to only one Remote UE at any time.

SA1 response to Q4:

There are no service requirements on relative priority between concurrent emergency sessions.

***Conclusion:*** Revised to S1-230328

[**S1-230328**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230328.zip) **from** vivo: ***Relay LS on service requirement for emergency service support over ProSe relay*** (LS out)

***Summary:*** Replaces S1-230031

***Discussion:*** Revision of S1-230031.

Remove square brackets.

***Conclusion:*** Revised to S1-230740

[**S1-230740**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230740.zip) **from** SA1: ***LS to SA2 on service requirement for emergency service support over ProSe relay*** (LS out)

***Summary:*** Replaces S1-230328

***Discussion:*** Revision of S1-230031. Revision of S1-230328.

***Conclusion:*** Agreed

## 3.3 LSs on KPIs for AI/ML model transfer in 5GS

[**S1-230044**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230044.zip) from SA2: ***LS about KPIs for AI/ML model transfer in 5GS*** (LS in)

***Summary:*** TO:

SA2 asks SA1 to review the KPIs in clause 7.10 of TS 22.261 and provide feedback to a series of questions.

***Discussion:*** See proposed answers in 0109 and 173.

***Conclusion:*** Replied in 0324

[**S1-230109**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230109.zip) from Qualcomm : ***Draft reply LS on AI-ML KPIs*** (LS out)

***Summary:***  Following answers are proposed:

Q1: Could SA1 check whether the 2 ms Max allowed DL end-to-end latency in Table 7.10-1 of TS 22.261 for Split AI/ML image recognition is really necessary KPI value for 5GC? If not, SA2 kindly asks SA1 to revise this KPI.

[SA1 answer]: Assuming SA2 is referring to the Max allowed UL end-to-end latency in Table 7.10-1 of TS 22.261 (see below), SA1 agreed to revise the KPI value, as per the CR in 0110.

Q2: Could SA1 clarify if it is really necessary to update the model in 1 sec?

[SA1 answer]: 1sec is confirmed to be a suitable requirement.

Q3: SA2 would like to ask if any suggested PDB value from SA1? For example, Does PDB = 10ms for AI/ML inference between UE and Application Function and PDB = 100ms for AI/ML model downloading/Federated learning can fulfil the SA1 requirement or not?

[SA1 answer]: the indicated PDB values are reasonable.

Q4: Any other feedback SA1 would like to provide?

[SA1 answer]: no further feedback.

***Discussion:*** See Oppo's answer too in 173/175

***Conclusion:*** Revised to S1-230324

[**S1-230324**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230324.zip) **from** SA1: ***LS to SA2 on reply on AI-ML KPIs*** (LS out)

***Summary:*** Replaces S1-230109

***Discussion:*** Revision of S1-230109.

***Conclusion:*** Agreed

[**S1-230110**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230110.zip) from Qualcomm: ***Clarification on AI-ML KPIs*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0675 cat F v.18.8.0, [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193), WID: [AIML-MT, TEI-18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920030))

***Discussion:*** Why TEI-18?

***Conclusion:*** Revised to S1-230741

[**S1-230741**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230741.zip) **from** Qualcomm: ***Clarification on AI-ML KPIs*** (CR to 22.261 #0675r1 cat F v.18.8.0, Rel-18, WID: AIML\_MT)

***Summary:*** Replaces S1-230110

***Discussion:*** Why TEI-18? Revision of S1-230110.

***Conclusion:*** Agreed

[**S1-230173**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230173.zip) from OPPO: ***[Draft] Reply LS on KPIs for AIML model transfer in 5GS*** (LS out)

***Summary:*** [Draft] Reply LS on KPIs for AIML model transfer in 5GS

***Conclusion:*** Noted

[**S1-230175**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230175.zip) from OPPO: ***Discussion on KPI value of R18 AIML Model Transfer (AMMT)*** (discussion)

***Summary:*** This document analyse the question provided in S2-2300559 and provides the proposal answer to each question.

Proposal-1: change the value of “intermediate data uploading latency” from 2ms to 10ms, which aligns the value defined for the similar service motion-to-photon, remote-driving, remote-controlled robotics

Proposal-2: confirm the 1 second for model downloading is a minimum latency to be fulfilled. Also mention the real time service needs to download a model in a range of 1~3 seconds in the LS reply.

Proposal-3: Confirm the suggested value PDB=100ms for AIML model downloading is fine to SA1, while the PDB for AIML inference should be further reduced to 4ms suggested by SA1. Meanwhile, SA1 would like to notify SA2 though the expected PDB for AI inference is 4ms, the payload size (intermediate data) is small such as 0.27Mbyte only.

Proposal-4: answer in the LS reply, that given in the special usage of AIML traffic (for example, the model training data is not normally consumed by the user, a capability needs to be distinguished so that, depending on the users' agreement with their operator, the user is not charged for such model training data transfer usage), SA1 considers different QoS flows with their respective dedicated 5QIs for AIML traffic (inference, model downloading, federated learning) will not only help a good QoS performance but also to distinguish the traffic for operator’s better policy and charging control.

***Discussion:*** Overall, Qualcomm and Oppo's proposed answers are not so far, and can be combined.

Talks are encouraged offline.

Qualcomm's one to be used as a basis.

***Conclusion:*** Noted

## 3.4 LSs on Ad hoc group

[**S1-230048**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230048.zip) from S6-230288: ***Ad hoc group*** (LS in)

***Summary:*** TO:

SA6 asks SA1 to provide answers to a series of questions on the use of ad hoc groups.

***Discussion:*** For the Police of the Netherlands, an emergency alert is something sent to a group, it is not a trigger.

***Conclusion:*** Replied into 0780

[**S1-230292**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230292.zip) from Union Inter. Chemins de Fer: ***Draft reply LS on ad-hoc group*** (LS out)

***Summary:*** UIC proposes SA1 to answer by the following to SA6:

Question 1: Whether an Ad hoc group communication shall also be tied to that Ad hoc group (used for an emergency alert)?

Answer 1: Yes,

Question 2: Whether an Ad hoc group communication can be started on that Ad hoc group (used for an emergency alert)?

Answer 2: Yes,

Question 3: Whether the Ad hoc group is deleted (and the alert state is cancelled) when the Ad hoc group communication is terminated? Or is there a need to extend the lifetime of an Ad hoc group when the Ad hoc group communication is terminated if an Ad hoc group emergency alert is still active for the same Ad hoc group?

Answer 3:

The termination of the Ad hoc group emergency communication does not cancel the Ad hoc group emergency alert.

Question 4: Whether the Ad hoc group is deleted (and the Ad hoc group communication is terminated) when the alert state is cancelled? Or is there a need to extend the lifetime of an Ad hoc group when the alert state is cancelled because the Ad hoc group communication remains up?

Answer 4: The cancellation of the Ad hoc group emergency alert does not terminate the Ad hoc group emergency communication.

***Discussion:*** The CR is to be revised in 322.

***Conclusion:*** Revised to S1-230325

[**S1-230325**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230325.zip) **from** Nokia, Nokia Shanghai Bell, Deutsche Telekom: ***Reply LS on Ad hoc group*** (LS out)

***Summary:*** Replaces S1-230292

***Discussion:*** Revision of S1-230292.

***Conclusion:*** Revised to S1-230749

[**S1-230749**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230749.zip) **from** Union Inter. Chemins de Fer: ***Draft reply LS to SA6 on ad-hoc group*** (LS out)

***Summary:*** Replaces S1-230325

***Discussion:*** dates of next meeting wrong, revisions, two CRs can be added

***Conclusion:*** Revised to S1-230780

[**S1-230780**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230780.zip) **from** SA1: ***LS to SA6 on reply on ad-hoc group*** (LS out)

***Summary:*** Replaces S1-230749

***Discussion:*** Revision of S1-230292. Revision of S1-230325. Revision of S1-230749. No track changes and attachments both CRs, Next meetings

***Conclusion:*** Agreed

[**S1-230322**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230322.zip) **from** UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell: ***Introduction of MCX Service Ad hoc Group Emergency Alert*** (CR to 22.28 #0158 cat B v.18.2.0, Rel-18, WID: AHGC)

***Conclusion:*** Revised to S1-230750

[**S1-230750**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230750.zip) **from** UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell: ***Introduction of MCX Service Ad hoc Group Emergency Alert*** (CR to 22.280 #0158r1 cat B v.18.2.0, Rel-18, WID: AHGC)

***Summary:*** Replaces S1-230322

***Discussion:*** Revision of S1-230322.

***Conclusion:*** Agreed

[**S1-230686**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230686.zip) **from** UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell: ***Introduction of MCX Service Ad hoc Group Emergency Alert*** (CR to 22.28 #0159 cat A v.19.0.0, Rel-18, WID: AHGC)

***Conclusion:*** Revised to S1-230751

[**S1-230751**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230751.zip) **from** UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell: ***Introduction of MCX Service Ad hoc Group Emergency Alert*** (CR to 22.280 #0159r1 cat A v.19.0.0, Rel-19, WID: AHGC)

***Summary:*** Replaces S1-230686

***Discussion:*** Mirror of the previous one

***Conclusion:*** Agreed

## 3.5 LSs on PS Data Off for IMS Data Channel service

[**S1-230045**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230045.zip) from S2-2301827: ***LS on PS Data Off for IMS Data Channel service*** (LS in)

***Summary:*** TO:

SA2 kindly asks SA1 to investigate whether IMS data channel should be considered as a feature to be exempted when PS Data Off is activated and reply back to SA2 with their decision.

***Discussion:*** See 0075 as answer and related WID and CR in 090 and 074

***Conclusion:*** Replied into 590

[**S1-230075**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230075.zip) from Xiaomi, China Mobile: ***Reply LS on PS Data Off for IMS Data Channel Service*** (LS out)

***Summary:*** This is a Reply LS on PS Data Off for IMS Data Channel Service for SA2 LS S2-2301827.

***Discussion:*** Nokia wondered if there are not already requirements to support IMS data channel, and it was pointed out that data channel is not a service by itself, it is to support other services and applications. Samsung clarified that this is initiated by SA4.

At least, these points should be clarified.

Telefonica support the CR and the WID.

***Conclusion:*** Revised to S1-230590

[**S1-230590**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230590.zip) **from** SA1: ***LS to SA2 on reply on PS Data Off for IMS Data Channel Service*** (LS out)

***Summary:*** Replaces S1-230075

***Discussion:*** Revision of S1-230075.

***Conclusion:*** Agreed

[**S1-230090**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230090.zip) from China Mobile: ***New WID on PS Data Off for IMS Data Channel Service*** (WID new)

***Discussion:*** Moved from 4

***Conclusion:*** Revised to S1-230482

[**S1-230482**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230482.zip) **from** China Mobile: ***New WID on PS Data Off for IMS Data Channel Service*** (WID new)

***Summary:*** Replaces S1-230090

Supporting companies changed.

***Discussion:*** Moved from 4 Revision of S1-230090.

***Conclusion:*** Agreed

[**S1-230074**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230074.zip) from Xiaomi, China Mobile, Deutsche Telekom, Qualcomm, KPN: ***PS Data Off for IMS Data Channel Service*** (CR to [22.011](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=566) #0348 cat B v.18.4.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [IMSDCDataOff](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=980130))

***Summary:*** Define IMS Data Channel as part of the 3GPP PS Data Off Exempt Services

***Discussion:*** Moved from 4

***Conclusion:*** Revised to S1-230736

[**S1-230736**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230736.zip) **from** Xiaomi, China Mobile, Deutsche Telekom, Qualcomm, KPN, Telefonica: ***PS Data Off for IMS Data Channel Service*** (CR to 22.011 #0348r1 cat B v.18.4.0, Rel-19, WID: IMSDCDataOff)

***Summary:*** Replaces S1-230074

***Discussion:*** Moved from 4 Revision of S1-230074.

Cover page, note numberring issues.

***Conclusion:*** Revised to S1-230745

[**S1-230745**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230745.zip) **from** Xiaomi, China Mobile, Deutsche Telekom, Qualcomm, KPN, Telefonica, Huawei, China Unicom: ***PS Data Off for IMS Data Channel Service*** (CR to 22.011 #0348r2 cat B v.18.4.0, Rel-19, WID: IMSDCDataOff)

***Summary:*** Replaces S1-230736

***Discussion:*** Moved from 4 Revision of S1-230074. Revision of S1-230736.

***Conclusion:*** Agreed

## 3.6 LSs on SNAAPP requirements clarifications

[**S1-230108**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230108.zip) from S3-222970: ***LS on SNAAPP requirements clarifications*** (LS in)

***Discussion:*** Postponed from SA1#100

***Conclusion:*** Replied into 0591

[**S1-230047**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230047.zip) from S6-223488: ***LS reply on SNAAPP requirements clarifications*** (LS in)

***Summary:*** TO:

***Conclusion:*** Replied into 0591

[**S1-230118**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230118.zip) from NTT DOCOMO: ***[DRAFT] Reply LS on SNAAPP requirements clarifications*** (LS out)

***Summary:***  [Revision of S1-223541](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1393867)

***Conclusion:*** Revised to S1-230329

[**S1-230329**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230329.zip) **from** NTT DOCOMO: ***[DRAFT] Reply LS on SNAAPP requirements clarifications*** (LS out)

***Summary:*** Replaces S1-230118

***Discussion:*** Revision of S1-230118.

***Conclusion:*** Revised to S1-230625

[**S1-230625**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230625.zip) **from** NTT DOCOMO: ***[DRAFT] Reply LS on SNAAPP requirements clarifications*** (LS out)

***Summary:*** Replaces S1-230329

***Discussion:*** Revision of S1-230118. Revision of S1-230329.

Remove last sentence in "action for SA3"

***Conclusion:*** Revised to S1-230591

[**S1-230591**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230591.zip) **from** SA1: ***LS to SA3, SA6 on reply on SNAAPP requirements clarifications*** (LS out)

***Summary:*** Replaces S1-230625

***Discussion:*** Revision of S1-230118. Revision of S1-230329. Revision of S1-230625. Take DRAFT, Accept all changes and action SA3 is ACTION: SA1 kindly asks SA3 to take the answers above into account.

***Conclusion:*** Agreed

## 3.7 LSs on Facilitating roaming adoption across 3GPP NPN deployments

[**S1-230051**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230051.zip) from SA: ***Reply LS on Facilitating roaming adoption across 3GPP NPN deployments*** (LS)

***Summary:*** TO:

***Discussion:*** Postponed from SA1#100

***Conclusion:*** Noted

## 3.8 LSs Noted

[**S1-230049**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230049.zip) from SG13-LS39: ***LS on initiation of new work item Y.CCO-req: ""Requirements of orchestration supporting confidential computing for network slices in IMT-2020 networks and beyond""*** (LS in)

***Summary:*** TO:

***Conclusion:*** Noted

[**S1-230050**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230050.zip) from sp17-sg11-oLS-00044: ***LS on proposed new draft Recommendation ""Requirements and framework of disaster mitigation and personnel rescue for sudden natural disasters in network""*** (LS in)

***Summary:*** TO:

***Conclusion:*** Noted

[**S1-230036**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230036.zip) from C1-227157: ***Reply LS on the progress and open issues for NPN enhancements in Rel-18*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230037**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230037.zip) from R2-2212997: ***Reply LS on SENSE feature*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230038**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230038.zip) from R2-2213320: ***Reply LS on GNSS integrity requirement provisioning*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230039**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230039.zip) from S2-2211199: ***LS Response on Latency impact for NTN verified UE location*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230041**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230041.zip) from S2-2211411: ***Reply LS on QoS Sustainability analytics and V2X service adaptations*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230042**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230042.zip) from S2-2301362: ***Reply to LS on PIN Management*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230043**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230043.zip) from S2-2301441: ***Regarding issues related to SNPN selection for Localized services*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230046**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230046.zip) from S3-224175: ***Reply LS on Progress and open issues for NPN enhancements in Rel-18*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230052**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230052.zip) from SP-221320: ***Reply LS on QoS Sustainability analytics and V2X service adaptations*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

**[S1-230053](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230053.zip)** from SP-221322: ***Reply LS on Use Cases and requirements for industrial factory applications*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230054**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230054.zip) from SP-221331: ***LS to GSMA 5GMRR on finalisation of Study on Roaming Value-Added Services*** (LS in)

***Summary:*** CC:

***Conclusion:*** Noted

[**S1-230315**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230315.zip) from Verizon Switzerland AG: ***Distinguished Engineer*** (CR to [22.105](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=606) #0059 cat C v.17..0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [FS\_IIoT](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=850012))

***Summary:*** A CR targeting improvement in TS 22.104 corresponding to the LS from 5G-ACIA on Edge computing to SA and SA1

***Conclusion:*** Withdrawn

[**S1-230106**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230106.zip) from SP-220985/S1-223277: ***(postponed) Reply LS on Facilitating roaming adoption across 3GPP NPN deployments*** (LS in)

***Conclusion:*** Withdrawn

[**S1-230107**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230107.zip) from S3-222970/S1-223272: ***(postponed) LS on SNAAPP requirements clarifications*** (LS in)

***Conclusion:*** Withdrawn

# 4 New Work Items (including related contributions, studies exceptionally)

## 4.1 SIDs

[**S1-230184**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230184.zip) from China Mobile: ***Revised SID on Energy Efficiency as service criteria*** (SID revised)

***Discussion:*** TR number missing, other

***Conclusion:*** Revised to S1-230332

[**S1-230332**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230332.zip) **from** China Mobile: ***Revised SID on Energy Efficiency as service criteria*** (SID revised)

***Summary:*** Replaces S1-230184

***Discussion:*** Revision of S1-230184.

***Conclusion:*** Revised to S1-230627

[**S1-230627**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230627.zip) **from** China Mobile: ***Revised SID on Energy Efficiency as service criteria*** (SID revised)

***Summary:*** Replaces S1-230332

***Discussion:*** Revision of S1-230184. Revision of S1-230332. ME impacts NO and only correct changes.

***Conclusion:*** Agreed

[**S1-230306**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230306.zip) from Novamint, b-com, EDF, Intel, Cisco: ***New SID on Interconnect of SNPN*** (SID new)

***Summary:***  The objectives of this study are:

- To study use cases on interconnect between 3GPP SNPNs and interconnect of SNPN with entities that authenticate and authorize UE access to the SNPNs.

- To identify potential new service requirements and enhancements for 5G system to enable interconnect between SNPNs.

- To identify potential new service requirements to address scalability and security aspects inherent to interconnect of SNPNs with entities that authenticate and authorize UE access to the SNPNs.

***Discussion:*** Interdigital: Is it all network-based security or does it involve the UE?

Several other questions for clarifications.

Nokia: this is quite late for Rel-19 SID, and propose a Rel-20 SID instead.

Orange: lot of off-line work done by Novamint. This might however be an implementation issue.

Sprint: concerned about the objectives, in particular on the interconnections of SNPN. The case of MNO might also have to be distinguished.

NCSC: is "3GPP SNPN" the same as "SNPN"? The note in the justification is ambiguous in particular wrt "administrations ".

Xiaomi: a CR plus miniWID can also be considered.

Futurewei: they support the overall idea, but have some concerns about the security. They are in favour of the study, not a miniWID.

Novamint:lot of comments. Operators do not want to address roaming and interconnection. About the study: this is provided because the normative WID approach was not acceptable at previous meeting.

Orange; the SA3 colleagues are not comfortable in doing this work in 3GPP.

Qualcomm: let's focus on what can be done in Rel-19.

Cisco: SA3 need requirements from SA1, this is why it was controversial there.

Chair: SA asked SA1 to consider this for Rel-19. To fulfil this plan, this needs SA1 to agree on some principles at this meeting.

***Conclusion:*** Revised to S1-230347

[**S1-230347**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230347.zip) **from** Novamint, b-com, EDF, Intel, Cisco: ***New SID on Interconnect of SNPN*** (SID new)

***Summary:*** Replaces S1-230306

***Discussion:*** Revision of S1-230306.

Ericsson:

Orange not ready to accept this at this point

Several concerns about the timing when this is proposed

SA5 charging chair: Charging and billing is also covered in SA5, not clear why this is needed in SA1

Ericsson: concerns with the process (new use cases introduced for a purpose, a clear context is needed)

Off-line discussions needed

***Conclusion:*** Revised to S1-230628

[**S1-230628**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230628.zip) **from** Novamint, b-com, EDF, Intel, Cisco: ***New SID on Interconnect of SNPN*** (SID new)

***Summary:*** Replaces S1-230347

***Discussion:*** Revision of S1-230306. Revision of S1-230347.

Nokia and Orange think this should be for Rel-20.

It is wondered why there are two rapporteurs.

Orange ask the note to be reworded.

***Conclusion:*** Revised to S1-230687

[**S1-230687**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230687.zip) **from** Novamint, b-com, EDF, Intel, Cisco: ***New SID on Interconnect of SNPN*** (SID new)

***Summary:*** Replaces S1-230628

***Discussion:*** This has to be progressed in between meetings.

Rev marks to be cleaned.

***Conclusion:*** Revised to S1-230794

[**S1-230794**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230794.zip) **from** Novamint, b-com, EDF, Intel, Cisco: ***New SID on Interconnect of SNPN*** (SID new)

***Summary:*** Replaces S1-230687

***Discussion:*** Revision of S1-230306. Revision of S1-230347. Revision of S1-230628. Revision of S1-230687. No track changes

***Conclusion:*** Agreed

[**S1-230310**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230310.zip) from NOVAMINT, b-com, EDF, Intel, Cisco: ***Motivation for a SID on Interconnect of SNPN*** (SID new)

***Summary:***  Between previous meeting and the current meeting, the interconnect aspects have been added as well as the timeline.

***Conclusion:*** Noted

## 4.2 WIDs Rel-19

### 4.2.0 Other than mini-WIDs

[**S1-230033**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230033.zip) from Ericsson, Deutsche Telekom: ***New WID on Roaming Value-Added Services*** (WID new)

***Summary:*** WID to create normative requirements for RVAS

***Conclusion:*** Revised to S1-230334

[**S1-230334**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230334.zip) **from** Ericsson, Deutsche Telekom: ***New WID on Roaming Value-Added Services*** (WID new)

***Summary:*** Replaces S1-230033

***Discussion:*** Revision of S1-230033. Completion date March.

***Conclusion:*** Agreed

[**S1-230034**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230034.zip) from Ericsson, Deutsche Telekom, KPN, AT&T: ***Roaming Value-Added Services*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0668 cat B v.19.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [RVAS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=699999))

***Summary:*** CR to add the Roaming Value-Added Services (RVAS) identified in the RVAS study.

***Conclusion:*** Revised to S1-230333

[**S1-230333**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230333.zip) **from** Ericsson, Deutsche Telekom, KPN, AT&T: ***Roaming Value-Added Services*** (CR to 22.261 #0668r1 cat B v.19.1.0, Rel-19, WID: RVAS)

***Summary:*** Replaces S1-230034

***Discussion:*** Revision of S1-230034.

6.44.1 starts with a hanging paragraph. This has to be corrected.

Nokia: "forward signalling" is not SA1's matters

***Conclusion:*** Revised to S1-230629

[**S1-230629**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230629.zip) **from** Ericsson, Deutsche Telekom, KPN, AT&T: ***Roaming Value-Added Services*** (CR to 22.261 #0668r2 cat B v.19.1.0, Rel-19, WID: RVAS)

***Summary:*** Replaces S1-230333

***Discussion:*** Revision of S1-230034. Revision of S1-230333.

***Conclusion:*** Revised to S1-230688

[**S1-230688**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230688.zip) **from** Ericsson, Deutsche Telekom, KPN, AT&T: ***Roaming Value-Added Services*** (CR to 22.261 #0668r3 cat B v.19.1.0, Rel-19, WID: RVAS)

***Summary:*** Replaces S1-230629

Minor rewording done

***Discussion:*** Revision of S1-230034. Revision of S1-230333. Revision of S1-230629. Last req The 5G system shall be able to support a mechanism such that all

***Conclusion:*** Agreed

[**S1-230088**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230088.zip) from China Unicom, China Telecom?, Charter Communications?, vivo?,: ***New WID of Network Sharing*** (WID new)

***Summary:*** Starting the normative work of network sharing R19, based on the discussion in the study report TR 22.851 of FS\_Netshare.

***Conclusion:*** Revised to S1-230330

[**S1-230330**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230330.zip) **from** China Unicom, China Telecom?, Charter Communications?, vivo?,: ***WID on Indirect Network Sharing*** (WID new)

***Summary:*** Replaces S1-230088

***Discussion:*** Revision of S1-230088.

***Conclusion:*** Revised to S1-230337

[**S1-230337**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230337.zip) **from** China Unicom, China Telecom, Charter Communications, vivo,: ***WID on Indirect Network Sharing*** (WID new)

***Summary:*** Replaces S1-230330

The "impacts" table at the beginning has been updated.

***Discussion:*** Revision of S1-230088. Revision of S1-230330.

To be further progressed in between now and next meeting.

***Conclusion:*** Noted

[**S1-230134**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230134.zip) from China Unicom, CATT: ***Addition of feature for Network Sharing*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0676 cat B v.19.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [INS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=699999))

***Discussion:*** Check WI code

***Conclusion:*** Revised to S1-230331

[**S1-230331**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230331.zip) **from** China Unicom, CATT, Charter Communications: ***Addition of feature for Network Sharing*** (CR to 22.261 #0676r1 cat B v.19.1.0, Rel-19, WID: INS)

***Summary:*** Replaces S1-230134

***Discussion:*** Check WI code Revision of S1-230134.

***Conclusion:*** Revised to S1-230336

[**S1-230336**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230336.zip) **from** China Unicom, CATT: ***Addition of feature for Network Sharing*** (CR to 22.261 #0676r2 cat B v.19.1.0, Rel-19, WID: INS)

***Summary:*** Replaces S1-230331

***Discussion:*** Check WI code Revision of S1-230134. Revision of S1-230331.

***Conclusion:*** Noted

[**S1-230162**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230162.zip) from OPPO: ***New WID on Ambient power-enabled Internet of Things*** (WID new)

***Summary:*** New WID on Ambient power-enabled Internet of Things

***Conclusion:*** Noted

[**S1-230276**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230276.zip) from Samsung: ***New WID on Feasibility Study on Localized Mobile Metaverse Services*** (WID new)

***Summary:*** The WID is only for discussion at SA1 101.

***Discussion:*** Moved from 7.3

***Conclusion:*** Revised to S1-230335

[**S1-230335**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230335.zip) **from** Samsung: ***New WID on Feasibility Study on Localized Mobile Metaverse Services*** (WID new)

***Summary:*** Replaces S1-230276

***Discussion:*** Moved from 7.3 Revision of S1-230276.

***Conclusion:*** Noted

### 4.2.1 Subscribed Network Slice Priority

[**S1-230069**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230069.zip) from Nokia, Nokia Shanghai Bell, Verizon, AT&T, CMCC, InterDigital, Vodafone: ***New Rel-19 mini Work Item on Subscribed Network Slice Priority*** (WID new)

***Summary:*** Subscribed Network Slice Priority   
This miniWID proposes to solve an issue in handling slices in case a UE is subscribed to more than one slice at the same time.   
Amongst others this is to help when the network needs to redirect a UE to a band supporting certain requested network slices, the network may need to know which of the requested network slices by the UE is(are) more important if a choice needs to be made if there is no band in the network that can accommodate all the requested network slices simultaneously. Therefore the CN may e.g send to the RAN indications to redirect the UE to certain bands supporting different groups of slices based on their priority order.

***Discussion:*** Check WI code.

corresponding CR in 0339 not agreeable

***Conclusion:*** Noted

[**S1-230070**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230070.zip) from Nokia, Nokia Shanghai Bell, Verizon UK Ltd., AT&T, CMCC, InterDigital, Vodafone: ***Introducing the Subscribed Network Slice Priority*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0680 cat B v.19.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [(New) SNSP](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=699999))

***Summary:*** There is no way today in the system to control the user experience by assisting the UE or the network to derive the relative importance between subscribed network slices which what this CR resolves

***Discussion:*** Check WI code, wrong CR number, wrong cover page.

For Ericsson, this is solution-oriented. And it is not in ling with SA2's preferred approach, to have Policy control, controlled by the operator. T-Mobile agree with Ericsson and add that when a UE is subscribed to different slices, it is because it wants to access to different services, and it is not clear how it will work with this proposal.

For Nokia, the key point is to have more flexibility

***Conclusion:*** Revised to S1-230339

[**S1-230339**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230339.zip) **from** Nokia, Nokia Shanghai Bell, Verizon UK Ltd., AT&T, CMCC, InterDigital, Vodafone, KDDI: ***Introducing the per UE Network Slice Priority*** (CR to 22.261 #0680r1 cat B v.19.1.0, Rel-19, WID: Dummy)

***Summary:*** Replaces S1-230070

***Discussion:*** Check WI code, wrong CR number, wrong cover page. Revision of S1-230070.

Ericsson: it is still not clear why this is needed, the wording is too vague, it is not clear in SA1 that this is needed

Concerns also from Mediatek, Qualcomm, KDDI. Telefonica and Nokia think this can already be achieved with policies.

More discussions in between meetings

***Conclusion:*** Noted

### 4.2.2 Supporting mobility for XR services

[**S1-230190**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230190.zip) from China Mobile, NTT Docomo, China Telecom, China Unicom: ***New Rel-19 mini Work Item in Supporting UE Mobility for XR services*** (WID new)

***Discussion:*** Check WI code.

See corresponding CR in 191.

***Conclusion:*** Revised to S1-230483

[**S1-230483**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230483.zip) **from** China Mobile, NTT Docomo, China Telecom, China Unicom: ***New Rel-19 mini Work Item in Supporting UE Mobility for XR services*** (WID new)

***Summary:*** Replaces S1-230190

***Discussion:*** Check WI code Revision of S1-230190.

***Conclusion:*** Revised to S1-230593

[**S1-230593**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230593.zip) **from** China Mobile, NTT Docomo, China Telecom, China Unicom: ***New Rel-19 mini Work Item in Supporting UE Mobility for XR services*** (WID new)

***Summary:*** Replaces S1-230483

***Discussion:*** Check WI code Revision of S1-230190. Revision of S1-230483.

***Conclusion:*** Agreed

[**S1-230191**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230191.zip) from China Mobile, NTT Docomo, China Telecom, China Unicom: ***Supporting UE Mobility for XR service*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0677 cat B v.19.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [(New) SUMXS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=980130))

***Summary:***  The CR adds the requirement that the 5G system shall support service continuity for AR/VR to support immersive user experience

***Discussion:*** Check WI code.

China Mobile want to remove the change on the third line in the table.

Ericsson concern, both with the numbers provided and whether these changes are actually needed to support the service.

Other companies are OK with the idea but need to further check the numbers.

***Conclusion:*** Revised to S1-230340

[**S1-230340**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230340.zip) **from** China Mobile, NTT Docomo, China Telecom, China Unicom: ***Supporting UE Mobility for XR service*** (CR to 22.261 #0677r1 cat B v.19.1.0, Rel-19, WID: TEI19)

***Summary:*** Replaces S1-230191

***Discussion:*** Check WI code Revision of S1-230191.

Qualcomm needs more time to check.

NSCS: rev1, next will be rev2

***Conclusion:*** Revised to S1-230484

[**S1-230484**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230484.zip) **from** China Mobile, NTT Docomo, China Telecom, China Unicom: ***Supporting UE Mobility for XR service*** (CR to 22.261 #0677r2 cat B v.19.1.0, Rel-19, WID: XRMobilityTEI19)

***Summary:*** Replaces S1-230340

***Discussion:*** Check WI code Revision of S1-230191. Revision of S1-230340.

Wrong formatting: it shows that the KPI table is deleted, when this is not the intention.

***Conclusion:*** Revised to S1-230592

[**S1-230592**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230592.zip) **from** China Mobile, NTT Docomo, China Telecom, China Unicom, Futurewei, Huawei, ZTE, OPPO: ***Supporting UE Mobility for XR service*** (CR to 22.261 #0677r3 cat B v.19.1.0, Rel-19, WID: XRMobility)

***Summary:*** Replaces S1-230484

***Discussion:*** Check WI code Revision of S1-230191. Revision of S1-230340. Revision of S1-230484. Keep KPI table without any change in the CR + right clause affected+ add Huawei, Futerwei, OPPO, ZTE as supporting company.

***Conclusion:*** Agreed

### 4.2.3 Positioning Services for UEs connecting via Dual 3GPP Access

[**S1-230213**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230213.zip) from CATT: ***New WID on Positioning Services for UEs connecting via dual 3GPP access*** (WID new)

***Discussion:*** See corresponding CR in 214 and 215

***Conclusion:*** Noted

[**S1-230214**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230214.zip) from CATT: ***Location Service for UE connecting to dual 3GPP access networks*** (CR to [22.071](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=584) #0085 cat B v.17.0.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [DualAccessLCS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=699999))

***Summary:*** This CR adds new requirements e.g. high-accuracy positioning when UE connecting to two 3GPP access networks.

***Conclusion:*** Noted

[**S1-230215**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230215.zip) from CATT: ***Positioning Services for UEs connecting via dual 3GPP access networks*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0678 cat B v.19.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [DualAccessLCS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=699999))

***Summary:***  Same as 214

***Discussion:*** Qualcomm, Nokia, Huawei and T-Mobile ask what changed compared to previous attempts at previous meetings, when there was no agreement to go forward. For them, only one paragraph was added in the "justification" section, when the concern was that it can be already done (without the CR) at the application layer. Nokia add that dual-steer is also related to this topic. Huawei disagree with the relationship with DualSteer.

These 3 documents are noted and we will come back on them if agreements can be found off-line.

***Conclusion:*** Noted

### 4.2.4 Edge Computing for Industrial Scenarios

[**S1-230299**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230299.zip) from Orange, Verizon, Ericsson, Huawei?: ***WID on Edge Computing for Industrial Scenarios*** (WID new)

***Summary:*** This work Item aims at defining 5G service requirements on edge computing for industrial Scenarios

***Discussion:*** Check WI code.

This is based on 5G-ACIA work.

See corresponding CRs in 301 and 314.

T-Mobile: No "impact" box is ticked in the cover page. It is not clear if it is a Feature, BB or WT.

Samsung: "digital twin" is not defined and has no clear meaning.

Siemens: several editorial clean-up are needed on the CRs.

Sprint: "digital twin" is a main topic in 5G-ACIA views.

LG: similarities with SOBOT have to be underlined.

Vodafone: they support the idea, even if they acknowledge that "digital twin" is not (yet) defined

Interdigital also support, even if several clean-up is needed.

Same for Nokia.

Huawei: some material is available on "digital twin". And Sobot is definitely a different topic.

NCSC and Qualcomm: some formal issues with the process (where does it come from?), and the WID has to be more specific with references.

Siemens: then each time the term "digital twin" is used, the context has to be clarified.

***Conclusion:*** Revised to S1-230342

[**S1-230342**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230342.zip) **from** Orange, Verizon, Ericsson, Huawei? NTTDocomo, China Unicom, Vodafone,: ***WID on Edge Computing for Industrial Scenarios*** (WID new)

***Summary:*** Replaces S1-230299.

***Discussion:*** Check WI code Revision of S1-230299.

InterDigital, Xiaomi, also support.

It has to be a Feature.

***Conclusion:*** Revised to S1-230630

[**S1-230630**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230630.zip) **from** Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone,: ***WID on Edge Computing for Industrial Scenarios*** (WID new)

***Summary:*** Replaces S1-230342

***Discussion:*** Revision of S1-230299. Revision of S1-230342.

Supporting companies in bold have to be put normally

***Conclusion:*** Revised to S1-230689

[**S1-230689**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230689.zip) **from** Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone,: ***WID on Edge Computing for Industrial Scenarios*** (WID new)

***Summary:*** Replaces S1-230630

***Discussion:*** Check WI code Revision of S1-230299. Revision of S1-230342. Revision of S1-230630.

***Conclusion:*** Agreed

[**S1-230301**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230301.zip) from Orange, Verizon, Huawei: ***Additional clarification on security, privacy for mobile robots using edge cloud*** (CR to [22.104](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) #0093 cat B v.18.3.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [ECINDS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800007))

***Summary:*** Add clarifications related to security and privacy for mobile robots enabled by edge cloud

***Discussion:*** Check WI code, wrong CR number Moved from 6.1

***Conclusion:*** Revised to S1-230343

[**S1-230343**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230343.zip) **from** Orange, Verizon, Huawei,NTT Docomo, Vodafone,China Unicom, Nokia,Ericsonn?: ***Additional clarification on security, privacy for mobile robots using edge cloud*** (CR to 22.104 #0093r1 cat B v.18.3.0, Rel-19, WID: ECINDS)

***Summary:*** Replaces S1-230301

***Discussion:*** Check WI code, wrong CR number Moved from 6.1 Revision of S1-230301.

Acronym to be changed, Ericsson to be correctly spelled, wrong clauses affected, etc.

***Conclusion:*** Revised to S1-230631

[**S1-230631**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230631.zip) **from** Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone, Nokia, Deutsche Telekom, InterDigital, Xiaomi: ***Additional clarification on security, privacy for mobile robots using edge cloud*** (CR to 22.104 #0093r1 cat B v.18.3.0, Rel-19, WID: EDGINDUS)

***Summary:*** Replaces S1-230343

***Discussion:*** Revision of S1-230301. Revision of S1-230343.

Wrong rev number.

Extra space, full stop missing

***Conclusion:*** Revised to S1-230690

[**S1-230690**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230690.zip) **from** Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone, Nokia, LG Electronics, Deutsche Telekom, InterDigital, Xiaomi: ***Additional clarification on security, privacy for mobile robots using edge cloud*** (CR to 22.104 #0093r3 cat B v.18.3.0, Rel-19, WID: EDGINDUS)

***Summary:*** Replaces S1-230631

***Discussion:*** Check WI code, wrong CR number Moved from 6.1 Revision of S1-230301. Revision of S1-230343. Revision of S1-230631. This is r3 in the counter and full stop at the end of the paragraph.

***Conclusion:*** Agreed

[**S1-230314**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230314.zip) from Verizon: ***An additional usecase for Industrial edge cloud regarding digital twin usage*** (CR to [22.104](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3528) #0094 cat C v.18.3.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193), WID: [ECINDS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800007))

***Summary:*** Adding clarification on edge computing for Mobile robots and adding an example new use case for digital twin in production manufacturing– it is a follow-up for 5G-ACIA LS to 3GPP

***Discussion:*** Check WI code, wrong CR number Moved from 6.1

***Conclusion:*** Revised to S1-230344

[**S1-230344**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230344.zip) **from** Verizon, Orange, Vodafone, Nokia, Huawei, Deutsche Telekom,T, NTT Docomo, Lenovo, China Unicom, Ericsson, Interdigital, Siemens(?): ***An additional usecase for Industrial edge cloud regarding digital twin usage*** (CR to 22.104 #0094r1 cat C v.18.3.0, Rel-19, WID: EDGINDUSCINDS)

***Summary:*** Replaces S1-230314

***Discussion:*** Check WI code, wrong CR number Moved from 6.1 Revision of S1-230314.

Issues with double diagram

***Conclusion:*** Revised to S1-230632

[**S1-230632**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230632.zip) **from** Verizon, Orange, Vodafone, Nokia, Huawei, Deutsche Telekom, NTT Docomo, Lenovo, China Unicom, Ericsson, InterDdigital: ***An additional usecase for Industrial edge cloud regarding digital twin usage*** (CR to 22.104 #0094r2 cat BC v.18.3.0, Rel-19, WID: EDGINDUS)

***Summary:*** Replaces S1-230344

***Discussion:*** Revision of S1-230314. Revision of S1-230344.

Problems with cover page

No rev marks shown on the text

***Conclusion:*** Revised to S1-230691

[**S1-230691**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230691.zip) **from** Verizon, Orange, Vodafone, Nokia, Huawei, Deutsche Telekom, NTT Docomo, Lenovo, China Unicom, Ericsson, InterDigital, LG Electronics: ***An additional usecase for Industrial edge cloud regarding digital twin usage*** (CR to 22.104 #0094r3 cat B v.18.3.0, Rel-19, WID: EDGINDUS)

***Summary:*** Replaces S1-230632

***Discussion:*** Section A.2.2.2 should be removed from the CR (no change)

***Conclusion:*** Revised to S1-230797

[**S1-230797**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230797.zip) **from** Verizon, Orange, Vodafone, Nokia, Huawei, Deutsche Telekom, NTT Docomo, Lenovo, China Unicom, Ericsson, InterDigital, LG Electronics: ***An additional usecase for Industrial edge cloud regarding digital twin usage*** (CR to 22.104 #0094r4 cat B v.18.3.0, Rel-19, WID: EDGINDUS)

***Summary:*** Replaces S1-230691

***Discussion:*** Check WI code, wrong CR number Moved from 6.1 Revision of S1-230314. Revision of S1-230344. Revision of S1-230632. Revision of S1-230691. Delete clause A2.2.2

***Conclusion:*** Agreed

### 4.2.5 MPS handling for multiple accesses

[**S1-230346**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230346.zip) **from** Peraton: ***New WID to cover the CR in 345*** (Other)

***Conclusion:*** Withdrawn

[**S1-230105**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230105.zip) from Peraton Labs, CISA ECD, AT&T, T-Mobile US, Verizon: ***MPS handling for multiple accesses*** (CR to [22.153](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=617) #0057 cat B v.18.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [TIE19](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=980130))

***Summary:*** Normative requirements for MPS handling when the UE is simultaneously connected to the EPC or 5GC via two or more accesses.

***Discussion:*** Needs a WID Wrong WI code

Qualcomm: the context has to be clarified (same PLMN? different ones? etc)

***Conclusion:*** Revised to S1-230345

[**S1-230345**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230345.zip) **from** Peraton Labs, CISA ECD, AT&T, T-Mobile US, Verizon: ***MPS handling for multiple accesses*** (CR to 22.153 #0057r1 cat B v.19.0.0, Rel-19, WID: TEI19)

***Summary:*** Replaces S1-230105

***Discussion:*** Needs a WID Wrong WI code Revision of S1-230105.

***Conclusion:*** Noted

# 5 Quality improvement contributions

[**S1-230081**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230081.zip) from Lenovo: ***Miscellaneous corrections to Ranging*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0669 cat D v.18.8.0, [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193), WID: [Ranging](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=910040))

***Summary:*** Editorial comments are provided.

***Discussion:*** Huawei: "Ranging" refers to the defined word, it should appear with a capital to distinguish from "normal" ranging.

Samsung, Siemens, KPN: not sure this is a rule.

Samsung: then have "Ranging" with a capital R in the definition, and clarify that this is not the "normal" ranging

Qualcomm: or "Ranging" can be changed to "Ranging-based services"

***Conclusion:*** Revised to S1-230348

[**S1-230348**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230348.zip) **from** Lenovo: ***Miscellaneous corrections to Ranging*** (CR to 22.261 #0669r1 cat D v.18.8.0, Rel-18, WID: Ranging)

***Summary:*** Replaces S1-230081

***Discussion:*** Revision of S1-230081.

***Conclusion:*** Agreed

[**S1-230082**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230082.zip) from Lenovo: ***Miscellaneous corrections to Ranging*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0670 cat A v.19.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [Ranging](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=910040))

***Summary:*** Editorial comments are provided.

***Conclusion:*** Revised to S1-230349

[**S1-230349**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230349.zip) **from** Lenovo: ***Miscellaneous corrections to Ranging*** (CR to 22.261 #0670r1 cat A v.19.1.0, Rel-19, WID: Ranging)

***Summary:*** Replaces S1-230082

***Discussion:*** Revision of S1-230082.

***Conclusion:*** Agreed

# 6 Rel-18 and earlier contributions

## 6.1 Rel-18 correction and clarification CRs

[**S1-230080**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230080.zip) from Xiaomi: ***Clarification of SENSE requirement about the USIM usage*** (CR to [22.011](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=566) #0349 cat F v.18.4.0, [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193), WID: [SENSE](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920033))

***Summary:*** Clarify that 5G system shall support to limit the USIM usage only for the IoT stationary devices in SENSE.

***Discussion:*** Qualcomm, T-Mobile, NCSS: this is not helpful and might be confusing to other groups.

***Conclusion:*** Noted

[**S1-230083**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230083.zip) from Lenovo: ***Removal of redundant pointer to LPHAP use cases in TS 22.104*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0671 cat F v.18.8.0, [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193), WID: [LPHAP](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=910036))

***Summary:*** In subclause 7.3.2.3 the redundant pointer to LPHAP use cases in TS 22.104 acc. to CR0526 has been removed.

***Discussion:*** MCC to check what happened. After checking, there was no problem with CR implementation, it was coming from different CRs.

***Conclusion:*** Noted

[**S1-230084**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230084.zip) from Lenovo: ***Removal of redundant pointer to LPHAP use cases in TS 22.104*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0672 cat A v.19.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [LPHAP](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=910036))

***Summary:*** Source modified on 2/9/2023. Original source : Lenovo

***Conclusion:*** Noted

[**S1-230085**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230085.zip) from Lenovo, Qualcomm: ***Corrections to PALS*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0673 cat F v.18.8.0, [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193), WID: PALS)

***Summary:*** Source modified on 2/9/2023. Original source : Lenovo, Qualcomm

***Discussion:*** not clear what is "1t change", "2nd change", etc

***Conclusion:*** Revised to S1-230550

[**S1-230550**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230550.zip) **from** Lenovo, Qualcomm: ***Corrections to PALS*** (CR to 22.261 #0673r1 cat F v.18.8.0, Rel-18, WID: PALS)

***Summary:*** Replaces S1-230085

***Discussion:*** Revision of S1-230085.

Huawei wonder about the "Impacts" tick boxes on the cover page but do not formally object.

***Conclusion:*** Agreed

[**S1-230086**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230086.zip) from Lenovo, Qualcomm: ***Corrections to PALS*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0674 cat A v.19.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [PALS](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=920038))

***Summary:*** Source modified on 2/9/2023. Original source : Lenovo, Qualcomm

***Discussion:*** same problem

***Conclusion:*** Revised to S1-230551

[**S1-230551**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230551.zip) **from** Lenovo, Qualcomm: ***Corrections to PALS*** (CR to 22.261 #0674r1 cat A v.19.1.0, Rel-19, WID: PALS)

***Summary:*** Replaces S1-230086

***Discussion:*** Revision of S1-230086.

***Conclusion:*** Agreed

[**S1-230154**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230154.zip) from Qualcomm: ***Correction to MPS requirements*** (CR to [22.153](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=617) #0058 cat F v.18.1.0, [Rel-18](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=193), WID: [MPS-WLAN, TEI-18](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=930024))

***Summary:*** Propose to remove the requirements in sec. 10.1.3

***Discussion:*** F TEI-18 no needed.

yellow highlight to be removed.

***Conclusion:*** Revised to S1-230552

[**S1-230552**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230552.zip) **from** Qualcomm: ***CR to correct MPS requirements*** (CR to 22.153 #0058r1 cat F v.18.1.0, Rel-18, WID: MPS\_WLAN)

***Summary:*** Replaces S1-230154

***Discussion:*** TEI-18 no needed Revision of S1-230154.

***Conclusion:*** Noted

## 6.2 Release 17 Alignment CRs (aligning Stage 1 specifications with what has been implemented in Stage 2 and 3)

There was no contribution for this agenda item.

## 6.3 Rel-17 and earlier CRs (other than alignment)

There was no contribution for this agenda item.

# 7 Rel19 contributions

## 7.1 FS\_Sensing: Study on Integrated Sensing and Communication [SP-220717]

Work status prior to this meeting:

Rapporteur: Vasil Aleksiev (Deutsche Telekom)

Latest version: TR 22.837v0.3.0

Target completion date: SA#100 (06/2023)

Percentage completion: 65%

### 7.1.1 General

[**S1-230077**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230077.zip) from Nokia, Nokia Shanghai Bell, Deutsche Telekom: ***Pseudo-CR on correction to sensing KPI definitions*** (pCR)

***Summary:*** This contribution proposes to correct the definition of Sensing Resolution which can be understood in a different way.

***Conclusion:*** Revised to S1-230600

[**S1-230600**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230600.zip) **from** Nokia, Nokia Shanghai Bell, Deutsche Telekom, KPN: ***Pseudo-CR on correction to sensing KPI definitions*** (pCR)

***Summary:*** Revision of S1-230077

***Discussion:*** Revision of S1-230077.

***Conclusion:*** Agreed

[**S1-230181**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230181.zip) from KPN: ***Pseudo-CR on update of definitions in TR 22.837*** (pCR)

***Summary:*** This pCR proposes changes to the definitions.

***Conclusion:*** Merge into S1-230600

[**S1-230194**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230194.zip) from China Telecom: ***Definition of rainfall estimation accuracy*** (pCR)

***Conclusion:*** Revised to S1-230601

[**S1-230601**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230601.zip) **from** China Telecom: ***Definition of rainfall estimation accuracy*** (pCR)

***Summary:*** Revision of S1-230194

***Discussion:*** Revision of S1-230194.

***Conclusion:*** Agreed

[**S1-230221**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230221.zip) from Huawei: ***Discussion on the sensing definitions*** (discussion)

***Conclusion:*** Noted

[**S1-230222**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230222.zip) from Huawei: ***Update of sensing definitions*** (pCR)

***Conclusion:*** Revised to S1-230532

[**S1-230532**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230532.zip) **from** Huawei: ***Update of sensing definitions*** (pCR)

***Summary:*** Revision of S1-230222

***Discussion:*** Revision of S1-230222.

***Conclusion:*** Revised to S1-230549

[**S1-230549**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230549.zip) **from** Huawei: ***Update of sensing definitions*** (pCR)

***Summary:*** Revision of S1-230532

***Discussion:*** Revision of S1-230222. Revision of S1-230532.

***Conclusion:*** Agreed

[**S1-230224**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230224.zip) from vivo: ***Update definition and usage on motion rate accuracy*** (pCR)

***Summary:*** This document proposes to include motion rate accuracy in UAV intrusion detection in restricted area

***Conclusion:*** Revised to S1-230602

**S1-230602 from** vivo: ***Update definition and usage on motion rate accuracy*** (pCR)

***Summary:*** Revision of S1-230224

***Discussion:*** Revision of S1-230224.

***Conclusion:*** Withdrawn

[**S1-230320**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230320.zip) **from** SA1 chair: ***Definition updates compilation*** (pCR)

***Conclusion:*** Noted

[**S1-230297**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230297.zip) from Apple: ***Discussion of Sensing concepts*** (discussion)

***Conclusion:*** Noted

[**S1-230180**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230180.zip) from OPPO: ***Discussion paper on KPI definitions about false alarm related use cases*** (discussion)

***Summary:*** This contribution describes the problem of KPI definitions about the false alarm related use cases and proposes several ways forward to address the problem of TR 22.837.

***Conclusion:*** Noted

### 7.1.2 New Use Cases

[**S1-230012**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230012.zip) from FirstNet: ***Pseudo-CR on Public Safety indoor search and rescue for Sensing and Communications*** (pCR)

***Conclusion:*** Revised to S1-230024

[**S1-230024**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230024.zip) from FirstNet: ***Pseudo-CR on Public Safety indoor search and rescue for Sensing and*** (pCR)

Summary:

This change request provides a use case that can help support public safety’s mission to protect and serve. The ability to help public safety in an indoor environment with very limited visibility to locate trapped or injured individuals can help save lives and provide better results in indoor dangerous situations

***Discussion:*** Revision of S1-230012.

***Conclusion:*** Revised to S1-230503

[**S1-230503**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230503.zip) **from** FirstNet: ***Pseudo-CR on Public Safety indoor search and rescue for Sensing and*** (pCR)

***Summary:*** Revision of S1-230024

***Discussion:*** Revision of S1-230012. Revision of S1-230024.

***Conclusion:*** Merge into S1-230504

[**S1-230013**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230013.zip) from FirstNet: ***Pseudo-CR on Public Safety Outdoor search and rescue/apprehend for Sensing and Communications*** (pCR)

***Conclusion:*** Revised to S1-230504

[**S1-230504**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230504.zip) **from** FirstNet: ***Pseudo-CR on Public Safety Indoor/Outdoor search and rescue/apprehend for*** (pCR)

***Summary:*** Revision of S1-230013

***Discussion:*** Revision of S1-230013.

***Conclusion:*** Revised to S1-230607

[**S1-230607**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230607.zip) **from** FirstNet: ***Pseudo-CR on Public Safety Indoor/Outdoor search and rescue/apprehend for*** (pCR)

***Discussion:*** Revision of S1-230013. Revision of S1-230504.

Clean-up needed (rev on rev)

***Conclusion:*** Revised to S1-230633

[**S1-230633**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230633.zip) **from** FirstNet: ***Pseudo-CR on Public Safety Indoor/Outdoor search and rescue/apprehend for*** (pCR)

***Summary:*** Replaces S1-230607

***Discussion:*** Revision of S1-230013. Revision of S1-230504. Revision of S1-230607.

***Conclusion:*** Revised to S1-230668

[**S1-230668**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230668.zip) **from** FirstNet: ***Pseudo-CR on public safety indoor/outdoor search and rescue/apprehend for*** (pCR)

***Summary:*** Replaces S1-230633

***Discussion:*** Revision of S1-230013. Revision of S1-230504. Revision of S1-230607. Revision of S1-230633.

The PR should be in the continuation of the text, not in a new section.

It should be checked if a similar PR is not already present.

***Conclusion:*** Revised to S1-230692

[**S1-230692**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230692.zip) **from** FirstNet: ***Pseudo-CR on public safety indoor/outdoor search and rescue/apprehend for*** (pCR)

***Summary:*** Replaces S1-230668

***Discussion:*** Revision of S1-230013. Revision of S1-230504. Revision of S1-230607. Revision of S1-230633. Revision of S1-230668.

***Conclusion:*** Agreed

[**S1-230076**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230076.zip) from Nokia, Nokia Shanghai Bell: ***Health monitoring in care facilities*** (pCR)

***Summary:*** This contribution proposes a new use case and requirements on health monitoring in care facilities by means of 5G Wireless sensing.

***Conclusion:*** Revised to S1-230505

[**S1-230505**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230505.zip) **from** Nokia, Nokia Shanghai Bell: ***Health monitoring in care facilities*** (pCR)

***Discussion:*** Revision of S1-230076.

***Conclusion:*** Withdrawn

[**S1-230089**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230089.zip) from Xiaomi, Qualcomm, OPPO: ***New use case: Vehicle Sensing for ADAS*** (pCR)

***Summary:*** It is proposed to add a new use case: Vehicle Sensing for ADAS to 3GPP FS\_Sensing TR 22.837 V0.3.0.

***Conclusion:*** Revised to S1-230506

[**S1-230506**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230506.zip) **from** Xiaomi, Qualcomm, OPPO: ***New use case: Vehicle Sensing for ADAS*** (pCR)

***Discussion:*** Revision of S1-230089.

Rapporteur: 1st PR shall be clarified (V2X UE)

Ericsson: "for ADAS" to be removed in the 2nd PR, and same change could be done in the title

***Conclusion:*** Revised to S1-230634

[**S1-230634**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230634.zip) **from** Xiaomi, Qualcomm, OPPO: ***New use case: Vehicles Sensing for ADAS*** (pCR)

***Summary:*** Replaces S1-230506

***Discussion:*** Revision of S1-230089. Revision of S1-230506.

Huawei support. Some unused references to be deleted.

***Conclusion:*** Revised to S1-230693

[**S1-230693**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230693.zip) **from** Xiaomi, Qualcomm, OPPO, Huawei: ***New use case: Vehicles Sensing for ADAS*** (pCR)

***Summary:*** Replaces S1-230634

***Discussion:*** Revision of S1-230089. Revision of S1-230506. Revision of S1-230634. Remove references not used + add Huawei

***Conclusion:*** Agreed

[**S1-230094**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230094.zip) from Xiaomi: ***New use case: eCall Sensing for life detection*** (pCR)

***Summary:*** It is proposed to add a new use case: eCall Sensing for life detection to 3GPP TR 22.837 V0.3.0.

***Conclusion:*** Revised to S1-230507

[**S1-230507**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230507.zip) **from** Xiaomi: ***New use case: vehicle in cabin eCall sSensing in the event of a vehicle collision*** (pCR)

***Discussion:*** Revision of S1-230094.

For Ericsson and T-Mobile, there are similar use cases already in the TR.

***Conclusion:*** Noted

[**S1-230111**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230111.zip) from Intel: ***Use case on Malicious UE Transmitter in 5G Sensing*** (pCR)

***Conclusion:*** Revised to S1-230508

[**S1-230508**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230508.zip) **from** Intel: ***Use case on Malicious UE Transmitter in 5G Sensing*** (pCR)

***Discussion:*** Revision of S1-230111.

Wrong font.

Sony: the criteria for detecting "malicious" data cannot be suspicion. This shall be clarified.

***Conclusion:*** Revised to S1-230635

**S1-230635 from** Intel: ***Use case on Sensing Malicious UE Transmitter*** (pCR)

***Summary:*** Replaces S1-230508

***Discussion:*** Revision of S1-230111. Revision of S1-230508.

***Conclusion:*** Withdrawn

[**S1-230112**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230112.zip) from Intel: ***Use case on Sensing 5G Spectrum for Opportunistic Spectrum*** (pCR)

***Conclusion:*** Noted

[**S1-230120**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230120.zip) from Qualcomm, Charter Communications: ***Use Case on Application Navigation using Gesture Recognition*** (pCR)

***Conclusion:*** Revised to S1-230509

[**S1-230509**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230509.zip) **from** Qualcomm, CATT: ***Use Case on Gesture Recognition for Application Navigation and Immersive*** (pCR)

***Discussion:*** Revision of S1-230120.

Ericsson: why accuracy in bracket? To be replaced by FFS

Traffic scenarios to be considered

***Conclusion:*** Revised to S1-230636

[**S1-230636**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230636.zip) **from** Qualcomm, CATT: ***Use Case on Gesture Recognition for Application Navigation and Immersive*** (pCR)

***Summary:*** Replaces S1-230509

***Discussion:*** Revision of S1-230120. Revision of S1-230509.

"0.04" to be changed to FFS (in resolution) as well as another value

***Conclusion:*** Revised to S1-230695

[**S1-230695**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230695.zip) **from** Qualcomm: ***Use Case on Application Navigation using Gesture Recognition*** (pCR)

***Summary:*** Replaces S1-230636

***Discussion:*** Revision of S1-230120. Revision of S1-230509. Revision of S1-230636. Range resolutions and positioning accuracy to FFS

***Conclusion:*** Revised to S1-230808

r[**S1-230808**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230808.zip) **from** Qualcomm: ***Use Case on Application Navigation using Gesture Recognition*** (pCR)

***Summary:*** Replaces S1-230695

***Conclusion:*** Agreed.

[**S1-230124**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230124.zip) from Rakuten Mobile: ***Pseudo-CR Use case of sensing on Crowd Detection*** (pCR)

Summary:

This contribution proposes a new use case for FS\_Sensing

***Conclusion:*** Noted

[**S1-230135**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230135.zip) from Huawei, Xiaomi: ***Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive*** (pCR)

***Conclusion:*** Revised to S1-230502

[**S1-230502**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230502.zip) **from** Huawei, Xiaomi: ***Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive*** (pCR)

***Discussion:*** Revision of S1-230135.

***Conclusion:*** Revised to S1-230510

[**S1-230510**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230510.zip) **from** Huawei, Xiaomi, DENSO: ***Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive*** (pCR)

***Discussion:*** Revision of S1-230135. Revision of S1-230502.

Vodafone (GTM): need more time, in particular for continuity aspects

***Conclusion:*** Revised to S1-230637

[**S1-230637**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230637.zip) **from** Huawei, Xiaomi, DENSO: ***Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive*** (pCR)

***Summary:*** Replaces S1-230510

***Discussion:*** Revision of S1-230135. Revision of S1-230502. Revision of S1-230510.

Ericsson has an issue with the note in the service flow: they do not think it is possible.

***Conclusion:*** Revised to S1-230798

[**S1-230798**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230798.zip) **from** Huawei, Xiaomi, DENSO, OPPO: ***Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive*** (pCR)

***Summary:*** Replaces S1-230637

***Discussion:*** Revision of S1-230135. Revision of S1-230502. Revision of S1-230510. Revision of S1-230637. Delete note from service flow step 2.

***Conclusion:*** Agreed

[**S1-230146**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230146.zip) from CMCC: ***New use case: intersection detection for a Smart Traffic Light*** (pCR)

***Summary:*** new use case on intersection detection for a Smart Traffic Light

***Conclusion:*** Revised to S1-230562

**[S1-230562](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230562.zip) from** CMCC: ***New use case: intersection detection for a Smart Traffic Light*** (pCR)

***Discussion:*** Revision of S1-230146.

***Conclusion:*** Revised to S1-230511

[**S1-230511**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230511.zip) **from** CMCC: ***New use case: intersection detection for a Smart Traffic Light*** (pCR)

***Discussion:*** Revision of S1-230146. Revision of S1-230562.

***Conclusion:*** Revised to S1-230638

**S1-230638 from** CMDI: ***pCR on new use case on intersection detection for a Smart Traffic Light*** (pCR)

***Summary:*** Replaces S1-230511

***Discussion:*** Revision of S1-230146. Revision of S1-230562. Revision of S1-230511.

***Conclusion:*** Withdrawn

[**S1-230152**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230152.zip) from CATT: ***Pseudo-CR: Use Case on Hand Tracking in XR applications*** (pCR)

***Conclusion:*** Merge into S1-230509

[**S1-230206**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230206.zip) from DENSO CORPORATION: ***5G Wireless sensing for automated mobility in partial coverage and out-of-coverage*** (pCR)

***Summary:*** This document proposes a new use case of 5G Wireless sensing support for automated mobility.

***Conclusion:*** Merge into S1-230510

[**S1-230216**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230216.zip) from Indian Institute of Technology Bombay: ***Use case on sensing disturbance/intrusion in maritime scenario.*** (pCR)

***Summary:*** This document proposes a use case along with requirements to be considered for FS\_Sensing in TR 22.837

***Conclusion:*** Revised to S1-230554

[**S1-230554**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230554.zip) **from** Indian Institute of Technology Bombay: ***Use case on sensing disturbance/intrusion in maritime scenario.*** (pCR)

***Summary:*** Replaces S1-230216

***Discussion:*** Revision of S1-230216.

***Conclusion:*** Noted

[**S1-230227**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230227.zip) from vivo: ***Use case on blind spot detection*** (pCR)

***Summary:*** The document provides a Text Proposal to introduce a new use case on blind spot detection

***Conclusion:*** Revised to S1-230512

[**S1-230512**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230512.zip) **from** vivo, KPN, China Mobile: ***Use case on blind spot detection*** (pCR)

***Discussion:*** Revision of S1-230227.

Telefonica: a clearer distinction should be made for new use cases versus existing ones.

***Conclusion:*** Revised to S1-230639

[**S1-230639**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230639.zip) **from** vivo, KPN, China Mobile: ***Use case on blind spot detection*** (pCR)

***Summary:*** Replaces S1-230512

***Discussion:*** Revision of S1-230227. Revision of S1-230512.

***Conclusion:*** Agreed

[**S1-230244**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230244.zip) from Xiaomi: ***New use case on sensing-assisted autonomous driving*** (pCR)

***Conclusion:*** Merge into S1-230510

[**S1-230245**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230245.zip) from Xiaomi: ***New use case on sensing-assisted child custody*** (pCR)

***Conclusion:*** Noted

[**S1-230269**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230269.zip) from Rakuten Mobile Inc: ***Use Case on Air Pollution Monitoring using Sensing*** (pCR)

***Summary:*** This contribution proposes a new use case and requirements on Air Pollution Monitoring using Sensing to 22.837

***Conclusion:*** Revised to S1-230513

[**S1-230513**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230513.zip) **from** Rakuten Mobile Inc: ***Use Case on Air Pollution Monitoring using Sensing*** (pCR)

***Discussion:*** Revision of S1-230269.

***Conclusion:*** Noted

[**S1-230317**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230317.zip) from Philips International B.V.: ***New use case on fall detection using wireless sensing*** (pCR)

***Conclusion:*** Revised to S1-230514

[**S1-230514**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230514.zip) **from** Philips International B.V.: ***New use case on fall detection using wireless sensing*** (pCR)

***Discussion:*** Revision of S1-230317.

No objection but rewording needed

***Conclusion:*** Revised to S1-230646

[**S1-230646**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230646.zip) **from** Philips International B.V.: ***New use case on fall detection using wireless sensing*** (pCR)

***Summary:*** Replaces S1-230514

***Discussion:*** Revision of S1-230317. Revision of S1-230514

Ericsson still has issues with the target of the sensing.

***Conclusion:*** Noted

[**S1-230295**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230295.zip) from Apple: ***New Use case on Simultaneous Sensing Services*** (pCR)

***Conclusion:*** Revised to S1-230548

[**S1-230548**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230548.zip) **from** Apple: ***New Use case on Simultaneous Active Sensing Services*** (pCR)

***Discussion:*** Revision of S1-230295.

***Conclusion:*** Noted

[**S1-230318**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230318.zip) from Lenovo: ***Use Case of sensing assistance for visually impaired*** (pCR)

***Summary:*** This contribution proposes a new use case for FS\_Sensing, which is about providing environment perception assistance for visually impaired, based on the 5GS sensing service.

***Conclusion:*** Revised to S1-230530

[**S1-230530**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230530.zip) **from** Lenovo: ***Use Case of sensing assistance for visually impaired*** (pCR)

***Discussion:*** Revision of S1-230318.

***Conclusion:*** Revised to S1-230533

[**S1-230533**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230533.zip) **from** Lenovo: ***Use Case of sensing assistance for visually impaired*** (pCR)

***Discussion:*** Revision of S1-230318. Revision of S1-230530.

Chair "5GS" to be replaced by "The 5GS"

Ericsson: more time needed for review

***Conclusion:*** Revised to S1-230640

[**S1-230640**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230640.zip) **from** Lenovo: ***Use Case of sensing assistance for visually impaired*** (pCR)

***Summary:*** Replaces S1-230533

***Discussion:*** Revision of S1-230318. Revision of S1-230530. Revision of S1-230533.

For Ericsson and T-Mobile, this is still for the application layer, not for 3GPP.

***Conclusion:*** Revised to S1-230779

**S1-230779 from** Lenovo: ***Use Case of sensing assistance for visually impaired*** (pCR)

***Summary:*** Replaces S1-230640

***Discussion:*** Revision of S1-230318. Revision of S1-230530. Revision of S1-230533. Revision of S1-230640.

***Conclusion:*** Withdrawn

[**S1-230319**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230319.zip) from Lenovo: ***Use Case of sensing assistance for enhanced positioning*** (pCR)

***Summary:*** This contribution proposes a new use case for FS\_Sensing, which is about enhanced positioning of a UE utilizing 5GS sensing service.

***Conclusion:*** Revised to S1-230531

[**S1-230531**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230531.zip) **from** Lenovo: ***Use Case of sensing assistance for enhanced positioning*** (pCR)

***Discussion:*** Revision of S1-230319.

***Conclusion:*** Revised to S1-230534

[**S1-230534**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230534.zip) **from** Lenovo: ***Use Case of sensing assistance for enhanced positioningintegrated sensing*** (pCR)

***Discussion:*** Revision of S1-230319. Revision of S1-230531.

"The 5GS" also.

Ericsson: this is in the application area and should not be specified by 3GPP.

***Conclusion:*** Revised to S1-230641

[**S1-230641**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230641.zip) **from** Lenovo, Kyonggi University: ***Use Case of sensing assistance for enhanced positioningintegrated sensing*** (pCR)

***Summary:*** Replaces S1-230534

***Discussion:*** Revision of S1-230319. Revision of S1-230531. Revision of S1-230534.

Ericsson want the 2nd requirement to be removed

Lenovo think that this 2nd requirement is essential, but as a compromise, they have to accept to remove it.

***Conclusion:*** Revised to S1-230696

[**S1-230696**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230696.zip) **from** Lenovo, Kyonggi University: ***Use Case of sensing assistance for enhanced positioningintegrated sensing*** (pCR)

***Summary:*** Replaces S1-230641

***Discussion:*** Revision of S1-230319. Revision of S1-230531. Revision of S1-230534. Revision of S1-230641. Remove second requirement

***Conclusion:*** Agreed

### 7.1.3 Former Use cases Updates

[**S1-230055**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230055.zip) from InterDigital: ***Update of the use case of intruder detection in smart home*** (pCR)

***Conclusion:*** Revised to S1-230557

[**S1-230557**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230557.zip) **from** InterDigital: ***Update of the use case of intruder detection in smart home*** (pCR)

***Summary:*** Replaces S1-230055

***Discussion:*** InterDigital: "to define and reconfigure" to be changed into "to configure"

Vodafone (GTM): the understanding of this sentence could be quite wide. It has to be rephrased.

InterDIgital: this is in the same style as many other PR.

***Conclusion:*** Revised to S1-230642

[**S1-230642**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230642.zip) **from** InterDigital: ***Update of the use case of intruder detection in smart home*** (pCR)

***Summary:*** Replaces S1-230557

***Discussion:*** Revision of S1-230055. Revision of S1-230557.

For Ericsson and T-Mobile, this is again combining two different services.

***Conclusion:*** Noted

[**S1-230294**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230294.zip) from Apple: ***Pseudo-CR on Clarification on sensing data processing and entity initiating*** (pCR)

***Summary:*** The use case of intruder detection in smart home is updated to clarify that:

1. the entity requesting the initiation of sensing procedure can be different than the entity that performs the sensing procedure

2. sensing information can be processed at the sensing receiver and the 5G network

***Discussion:*** Need further talks, in particular since it has relationships with other documents (e.g. 055)

***Conclusion:*** Revised to S1-230535

[**S1-230535**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230535.zip) **from** Apple: ***Clarification on sensing data processing and entity initiating sensing procedure*** (pCR)

***Discussion:*** Revision of S1-230294.

***Conclusion:*** Noted

[**S1-230056**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230056.zip) from InterDigital: ***Update of the use case on health monitoring at home*** (pCR)

***Summary:*** This use case is updated in particular to add a new PR:

[PR 5.17.6-5] The 5G system shall support a mechanism for the 5G network to trigger a communication service based on the sensing result (for example, event exposure of sensing service).

***Discussion:*** Some off-line talks needed (T-Mobile).

***Conclusion:*** Revised to S1-230556

[**S1-230556**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230556.zip) **from** InterDigital: ***Update of the use case on health monitoring at home*** (pCR)

***Summary:*** Replaces S1-230056

***Discussion:*** Similar concerns as 557

***Conclusion:*** Revised to S1-230643

[**S1-230643**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230643.zip) **from** InterDigital: ***Update of the use case on health monitoring at home*** (pCR)

***Summary:*** Replaces S1-230556

***Discussion:*** Revision of S1-230056. Revision of S1-230556.

***Conclusion:*** Noted

[**S1-230060**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230060.zip) from InterDigital: ***Update of use case on sensing in smart cities*** (pCR)

***Summary:*** The update to include collaboration of sensing and communication service is proposed.

***Discussion:*** Ericsson: It can be made more generic, about transmitting and receiving devices.

Chair: clear progress has to be made at this meeting on the vocabulary.

***Conclusion:*** Revised to S1-230558

[**S1-230558**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230558.zip) **from** InterDigital: ***Update of use case on sensing in smart cities*** (pCR)

***Summary:*** Replaces S1-230060

***Discussion:*** Revision of S1-230060.

For Ericsson, this does not add anything to the existing requirements.

For Samsung, there is no harm in duplication requirements.

***Conclusion:*** Agreed

[**S1-230116**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230116.zip) from NTT DOCOMO, NTT: ***Update use case on sensing for flooding in smart cities*** (pCR)

***Summary:*** KPI table and NOTE are added to the use case on sensing for flooding in smart cities.

***Conclusion:*** Revised to S1-230539

[**S1-230539**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230539.zip) **from** NTT DOCOMO, NTT: ***Update use case on sensing for flooding in smart cities*** (pCR)

***Discussion:*** Revision of S1-230116.

***Conclusion:*** Agreed

[**S1-230098**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230098.zip) from ZTE: ***pCR to update 5.11*** (pCR)

***Summary:*** This contribution proposes to update the section 5.11 “use case on sensing at crossroads with/without obstacle”, including to add new PRs and align the KPI table with the TR.

***Conclusion:*** Revised to S1-230559

[**S1-230559**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230559.zip) **from** ZTE: ***pCR to update 5.11*** (pCR)

***Summary:*** Replaces S1-230098

***Discussion:*** "sensing measuring data" -> "sensing data"

changes on changes

***Conclusion:*** Revised to S1-230644

[**S1-230644**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230644.zip) **from** ZTE: ***pCR to update 5.11*** (pCR)

***Summary:*** Replaces S1-230559

***Discussion:*** Revision of S1-230098. Revision of S1-230559.

Clean-up needed (remove change on change)

***Conclusion:*** Revised to S1-230697

[**S1-230697**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230697.zip) **from** ZTE: ***pCR to update 5.11*** (pCR)

***Summary:*** Replaces S1-230644

***Discussion:*** Revision of S1-230098. Revision of S1-230559. Revision of S1-230644. Remove changes on changes No presentation

***Conclusion:*** Agreed

[**S1-230113**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230113.zip) from Qualcomm, Charter Communications, AT&T Services: ***Update to Use case on Seamless XR Streaming*** (pCR)

***Conclusion:*** Revised to S1-230536

[**S1-230536**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230536.zip) **from** Qualcomm, Charter Communications, AT&T Services: ***Update to Use case on Seamless XR Streaming*** (pCR)

***Discussion:*** Revision of S1-230113.

***Conclusion:*** Revised to S1-230605

[**S1-230605**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230605.zip) **from** Qualcomm, Charter Communications, AT&T Services: ***Update to Use case on Seamless XR Streaming*** (pCR)

***Discussion:*** Revision of S1-230113. Revision of S1-230536.

***Conclusion:*** Revised to S1-230647

[**S1-230647**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230647.zip) **from** Qualcomm, Charter Communications, AT&T Services, Xiaomi: ***Update to Use case on Seamless XR Streaming*** (pCR)

***Summary:*** Replaces S1-230605

***Discussion:*** Revision of S1-230113. Revision of S1-230536. Revision of S1-230605.

***Conclusion:*** Agreed

[**S1-230115**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230115.zip) from Qualcomm, Charter Communications: ***Update to Use case on Sensing Assisted Automotive Maneuvering and Navigation*** (pCR)

***Conclusion:*** Revised to S1-230537

[**S1-230537**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230537.zip) **from** Qualcomm, Charter Communications: ***Update to Use case on Sensing Assisted Automotive Maneuvering and Navigation*** (pCR)

***Discussion:*** Revision of S1-230115.

***Conclusion:*** Revised to S1-230606

[**S1-230606**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230606.zip) **from** Qualcomm, Charter Communications: ***Update to Use case on Sensing Assisted Automotive Maneuvering and Navigation*** (pCR)

***Discussion:*** Revision of S1-230115. Revision of S1-230537.

Typos to be corrected

***Conclusion:*** Revised to S1-230648

[**S1-230648**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230648.zip) **from** Qualcomm, Charter Communications, Xiaomi: ***Update to Use case on Sensing Assisted Automotive Maneuvering and Navigation*** (pCR)

***Summary:*** Replaces S1-230606

***Discussion:*** Revision of S1-230115. Revision of S1-230537. Revision of S1-230606.

***Conclusion:*** Agreed

[**S1-230117**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230117.zip) from NTT DOCOMO, NTT: ***Update use case on intruder detection in surroundings of smart home*** (pCR)

***Summary:*** KPI table is added to the use case on intruder detection in surroundings of smart home.

***Conclusion:*** Revised to S1-230538

[**S1-230538**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230538.zip) **from** NTT DOCOMO, NTT: ***Update use case on intruder detection in surroundings of smart home*** (pCR)

***Discussion:*** Revision of S1-230117.

***Conclusion:*** Agreed

[**S1-230121**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230121.zip) from Qualcomm: ***Update to use case 5.10*** (pCR)

***Summary:*** This contribution provides updates to the use case on Flight trajectory tracking in Clause 5.10

***Conclusion:*** Agreed

[**S1-230177**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230177.zip) from Huawei: ***Update of KPI table for railway intrusion detection*** (pCR)

***Summary:*** This document proposes to address the Editor’s Note of the KPI table for railway intrusion detection.

***Conclusion:*** Agreed

[**S1-230178**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230178.zip) from Huawei: ***Update of Clause 5.13*** (pCR)

***Summary:*** This document proposes to update Clause 5.13.

***Discussion:*** All references need to be in English (and freely available).

***Conclusion:*** Revised to S1-230560

[**S1-230560**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230560.zip) **from** Huawei: ***Update of Clause 5.13*** (pCR)

***Summary:*** Replaces S1-230178

***Discussion:*** Revision of S1-230178.

***Conclusion:*** Revised to S1-230547

[**S1-230547**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230547.zip) **from** Huawei, CMCC: ***Update of Clause 5.13*** (pCR)

***Discussion:*** Revision of S1-230178. Revision of S1-230560.

***Conclusion:*** Agreed

[**S1-230207**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230207.zip) from CMCC: ***pCR on updates KPI on use case on sensing for tourist spot traffic*** (pCR)

Summary: .

This document proposes on updating KPI table on use case on sensing for tourist spot traffic management.

***Discussion:*** Ericsson lacks motivation about why the changes are made.

***Conclusion:*** Revised to S1-230540

[**S1-230540**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230540.zip) **from** CMCC: ***pCR on updates KPI on use case on sensing for tourist spot traffic*** (pCR)

***Discussion:*** Revision of S1-230207.

***Conclusion:*** Revised to S1-230649

[**S1-230649**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230649.zip) **from** CMCC: ***pCR on updates KPI on use case on sensing for tourist spot traffic*** (pCR)

***Summary:*** Replaces S1-230540

***Discussion:*** Revision of S1-230207. Revision of S1-230540.

***Conclusion:*** Agreed

[**S1-230208**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230208.zip) from CMCC: ***pCR on update KPI on use case sensing for UAV intrusion detection*** (pCR)

Summary:

***Discussion:*** Same comment from Ericsson.

Units to be changed

***Conclusion:*** Revised to S1-230561

[**S1-230561**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230561.zip) **from** China Mobile Com. Corporation: ***pCR on update KPI of use case sensing for UAV intrusion detection*** (pCR)

***Summary:*** Replaces S1-230208

***Discussion:*** Revision of S1-230208.

***Conclusion:*** Merged into S1-230547

[**S1-230225**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230225.zip) from vivo: ***Updates on Use case 5.18 to delete EN and enable detection of sensing target*** (pCR)

***Summary:*** This document provides a Text Proposal to resolve EN on use case 5.18

***Discussion:*** Ericsson has concerns with the service continuity.

***Conclusion:*** Merged into S1-230541

[**S1-230316**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230316.zip) **from** Philips International B.V.: ***Addressing Editor s Note in Use Case 5.18*** (pCR)

***Conclusion:*** Revised to S1-230541

[**S1-230541**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230541.zip) **from** Philips International B.V.: ***Addressing Editor s Note in Use Case 5.18*** (pCR)

***Discussion:*** Revision of S1-230316.

***Conclusion:*** Agreed

[**S1-230226**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230226.zip) from vivo, CMCC?: ***Update of Use case 5.22 to include sensing assistance information.*** (pCR)

***Summary:*** This document provides a Text Proposal to include utiliization of assistance data for deriving sensing result on use case 5.22

***Conclusion:*** Revised to S1-230542

[**S1-230542**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230542.zip) **from** vivo: ***Update of Use case 5.22 to include sensing assistance information.*** (pCR)

***Discussion:*** Revision of S1-230226.

***Conclusion:*** Revised to S1-230626

[**S1-230626**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230626.zip) **from** vivo: ***Update of Use case 5.22 to include sensing assistance information.*** (pCR)

***Summary:*** Replaces S1-230542

***Discussion:*** Revision of S1-230226. Revision of S1-230542.

***Conclusion:*** Agreed

[**S1-230251**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230251.zip) from KPN: ***Pseudo-CR on update of use case 5.10 in TR 22.837*** (pCR)

***Summary:*** Update of the use case on UAV flight trajectory tracing in TR 22.837.

***Conclusion:*** Noted

[**S1-230254**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230254.zip) from KPN: ***Pseudo-CR on update of use case 5.8 Sensing Assisted Automotive*** (pCR)

***Summary:*** Update of the use case on Sensing Assisted Automotive Manoeuvring and Navigation.

***Conclusion:*** Revised to S1-230543

[**S1-230543**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230543.zip) **from** KPN: ***Pseudo-CR on update of use case 5.8 Sensing Assisted Automotive*** (pCR)

***Discussion:*** Revision of S1-230254.

"shall provide" -> "shall be able to provide"

***Conclusion:*** Revised to S1-230650

[**S1-230650**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230650.zip) **from** KPN: ***Pseudo-CR on update of use case 5.8 Sensing Assisted Automotive*** (pCR)

***Summary:*** Replaces S1-230543

***Discussion:*** Revision of S1-230254. Revision of S1-230543.

Changes on changes to be cleaned up.

Siemens: "Any MNO" -> "any operator"

For Ericsson, this is already covered, so last requirement has to be removed (number 7).

***Conclusion:*** Revised to S1-230698

[**S1-230698**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230698.zip) **from** KPN: ***Pseudo-CR on update of use case 5.8 Sensing Assisted Automotive*** (pCR)

***Summary:*** Replaces S1-230650

***Discussion:*** Revision of S1-230254. Revision of S1-230543. Revision of S1-230650.

***Conclusion:*** Agreed

[**S1-230296**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230296.zip) from Apple: ***Pseudo-CR on Clarification on UE sensing configuration*** (pCR)

***Conclusion:*** Noted

[**S1-230255**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230255.zip) from Deutsche Telekom, Samsung: ***pCR on updating Sensor Groups use case and proposing new definitions*** (pCR)

***Conclusion:*** Revised to S1-230544

[**S1-230544**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230544.zip) **from** Deutsche Telekom, Samsung: ***pCR on updating Sensor Groups use case and proposing new definitions*** (pCR)

***Discussion:*** Revision of S1-230255.

Some typos

***Conclusion:*** Revised to S1-230651

[**S1-230651**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230651.zip) **from** Deutsche Telekom, Samsung: ***pCR on updating Sensor Groups use case and proposing new definitions*** (pCR)

***Summary:*** Replaces S1-230544

***Discussion:*** Revision of S1-230255. Revision of S1-230544.

***Conclusion:*** Revised to S1-230754

[**S1-230754**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230754.zip) **from** Deutsche Telekom, Samsung: ***pCR on updating Sensor Groups use case and proposing new definitions*** (pCR)

***Summary:*** Replaces S1-230651

***Discussion:*** Revision of S1-230255. Revision of S1-230544. Revision of S1-230651. sensing service in the Note

***Conclusion:*** Agreed

[**S1-230256**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230256.zip) from KPN: ***Pseudo-CR on update of use case 5.20 in TR 22.837*** (pCR)

***Summary:*** Update of the use case on Sensing for Parking Space Determination.

***Conclusion:*** Noted

[**S1-230279**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230279.zip) from Samsung: ***Pseudo-CR on Update to Use Case 5.4*** (pCR)

***Summary:*** This pCR removes editor's notes and cleans up the user of terminology in the use case.

***Conclusion:*** Revised to S1-230545

[**S1-230545**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230545.zip) **from** Samsung: ***Pseudo-CR on Update to Use Case 5.4*** (pCR)

***Discussion:*** Revision of S1-230279. We need terminology alignment.

PR 5.46-1a to be cleaned-up

***Conclusion:*** Revised to S1-230652

[**S1-230652**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230652.zip) **from** Samsung: ***Pseudo-CR on Update to Use Case 5.4*** (pCR)

***Summary:*** Replaces S1-230545

***Discussion:*** Revision of S1-230279. We need terminology alignment. Revision of S1-230545.

***Conclusion:*** Revised to S1-230694

[**S1-230694**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230694.zip) **from** Samsung: ***Pseudo-CR on Update to Use Case 5.4*** (pCR)

***Summary:*** Replaces S1-230652

***Discussion:*** Terminology to be aligned

***Conclusion:*** Revised to S1-230755

[**S1-230755**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230755.zip) **from** Samsung: ***Pseudo-CR on Update to Use Case 5.4*** (pCR)

***Summary:*** Replaces S1-230694

***Discussion:*** Revision of S1-230279. We need terminology alignment. Revision of S1-230545. Revision of S1-230652. Revision of S1-230694. Adapt to sensing data and adapt to regulatory requirements No presentation

***Conclusion:*** Agreed

[**S1-230308**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230308.zip) from Deutsche Telekom, Nokia, Nokia Shanghai Bell: ***Updates in use cases 5.1 5.12 to align usage of sensing transmitter and*** (pCR)

***Conclusion:*** Revised to S1-230603

[**S1-230603**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230603.zip) **from** Deutsche Telekom, Nokia, Nokia Shanghai Bell: ***Updates in use cases 5.1 5.12 to align usage of sensing transmitter and*** (pCR)

***Discussion:*** Revision of S1-230308.

Some concerns still on the Transfer existing new requirement to receiver. Sensing node and telecommunication node need to be clarified.

More companies need time to check.

This can be mentioned in the contentious issue (or in the open issue) in the TR cover page.

This is to be progressed off-line in between meetings.

***Conclusion:*** Noted

[**S1-230078**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230078.zip) from Nokia, Nokia Shanghai Bell, Deutsche Telekom: ***Updates in use cases 5.13 - 5.26 to align usage of sensing transmitter and*** (pCR)

***Summary:*** Changes in clause 5.13 till 5.26 to accommodate sensing transmitter and sensing receiver

***Conclusion:*** Revised to S1-230604

[**S1-230604**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230604.zip) **from** Nokia, Nokia Shanghai Bell, Deutsche Telekom: ***Updates in use cases 5.13 - 5.26 to align usage of sensing transmitter and*** (pCR)

***Discussion:*** Revision of S1-230078.

Same concerns as 603,

***Conclusion:*** Noted

### 7.1.4 Consolidation

[**S1-230099**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230099.zip) from ZTE, China Telecom: ***Discussion paper on consolidation of service requirement of Sensing*** (discussion)

***Summary:*** This contribution analyzes and summarizes the possible consolidation of service requirements of sensing TR22.837.

***Conclusion:*** Noted

[**S1-230223**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230223.zip) from Huawei: ***Consolidated potential requirement for intruder detection in FS\_Sensing*** (pCR)

***Conclusion:*** Noted

[**S1-230100**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230100.zip) from ZTE, China Telecom: ***pCR on Consolidation of potential service requirement of Sensing*** (pCR)

***Summary:*** This contribution proposes the consolidation of potential service functional requirements of sensing according to the agreed PRs in TR22.837 v0.3.0.

***Conclusion:*** Noted

[**S1-230147**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230147.zip) from China Mobile: ***Discussion about Consolidation on Potential Requirement of Sensing*** (pCR)

***Summary:*** Discussion about Consolidation on Potential Requirement of Sensing

***Conclusion:*** Noted

[**S1-230286**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230286.zip) from vivo: ***Consolidation considerations and proposals*** (discussion)

***Summary:*** This document provides considerations and proposals for consolidation

***Conclusion:*** Noted

[**S1-230287**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230287.zip) from vivo: ***Consolidation skeleton proposal*** (pCR)

***Summary:*** This document provides skeleton proposal for consolidation

***Conclusion:*** Noted

[**S1-230290**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230290.zip) from Deutsche Telekom: ***Discussion on consolidated requirements of FS\_Sensing*** (discussion)

***Conclusion:*** Noted

[**S1-230291**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230291.zip) from Deutsche Telekom: ***pCR on consolidated requirements section of FS\_Sensing*** (pCR)

***Conclusion:*** Noted

### 7.1.5 Others

[**S1-230311**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230311.zip) from Beijing Xiaomi Software Tech: ***[draft] LS on clarification for commercial use case supported in 5GS ProSe Service*** (LS out)

***Conclusion:*** Noted

[**S1-230230**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230230.zip) from OTD\_US: ***Pseudo-CR to update considerations for Mission Critical and other priority services*** (pCR)

***Summary:*** This contribution proposes additional clarification for the users of sensing services related to regional and national regulatory rules/policies.

***Conclusion:*** Merged into S1-230321

[**S1-230235**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230235.zip) from OTD\_US: ***Pseudo-CR to update considerations on Privacy for regulatory services*** (pCR)

***Summary:*** This contribution proposes additional clarification for considerations on privacy for regulatory services.

***Conclusion:*** Merged into S1-230321

[**S1-230022**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230022.zip) from Deutsche Telekom: ***Updates in Considerations section*** (pCR)

***Summary:*** Changes in clause 6 - considerations for better readibility and clarity

***Conclusion:*** Revised to S1-230321

[**S1-230321**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230321.zip) **from** Deutsche Telekom, OTD\_US, Nokia, Nokia Shanghai Bell: ***Updates in Considerations section*** (pCR)

***Discussion:*** Revision of S1-230022.

***Conclusion:*** Revised to S1-230546

[**S1-230546**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230546.zip) **from** Deutsche Telekom, OTD\_US, Nokia, Nokia Shanghai Bell, Xiaomi, Peraton Labs: ***Updates in Considerations section*** (pCR)

***Discussion:*** Revision of S1-230022. Revision of S1-230321.

***Conclusion:*** Revised to S1-230653

[**S1-230653**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230653.zip) **from** Deutsche Telekom, OTD\_US, Nokia, Nokia Shanghai Bell, Xiaomi, Peraton Labs: ***Updates in Considerations section*** (pCR)

***Summary:*** Replaces S1-230546

***Discussion:*** Revision of S1-230022. Revision of S1-230321. Revision of S1-230546.

***Conclusion:*** Agreed

[**S1-230228**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230228.zip) from Xiaomi: ***Update to Sensing Security Considerations*** (pCR)

***Summary:*** It is proposed to update the current considerations on confidentiality, integrity and privacy in clauses 6.1 and 6.2 of 3GPP TR 22.837 V0.3.0.

***Conclusion:*** Merged into S1-230546

[**S1-230312**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230312.zip) from Lenovo: ***Use Case of sensing assistance for visually impaired*** (pCR)

***Summary:*** This contribution proposes a new use case for FS\_Sensing, which is about providing environment perception assistance for visually impaired, based on the 5GS sensing service.

***Conclusion:*** Withdrawn

[**S1-230313**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230313.zip) from Lenovo: ***Use Case of sensing assistance for enhanced positioning*** (pCR)

***Summary:*** This contribution proposes a new use case for FS\_Sensing, which is about enhanced positioning of a UE utilizing 5GS sensing service.

***Conclusion:*** Withdrawn

### 7.1.6 FS\_ Sensing Output

[**S1-230718**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230718.zip) **from** Rapporteur: ***Cover page for TR 22.837 on sensing*** (pCR)

***Discussion:*** 1st sentence to be deleted

***Conclusion:*** Revised to S1-230799

[**S1-230799**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230799.zip) **from** Rapporteur: ***Cover page for TR 22.837 on sensing*** (pCR)

***Summary:*** Replaces S1-230718

***Discussion:*** Revision of S1-230718.

***Conclusion:*** Agreed

**[S1-230810](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230719.zip) from** Rapporteur (Deutsche Telekom): ***TR 22.837v0.4.0 Study on Integrated Sensing and Communication*** (pCR)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

Note: S1-230719 initially allocated but used by mistake for another document, so new number S1-230810 allocated for TR 22.837 v.0.4.0)

***Conclusion:*** Agreed

## 7.2 FS\_AmbientIoT: Study on Ambient power-enabled Internet of Things [SP-220085]

Work status prior to this meeting:

Rapporteur: Weijie Xu (OPPO)

Latest version: TR 22.840v1.0.0

Target completion date: SA#98 (12/2022)

Percentage completion: 65%

### 7.2.1 General

[**S1-230167**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230167.zip) from OPPO: ***pCR on overview of TR22840*** (pCR)

***Summary:*** This document provides a Text Proposal on the overview part of TR22840.

***Conclusion:*** Revised to S1-230515

[**S1-230515**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230515.zip) **from** OPPO: ***pCR on overview of TR22840*** (pCR)

***Discussion:*** Revision of S1-230167.

***Conclusion:*** Revised to S1-230654

[**S1-230654**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230654.zip) **from** OPPO: ***pCR on overview of TR22840*** (pCR)

***Summary:*** Replaces S1-230515

***Discussion:*** Revision of S1-230167. Revision of S1-230515.

***Conclusion:*** Agreed

[**S1-230205**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230205.zip) from Xiaomi: ***Use Case grouping and priority*** (pCR)

***Summary:*** It is proposed to add the use case grouping and priority recommendation to 3GPP TR 22.840 V1.0.0.

***Conclusion:*** Noted

[**S1-230164**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230164.zip) from vivo: ***Use case categories*** (pCR)

***Conclusion:*** Revised to S1-230516

[**S1-230516**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230516.zip) **from** vivo, xiaomi: ***Use case categories*** (pCR)

***Discussion:*** Revision of S1-230164.

Still several companies with concerns (Qualcomm, etc)

***Conclusion:*** Noted

[**S1-230161**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230161.zip) from OPPO: ***On the use of comparison operators in the KPI tables*** (discussion)

***Summary:*** Discussion on the use of comparison operators in the KPI tables

***Conclusion:*** Noted

[**S1-230201**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230201.zip) from vivo: ***new KPI parameter proposal*** (pCR)

***Conclusion:*** Revised to S1-230518

[**S1-230518**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230518.zip) **from** vivo: ***new KPI parameter proposal*** (pCR)

***Discussion:*** Revision of S1-230201.

There is still some opposition (Ericsson, Huawei, Sony)

***Conclusion:*** Noted

### 7.2.2 New Use Cases

[**S1-230059**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230059.zip) from Sharp: ***Pseudo-CR on Ambient IoT device permanent deactivation*** (pCR)

***Discussion:*** Uploaded by Jose in the inbox

***Conclusion:*** Revised to S1-230501

[**S1-230501**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230501.zip) **from** Sharp: ***Pseudo-CR on Ambient IoT device permanent deactivation*** (pCR)

***Discussion:*** Revision of S1-230059.

***Conclusion:*** Revised to S1-230519

[**S1-230519**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230519.zip) **from** Sharp: ***Pseudo-CR on Ambient IoT device permanent deactivation*** (pCR)

***Discussion:*** Revision of S1-230059. Revision of S1-230501.

***Conclusion:*** Revised to S1-230624

[**S1-230624**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230624.zip) **from** Sharp, Apple, Convida Wireless: ***Pseudo-CR on Ambient IoT device permanent deactivation*** (pCR)

***Discussion:*** Revision of S1-230059. Revision of S1-230501. Revision of S1-230519.

***Conclusion:*** Revised to S1-230655

[**S1-230655**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230655.zip) **from** Sharp, Apple, Convida Wireless: ***Pseudo-CR on Ambient IoT device permanent deactivation*** (pCR)

***Summary:*** Replaces S1-230624

***Discussion:*** Revision of S1-230059. Revision of S1-230501. Revision of S1-230519. Revision of S1-230624.

***Conclusion:*** Agreed

[**S1-230097**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230097.zip) from ZTE: ***Use case on Ambient IoT device acting as a controller in smart agriculture*** (pCR)

***Summary:*** This contribution describes a new use case about ambient IoT device acting as a controller to control e.g. the pesticide spraying and irrigation equipment in smart agriculture

***Conclusion:*** Revised to S1-230500

[**S1-230500**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230500.zip) **from** ZTE: ***Use case on Ambient IoT device acting as a controller in smart agriculture*** (pCR)

***Discussion:*** Revision of S1-230097.

***Conclusion:*** Revised to S1-230520

[**S1-230520**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230520.zip) **from** ZTE: ***Use case on Ambient IoT device acting as a controller in smart agriculture*** (pCR)

***Discussion:*** Revision of S1-230097. Revision of S1-230500.

***Conclusion:*** Revised to S1-230657

[**S1-230657**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230657.zip) **from** ZTE: ***Use case on Ambient IoT device acting as a controller in smart agriculture*** (pCR)

***Summary:*** Replaces S1-230520

***Discussion:*** Revision of S1-230097. Revision of S1-230500. Revision of S1-230520.

"to begin communication" -> "to communicate"

Reliability: 99%->NA

"provide suitable means" -> "provide means"

"authorised third party" -"trusted third party"

Wrong header

***Conclusion:*** Revised to S1-230757

[**S1-230757**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230757.zip) **from** ZTE: ***Use case on Ambient IoT device acting as a controller in smart agriculture*** (pCR)

***Summary:*** Replaces S1-230657

***Discussion:*** Revision of S1-230097. Revision of S1-230500. Revision of S1-230520. Revision of S1-230657. [P.R.5.x.6-001] The 5G system shall provide means for an trusted third-party to trigger an ambient IoT device or group of ambient IoT devices to communicate periodically. + tdoc number + reliability to NA

***Conclusion:*** Agreed

[**S1-230119**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230119.zip) from Intel: ***Use case on 5GS-ambientIoT relay communication for animal health*** (pCR)

***Conclusion:*** Revised to S1-230529

[**S1-230529**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230529.zip) **from** Intel: ***Use case on 5GS -aAmbient IoT relay communication for animal*** (pCR)

***Discussion:*** Revision of S1-230119.

Still several objections (Nokia, etc)

***Conclusion:*** Noted

[**S1-230168**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230168.zip) from OPPO: ***Traffic scenario on Electronic Shelf Label*** (pCR)

***Summary:*** Proposes a Traffic scenario on Electronic Shelf Label

***Conclusion:*** Revised to S1-230521

[**S1-230521**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230521.zip) **from** OPPO: ***Traffic scenario on Electronic Shelf Label*** (pCR)

***Discussion:*** Revision of S1-230168.

Units to be considered

***Conclusion:*** Revised to S1-230658

[**S1-230658**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230658.zip) **from** OPPO: ***Traffic scenario on Electronic Shelf Label*** (pCR)

***Summary:*** Replaces S1-230521

***Discussion:*** Revision of S1-230168. Revision of S1-230521.

***Conclusion:*** Revised to S1-230756

[**S1-230756**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230756.zip) **from** OPPO: ***Traffic scenario on Electronic Shelf Label*** (pCR)

***Summary:*** Replaces S1-230658

***Discussion:*** "square feet" to be changed to square meters. Wrong header.

transfer interval 1 day to be changed to FFS

***Conclusion:*** Revised to S1-230758

[**S1-230758**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230758.zip) **from** OPPO: ***Traffic scenario on Electronic Shelf Label*** (pCR)

***Summary:*** Replaces S1-230756

***Discussion:*** Revision of S1-230168. Revision of S1-230521. Revision of S1-230658. Revision of S1-230756. Tdoc numbering, square feet to square meters and transfer interval to FFS

***Conclusion:*** Agreed

[**S1-230240**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230240.zip) from Xiaomi: ***Use Case on Ambient IoT for Self-service Library*** (pCR)

***Conclusion:*** Noted

[**S1-230241**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230241.zip) from Xiaomi: ***Use Case on Ambient IoT for underground mining*** (pCR)

***Conclusion:*** Revised to S1-230565

[**S1-230565**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230565.zip) **from** Xiaomi: ***Use Case on Ambient IoT for underground mining*** (pCR)

***Summary:*** Replaces S1-230403

***Discussion:*** Revision of S1-230241.

***Conclusion:*** Revised to S1-230522

[**S1-230522**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230522.zip) **from** Xiaomi: ***Use Case on Ambient IoT for underground mining*** (pCR)

***Discussion:*** Revision of S1-230241. Revision of S1-230565.

***Conclusion:*** Revised to S1-230659

[**S1-230659**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230659.zip) **from** Xiaomi: ***Use Case on Ambient IoT for underground mining*** (pCR)

***Summary:*** Replaces S1-230522

***Discussion:*** Revision of S1-230241. Revision of S1-230565. Revision of S1-230522.

Still some concerns on last day

***Conclusion:*** Noted

[**S1-230242**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230242.zip) from Xiaomi: ***Use Case on Ambient IoT in Wild Animal Park*** (pCR)

***Conclusion:*** Revised to S1-230566

[**S1-230566**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230566.zip) **from** Xiaomi: ***Use Case on Ambient IoT in Wild Animal Park*** (pCR)

***Summary:*** Replaces S1-230071

***Discussion:*** Revision of S1-230242.

***Conclusion:*** Revised to S1-230523

[**S1-230523**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230523.zip) **from** Xiaomi: ***Use Case on Ambient IoT in Wild Animal Park*** (pCR)

***Discussion:*** Revision of S1-230242. Revision of S1-230566.

***Conclusion:*** Noted

### 7.2.3 Former Use cases Updates

[**S1-230011**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230011.zip) from InterDigital: ***Update to the Use Case for supporting Ambient power-enabled IoT in non-public network for logistics*** (pCR)

Summary:

***Conclusion:*** Revised to S1-230608

[**S1-230608**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230608.zip) **from** InterDigital: ***Update to the Use Case for supporting Ambient power-enabled IoT in non-public*** (pCR)

***Discussion:*** Revision of S1-230011.

Huawei don't think that the new requirements are needed.

***Conclusion:*** Revised to S1-230660

[**S1-230660**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230660.zip) **from** InterDigital: ***Update to the Use Case for supporting Ambient power-enabled IoT in non-public*** (pCR)

***Summary:*** Replaces S1-230608

***Discussion:*** Revision of S1-230011. Revision of S1-230608.

No consensus on last day.

***Conclusion:*** Noted

[**S1-230095**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230095.zip) from ZTE, Huawei: ***Pseudo-CR to update 5.2*** (pCR)

***Summary:*** This document proposes to update clause 5.2 “medical instruments inventory management and positioning” in TR 22.840 v.1.0.0 to improve the description, remove editor notes of [PR 5.2.6-003] and the KPI value of “transfer interval” in Table 5.2.6-1

***Conclusion:*** Revised to S1-230524

[**S1-230524**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230524.zip) **from** ZTE, Huawei: ***Pseudo-CR to update 5.2*** (pCR)

***Discussion:*** Revision of S1-230095.

Remove requirements and editor's notes.

***Conclusion:*** Revised to S1-230662

[**S1-230662**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230662.zip) **from** ZTE, Huawei: ***Pseudo-CR to update 5.2*** (pCR)

***Summary:*** Replaces S1-230524

***Discussion:*** Revision of S1-230095. Revision of S1-230524. Remove req and editors note. Taking care of the numbering.

***Conclusion:*** Agreed

[**S1-230096**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230096.zip) from ZTE, Huawei: ***Pseudo-CR to update 5.11*** (pCR)

***Summary:*** This document proposes to update clause 5.11 “online modification of medical instruments status” in TR 22.840 v.1.0.0, to improve the description, remove editor notes of [PR 5.11.6-002] and the KPI value of “transfer interval” in the table 5.11.6-1

***Conclusion:*** Revised to S1-230525

[**S1-230525**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230525.zip) **from** ZTE, Huawei: ***Pseudo-CR to update 5.11*** (pCR)

***Discussion:*** Revision of S1-230096.

***Conclusion:*** Revised to S1-230663

[**S1-230663**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230663.zip) **from** ZTE, Huawei: ***Pseudo-CR to update 5.11*** (pCR)

***Summary:*** Replaces S1-230525

***Discussion:*** Revision of S1-230096. Revision of S1-230525. Remove req and editors note. Taking care of the numbering.

***Conclusion:*** Agreed

[**S1-230122**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230122.zip) from Qualcomm: ***Update to Use case 5.7*** (pCR)

***Conclusion:*** Revised to S1-230526

[**S1-230526**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230526.zip) **from** Qualcomm: ***Update to Use case 5.7*** (pCR)

***Discussion:*** Revision of S1-230122.

***Conclusion:*** Agreed

[**S1-230123**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230123.zip) from Qualcomm: ***Update to Use case 5.8*** (pCR)

***Conclusion:*** Agreed

[**S1-230174**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230174.zip) from vivo: ***Update of Use case 5.12*** (pCR)

***Conclusion:*** Revised to S1-230527

[**S1-230527**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230527.zip) **from** vivo: ***Update of Use case 5.12*** (pCR)

***Discussion:*** Revision of S1-230174.

***Conclusion:*** Revised to S1-230664

[**S1-230664**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230664.zip) **from** vivo: ***Update of Use case 5.12*** (pCR)

***Summary:*** Replaces S1-230527

***Discussion:*** Revision of S1-230174. Revision of S1-230527.

***Conclusion:*** Revised to S1-230759

[**S1-230759**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230759.zip) **from** vivo: ***Update of Use case 5.12*** (pCR)

***Summary:*** Replaces S1-230664

***Discussion:*** Revision of S1-230174. Revision of S1-230527. Revision of S1-230664.

***Conclusion:*** Agreed

[**S1-230176**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230176.zip) from vivo: ***Update of Use case 5.20*** (pCR)

***Conclusion:*** Revised to S1-230609

[**S1-230609**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230609.zip) **from** vivo: ***Update of Use case 5.20*** (pCR)

***Discussion:*** Revision of S1-230176.

***Conclusion:*** Agreed

[**S1-230183**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230183.zip) from Huawei: ***Pseudo-CR on updates to clause 5.3*** (pCR)

***Conclusion:*** Revised to S1-230610

[**S1-230610**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230610.zip) **from** Huawei: ***Pseudo-CR on updates to clause 5.3*** (pCR)

***Discussion:*** Revision of S1-230183.

***Conclusion:*** Agreed

[**S1-230209**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230209.zip) from CMCC: ***pCR on update service requirements and KPI table for clause 5.1*** (pCR)

Summary:

***Conclusion:*** Revised to S1-230564

[**S1-230564**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230564.zip) **from** CMCC: ***pCR on update service requirements and KPI table for clause 5.1*** (CR to 22.011 #0348r1 cat B v.18.4.0, Rel-19, WID: TEI19)

***Summary:*** Replaces S1-230074

***Discussion:*** Revision of S1-230209.

***Conclusion:*** Revised to S1-230611

[**S1-230611**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230611.zip) **from** CMCC: ***pCR on update service requirements and KPI table for clause 5.1*** (pCR)

***Discussion:*** Revision of S1-230209. Revision of S1-230564.

***Conclusion:*** Revised to S1-230699

[**S1-230699**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230699.zip) **from** CMCC: ***pCR on update service requirements and KPI table for clause 5.1*** (pCR)

***Summary:*** Replaces S1-230611

***Discussion:*** Ericsson do not understand the purpose of the change. It used to be one device per square meter, they are not sure of the impact on changing it to 5.

This change is marked as FFS.

Req 4 to be kept as it was.

***Conclusion:*** Revised to S1-230760

[**S1-230760**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230760.zip) **from** CMCC: ***pCR on update service requirements and KPI table for clause 5.1*** (pCR)

***Summary:*** Replaces S1-230699

***Discussion:*** Revision of S1-230209. Revision of S1-230564. Revision of S1-230611. Revision of S1-230699. Req 4 we keep the original + KPI Device is FFS

***Conclusion:*** Agreed

[**S1-230210**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230210.zip) from CMCC: ***pCR on update service requirements and KPI table for clause 5.13*** (pCR)

Summary:

***Conclusion:*** Revised to S1-230563

**[S1-230563](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230563.zip) from** CMCC: ***pCR on update service requirements and KPI table for clause 5.13*** (pCR)

***Summary:*** Replaces S1-230163

***Discussion:*** Revision of S1-230210.

***Conclusion:*** Revised to S1-230612

[**S1-230612**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230612.zip) **from** CMCC: ***pCR on update service requirements and KPI table for clause 5.13*** (pCR)

***Discussion:*** Revision of S1-230210. Revision of S1-230563.

***Conclusion:*** Revised to S1-230747

[**S1-230747**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230747.zip) **from** CMCC: ***pCR on update service requirements and KPI table for clause 5.13*** (pCR)

***Summary:*** Replaces S1-230612

***Discussion:*** Same changes as for 699

***Conclusion:*** Revised to S1-230761

[**S1-230761**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230761.zip) **from** CMCC: ***pCR on update service requirements and KPI table for clause 5.13*** (pCR)

***Summary:*** Replaces S1-230747

***Discussion:*** Revision of S1-230210. Revision of S1-230563. Revision of S1-230612. Revision of S1-230747. Req3 we keep the original

***Conclusion:*** Agreed

[**S1-230231**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230231.zip) from Huawei: ***Pseudo-CR add Communication Service Availability KPI to use case*** (pCR)

***Summary:*** add Communication Service Availability KPI to use case intralogistics in automobile manufacturing clause 5.5

***Conclusion:*** Agreed

[**S1-230232**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230232.zip) from Huawei, Haier: ***Pseudo-CR add Communication Service Availability KPI to use case*** (pCR)

***Summary:*** Pseudo-CR add Communication Service Availability KPI to use case automated supply distribution Clause 5.16

***Conclusion:*** Revised to S1-230613

[**S1-230613**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230613.zip) **from** Huawei, Haier: ***Pseudo-CR add Communication Service Availability KPI to use case*** (pCR)

***Discussion:*** Revision of S1-230232.

***Conclusion:*** Agreed

[**S1-230234**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230234.zip) from Huawei: ***Pseudo-CR add Communication Service Availability KPI and*** (pCR)

***Summary:*** Pseudo-CR add Communication Service Availability KPI and Communication Range KPI to use case smart grazing dairy farming Clause 5.22

***Conclusion:*** Revised to S1-230614

[**S1-230614**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230614.zip) **from** Huawei: ***Pseudo-CR add Communication Service Availability KPI and*** (pCR)

***Discussion:*** Revision of S1-230234.

***Conclusion:*** Agreed

[**S1-230237**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230237.zip) from Huawei: ***Pseudo-CR add Communication Service Availability KPI and*** (pCR)

***Summary:*** Pseudo-CR add Communication Service Availability KPI and Communication Range KPI to use case smart manhole cover safety monitoring Clause 5.24

***Conclusion:*** Revised to S1-230615

[**S1-230615**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230615.zip) **from** Huawei: ***Pseudo-CR add Communication Service Availability KPI and*** (pCR)

***Discussion:*** Revision of S1-230237.

***Conclusion:*** Agreed

[**S1-230238**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230238.zip) from Xiaomi: ***Update to Use Case on Ambient IoT for Museum Guide*** (pCR)

***Conclusion:*** Agreed

[**S1-230239**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230239.zip) from Huawei: ***Pseudo-CR add Communication Service Availability KPI and*** (pCR)

***Summary:*** Pseudo-CR add Communication Service Availability KPI and Communication Range KPI to use case smart bridge health monitoring Clause 5.25

***Conclusion:*** Revised to S1-230616

[**S1-230616**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230616.zip) **from** Huawei: ***Pseudo-CR add Communication Service Availability KPI and*** (pCR)

***Discussion:*** Revision of S1-230239.

***Conclusion:*** Agreed

[**S1-230293**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230293.zip) **from** Vodafone: ***Pseudo-CR on update to clause 5.26*** (pCR)

***Summary:*** Update on clause 5.26 to add the KPI table.

***Conclusion:*** Revised to S1-230621

[**S1-230621**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230621.zip) **from** Vodafone: ***Pseudo-CR on update to clause 5.26*** (pCR)

***Discussion:*** Revision of S1-230293.

Huawei supports removing Note 2.

***Conclusion:*** Agreed

[**S1-230298**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230298.zip) from Intel: ***Update to section-5.19 Resolving EN Note.*** (pCR)

***Conclusion:*** Revised to S1-230528

[**S1-230528**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230528.zip) **from** Intel: ***Update to section-5.19 Resolving EN Note.*** (pCR)

***Discussion:*** Revision of S1-230298.

***Conclusion:*** Revised to S1-230617

[**S1-230617**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230617.zip) **from** Intel: ***Update to section-5.19 Resolving EN Note.*** (pCR)

***Discussion:*** Revision of S1-230298. Revision of S1-230528.

Fix units

***Conclusion:*** Revised to S1-230665

[**S1-230665**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230665.zip) **from** Intel: ***Update to section-5.19 Resolving EN Note.*** (pCR)

***Summary:*** Replaces S1-230617

***Discussion:*** Revision of S1-230298. Revision of S1-230528. Revision of S1-230617.

***Conclusion:*** Agreed

[**S1-230305**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230305.zip) from KPN: ***Pseudo-CR on store and forward messaging for Ambient IoT*** (pCR)

***Summary:*** This contribution provides an update (with additional requirement) for the use case 5.27 use case on end-to-end logistics.

***Conclusion:*** Revised to S1-230618

[**S1-230618**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230618.zip) **from** KPN: ***Pseudo-CR on store and forward messaging for Ambient IoT*** (pCR)

***Discussion:*** Revision of S1-230305.

***Conclusion:*** Revised to S1-230666

[**S1-230666**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230666.zip) **from** KPN: ***Pseudo-CR on store and forward messaging for Ambient IoT*** (pCR)

***Summary:*** Replaces S1-230618

***Discussion:*** Revision of S1-230305. Revision of S1-230618.

Huawei: add "secure messaging is FFS" (in req 5)

***Conclusion:*** Revised to S1-230763

[**S1-230763**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230763.zip) **from** KPN: ***Pseudo-CR on store and forward messaging for Ambient IoT*** (pCR)

***Summary:*** Replaces S1-230666

***Discussion:*** Revision of S1-230305. Revision of S1-230618. Revision of S1-230666. Req#5 is FFS

***Conclusion:*** Agreed

[**S1-230023**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230023.zip) from InterDigital: ***Clarifications of the use case on End-to-End Logistics*** (pCR)

***Conclusion:*** Merged into S1-230619

[**S1-230307**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230307.zip) from KPN: ***Pseudo-CR on definition of Ambient IoT device triggering*** (pCR)

***Summary:*** This contribution addresses an Editor’s Note in clause 5.27

***Conclusion:*** Revised to S1-230517

[**S1-230517**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230517.zip) **from** KPN: ***Pseudo-CR on definition of Ambient IoT device triggering*** (pCR)

***Discussion:*** Revision of S1-230307.

***Conclusion:*** Revised to S1-230619

[**S1-230619**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230619.zip) **from** KPN, Interdigital: ***Pseudo-CR on definition of Ambient IoT device triggering*** (pCR)

***Discussion:*** Revision of S1-230307. Revision of S1-230517.

***Conclusion:*** Agreed

[**S1-230309**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230309.zip) from KPN: ***Pseudo-CR to clarify terminology in clause 5.28*** (pCR)

***Summary:*** This contribution addresses an editor’s note in clause 5.28.

***Conclusion:*** Revised to S1-230620

[**S1-230620**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230620.zip) **from** KPN: ***Pseudo-CR to clarify terminology in clause 5.28*** (pCR)

***Discussion:*** Revision of S1-230309.

***Conclusion:*** Revised to S1-230667

[**S1-230667**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230667.zip) **from** KPN, Interdigital: ***Pseudo-CR to clarify terminology in clause 5.28*** (pCR)

***Summary:*** Replaces S1-230620

***Discussion:*** Revision of S1-230309. Revision of S1-230620.

***Conclusion:*** Revised to S1-230764

[**S1-230764**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230764.zip) **from** KPN, Interdigital: ***Pseudo-CR to clarify terminology in clause 5.28*** (pCR)

***Summary:*** Replaces S1-230667

***Discussion:*** ffs to be added

***Conclusion:*** Revised to S1-230800

[**S1-230800**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230800.zip) **from** KPN, Interdigital: ***Pseudo-CR to clarify terminology in clause 5.28*** (pCR)

***Summary:*** Replaces S1-230764

***Discussion:*** Revision of S1-230309. Revision of S1-230620. Revision of S1-230667. Revision of S1-230764. Editors note : second req FFS No presentation

***Conclusion:*** Agreed

[**S1-230026**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230026.zip) from InterDigital: ***Update to the use case on Pressure Powered Switch*** (pCR)

***Conclusion:*** Merge into S1-230620

### 7.2.4 Consolidation

[**S1-230163**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230163.zip) from OPPO, vivo: ***Consolidation on Functional Requirement of Ambient IoT*** (pCR)

***Summary:*** It is proposed to put the functional requirements into 6 subclauses. Then make CPR mapping table for consolidation under each subclause.

***Discussion:*** 622 used in the end for revision of 163

***Conclusion:*** Revised to S1-230622

[**S1-230622**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230622.zip) **from** OPPO, vivo: ***Consolidation on Functional Requirement of Ambient IoT*** (pCR)

***Discussion:*** Revision of S1-230163.

***Conclusion:*** Revised to S1-230762

[**S1-230762**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230762.zip) **from** OPPO, vivo: ***Consolidation on Functional Requirement of Ambient IoT*** (pCR)

***Summary:*** Replaces S1-230622

***Discussion:*** Ericsson and Nokia prefer to note the document at this meeting and have it as a basis for the next meeting.

All companies acknowledge the tremendous efforts from the rapporteur.

This is to be kept as a basis for future discussion, A revised version, without any CPR, is provided for agreement at this meeting

***Conclusion:*** Revised to S1-230765

[**S1-230765**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230765.zip) **from** OPPO, vivo: ***Consolidation on Functional Requirement of Ambient IoT*** (pCR)

***Summary:*** Replaces S1-230762

***Discussion:*** Without any CPR

***Conclusion:*** Agreed

[**S1-230165**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230165.zip) from OPPO: ***Consolidation on KPI for Ambient IoT*** (pCR)

***Summary:*** This document provides a Text Proposal for the consolidation on KPI for Ambient IoT.

***Conclusion:*** Revised to S1-230623

[**S1-230623**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230623.zip) **from** OPPO, Futurewei: ***Consolidation on KPI for Ambient IoT*** (pCR)

***Discussion:*** Revision of S1-230165.

This is the basis for future discussions.

***Conclusion:*** Noted

[**S1-230212**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230212.zip) from CMCC: ***Consolidated KPI for Ambient IoT*** (pCR)

***Conclusion:*** Merge into S1-230623

### 7.2.5 Others

[**S1-230211**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230211.zip) from CMCC: ***Annex for Communication Modes of Low Power Consumption*** (pCR)

***Conclusion:*** Noted

### 7.2.6 FS\_ Ambient IoT Output

**S1-230720 from** OPPO: ***Presentation of Specification/Report to TSG:*** (other)

***Conclusion:*** Withdrawn

[**S1-230721**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230721.zip) **from** Rapporteur (OPPO): ***TR 22.840v1.1.0 Study on Ambient power-enabled Internet of Things*** (TR draft)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

***Conclusion:*** Agreed

## 7.3 FS\_Metaverse: Study on Localized Mobile Metaverse Services [SP-220353]

Work status prior to this meeting:

Rapporteur: Erik Guttman (Samsung)

Latest version: TR 22.856v0.3.0

Target completion date: SA#99 (03/2023)

Percentage completion: 55%

### 7.3.1 General

[**S1-230182**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230182.zip) from Huawei, Samsung, Lenovo: ***Pseudo-CR on quality improvement in clauses 1 and 2*** (pCR)

***Discussion:*** Rapporteur will reuse reference 29 for another reference information.

***Conclusion:*** Agreed

[**S1-230273**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230273.zip) from Samsung, Huawei: ***Pseudo-CR on Alignment of TR 22.856 Terminology*** (pCR)

***Summary:*** Terminology alignment for most of 22.856 is in this pCR. Some clauses are handled in other pCRs to avoid clashes.

***Conclusion:*** Revised to S1-230402

[**S1-230402**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230402.zip) **from** Samsung, Huawei: ***Pseudo-CR on Alignment of TR 22.856 Terminology*** (pCR)

***Discussion:*** Revision of S1-230273.

No first names should be used, company names should be used instead.

A global editor's note to be put about "immersive".

***Conclusion:*** Revised to S1-230486

[**S1-230486**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230486.zip) **from** Samsung, Huawei: ***Pseudo-CR on Alignment of TR 22.856 Terminology*** (pCR)

***Summary:*** Replaces S1-230402

***Discussion:*** Revision of S1-230273. Revision of S1-230402. Including editors note about immersive.

An editor's note will be added in the terminology section, to say that the term "avatar" will be added

***Conclusion:*** Revised to S1-230774

[**S1-230774**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230774.zip) **from** Samsung, Huawei: ***Pseudo-CR on Alignment of TR 22.856 Terminology*** (pCR)

***Summary:*** Replaces S1-230486

***Discussion:*** Revision of S1-230273. Revision of S1-230402. Including editors note about immersive. Revision of S1-230486. Include editors note : The term avatar will be added.

***Conclusion:*** Agreed

[**S1-230257**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230257.zip) from Samsung: ***Pseudo-CR on Update of 4: Overview*** (pCR)

***Summary:*** This pCR suggests updates for the overview of 22.856.

***Conclusion:*** Not Handled

### 7.3.2 New Use Cases

[**S1-230065**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230065.zip) from Nokia: ***Use-case proposal on Immersive Tele-Operation in Hazardous Environment*** (pCR)

***Summary:*** This document proposes a new use-case to TR 22.856

***Conclusion:*** Revised to S1-230327

[**S1-230327**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230327.zip) **from** Nokia: ***Use-case proposal on Immersive Tele-Operation in Hazardous Environment*** (pCR)

***Summary:*** Replaces S1-230065

***Discussion:*** Revision of S1-230065.

***Conclusion:*** Revised to S1-230403

[**S1-230403**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230403.zip) **from** Nokia: ***Use-case proposal on Immersive Tele-Operation in Hazardous Environment*** (pCR)

***Discussion:*** Revision of S1-230065. Revision of S1-230327.

***Conclusion:*** Revised to S1-230734

[**S1-230734**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230734.zip) **from** Nokia: ***Use-case proposal on Immersive Tele-Operation in Hazardous Environment*** (pCR)

***Summary:*** Replaces S1-230403

***Discussion:*** Revision of S1-230065. Revision of S1-230327. Revision of S1-230403.

***Conclusion:*** Revised to S1-230743

[**S1-230743**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230743.zip) **from** Nokia, Kyonggi University: ***Use-case proposal on Immersive Tele-Operation in Hazardous Environment*** (pCR)

***Summary:*** Replaces S1-230734

***Discussion:*** Revision of S1-230065. Revision of S1-230327. Revision of S1-230403. Revision of S1-230734.

***Conclusion:*** Agreed

[**S1-230114**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230114.zip) from Intel: ***Use case on Compute Offload for Metaverse MMO Gaming.*** (pCR)

***Conclusion:*** Revised to S1-230338

[**S1-230338**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230338.zip) **from** Intel: ***Use case on Compute Offload for Metaverse MMO Gaming*** (pCR)

***Summary:*** Replaces S1-230114

***Discussion:*** Revision of S1-230114.

***Conclusion:*** Revised to S1-230404

[**S1-230404**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230404.zip) **from** Intel: ***Use case on Compute Offload for Metaverse MMO Gaming*** (pCR)

***Discussion:*** Revision of S1-230114. Revision of S1-230338.

***Conclusion:*** Withdrawn

[**S1-230125**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230125.zip) from Rakuten Mobile: ***Pseudo-CR Use case of Virtual Emergency Drill over 5G Metaverse*** (pCR)

***Summary:*** This contribution proposes a new use case for FS\_Metaverse

***Conclusion:*** Revised to S1-230405

[**S1-230405**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230405.zip) **from** Rakuten Mobile: ***Pseudo-CR Use case of Virtual Emergency Drill over 5G Metaverse*** (pCR)

***Discussion:*** Revision of S1-230125.

Samsung (Rapporteur), Qualcomm: "virtual 5GS" not defined.

NSCS: "suitable" is not adding information here, it can be removed

***Conclusion:*** Revised to S1-230487

[**S1-230487**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230487.zip) **from** Rakuten Mobile: ***Pseudo-CR Use case of Virtual Emergency Drill over 5G Metaverse*** (pCR)

***Summary:*** Replaces S1-230405

***Discussion:*** Revision of S1-230125. Revision of S1-230405.

"virtual 5G system" and "suitable" to be removed

***Conclusion:*** Revised to S1-230766

[**S1-230766**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230766.zip) **from** Rakuten: ***Use case of Virtual Emergency Drill over 5G Metaverse*** (pCR)

***Summary:*** Replaces S1-230487

***Discussion:*** Revision of S1-230125. Revision of S1-230405. Revision of S1-230487. Remove suitable, replace editors note with 1 editors note these 2 requirements are FFS

***Conclusion:*** Agreed

[**S1-230145**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230145.zip) from NTT DOCOMO: ***New use case - "Device independent mobile metaverse experience"*** (pCR)

***Conclusion:*** Revised to S1-230400

[**S1-230400**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230400.zip) **from** NTT DOCOMO: ***New use case - "Device independent mobile metaverse experience"*** (pCR)

***Discussion:*** Revision of S1-230145.

***Conclusion:*** Revised to S1-230406

[**S1-230406**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230406.zip) **from** NTT DOCOMO: ***New use case - "Device independent mobile metaverse experience"*** (pCR)

***Discussion:*** Revision of S1-230145. Revision of S1-230400.

Rapporteur: PR2 too ambiguous and should be deleted

Qualcomm, Nokia: PR1 also not so clear

***Conclusion:*** Revised to S1-230488

[**S1-230488**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230488.zip) **from** NTT DOCOMO: ***New use case - "Device independent mobile metaverse experience"*** (pCR)

***Summary:*** Replaces S1-230406

***Discussion:*** Revision of S1-230145. Revision of S1-230400. Revision of S1-230406.

***Conclusion:*** Noted

[**S1-230169**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230169.zip) from vivo: ***Pseudo-CR on Media Negotiation to Achieve Media Delivery Optimization*** (pCR)

***Conclusion:*** Revised to S1-230407

[**S1-230407**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230407.zip) **from** vivo, InterDigital? China Mobile？: ***Pseudo-CR on Media Negotiation to Achieve Media Delivery Optimization*** (pCR)

***Discussion:*** Revision of S1-230169.

Still not stable (Rapporteur, Qualcomm, etc)

***Conclusion:*** Revised to S1-230490

[**S1-230490**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230490.zip) **from** vivo: ***Pseudo-CR on use case of media negotiation to achieve media delivery optimization*** (pCR)

***Summary:*** Replaces S1-230407

***Discussion:*** Revision of S1-230169. Revision of S1-230407.

***Conclusion:*** Withdrawn

[**S1-230170**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230170.zip) from vivo: ***Pseudo-CR on Metaverse Live Concert*** (pCR)

***Conclusion:*** Revised to S1-230408

[**S1-230408**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230408.zip) **from** vivo: ***Pseudo-CR on Mobile Metaverse Live Concert*** (pCR)

***Discussion:*** Revision of S1-230170.

One global editor's note to be added to state in the terminology: it will be revised to

Ericsson: "group communication" has a specific meaning. Different words should be used when not in the usual concept (e.g. "communication between groups")

Formatting is wrong (wrong styles)

***Conclusion:*** Revised to S1-230491

[**S1-230491**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230491.zip) **from** vivo: ***Pseudo-CR on Mobile Metaverse Live Concert*** (pCR)

***Summary:*** Replaces S1-230408

***Discussion:*** Revision of S1-230170. Revision of S1-230408.

***Conclusion:*** Agreed

[**S1-230192**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230192.zip) from China Mobile: ***Use case of cooperation between metaverse service and network*** (pCR)

Summary:

***Conclusion:*** Revised to S1-230409

[**S1-230409**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230409.zip) **from** China Mobile: ***Use case of cooperation between metaverse service and network*** (pCR)

***Discussion:*** Revision of S1-230192.

Several points still to be clarified: Granularity, latency (Nokia, Huawei, Qualcomm)

***Conclusion:*** Revised to S1-230492

[**S1-230492**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230492.zip) **from** China Mobile: ***Use case of cooperation between metaverse service and network*** (pCR)

***Summary:*** Replaces S1-230409

***Discussion:*** Revision of S1-230192. Revision of S1-230409.

***Conclusion:*** Agreed

[**S1-230198**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230198.zip) **from** China Mobile, China Telecom, Huawei: ***Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights*** (pCR)

***Conclusion:*** Revised to S1-230410

[**S1-230410**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230410.zip) **from** China Mobile, China Telecom, Huawei, OTD\_US: ***Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights*** (pCR)

***Discussion:*** Revision of S1-230198.

Wrong version uploaded.

Note 1 should be removed (out of context).

***Conclusion:*** Revised to S1-230493

[**S1-230493**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230493.zip) **from** China Mobile, China Telecom, Huawei, OTD\_US: ***Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights*** (pCR)

***Summary:*** Replaces S1-230410

***Discussion:*** Revision of S1-230198. Revision of S1-230410.

"in real world" to be deleted at the end of Req 1.

Last 3 req have to be marked FFS.

***Conclusion:*** Revised to S1-230767

[**S1-230767**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230767.zip) **from** China Mobile, China Telecom, Huawei, OTD\_US: ***Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights*** (pCR)

***Summary:*** Replaces S1-230493

***Discussion:*** Revision of S1-230198. Revision of S1-230410. Revision of S1-230493. [PR 5.x.6-1] Subject to regulatory requirements, user s consent and operator s policy, the 5G system shall support mechanisms to identify an avatars and associate an avatar with a subscriber (i.e. the owner of the avatar). Req#4,5,6 are FFS

***Conclusion:*** Agreed

[**S1-230246**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230246.zip) from CableLabs, Charter Communications, Futurewei: ***22.856 pCR: New Use case on Metaverse Multi Access Scenario*** (pCR)

***Summary:*** pCR introduces a new use case and requirements for Metaverse traffic routed or steered over both 3GPP and non-3GPP access

***Conclusion:*** Revised to S1-230411

[**S1-230411**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230411.zip) **from** CableLabs, Charter Communications, Comcast, Futurewei,: ***22.856 pCR: New Use case on Metaverse Multi Access Scenario*** (pCR)

***Discussion:*** Revision of S1-230246.

Note: CableLabs (Omkar) participation was remote.

***Conclusion:*** Agreed

[**S1-230253**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230253.zip) from China Telecom: ***New Use Case on Location-restricted Access*** (pCR)

***Conclusion:*** Revised to S1-230412

[**S1-230412**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230412.zip) **from** China Telecom: ***New use case on user identities in a digital asset container*** (pCR)

***Discussion:*** Revision of S1-230253.

Note: China Telecom (Yinglin) participation was remote.

When presenting, prefer to reword as:

"[PR 5.x.6-2] The 5G system shall be able for users to define conditions (e.g. based on user location information) associated with the use and management of the User Identity specific information in their digital asset containers."

Qualcomm: both the new version and the old version of the PR are confusing.

***Conclusion:*** Revised to S1-230494

[**S1-230494**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230494.zip) **from** China Telecom, China Mobile: ***New use case on user identities in a digital asset container*** (pCR)

***Summary:*** Replaces S1-230412

***Discussion:*** Revision of S1-230253. Revision of S1-230412.

"these 2 PR are FFS" to be added

changes on changes to be removed.

***Conclusion:*** Revised to S1-230768

[**S1-230768**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230768.zip) **from** China Telecom, China Mobile: ***New use case on user identities in a digital asset container*** (pCR)

***Summary:*** Replaces S1-230494

***Discussion:*** Revision of S1-230253. Revision of S1-230412. Revision of S1-230494. Clean up changes, both reqs are FFS

***Conclusion:*** Agreed

[**S1-230266**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230266.zip) from Samsung: ***Pseudo-CR on 5.X: New use case on IMS-based Avatar Call Support for*** (pCR)

***Summary:*** This use case considers the potential for use of IMS 3D Avatar Call to improve the possibilities for accessible communication and adds charging requirements.

***Conclusion:*** Revised to S1-230413

[**S1-230413**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230413.zip) **from** Samsung: ***Pseudo-CR on 5.X: New use case on IMS-based Avatar Call Support for*** (pCR)

***Discussion:*** Revision of S1-230266.

Wrong version uploaded

***Conclusion:*** Revised to S1-230495

[**S1-230495**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230495.zip) **from** Samsung: ***Pseudo-CR on 5.X: New use case on IMS-based Avatar Call Support for*** (pCR)

***Summary:*** Replaces S1-230413

***Discussion:*** Revision of S1-230266. Revision of S1-230413.

Huawei supports.

Req 1:M"Such that" to be removed as well as "in a standard form"

***Conclusion:*** Revised to S1-230769

[**S1-230769**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230769.zip) **from** Samsung, Huawei: ***Pseudo-CR on 5.X: New use case on IMS-based Avatar Call Support for*** (pCR)

***Summary:*** Replaces S1-230495

***Discussion:*** Revision of S1-230266. Revision of S1-230413. Revision of S1-230495. [P.R.-5.W.6-1] The 5G system shall support the encoding of sensor data capturing the facial expression and movement and gestures of a person as part of the avatar encoding.+ Huawei as supporting company

***Conclusion:*** Agreed

[**S1-230268**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230268.zip) from Samsung: ***Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling*** (pCR)

***Summary:*** This pCR proposes to introduce a new use case on Metaverse services and overloading the network in the context of an AR augmented entertainment theme park and adds charging requirements.

***Conclusion:*** Revised to S1-230415

[**S1-230415**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230415.zip) **from** Samsung, AT&T: ***Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling*** (pCR)

***Discussion:*** Revision of S1-230268.

***Conclusion:*** Revised to S1-230496

[**S1-230496**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230496.zip) **from** Samsung, AT&T: ***Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling*** (pCR)

***Summary:*** Replaces S1-230415

***Discussion:*** Revision of S1-230268. Revision of S1-230415.

"identified" to be removed

***Conclusion:*** Revised to S1-230770

[**S1-230770**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230770.zip) **from** Samsung, AT&T: ***Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling*** (pCR)

***Summary:*** Replaces S1-230496

***Discussion:*** Revision of S1-230268. Revision of S1-230415. Revision of S1-230496.

***Conclusion:*** Revised to S1-230796

[**S1-230796**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230796.zip) **from** Samsung, AT&T: ***Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling*** (pCR)

***Summary:*** Replaces S1-230770

***Discussion:*** Revision of S1-230268. Revision of S1-230415. Revision of S1-230496. Revision of S1-230770.

***Conclusion:*** Agreed

### 7.3.3 Former Use cases Updates

[**S1-230029**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230029.zip) from InterDigital: ***Update to the Critical HealthCare Services Use Case*** (pCR)

***Conclusion:*** Revised to S1-230416

[**S1-230416**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230416.zip) **from** InterDigital: ***Update to the Use Case for supporting Metaverse for Critical HealthCare*** (pCR)

***Discussion:*** Revision of S1-230029.

***Conclusion:*** Noted

[**S1-230030**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230030.zip) from InterDigital: ***Update to the Use Case on Autonomous Virtual Alter Ego*** (pCR)

***Conclusion:*** Revised to S1-230417

[**S1-230417**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230417.zip) **from** InterDigital, NTT DOCOMO: ***Update to the Use Case on Autonomous Virtual Alter Ego*** (pCR)

***Discussion:*** Revision of S1-230030.

Qualcomm: third PR still unclear

***Conclusion:*** Revised to S1-230497

[**S1-230497**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230497.zip) **from** InterDigital, NTT DOCOMO: ***Update to the Use Case on Autonomous Virtual Alter Ego*** (pCR)

***Summary:*** Replaces S1-230417

***Discussion:*** Revision of S1-230030. Revision of S1-230417.

Numbering issue, other typos

***Conclusion:*** Revised to S1-230771

[**S1-230771**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230771.zip) **from** InterDigital, NTT DOCOMO: ***Update to the Use Case on Autonomous Virtual Alter Ego*** (pCR)

***Summary:*** Replaces S1-230497

***Discussion:*** Revision of S1-230030. Revision of S1-230417. Revision of S1-230497. Correctly typos and numbering

***Conclusion:*** Agreed

[**S1-230032**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230032.zip) from Ericsson: ***Pseudo-CR on simplify the privacy requirements and remove EN*** (pCR)

***Summary:*** The text in the two requirements in chapter 5.19.6 has been simplified in order to remove the editor’s note. No conceptual changes are intended for the two requirements.

***Conclusion:*** Revised to S1-230341

[**S1-230341**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230341.zip) **from** Ericsson, OTD\_US: ***Pseudo-CR on simplify the privacy requirements and remove EN*** (pCR)

***Summary:*** Replaces S1-230032

***Discussion:*** Revision of S1-230032.

***Conclusion:*** Revised to S1-230425

[**S1-230425**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230425.zip) **from** Ericsson, OTD\_US: ***Pseudo-CR on simplify the privacy requirements and remove EN*** (pCR)

***Discussion:*** Revision of S1-230032. Revision of S1-230341.

Qualcomm, NSCS: the wording is unclear

***Conclusion:*** Revised to S1-230498

[**S1-230498**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230498.zip) **from** Ericsson, OTD\_US: ***Pseudo-CR on simplify the privacy requirements and remove EN*** (pCR)

***Summary:*** Replaces S1-230425

***Discussion:*** Revision of S1-230032. Revision of S1-230341. Revision of S1-230425.

***Conclusion:*** Agreed

[**S1-230064**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230064.zip) from Nokia: ***Revision of use-case 5.7 Immersive AR experience*** (pCR)

***Summary:*** This document proposes a revision of use-case 5.7

***Conclusion:*** Revised to S1-230426

[**S1-230426**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230426.zip) **from** Nokia: ***Revision of use-case 5.7 Immersive AR experience*** (pCR)

***Discussion:*** Revision of S1-230064.

***Conclusion:*** Revised to S1-230485

[**S1-230485**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230485.zip) **from** Nokia: ***Revision of use-case 5.7 Immersive AR experience*** (pCR)

***Summary:*** Replaces S1-230426

***Discussion:*** Wrong styles used.

Qualcomm: more re-wording needed.

***Conclusion:*** Revised to S1-230499

[**S1-230499**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230499.zip) **from** Nokia, Kyonggi University: ***Revision of use-case 5.7 Immersive AR experience*** (pCR)

***Summary:*** Replaces S1-230485

***Discussion:*** Revision of S1-230064. Revision of S1-230426. Revision of S1-230485.

Speed to be changed to FFS in the 2nd table.

***Conclusion:*** Revised to S1-230772

[**S1-230772**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230772.zip) **from** Nokia, Kyonggi University: ***Revision of use-case 5.7 Immersive AR experience*** (pCR)

***Summary:*** Replaces S1-230499

***Discussion:*** Revision of S1-230064. Revision of S1-230426. Revision of S1-230485. Revision of S1-230499. Second table, UE Speed is FFS

***Conclusion:*** Agreed

[**S1-230091**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230091.zip) from CMCC, Huawei, Orange: ***Pseudo-CR on updates to clause 5.16*** (pCR)

***Conclusion:*** Revised to S1-230427

[**S1-230427**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230427.zip) **from** CMCC, Huawei, Orange: ***Pseudo-CR on updates to clause 5.16*** (pCR)

***Discussion:*** Revision of S1-230091.

Some typos.

Nokia: "Regulatory requirements" should not be deleted.

***Conclusion:*** Revised to S1-230567

[**S1-230567**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230567.zip) **from** CMCC, Huawei, Orange: ***Pseudo-CR on updates to clause 5.16*** (pCR)

***Summary:*** Replaces S1-230427

***Discussion:*** Revision of S1-230091. Revision of S1-230427.

***Conclusion:*** Revised to S1-230682

[**S1-230682**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230682.zip) **from** CMCC, Huawei, Orange: ***Pseudo-CR on updates to clause 5.16*** (pCR)

***Summary:*** Replaces S1-230567

***Discussion:*** Revision of S1-230091. Revision of S1-230427. Revision of S1-230567.

***Conclusion:*** Agreed

[**S1-230144**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230144.zip) from NTT DOCOMO: ***Update of use case on Work delegation to autonomous virtual alter ego*** (pCR)

***Conclusion:*** Revised to S1-230401

[**S1-230401**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230401.zip) **from** NTT DOCOMO: ***Update of use case on Work delegation to autonomous virtual alter ego*** (pCR)

***Discussion:*** Revision of S1-230144.

***Conclusion:*** Revised to S1-230428

[**S1-230428**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230428.zip) **from** NTT DOCOMO: ***Update of use case on Work delegation to autonomous virtual alter ego*** (pCR)

***Discussion:*** Revision of S1-230144. Revision of S1-230401.

Nokia: potential conflicts with PR from other contributions (in particular 497). A merge is possible.

NSCS: the last part about charging is not useful.

Editor's note on the 2nd PR was added by mistake, to be deleted.

***Conclusion:*** Revised to S1-230568

[**S1-230568**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230568.zip) **from** NTT DOCOMO, OTD\_US: ***Update of use case on Work delegation to autonomous virtual alter ego*** (pCR)

***Summary:*** Replaces S1-230428

***Discussion:*** Revision of S1-230144. Revision of S1-230401. Revision of S1-230428.

The terminology has to be aligned, to be done by the rapporteur.

A note will be added to state that the term "avatar" will be defined.

***Conclusion:*** Agreed

[**S1-230153**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230153.zip) from CATT: ***Pseudo-CR on Updates of clause 5.6 Mobile Metaverse for Immersive Gaming*** (pCR)

***Conclusion:*** Revised to S1-230429

[**S1-230429**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230429.zip) **from** CATT: ***Pseudo-CR on Updates of clause 5.6 Mobile Metaverse for Immersive Gaming*** (pCR)

***Discussion:*** Revision of S1-230153.

***Conclusion:*** Revised to S1-230489

[**S1-230489**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230489.zip) **from** CATT: ***Pseudo-CR on Updates of clause 5.6 Mobile Metaverse for Immersive Gaming*** (pCR)

***Summary:*** Replaces S1-230429

***Discussion:*** Note: CATT (Qing) participation was remote.

Nokia: accuracy: this is to be rephrased.

Qualcomm: Note to be clarified.

***Conclusion:*** Revised to S1-230569

[**S1-230569**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230569.zip) **from** CATT: ***Pseudo-CR on Updates of clause 5.6 Mobile Metaverse for Immersive Gaming*** (pCR)

***Summary:*** Replaces S1-230489

***Discussion:*** Revision of S1-230153. Revision of S1-230429. Revision of S1-230489.

Positioning accuracy to be changed to NA

***Conclusion:*** Revised to S1-230773

**S1-230773 from** CATT: ***pCR on updates of clause 5.6*** (pCR)

***Summary:*** Replaces S1-230569

***Discussion:*** Revision of S1-230153. Revision of S1-230429. Revision of S1-230489. Revision of S1-230569.

***Conclusion:*** Withdrawn

[**S1-230171**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230171.zip) from vivo: ***Pseudo-CR on Update of use case on synchronization*** (pCR)

***Conclusion:*** Revised to S1-230430

[**S1-230430**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230430.zip) **from** vivo, Interdigital: ***Pseudo-CR on Update of use case on synchronization*** (pCR)

***Discussion:*** Revision of S1-230171.

Nokia: wrong PR numbering.

Wrong header

Qualcomm: typos just above 5.8, problem with the PR

***Conclusion:*** Revised to S1-230570

[**S1-230570**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230570.zip) **from** vivo, Interdigital: ***Pseudo-CR on Update of use case on synchronization*** (pCR)

***Summary:*** Replaces S1-230430

***Discussion:*** Revision of S1-230171. Revision of S1-230430.

***Conclusion:*** Agreed

[**S1-230172**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230172.zip) from vivo: ***Pseudo-CR on update the power consumption for immersive AR Interactive*** (pCR)

***Conclusion:*** Noted

[**S1-230233**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230233.zip) from OTD\_US: ***Pseudo-CR to update new requirements for identity management and privacy awareness for metaverse services*** (pCR)

***Summary:*** This contribution proposes the addition of new requirements for identity management and privacy awareness for regulatory services.

***Conclusion:*** Revised to S1-230431

[**S1-230431**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230431.zip) **from** OTD\_US: ***Pseudo-CR to update new requirements for identity management and privacy awareness for metaverse services*** (pCR)

***Discussion:*** Revision of S1-230233.

Wrong header

Ericsson: 5.19.6 to be deleted since there is no change on this section.

Nkia: "digital entity" not updated everywhere.

***Conclusion:*** Revised to S1-230576

[**S1-230576**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230576.zip) **from** OTD\_US: ***Pseudo-CR to update new requirements for identity management and privacy awareness for metaverse services*** (pCR)

***Summary:*** Replaces S1-230431

***Discussion:*** Revision of S1-230233. Revision of S1-230431.

***Conclusion:*** Merged into 0568

[**S1-230258**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230258.zip) from Samsung: ***Pseudo-CR on Update of 5.1: Localized Mobile Metaverse Service Use Case*** (pCR)

***Summary:*** Abstract: Updates use case 5.1 to add new requirements and to align terminology

***Conclusion:*** Revised to S1-230432

[**S1-230432**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230432.zip) **from** Samsung: ***Pseudo-CR on Update of 5.1: Localized Mobile Metaverse Service Use Case*** (pCR)

***Discussion:*** Revision of S1-230258.

"presentation"->"rendering"

***Conclusion:*** Revised to S1-230572

[**S1-230572**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230572.zip) **from** Samsung: ***Pseudo-CR on Update of 5.1: Localized Mobile Metaverse Service Use Case*** (pCR)

***Summary:*** Replaces S1-230432

***Discussion:*** Revision of S1-230258. Revision of S1-230432.

***Conclusion:*** Agreed

[**S1-230259**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230259.zip) from Samsung, Tencent, Tencent Cloud, Huawei: ***22.856 pCR: 5.2 and 5.6 Terminology and Clean Up*** (pCR)

***Summary:*** This pCR proposes changes to TR 22.856 5.2 and 5.6.

***Conclusion:*** Revised to S1-230433

[**S1-230433**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230433.zip) **from** Samsung, Tencent, Tencent Cloud, Huawei: ***22.856 pCR: 5.2 and 5.6 Terminology and Clean Up*** (pCR)

***Discussion:*** Revision of S1-230259.

***Conclusion:*** Agreed

[**S1-230261**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230261.zip) from Samsung: ***Pseudo-CR on Update of 5.4: Localized Mobile Metaverse Service Use Case*** (pCR)

***Summary:*** Updates use case 5.4 to add a new requirement for charging and correct some editorial issues.

***Conclusion:*** Revised to S1-230434

[**S1-230434**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230434.zip) **from** Samsung: ***Pseudo-CR on Update of 5.4: Localized Mobile Metaverse Service Use Case*** (pCR)

***Discussion:*** Revision of S1-230261.

***Conclusion:*** Revised to S1-230573

[**S1-230573**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230573.zip) **from** Samsung: ***Pseudo-CR on Update of 5.4: Localized Mobile Metaverse Service Use Case*** (pCR)

***Summary:*** Replaces S1-230434

***Discussion:*** Revision of S1-230261. Revision of S1-230434.

***Conclusion:*** Agreed

[**S1-230262**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230262.zip) from Samsung: ***Pseudo-CR on Update of 5.5: Spatial Mapping and Localization Enabler Use*** (pCR)

***Summary:*** Removes ENs that remain in the use case and adds charging requirements.

***Conclusion:*** Revised to S1-230435

[**S1-230435**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230435.zip) **from** Samsung: ***Pseudo-CR on Update of 5.5: Spatial Mapping and Localization Enabler Use*** (pCR)

***Discussion:*** Revision of S1-230262.

Note 2 to be removed

***Conclusion:*** Revised to S1-230574

[**S1-230574**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230574.zip) **from** Samsung: ***Pseudo-CR on Update of 5.5: Spatial Mapping and Localization Enabler Use*** (pCR)

***Summary:*** Replaces S1-230435

***Discussion:*** Revision of S1-230262. Revision of S1-230435.

***Conclusion:*** Agreed

[**S1-230263**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230263.zip) from Samsung: ***22.856 pCR: update to include an additional requirement for 5.8*** (pCR)

***Summary:*** This pCR proposes an additional requirement for end-to-end QoS monitoring and enforcement to clause 5.8 of 22.856 0.3.0.

***Conclusion:*** Noted

[**S1-230264**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230264.zip) from Samsung, Huawei: ***22.856 pCR: editorial clean up proposals for 5.10*** (pCR)

***Summary:*** This pCR proposes editorial improvement to clause 5.10 of 22.856 0.3.0.

***Conclusion:*** Revised to S1-230436

[**S1-230436**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230436.zip) **from** Samsung, Huawei, Interdigital: ***22.856 pCR: editorial clean up proposals for 5.10*** (pCR)

***Discussion:*** Revision of S1-230264.

***Conclusion:*** Agreed

[**S1-230265**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230265.zip) from Samsung: ***Pseudo-CR on Update of 5.11: Use case of IMS-based 3D Avatar Communication*** (pCR)

***Summary:*** This pCR updates use case 5.11 to further clarify the use of IMS-based 3D avatar communication and adds charging requirements.

***Conclusion:*** Revised to S1-230437

[**S1-230437**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230437.zip) **from** Samsung, Huawei: ***Pseudo-CR on Update of 5.11: Use case of IMS-based 3D Avatar Communication*** (pCR)

***Discussion:*** Revision of S1-230265.

PR3 : "used produces" -> "used to produce"

Nokia's name to be removed

***Conclusion:*** Revised to S1-230575

[**S1-230575**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230575.zip) **from** Samsung, Huawei: ***Pseudo-CR on Update of 5.11: Use case of IMS-based 3D Avatar Communication*** (pCR)

***Summary:*** Replaces S1-230437

***Discussion:*** Revision of S1-230265. Revision of S1-230437.

***Conclusion:*** Agreed

### 7.3.4 Consolidation & Others

[**S1-230247**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230247.zip) from China Telecom, Orange, China Mobile, Huawei: ***Merged potential service requirements on digital asset management*** (pCR)

***Conclusion:*** Noted

[**S1-230229**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230229.zip) from OTD\_US: ***Pseudo-CR to add considerations for Mission Critical and other priority services*** (pCR)

***Summary:*** This contribution proposes the addition of considerations for Mission Critical and other priority services.

***Conclusion:*** Revised to S1-230438

[**S1-230438**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230438.zip) **from** OTD\_US: ***Pseudo-CR to add considerations for clause 7*** (pCR)

***Discussion:*** Revision of S1-230229.

Changes on changes to be cleaned-up

***Conclusion:*** Revised to S1-230577

[**S1-230577**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230577.zip) **from** OTD\_US: ***Pseudo-CR to add considerations for clause 7*** (pCR)

***Summary:*** Replaces S1-230438

***Discussion:*** Revision of S1-230229. Revision of S1-230438.

Problem of formatting in the conclusion

***Conclusion:*** Revised to S1-230775

[**S1-230775**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230775.zip) **from** OTD\_US: ***Pseudo-CR to add considerations for clause 7*** (pCR)

***Summary:*** Replaces S1-230577

***Discussion:*** Revision of S1-230229. Revision of S1-230438. Revision of S1-230577. Fix format No presentation

***Conclusion:*** Agreed

[**S1-230267**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230267.zip) from Samsung: ***[DRAFT] LS on IMS-based 3D Avatar Call Support for Accessibility*** (LS out)

***Summary:*** Asks ITU-T SG16 for their opinion on the proposal and references.

***Conclusion:*** Revised to S1-230414

[**S1-230414**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230414.zip) **from** SA1: ***[DRAFT] LS on IMS-based 3D Avatar Call Support for Accessibility*** (LS)

***Discussion:*** Revision of S1-230267.

Qualcomm would prefer to have it handled at the next meeting

***Conclusion:*** Noted

[**S1-230270**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230270.zip) from Samsung: ***Pseudo-CR on 6: Relation to other standards activities*** (pCR)

***Summary:*** Mentions that other standards activities concerning Metaverse have not been considered in the development of this study

***Conclusion:*** Revised to S1-230439

[**S1-230439**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230439.zip) **from** Samsung: ***Pseudo-CR on 6: Relation to other standards activities*** (pCR)

***Discussion:*** Revision of S1-230270.

***Conclusion:*** Revised to S1-230578

[**S1-230578**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230578.zip) **from** Samsung: ***Pseudo-CR on 6: Relation to other standards activities*** (pCR)

***Summary:*** Replaces S1-230439

***Discussion:*** Revision of S1-230270. Revision of S1-230439. Remove the clause and check the Numbers.

***Conclusion:*** Agreed

[**S1-230271**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230271.zip) from Samsung: ***Pseudo-CR on 7: Considerations*** (pCR)

***Summary:*** Provides a brief statement of 'other considerations' discussed in the TR.

***Conclusion:*** Revised to S1-230440

[**S1-230440**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230440.zip) **from** Samsung: ***Pseudo-CR on 7: Considerations*** (pCR)

***Discussion:*** Revision of S1-230271.

***Conclusion:*** Noted

[**S1-230272**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230272.zip) from Samsung: ***FS\_Metaverse Requirement Consolidation except for 'digital assets'*** (pCR)

***Summary:*** This is an initial consolidation of the FS\_Metaverse requirements except for digital assets, which are consolidated in another pCR.

***Conclusion:*** Not Handled

### 7.3.5 FS\_Metaverse Output

[**S1-230275**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230275.zip) from Samsung: ***Presentation of Specification/Report to TSG:*** (TS or TR cover)

***Summary:*** cover sheet for TR 22.856  
For approval in SA1, but sent for \*information\* to SA 99.

***Discussion:*** to be sent for information

***Conclusion:*** Revised to S1-230801

[**S1-230801**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230801.zip) **from** Samsung: ***Presentation of Specification/Report to TSG:*** (TS or TR cover)

***Summary:*** Replaces S1-230275

***Discussion:*** Revision of S1-230275. Delete Changes since last SA and delete number of editors note.

***Conclusion:*** Agreed

[**S1-230723**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230723.zip) **from** Rapporteur (Samsung): ***TR 22.856v0.4.0 Study on Localized Mobile Metaverse Services*** (TR draft)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

***Conclusion:*** Agreed

[**S1-230197**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230197.zip) from China Mobile Com. Corporation: ***Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights*** (pCR)

***Conclusion:*** Withdrawn

## 7.4 FS\_NetShare: Study on Network Sharing Aspects [SP-220087]

Work status prior to this meeting:

Rapporteur: Qun Wei (China Unicom)

Latest version: TR 22.851v1.0.0

Target completion date: SA#98 (03/2023)

Percentage completion: 75%

### 7.4.1 General

[**S1-230093**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230093.zip) from China Unicom: ***FS\_Netshare Overview*** (pCR)

***Summary:*** Provide the potential Overview for TR22.851V1.0.0.

***Conclusion:*** Revised to S1-230553

[**S1-230553**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230553.zip) **from** China Unicom, Charter Communications: ***FS\_Netshare Overview*** (pCR)

***Summary:*** Replaces S1-230093

***Discussion:*** Revision of S1-230093.

***Conclusion:*** Revised to S1-230579

[**S1-230579**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230579.zip) **from** China Unicom, Charter Communications: ***FS\_Netshare Overview*** (pCR)

***Summary:*** Replaces S1-230553

***Discussion:*** Revision of S1-230093. Revision of S1-230553.

***Conclusion:*** Agreed

[**S1-230019**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230019.zip) from ZTE WistronTelecom AB: ***TR Cleanup*** (pCR)

***Summary:*** TR Editorial Cleanup

***Conclusion:*** Revised to S1-230071

[**S1-230071**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230071.zip) from China Unicom, Charter Communications, ZTE: ***Feasibility Study on Network Sharing Aspect*** (pCR)

Summary:

Editorial improvement throughout the document

***Discussion:*** Revision of S1-230019.

***Conclusion:*** Revised to S1-230735

[**S1-230735**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230735.zip) **from** China Unicom, Charter Communications, ZTE: ***Feasibility Study on Network Sharing Aspect*** (pCR)

***Summary:*** Replaces S1-230071

***Discussion:*** The format of this pCR is very unusual, with a cover page, etc. It should be a normal pCR.

***Conclusion:*** Revised to S1-230746

[**S1-230746**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230746.zip) **from** China Unicom, Charter Communications, ZTE: ***Feasibility Study on Network Sharing Aspect*** (pCR)

***Summary:*** Replaces S1-230735

***Discussion:*** Revision of S1-230019. Revision of S1-230071. Revision of S1-230735.

***Conclusion:*** Agreed

[**S1-230351**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230351.zip) **from** China Unicom: ***Discussion paper of FS\_Netshare WID and CR*** (other)

***Discussion:*** New coming document based on Monday discussion at main room Majority is going to Op 1. (located in 261 and refers 101)

***Conclusion:*** Noted

### 7.4.2 New Use Cases

[**S1-230016**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230016.zip) **from** Charter Communications, Inc: ***Add Public Warning System Requirement*** (pCR)

***Summary:*** Introduce the potential PWS requirement for the non-N2 shared network in TR 22.851 V1.0.0

***Discussion:*** Merged into the PR001 of #0361

***Conclusion:*** Noted

[**S1-230018**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230018.zip) from ZTE Wistron Telecom AB, one2many, Charter Communications Inc., China: ***Use Case on Support of PWS in 5G Shared Access Network with Indirect*** (pCR)

***Summary:*** Description of Use Case on Support of PWS in 5G Shared Access Network with Indirect Interconnection and potential requirements.

***Conclusion:*** Revised to S1-230102

[**S1-230102**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230102.zip) from ZTE Wistron Telecom AB, one2many, Charter Communications Inc., China: ***Use Case on Support of PWS in 5G Shared Access Network with Indirect*** (pCR)

Summary:

Description of Use Case on Support of PWS in 5G Shared Access Network with Indirect Interconnection and potential requirements.

***Discussion:*** Revision of S1-230018.

***Conclusion:*** Revised to S1-230361

[**S1-230361**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230361.zip) **from** ZTE Wistron Telecom AB, one2many, Charter Communications Inc., China: ***Use Case on Support of PWS in 5G Shared Access Network with Indirect*** (pCR)

***Discussion:*** Revision of S1-230018. Revision of S1-230102.

***Conclusion:*** Agreed

[**S1-230277**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230277.zip) from Samsung: ***Use case for prioritizing home RAN over partner operator s RAN*** (pCR)

***Summary:*** This pCR proposes a new use case to TR 22.851

***Conclusion:*** Revised to S1-230362

[**S1-230362**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230362.zip) **from** Samsung: ***Use case for prioritizing home RAN over partner operator s RAN*** (pCR)

***Discussion:*** Revision of S1-230277. approach : no UE impacts (Qualcomm, Charter, OPPO)

***Conclusion:*** Withdrawn

[**S1-230278**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230278.zip) from Samsung: ***Use case on Emergency services in a Shared Network*** (pCR)

***Summary:*** This pCR proposes a new use case to TR 22.851

***Conclusion:*** Revised to S1-230363

[**S1-230363**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230363.zip) **from** Samsung: ***Use case on Emergency services in a Shared Network*** (pCR)

***Discussion:*** Revision of S1-230278.

***Conclusion:*** Withdrawn

### 7.4.3 Former Use cases Updates

[**S1-230066**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230066.zip) from Nokia: ***22.851 pCR: Clarifications on UE steering*** (pCR)

***Summary:*** This document provides clarifications on UE steering for FS\_NetShare, which is currently FFS.

***Conclusion:*** Revised to S1-230385

[**S1-230385**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230385.zip) **from** Nokia: ***22.851 pCR: Clarifications on UE steering*** (pCR)

***Discussion:*** Revision of S1-230066.

CATT: "Steering indication" shall be clarified (in the 2nd requirement). Nokia: it was "guidance" initially, and it was requested to change it into "indication".

Qualcomm request for more clarifications to the text to be done off-line.

***Conclusion:*** Revised to S1-230580

[**S1-230580**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230580.zip) **from** Nokia, China Unicom: ***22.851 pCR: Clarifications on UE steering*** (pCR)

***Summary:*** Replaces S1-230385

***Discussion:*** Revision of S1-230066. Revision of S1-230385.

***Conclusion:*** Agreed

[**S1-230067**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230067.zip) from Nokia: ***22.851 pCR: Editorial changes to quoted text*** (pCR)

***Summary:*** This document provides editorial fixes to quoted text in FS\_NetShare TR

***Conclusion:*** Agreed

[**S1-230149**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230149.zip) from CATT: ***Pseudo-CR on updates of clause 5.7*** (pCR)

***Conclusion:*** Revised to S1-230386

[**S1-230386**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230386.zip) **from** CATT: ***Pseudo-CR on updates of clause 5.7*** (pCR)

***Conclusion:*** Revised to S1-230392

[**S1-230392**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230392.zip) **from** CATT: ***Pseudo-CR on updates of clause 5.7*** (pCR)

***Summary:*** Replaces S1-230386

***Discussion:*** During presentation, CATT propose to rewrite as: "[PR 5.7.6-003] In case of Indirect Network Sharing, the 5G system shall be able to apply the differentiated access control for the access networks of Shared RANs based on the Hosting and Participating Operator’s agreement and policies."

Qualcomm needs more time

***Conclusion:*** Revised to S1-230581

[**S1-230581**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230581.zip) **from** CATT: ***Pseudo-CR on updates of clause 5.7*** (pCR)

***Summary:*** Replaces S1-230392

***Discussion:*** Revision of S1-230386. Revision of S1-230392.

***Conclusion:*** Revised to S1-230776

[**S1-230776**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230776.zip) **from** CATT: ***Pseudo-CR on updates of clause 5.7*** (pCR)

***Summary:*** Replaces S1-230581

***Discussion:*** Editor's notes should be kept.

***Conclusion:*** Revised to S1-230781

[**S1-230781**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230781.zip) **from** CATT: ***Pseudo-CR on updates of clause 5.7*** (pCR)

***Summary:*** Replaces S1-230776

***Discussion:*** Revision of S1-230386. Revision of S1-230392. Revision of S1-230581. Revision of S1-230776. Keep the editors note

***Conclusion:*** Agreed

### 7.4.4 Consolidation & Others

[**S1-230020**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230020.zip) from ZTE, China Unicom: ***Requirements Consolidation*** (pCR)

***Summary:*** Different use cases described and potential requirements defined. The defined requirements need be consolidated for FS\_NetShare

***Conclusion:*** Revised to S1-230103

[**S1-230103**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230103.zip) from ZTE Wistron Telecom AB, China Unicom: ***Requirements Consolidation*** (pCR)

Summary:

Different use cases described and potential requirements defined. The defined requirements need be consolidated for FS\_NetShare

***Discussion:*** Revision of S1-230020.

***Conclusion:*** Revised to S1-230387

[**S1-230387**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230387.zip) **from** ZTE Wistron Telecom AB, China Unicom: ***Requirements Consolidation*** (pCR)

***Discussion:*** Revision of S1-230020. Revision of S1-230103.

***Conclusion:*** Revised to S1-230391

[**S1-230391**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230391.zip) **from** ZTE Wistron Telecom AB, China Unicom: ***Requirements Consolidation*** (pCR)

***Summary:*** Replaces S1-230387

***Discussion:*** SA1 agreement on NetShare: SA1's understanding is that there will be no more use cases presented at the next meeting.

On this pCR: Qualcomm's comments to be taken off-line.

***Conclusion:*** Revised to S1-230582

[**S1-230582**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230582.zip) **from** ZTE Wistron Telecom AB, China Unicom: ***Requirements Consolidation*** (pCR)

***Summary:*** Replaces S1-230391

***Discussion:*** Revision of S1-230020. Revision of S1-230103. Revision of S1-230387. Revision of S1-230391.

***Conclusion:*** Revised to S1-230777

[**S1-230777**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230777.zip) **from** ZTE Wistron Telecom AB, China Unicom: ***Requirements Consolidation*** (pCR)

***Summary:*** Replaces S1-230582

***Discussion:*** In 7.2.1, the categorisation is not useful, in Qualcomm's view. It is deleted.

***Conclusion:*** Revised to S1-230782

[**S1-230782**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230782.zip) **from** ZTE Wistron Telecom AB, China Unicom: ***Requirements Consolidation*** (pCR)

***Summary:*** Replaces S1-230777

***Discussion:*** Revision of S1-230020. Revision of S1-230103. Revision of S1-230387. Revision of S1-230391. Revision of S1-230582. Revision of S1-230777. Remove bullet list + editors note

***Conclusion:*** Agreed

[**S1-230079**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230079.zip) from China Unicom: ***FS\_Netshare Conclusions and Recommendations*** (pCR)

***Summary:*** Provide the potential Conclusions and Recommendations for TR22.851V1.0.0.

***Conclusion:*** Revised to S1-230388

[**S1-230388**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230388.zip) **from** China Unicom: ***TR 22.851 FS\_Netshare Conclusions*** (pCR)

***Discussion:*** Revision of S1-230079.

***Conclusion:*** Noted

[**S1-230148**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230148.zip) from CATT: ***Pseudo-CR on security considerations*** (pCR)

***Conclusion:*** Revised to S1-230389

[**S1-230389**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230389.zip) **from** CATT: ***Pseudo-CR on security considerations*** (pCR)

***Discussion:*** Revision of S1-230148.

Edited while projecting.

***Conclusion:*** Revised to S1-230583

[**S1-230583**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230583.zip) **from** CATT: ***Pseudo-CR on security considerations*** (pCR)

***Summary:*** Replaces S1-230389

***Discussion:*** Revision of S1-230148. Revision of S1-230389. Therefore, more security relative to user privacy and the operator s policy can be taken into account for the Indirect Network Sharing configuration.

***Conclusion:*** Agreed

### 7.4.5 FS\_NetShare Output

**S1-230724 from** Rapporteur (China Unicom): ***Cover sheet of the TR22.851 for approval*** (TS or TR cover)

***Conclusion:*** Withdrawn

[**S1-230725**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230725.zip) **from** Rapporteur (China Unicom): ***TR 22.851v1.1.0 Study on Network Sharing Aspects*** (TR draft)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

***Conclusion:*** Agreed

## 7.5 FS\_FRMCS\_Ph5: Study on FRMCS Phase 5 [SP-220088]

Work status prior to this meeting:

Rapporteur: Guillaume Gach (UIC)

Latest version: TR22.989v19.2.0

Target completion date: SA#101 (09/2023)

Percentage completion: 50%

There was no contribution for this agenda item.

## 7.6 FS\_AIML\_Ph2: Study on AI/ML Model Transfer\_Phase2 [SP-220083]

Work status prior to this meeting:

Rapporteur: Xu Yang (OPPO)

Latest version: TR22.876v0.2.0

Target completion date: SA#98 (03/2023)

Percentage completion: 50%

### 7.6.1 New Use Cases

[**S1-230017**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230017.zip) from InterDigital, OPPO: ***New use-case on local AI/ML model split on factory robots*** (pCR)

***Conclusion:*** Revised to S1-230364

[**S1-230364**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230364.zip) **from** InterDigital, OPPO: ***New use-case on local AI/ML model split on factory robots*** (pCR)

***Discussion:*** Revision of S1-230017.

***Conclusion:*** Revised to S1-230395

[**S1-230395**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230395.zip) **from** InterDigital, OPPO: ***New use-case on local AI/ML model split on factory robots*** (pCR)

***Summary:*** Replaces S1-230364

***Discussion:*** Revision of S1-230017. Revision of S1-230364.

Note to be removed in 5.x.6

***Conclusion:*** Revised to S1-230783

[**S1-230783**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230783.zip) **from** InterDigital, OPPO: ***New use-case on local AI/ML model split on factory robots*** (pCR)

***Summary:*** Replaces S1-230395

***Discussion:*** Revision of S1-230017. Revision of S1-230364. Revision of S1-230395. Delete note in section 5x6.

***Conclusion:*** Agreed

[**S1-230127**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230127.zip) from OPPO, Xiaomi: ***5GS assisted distributed joint inference for intelligent networked vehicles*** (pCR)

***Summary:*** This document proposes a use case and related potential requirements to be included in FS\_AIML\_Ph2 TR 22.876.

***Conclusion:*** Revised to S1-230365

[**S1-230365**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230365.zip) **from** OPPO, Xiaomi: ***5GS assisted distributed joint inference for intelligent networked vehicles*** (pCR)

***Discussion:*** Revision of S1-230127.

Wrong header

***Conclusion:*** Revised to S1-230393

[**S1-230393**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230393.zip) **from** OPPO, Xiaomi: ***5GS assisted distributed joint inference for intelligent networked vehicles*** (pCR)

***Summary:*** Replaces S1-230365

***Discussion:*** Revision of S1-230127. Revision of S1-230365. Fix HEader No presentation

***Conclusion:*** Agreed

[**S1-230128**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230128.zip) from OPPO, Xiaomi, Tsinghua University: ***5GS assisted transfer learning for vehicle trajectory prediction*** (pCR)

***Summary:*** This document proposes a new use case in FS\_AIML\_Ph2 TR 22.876.

***Conclusion:*** Revised to S1-230366

[**S1-230366**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230366.zip) **from** OPPO, Xiaomi, Tsinghua University: ***5GS assisted transfer learning for vehicle trajectory prediction*** (pCR)

***Discussion:*** Revision of S1-230128.

Wrong header, typo.

"This PR"-> "this requirement"

Note to be removed

***Conclusion:*** Revised to S1-230394

[**S1-230394**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230394.zip) **from** OPPO, Xiaomi, Tsinghua University: ***5GS assisted transfer learning for vehicle trajectory prediction*** (pCR)

***Summary:*** Replaces S1-230366

***Discussion:*** Revision of S1-230128. Revision of S1-230366. Agreed without the note

***Conclusion:*** Agreed

### 7.6.2 Former Use cases Updates

[**S1-230087**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230087.zip) from Lenovo: ***Pseudo-CR on corrections to clause 2 and 5*** (pCR)

***Discussion:*** No presentation

***Conclusion:*** Agreed

[**S1-230092**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230092.zip) from China Telecom, OPPO: ***Update on AI Model Transfer Management through Direct Device*** (pCR)

***Conclusion:*** Revised to S1-230367

[**S1-230367**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230367.zip) **from** China Telecom, OPPO: ***Update on AI Model Transfer Management through Direct Device*** (pCR)

***Discussion:*** Revision of S1-230092.

Qualcomm: add square brackets n the very last line to show that it is a range

***Conclusion:*** Revised to S1-230396

[**S1-230396**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230396.zip) **from** China Telecom, OPPO: ***Update on AI Model Transfer Management through Direct Device*** (pCR)

***Summary:*** Replaces S1-230367

***Discussion:*** Revision of S1-230092. Revision of S1-230367. Reliability is assumed to be [99.9 99.999]%

***Conclusion:*** Agreed

[**S1-230131**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230131.zip) from OPPO: ***Update of Use Case of direct device connection based federated learning*** (pCR)

***Summary:*** This document updates the use case and related potential requirements as well as resolves editor’s notes in FS\_AIML\_Ph2 TR 22.876 version 0.2.0.

***Conclusion:*** Revised to S1-230368

[**S1-230368**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230368.zip) **from** OPPO: ***Update of Use Case of direct device connection based federated learning*** (pCR)

***Discussion:*** Revision of S1-230131.

***Conclusion:*** Revised to S1-230397

[**S1-230397**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230397.zip) **from** OPPO: ***Update of Use Case of direct device connection based federated learning*** (pCR)

***Summary:*** Replaces S1-230368

***Discussion:*** Revision of S1-230131. Revision of S1-230368.

***Conclusion:*** Revised to S1-230784

[**S1-230784**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230784.zip) **from** OPPO: ***Update of Use Case of direct device connection based federated learning*** (pCR)

***Summary:*** Replaces S1-230397

***Discussion:*** Revision of S1-230131. Revision of S1-230368. Revision of S1-230397. Req3#1 shall be able to configure" No presentation

***Conclusion:*** Agreed

[**S1-230132**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230132.zip) from OPPO: ***Update of Use case Proximity based work task offloading for AI/ML inference*** (pCR)

***Summary:***  This document is to update the use case for proximity-based work task offloading in TR 22.876 clause 5.1

***Conclusion:*** Revised to S1-190369

[**S1-230369**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230369.zip) **from** OPPO: ***Update of Use case Proximity based work task offloading for AI/ML inference*** (pCR)

***Discussion:*** Revision of S1-230132.

***Conclusion:*** Revised to S1-230737

[**S1-230737**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230737.zip) **from** OPPO: ***Update of Use case Proximity based work task offloading for AI/ML inference*** (pCR)

***Summary:*** Replaces S1-230369

***Discussion:*** Revision of S1-230132. Revision of S1-230369.

***Conclusion:*** Revised to S1-230742

[**S1-230742**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230742.zip) **from** OPPO: ***Update of Use case Proximity based work task offloading for AI/ML inference*** (pCR)

***Summary:*** Replaces S1-230737

***Discussion:*** Qualcomm: 2nd Note ("Note X") to be deleted

***Conclusion:*** Revised to S1-230744

[**S1-230744**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230744.zip) **from** OPPO: ***Update of Use case Proximity based work task offloading for AI/ML inference*** (pCR)

***Summary:*** Replaces S1-230742

***Discussion:*** Revision of S1-230132. Revision of S1-230369. Revision of S1-230737. Revision of S1-230742. Remove NOTE X

***Conclusion:*** Agreed

### 7.6.3 Consolidation & Others

[**S1-230133**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230133.zip) from OPPO: ***Consolidation on Functional Requirement of AIML-Ph2*** (pCR)

***Summary:*** It is proposed to make CPR mapping table for consolidation of AIML-Ph2.

***Conclusion:*** Revised to S1-230390

[**S1-230390**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230390.zip) **from** OPPO: ***Consolidation on Functional Requirement of AIML-Ph2*** (pCR)

***Discussion:*** Revision of S1-230133.

***Conclusion:*** Noted

### 7.6.4 FS\_AIML\_Ph2 Output

[**S1-230726**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230726.zip) **from** OPPO (Rapporteur): ***Presentation of Specification/Report to TSG:*** (TS or TR cover)

***Conclusion:*** Revised to S1-230806

[**S1-230806**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230806.zip) **from** OPPO (Rapporteur): ***Presentation of Specification/Report to TSG:*** (TS or TR cover)

***Summary:*** Replaces S1-230726

***Discussion:*** Revision of S1-230726. Delete sentence There are one remaining editor's notes to be resolved before the TR is sent for approval.

***Conclusion:*** Agreed

[**S1-230727**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230727.zip) **from** Rapporteur (OPPO): ***TR 22.876v0.3.0 Study on AI/ML Model Transfer\_Phase2*** (TR draft)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

***Conclusion:*** Agreed

## 7.7 FS\_5GSAT\_Ph3: New SID on satellite access - Phase 3 [SP-220679]

Work status prior to this meeting:

Rapporteur: Thierry Bérisot (Novamint), Xu Xia (China Telecom)

Latest version: TR22.865v0.2.0

Target completion date: SA#99 (03/2023)

Percentage completion: 55%

### 7.7.1 General

[**S1-230136**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230136.zip) from Novamint: ***Text Proposal for the Overview section*** (pCR)

***Conclusion:*** Revised to S1-230454

[**S1-230454**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230454.zip) **from** Novamint, Huawei: ***Text Proposal for the Overview section*** (pCR)

***Discussion:*** Revision of S1-230136.

***Conclusion:*** Revised to S1-230475

[**S1-230475**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230475.zip) **from** Novamint, Huawei: ***Text Proposal for the Overview section*** (pCR)

***Discussion:*** Revision of S1-230136. Revision of S1-230454.

***Conclusion:*** Agreed

### 7.7.2 New Use Cases

[**S1-230072**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230072.zip) from ETRI: ***Use case on service continuity for UE-to-UE communication across*** (pCR)

***Summary:*** This document proposes a use case on service continuity for UE-to-UE communication across multiple satellites and relevant requirements for TR22.865 v0.2.0 (FS\_5GSAT\_ph3).

***Conclusion:*** Revised to S1-230129

[**S1-230129**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230129.zip) from ETRI, Novamint: ***Use case on service continuity for UE-to-UE communication across*** (pCR)

Summary:

This document proposes a use case on service continuity for UE-to-UE communication across multiple satellites and relevant requirements for TR22.865 v0.2.0 (FS\_5GSAT\_ph3).

***Discussion:*** Revision of S1-230072.

***Conclusion:*** Revised to S1-230450

[**S1-230450**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230450.zip) **from** ETRI, Novamint, Thales, Eutelsat, Lockheed Martin, KT Corporation,: ***Use case on service continuity for UE-to-UE communication across*** (pCR)

***Discussion:*** Revision of S1-230072. Revision of S1-230129.

***Conclusion:*** Revised to S1-230457

[**S1-230457**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230457.zip) **from** ETRI, Novamint, Thales, Eutelsat, Lockheed Martin, KT Corporation,: ***Use case on service continuity for UE-to-UE communication across*** (pCR)

***Discussion:*** Revision of S1-230072. Revision of S1-230129. Revision of S1-230450.

***Conclusion:*** Revised to S1-230645

[**S1-230645**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230645.zip) **from** ETRI, Novamint, Thales, Eutelsat, Lockheed Martin, KT Corporation,: ***Use case on service continuity for UE-to-UE communication across*** (pCR)

***Summary:*** Replaces S1-230457

***Discussion:*** It is explained that the 2nd requirement is for inter-satellite.

***Conclusion:*** Revised to S1-230669

[**S1-230669**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230669.zip) **from** ETRI, Novamint, Thales, Eutelsat, Lockheed Martin, KT Corporation,: ***Use case on service continuity for UE-to-UE communication across*** (pCR)

***Summary:*** Replaces S1-230645

***Discussion:*** Revision of S1-230072. Revision of S1-230129. Revision of S1-230450. Revision of S1-230457. Revision of S1-230645.

***Conclusion:*** Agreed

[**S1-230073**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230073.zip) from ETRI: ***Use case on service continuity for UE-to-UE communication in case of*** (pCR)

***Summary:*** This document proposes a use case on service continuity for UE-to-UE communication in case of network roaming and relevant requirements for TR22.865 v0.2.0 (FS\_5GSAT\_ph3)

***Conclusion:*** Revised to S1-230130

[**S1-230130**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230130.zip) from ETRI, Novamint: ***Use case on service continuity for UE-to-UE communication in case of*** (pCR)

Summary:

This document proposes a use case on service continuity for UE-to-UE communication in case of network roaming and relevant requirements for TR22.865 v0.2.0 (FS\_5GSAT\_ph3)

***Discussion:*** Revision of S1-230073.

***Conclusion:*** Revised to S1-230458

[**S1-230458**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230458.zip) **from** ETRI, Novamint, Lockheed Martin, KT Corporation, Gatehouse: ***Use case on service continuity for UE-to-UE communication in case of*** (pCR)

***Discussion:*** Revision of S1-230073. Revision of S1-230130.

***Conclusion:*** Revised to S1-230670

[**S1-230670**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230670.zip) **from** ETRI, Novamint, Lockheed Martin, KT Corporation, Gatehouse: ***Use case on service continuity for UE-to-UE communication in case of*** (pCR)

***Summary:*** Replaces S1-230458

***Discussion:*** Revision of S1-230073. Revision of S1-230130. Revision of S1-230458. Change roaming to mobility from Fig title.

***Conclusion:*** Agreed

[**S1-230126**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230126.zip) from Rakuten Mobile: ***Pseudo-CR Minimization of Service Interruption in case of Satellite Access*** (pCR)

***Summary:*** This contribution proposes a new use case for FS\_5GSAT\_Ph3

***Conclusion:*** Noted

[**S1-230203**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230203.zip) from Indian Institute of Technology Bombay: ***Usage of satellite connectivity for AI/ML support in 5GS*** (SID new)

***Summary:*** This document proposes a use case along with requirements to be considered for FS\_5GSAT\_Ph3 in TR 22.865.

***Conclusion:*** Noted

[**S1-230288**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230288.zip) from Novamint, Gatehouse, TNO: ***Use case on store and forward emergency report relaying*** (pCR)

***Conclusion:*** Revised to S1-230452

[**S1-230452**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230452.zip) **from** Novamint, Gatehouse, TNO, Sateliot: ***Use case on store and forward emergency report relaying*** (pCR)

***Discussion:*** Revision of S1-230288.

***Conclusion:*** Revised to S1-230459

[**S1-230459**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230459.zip) **from** Novamint, Gatehouse, TNO, Sateliot: ***Use case on store and forward emergency report relaying*** (pCR)

***Discussion:*** Revision of S1-230288. Revision of S1-230452.

***Conclusion:*** Revised to S1-230679

[**S1-230679**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230679.zip) **from** Novamint, Gatehouse, TNO, Sateliot: ***Use case on store and forward emergency report relaying*** (pCR)

***Discussion:*** Revision of S1-230288. Revision of S1-230452. Revision of S1-230459. Editors note FFS to PR#1.

***Conclusion:*** Agreed

[**S1-230289**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230289.zip) from Novamint, Gatehouse, TNO: ***Use case on store and forward emergency pass-through for UE to UE*** (pCR)

***Conclusion:*** Revised to S1-230460

[**S1-230460**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230460.zip) **from** Novamint, Gatehouse, TNO: ***Use case on store and forward emergency pass-through for UE to UE*** (pCR)

***Discussion:*** Revision of S1-230289.

***Conclusion:*** Revised to S1-230672

**S1-230672 from** NOVAMINT, GateHouse, TNO: ***Use case on store and forward emergency pass-through for UE to UE communication*** (pCR)

***Summary:*** Replaces S1-230460

***Discussion:*** Revision of S1-230289. Revision of S1-230460.

***Conclusion:*** Withdrawn

### 7.7.3 Former Use cases Updates

[**S1-230057**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230057.zip) from Nokia: ***22.865 pCR: Updates in use case 5.1 to align service flows and potential new*** (pCR)

***Summary:*** This contribution proposes updates of use case 5.1

***Conclusion:*** Revised to S1-230455

[**S1-230455**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230455.zip) **from** Nokia, Novamint, Sateliot, Gatehouse: ***22.865 pCR: Updates in use case 5.1 to align service flows and potential new*** (pCR)

***Discussion:*** Revision of S1-230057.

***Conclusion:*** Revised to S1-230467

[**S1-230467**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230467.zip) **from** Nokia, Novamint, Sateliot, Gatehouse: ***22.865 pCR: Updates in use case 5.1 to align service flows and potential new*** (pCR)

***Discussion:*** Revision of S1-230057. Revision of S1-230455.

***Conclusion:*** Revised to S1-230673

[**S1-230673**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230673.zip) **from** Nokia, Novamint, Sateliot, Gatehouse: ***22.865 pCR: Updates in use case 5.1 to align service flows and potential new*** (pCR)

***Summary:*** Replaces S1-230467

***Discussion:*** Revision of S1-230057. Revision of S1-230455. Revision of S1-230467. Editors note FFS for Req#6

***Conclusion:*** Agreed

[**S1-230058**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230058.zip) from Nokia: ***22.865 pCR: Updates in use case 5.2 to align service flows and potential new*** (pCR)

***Summary:*** This contribution proposes updates of use case 5.2

***Conclusion:*** Revised to S1-230456

[**S1-230456**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230456.zip) **from** Nokia, Novamint, , Sateliot, Gatehouse: ***22.865 pCR: Updates in use case 5.2 to align service flows and*** (pCR)

***Discussion:*** Revision of S1-230058.

***Conclusion:*** Revised to S1-230466

[**S1-230466**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230466.zip) **from** Nokia, Novamint, , Sateliot, Gatehouse: ***22.865 pCR: Updates in use case 5.2 to align service flows and*** (pCR)

***Discussion:*** Revision of S1-230058. Revision of S1-230456.

***Conclusion:*** Revised to S1-230468

[**S1-230468**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230468.zip) **from** Nokia, Novamint, Sateliot, Gatehouse: ***22.865 pCR: Updates in use case 5.2 to align service flows and*** (pCR)

***Discussion:*** Revision of S1-230058. Revision of S1-230456. Revision of S1-230466.

***Conclusion:*** Revised to S1-230674

[**S1-230674**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230674.zip) **from** Nokia, Novamint, Sateliot, Gatehouse: ***22.865 pCR: Updates in use case 5.2 to align service flows and*** (pCR)

***Summary:*** Replaces S1-230468

***Discussion:*** Revision of S1-230058. Revision of S1-230456. Revision of S1-230466. Revision of S1-230468. Editors note FFS for Req#5

***Conclusion:*** Agreed

[**S1-230137**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230137.zip) from Novamint, TNO: ***Update of 5.2*** (pCR)

***Conclusion:*** Merged into S1-230456

[**S1-230138**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230138.zip) from Novamint, TNO: ***Update of 5.3*** (pCR)

***Conclusion:*** Revised to S1-230469

[**S1-230469**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230469.zip) **from** Novamint, TNO: ***Update of 5.3*** (pCR)

***Discussion:*** Revision of S1-230138.

***Conclusion:*** Agreed

[**S1-230139**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230139.zip) from Novamint, TNO: ***Update of 5.4*** (pCR)

***Conclusion:*** Agreed

[**S1-230140**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230140.zip) from Novamint, TNO: ***Update of 5.5*** (pCR)

***Conclusion:*** Revised to S1-230470

[**S1-230470**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230470.zip) **from** Novamint, TNO: ***Update of 5.5*** (pCR)

***Discussion:*** Revision of S1-230140.

***Conclusion:*** Agreed

[**S1-230150**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230150.zip) from CATT: ***Pseudo-CR on updates of clause 5.5*** (pCR)

***Conclusion:*** Revised to S1-230471

[**S1-230471**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230471.zip) **from** CATT: ***Pseudo-CR on updates of clause 5.5*** (pCR)

***Discussion:*** Revision of S1-230150.

***Conclusion:*** Revised to S1-230656

[**S1-230656**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230656.zip) **from** CATT: ***Pseudo-CR on updates of clause 5.5*** (pCR)

***Summary:*** Replaces S1-230471

***Discussion:*** Revision of S1-230150. As on the photo Revision of S1-230471.

***Conclusion:*** Agreed

[**S1-230141**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230141.zip) from Novamint, TNO: ***Update of 5.7*** (pCR)

***Conclusion:*** Agreed

[**S1-230143**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230143.zip) from Novamint,TNO: ***Update of 5.8*** (pCR)

***Conclusion:*** Revised to S1-230472

[**S1-230472**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230472.zip) **from** Novamint,TNO: ***Update of 5.8*** (pCR)

***Discussion:*** Revision of S1-230143.

***Conclusion:*** Agreed

[**S1-230151**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230151.zip) from CATT, China Telecom: ***Pseudo-CR on updates of clause 5.10*** (pCR)

***Conclusion:*** Revised to S1-230473

[**S1-230473**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230473.zip) **from** CATT, China Telecom: ***Pseudo-CR on updates of clause 5.10*** (pCR)

***Discussion:*** Revision of S1-230151.

***Conclusion:*** Revised to S1-230675

[**S1-230675**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230675.zip) **from** CATT, China Telecom: ***Pseudo-CR on updates of clause 5.10*** (pCR)

***Summary:*** Replaces S1-230473

***Discussion:*** Revision of S1-230151. Revision of S1-230473.

***Conclusion:*** Revised to S1-230785

[**S1-230785**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230785.zip) **from** CATT, China Telecom: ***Pseudo-CR on updates of clause 5.10*** (pCR)

***Summary:*** Replaces S1-230675

***Discussion:*** Revision of S1-230151. Revision of S1-230473. Revision of S1-230675. Remove sentence from section 5 The 5G system shall be able to support a UE using simultaneous indirect and direct network connection mode. No presentation

***Conclusion:*** Agreed

[**S1-230166**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230166.zip) from China Telecom: ***Pseudo-CR on updates to clause 5.12*** (pCR)

***Conclusion:*** Revised to S1-230474

[**S1-230474**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230474.zip) **from** China Telecom: ***Pseudo-CR on updates to clause 5.12*** (pCR)

***Discussion:*** Revision of S1-230166.

***Conclusion:*** Revised to S1-230676

[**S1-230676**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230676.zip) **from** China Telecom: ***Pseudo-CR on updates to clause 5.12*** (pCR)

***Summary:*** Replaces S1-230474

***Discussion:*** Revision of S1-230166. Revision of S1-230474. [PR 5.7.6-002] The 5G system with satellite access shall be able to support positioning services and to provide information to a UE on delivered performance of positioning services.

***Conclusion:*** Agreed

### 7.7.4 Consolidation & Others

[**S1-230193**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230193.zip) from Huawei: ***Discussion on consolidation*** (pCR)

***Conclusion:*** Noted

### 7.7.5 FS\_5GSAT\_Ph3Output

[**S1-230803**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230803.zip) **from** Rapporteur (NOVAMINT): ***cover page for 5gsat*** (TS or TR cover)

***Conclusion:*** Agreed

[**S1-230728**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230728.zip) **from** Rapporteur (NOVAMINT): ***TR 22.865v0.3.0 Study on Satellite Access Phase 3*** (TR draft)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

***Conclusion:*** Revised to S1-230802

[**S1-230802**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230802.zip) **from** Rapporteur (NOVAMINT): ***TR 22.865v0.3.0 Study on Satellite Access Phase 3*** (TR draft)

***Summary:*** Replaces S1-230728

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC Revision of S1-230728. No presentation

***Conclusion:*** Agreed

## 7.8 FS\_UAV\_Ph3: Study on UAV Phase 3 [SP-220680]

Work status prior to this meeting:

Rapporteur: Pengtai Qin (China Mobile)

Latest version: TR22.843v0.2.0

Target completion date: SA#100 (06/2023)

Percentage completion: 45%

### 7.8.1 New Use Cases

[**S1-230010**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230010.zip) from InterDigital: ***New use case on UAV flight route tracking at Rendezvous points*** (pCR)

Summary:

***Conclusion:*** Revised to S1-230357

[**S1-230357**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230357.zip) **from** InterDigital, Futurewei: ***New use case on UAV flight route tracking at Rendezvous points*** (pCR)

***Discussion:*** Revision of S1-230010.

***Conclusion:*** Agreed

[**S1-230157**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230157.zip) from Qualcomm, Futurewei, InterDigital, Lockheed Martin: ***Use Case on UAV simultaneous traffic over two networks*** (pCR)

***Conclusion:*** Revised to S1-230358

[**S1-230358**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230358.zip) **from** Qualcomm: ***Use case on different UAV traffic over two networks*** (pCR)

***Discussion:*** Revision of S1-230157.

***Conclusion:*** Withdrawn

[**S1-230158**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230158.zip) from Qualcomm, Futurewei, InterDigital, Lockheed Martin: ***Use Case on UAV traffic over alternative networks*** (pCR)

***Conclusion:*** Revised to S1-230359

[**S1-230359**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230359.zip) **from** Qualcomm, Futurewei, InterDigital, Lockheed Martin: ***Use Case on UAV traffic over alternative networks*** (pCR)

***Discussion:*** Revision of S1-230158.

The problem expected to be solved is still not clear, in T-Mobile's view.

***Conclusion:*** Noted

[**S1-230196**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230196.zip) from Indian Institute of Technology Bombay: ***Use case on relay node onboard UAV, mobility between Terrestrial and*** (pCR)

***Summary:*** This document proposes a use case along with requirements to be considered for FS\_UAV\_Ph3 in TR 22.843

***Conclusion:*** Withdrawn

[**S1-230218**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230218.zip) from CMCC: ***New use case: Use case for supporting UTM relocation*** (pCR)

Summary:

***Conclusion:*** Revised to S1-230371

[**S1-230371**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230371.zip) **from** China Mobile: ***pCR on New use case on supporting USS UTM relocation*** (pCR)

***Discussion:*** Revision of S1-230218.

***Conclusion:*** Withdrawn

[**S1-230219**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230219.zip) from CMCC: ***New use case: Supporting UAV service differentiation and prioritization*** (pCR)

***Conclusion:*** Revised to S1-230370

[**S1-230370**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230370.zip) **from** CMCC: ***New use case: Supporting UAV service differentiation and prioritization*** (pCR)

***Discussion:*** Revision of S1-230219.

***Conclusion:*** Revised to S1-230372

[**S1-230372**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230372.zip) **from** CMCC: ***New use case: Supporting UAV service differentiation and prioritization*** (pCR)

***Discussion:*** Revision of S1-230219. Revision of S1-230370.

No agreement from T-Mobile and Huawei.

***Conclusion:*** Noted

### 7.8.2 Former Use cases Updates

[**S1-230068**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230068.zip) from Nokia: ***22.843 pCR: Update on UTM pre-/in-flight operation support*** (pCR)

***Summary:*** This document provides updates to UTM support PRs in FS\_UAV\_Ph3 TR

***Conclusion:*** Revised to S1-230373

[**S1-230373**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230373.zip) **from** Nokia: ***22.843 pCR: Update on UTM pre-/in-flight operation support*** (pCR)

***Discussion:*** Revision of S1-230068.

***Conclusion:*** Revised to S1-230584

[**S1-230584**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230584.zip) **from** Nokia: ***22.843 pCR: Update on UTM pre-/in-flight operation support*** (pCR)

***Summary:*** Replaces S1-230373

***Discussion:*** Revision of S1-230068. Revision of S1-230373.

Changes on changes

***Conclusion:*** Revised to S1-230786

[**S1-230786**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230786.zip) **from** Nokia: ***22.843 pCR: Update on UTM pre-/in-flight operation support*** (pCR)

***Summary:*** Replaces S1-230584

***Discussion:*** Revision of S1-230068. Revision of S1-230373. Revision of S1-230584. Remove changes on changes

***Conclusion:*** Agreed

[**S1-230159**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230159.zip) from Qualcomm: ***Pseudo-CR on Updating use case 5.4\_NW assisted DAA*** (pCR)

***Discussion:*** Merged with 0217

***Conclusion:*** Revised to S1-230360

[**S1-230360**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230360.zip) **from** Qualcomm, CMCC: ***Pseudo-CR on Updating use case 5.4\_NW assisted DAA*** (pCR)

***Discussion:*** Merged with 0217 Revision of S1-230159.

***Conclusion:*** Revised to S1-230378

[**S1-230378**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230378.zip) **from** Qualcomm, CMCC: ***Pseudo-CR on Updating use case 5.4\_NW assisted DAA*** (pCR)

***Discussion:*** Merged with 0217 Revision of S1-230159. Revision of S1-230360.

***Conclusion:*** Revised to S1-230585

[**S1-230585**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230585.zip) **from** Qualcomm, CMCC: ***Pseudo-CR on Updating use case 5.4\_NW assisted DAA*** (pCR)

***Summary:*** Replaces S1-230378

***Discussion:*** Merged with 0217 Revision of S1-230159. Revision of S1-230360. Revision of S1-230378.

Interdigital and Nokia stil have concerns.

***Conclusion:*** Noted

[**S1-230217**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230217.zip) from CMCC: ***pCR on updates on use case for network-assisted UAV DAA*** (pCR)

Summary:

***Conclusion:*** Withdrawn

[**S1-230250**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230250.zip) from Orange: ***Update of the use case Geofencing for Visual Line-of-Sight UAV missions*** (pCR)

***Summary:*** The present contribution proposes an update of the section “5.3.6 Potential New Requirements" of the use case “5.3 Geofencing for Visual Line-of-Sight UAV missions”.

***Conclusion:*** Revised to S1-230374

[**S1-230374**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230374.zip) **from** Orange: ***Update of the use case Geofencing for Visual Line-of-Sight UAV missions*** (pCR)

***Discussion:*** Revision of S1-230250.

Futurewei and Qualcomm ask for more time to review

***Conclusion:*** Revised to S1-230586

[**S1-230586**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230586.zip) **from** Orange: ***Update of the use case Geofencing for Visual Line-of-Sight UAV missions*** (pCR)

***Summary:*** Replaces S1-230374

***Discussion:*** Revision of S1-230250. Revision of S1-230374.

5GS to be changed in 5G system

Qualcomm has issues with req 3, to be deleted

Editor note in req 2 to be kept.

***Conclusion:*** Revised to S1-230787

[**S1-230787**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230787.zip) **from** Orange: ***Update of the use case Geofencing for Visual Line-of-Sight UAV missions*** (pCR)

***Summary:*** Replaces S1-230586

***Discussion:*** Revision of S1-230250. Revision of S1-230374. Revision of S1-230586. Remove req#3 and keep editors note in req#2.

***Conclusion:*** Agreed

[**S1-230274**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230274.zip) from Deutsche Telekom: ***pCR on updating use case 5.2 Supporting UAV flight preparation*** (pCR)

***Discussion:*** Discuss the #274 right after the #068

***Conclusion:*** Revised to S1-230375

[**S1-230375**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230375.zip) **from** Deutsche Telekom: ***pCR on updating use case 5.2 Supporting UAV flight preparation*** (pCR)

***Discussion:*** Discuss the #274 right after the #068 Revision of S1-230274.

***Conclusion:*** Revised to S1-230379

[**S1-230379**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230379.zip) **from** Deutsche Telekom, Nokia, Futurewei: ***pCR on updating use case 5.2 Supporting UAV flight preparation*** (pCR)

***Summary:*** Replaces S1-230375

***Discussion:*** Discuss the #274 right after the #068 Revision of S1-230274. Revision of S1-230375.

was Agreed

***Conclusion:*** Revised to S1-230778

[**S1-230778**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230778.zip) **from** Deutsche Telekom, Nokia, Futurewei, InterDigital: ***pCR on updating use case 5.2 Supporting UAV flight preparation*** (pCR)

***Summary:*** Replaces S1-230379

***Discussion:*** Qualcomm request for more time, until next meeting.

Deutsche Telekom noticed that they did not receive any feedback during the entire meeting, so it is odd to have this kind of comment on the last day.

***Conclusion:*** Noted

### 7.8.3 Consolidation & Others

[**S1-230300**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230300.zip) from InterDigital: ***Proposed consolidated requirements for UAV Phase 3*** (pCR)

***Conclusion:*** Revised to S1-230376

[**S1-230376**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230376.zip) **from** InterDigital: ***Proposed consolidated requirements for UAV Phase 3*** (pCR)

***Discussion:*** Revision of S1-230300.

***Conclusion:*** Noted

### 7.8.4 FS\_UAV\_Ph3 Output

[**S1-230220**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230220.zip) from China Mobile Com. Corporation: ***TR 22843 coversheet for SA information*** (TS or TR cover)

***Conclusion:*** Revised to S1-230377

[**S1-230377**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230377.zip) **from** China Mobile: ***TR 22843 coversheet for SA information*** (TS or TR cover)

***Discussion:*** Revision of S1-230220.

***Conclusion:*** Revised to S1-230804

[**S1-230804**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230804.zip) **from** China Mobile: ***TR 22843 coversheet for SA information*** (TS or TR cover)

***Summary:*** Replaces S1-230377

***Discussion:*** Revision of S1-230220. Revision of S1-230377.

***Conclusion:*** Agreed

[**S1-230729**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230729.zip) **from** Rapporteur (China Mobile): ***TR 22.843v0.3.0 Study on UAV Phase 3*** (TR draft)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

***Conclusion:*** Agreed

## 7.9 FS\_DualSteer: Study on Upper layer traffic steering, switching and split over dual 3GPP access [SP-220445]

Work status prior to this meeting:

Rapporteur: Francesco Pica (Qualcomm)

Latest version: TR22.841v0.2.0

Target completion date: SA#100 (06/2023)

Percentage completion: 60%

### 7.9.1 General

[**S1-230155**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230155.zip) from Qualcomm: ***Text Proposal for the Overview section*** (pCR)

***Conclusion:*** Revised to S1-230453

[**S1-230453**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230453.zip) **from** Qualcomm: ***Text Proposal for the Overview section*** (pCR)

***Discussion:*** Revision of S1-230155.

***Conclusion:*** Revised to S1-230478

[**S1-230478**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230478.zip) **from** Qualcomm: ***Overview section*** (pCR)

***Discussion:*** Revision of S1-230155. Revision of S1-230453.

***Conclusion:*** Agreed

### 7.9.2 New Use Cases

[**S1-230021**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230021.zip) from InterDigital, Qualcomm, Charter Communications, Lockheed Martin, Futurewei: ***New use case on Inter-PLMN scenario - TN and multiple NTN*** (pCR)

***Summary:***  [Revision of S1-223603](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1393929)

***Conclusion:*** Revised to S1-230461

[**S1-230461**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230461.zip) **from** InterDigital, Qualcomm, Charter Communications, Lockheed Martin, Futurewei: ***New use case on Inter-PLMN scenario - TN and multiple NTN*** (pCR)

***Discussion:*** Revision of S1-230021.

***Conclusion:*** Revised to S1-230479

[**S1-230479**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230479.zip) **from** InterDigital, Qualcomm, Charter Communications, Lockheed Martin, Futurewei: ***New use case on Inter-PLMN scenario - TN and multiple NTN*** (pCR)

***Discussion:*** Revision of S1-230021. Revision of S1-230461.

***Conclusion:*** Revised to S1-230481

[**S1-230481**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230481.zip) **from** InterDigital, Qualcomm, Charter Communications, Lockheed Martin, Futurewei: ***New use case on Inter-PLMN scenario - TN and multiple NTN*** (pCR)

***Summary:*** Replaces S1-230479

***Discussion:*** Revision of S1-230021. Revision of S1-230461. Revision of S1-230479.

***Conclusion:*** Agreed

[**S1-230025**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230025.zip) from NEC: ***Pseudo-CR on Use Case on access to local NPN services in inter (S)NPN*** (pCR)

***Conclusion:*** Revised to S1-230462

[**S1-230462**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230462.zip) **from** NEC, Qualcomm, [NOVAMINT, Charter Communications]: ***Pseudo-CR on Use Case on access to local NPN services in inter (S)NPN*** (pCR)

***Discussion:*** Revision of S1-230025.

***Conclusion:*** Revised to S1-230480

[**S1-230480**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230480.zip) **from** NEC, Qualcomm, [NOVAMINT, Charter Communications]: ***Pseudo-CR on Use Case on access to local NPN services in inter (S)NPN*** (pCR)

***Discussion:*** Revision of S1-230025. Revision of S1-230462.

***Conclusion:*** Revised to S1-230571

[**S1-230571**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230571.zip) **from** NEC, Qualcomm, [NOVAMINT, Charter Communications]: ***Pseudo-CR on Use Case on access to local NPN services in inter (S)NPN*** (pCR)

***Summary:*** Replaces S1-230480

***Discussion:*** Revision of S1-230025. Revision of S1-230462. Revision of S1-230480.

***Conclusion:*** Revised to S1-230588

[**S1-230588**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230588.zip) **from** NEC, Qualcomm, NOVAMINT, Charter Communications: ***Pseudo-CR on Use Case on access to local NPN services in inter NPN PLMN*** (pCR)

***Summary:*** Replaces S1-230571

***Discussion:*** Revision of S1-230025. Revision of S1-230462. Revision of S1-230480. Revision of S1-230571. No brackets in source companies, in req assuming the UE has a subscription with PNI-NPN.

***Conclusion:*** Agreed

[**S1-230027**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230027.zip) from NEC: ***Pseudo-CR on Use Case on a group of devices in intra-(S)NPN scenario*** (pCR)

***Conclusion:*** Revised to S1-230463

[**S1-230463**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230463.zip) **from** NEC: ***New use case on a group of devices in intra-(S)NPN scenario*** (pCR)

***Discussion:*** Revision of S1-230027.

***Conclusion:*** Withdrawn

[**S1-230028**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230028.zip) from NEC: ***Pseudo-CR on Use Case on a group of devices accessing local NPN services in*** (pCR)

***Conclusion:*** Revised to S1-230464

[**S1-230464**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230464.zip) **from** NEC, Qualcomm, [NOVAMINT, Lockheed Martin]: ***Pseudo-CR on Use Case on a group of devices accessing local NPN services in*** (pCR)

***Discussion:*** Revision of S1-230028.

***Conclusion:*** Revised to S1-230661

[**S1-230661**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230661.zip) **from** NEC, Qualcomm, [NOVAMINT, Lockheed Martin]: ***Pseudo-CR on Use Case on a group of devices accessing local NPN services in*** (pCR)

***Summary:*** Replaces S1-230464

***Discussion:*** Revision of S1-230028. Revision of S1-230464.

***Conclusion:*** Revised to S1-230677

[**S1-230677**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230677.zip) **from** NEC, Qualcomm, [NOVAMINT, Lockheed Martin]: ***Pseudo-CR on Use Case on a groupset of devices accessing local NPN services*** (pCR)

***Summary:*** Replaces S1-230661

***Discussion:*** Revision of S1-230028. Revision of S1-230464. Revision of S1-230661.

***Conclusion:*** Agreed

[**S1-230199**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230199.zip) from Indian Institute of Technology Bombay: ***Use case on relay node onboard a UAV, dual steering between Terrestrial*** (pCR)

***Summary:*** This document proposes a use case along with requirements to be considered for FS\_DualSteer in TR 22.841

***Conclusion:*** Noted

[**S1-230204**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230204.zip) from Indian Institute of Technology Bombay: ***Use case on dual steering through Satellite and terrestrial access networks*** (pCR)

***Summary:*** This document proposes a use case along with requirements to be considered for FS\_DualSteer in TR 22.841.

***Conclusion:*** Revised to S1-230465

[**S1-230465**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230465.zip) **from** IIT Bombay: ***Use case on dual steering through satellite and terrestrial access networks for AI/ML model transfer*** (pCR)

***Discussion:*** Revision of S1-230204.

***Conclusion:*** Withdrawn

[**S1-230236**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230236.zip) from Lockheed Martin, Qualcomm, InterDigital, SyncTechno Inc, Futurewei: ***Use Case on a UAV UE connecting to TN+NTN access networks*** (pCR)

***Summary:***  [Revision of S1-222019](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1344239)

***Conclusion:*** Revised to S1-230476

[**S1-230476**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230476.zip) **from** Lockheed Martin: ***Use Case on a UAV UE connecting to TN+NTN access networks*** (pCR)

***Discussion:*** Revision of S1-230236.

***Conclusion:*** Revised to S1-230678

[**S1-230678**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230678.zip) **from** Lockheed Martin, Qualcomm, InterDigital, SyncTechno Inc, Futurewei,: ***Use Case on a UAV UE connecting to TN+NTN access networks*** (pCR)

***Summary:*** Replaces S1-230476

***Discussion:*** corrupted header

req 1 to be slightly modified

***Conclusion:*** Revised to S1-230789

[**S1-230789**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230789.zip) **from** Lockheed Martin, Qualcomm, InterDigital, SyncTechno Inc, Futurewei,: ***Use Case on a UAV UE connecting to TN+NTN access networks*** (pCR)

***Summary:*** Replaces S1-230678

***Discussion:*** Revision of S1-230236. Revision of S1-230476. Revision of S1-230678. Req 1 ends " reporting to UE s HPLMN.

***Conclusion:*** Agreed

[**S1-230243**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230243.zip) from Lockheed Martin: ***FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN*** (pCR)

***Conclusion:*** Revised to S1-230451

[**S1-230451**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230451.zip) **from** Lockheed Martin: ***FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN*** (pCR)

***Discussion:*** Revision of S1-230243.

***Conclusion:*** Revised to S1-230477

[**S1-230477**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230477.zip) **from** Lockheed Martin, Novamint, NEC: ***FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN*** (pCR)

***Discussion:*** Revision of S1-230243. Revision of S1-230451.

***Conclusion:*** Revised to S1-230681

[**S1-230681**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230681.zip) **from** Lockheed Martin, Novamint, NEC: ***FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN*** (pCR)

***Summary:*** Replaces S1-230477

***Discussion:*** Header corrupted, rephrasing needed on req 1

***Conclusion:*** Revised to S1-230788

[**S1-230788**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230788.zip) **from** Lockheed Martin, Novamint, NEC: ***FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN*** (pCR)

***Summary:*** Replaces S1-230681

***Discussion:*** Revision of S1-230243. Revision of S1-230451. Revision of S1-230477. Revision of S1-230681. Req#1 [PR 5.x.6-001] Based on network providers agreed data routing policies, the 5G system shall be able to support mechanisms to allow splitting, steering and switching of IoT devices data traffic (of the same data session), which is anchored in the 5GC in the HPLMN, across two access networks e.g. NTN and TN.

***Conclusion:*** Agreed

### 7.9.3 Consolidation & Others

[**S1-230156**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230156.zip) from Qualcomm, Thales, Futurewei, SyncTechno: ***Initial consolidation proposal*** (other)

***Conclusion:*** Noted

**S1-230014** from Lockheed Martin: ***FS\_DualSteer Use Case on a UAV UE connecting to TN+NTN access*** (other)

***Summary:*** This paper proposes resubmission of S1-222019r9, a use case to be captured in TR 22.841

***Conclusion:*** Withdrawn

[**S1-230015**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230015.zip) **from** Lockheed Martin: ***FS\_DualSteer Use Case on Vehicle UE dualsteering via Satellite and TN gNB*** (other)

***Conclusion:*** Withdrawn

### 7.9.4 FS\_DualSteer Output

[**S1-230730**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230730.zip) **from** Rapporteur (Qualcomm): ***TR 22841 coversheet for SA information*** (TS or TR cover)

***Discussion:*** Revision of S1-230220.

More use cases can be brought, even if the cover page is not clear on this.

***Conclusion:*** Agreed

[**S1-230731**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230731.zip) **from** Rapporteur (Qualcomm): ***TR 22.841v0.3.0 Study on Upper layer traffic steering, switching and split over dual 3GPP access*** (TR draft)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

***Conclusion:*** Agreed

## 7.10 FS\_EnergyServ: Study on Energy Efficiency as service criteria [SP-220446]

Work status prior to this meeting:

Rapporteur: Xiaonan Shi, (China Mobile)

Latest version: TR22.882v0.2.0

Target completion date: SA#99 (13/2023)

Percentage completion: 40%

### 7.10.1 General

[**S1-230061**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230061.zip) from Nokia: ***22.882 pCR: Clarifications on energy efficiency modes*** (pCR)

***Summary:*** This document provides clarifications on “energy efficiency modes” for FS\_EnergyServ, which are currently FFS.

***Conclusion:*** Agreed

[**S1-230062**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230062.zip) from Nokia, Nokia Shanghai BellNokia: ***22.882 pCR: TR editorial fixes*** (pCR)

***Summary:*** This document provides editorial fixes to current EnergyServ TR.

***Conclusion:*** Revised to S1-230326

[**S1-230326**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230326.zip) **from** Nokia, China Mobile: ***22.882 pCR: TR editorial fixes*** (pCR)

***Summary:*** Replaces S1-230062

***Discussion:*** Revision of S1-230062.

***Conclusion:*** Revised to S1-230418

[**S1-230418**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230418.zip) **from** Nokia, China Mobile: ***22.882 pCR: TR editorial fixes*** (pCR)

***Discussion:*** Revision of S1-230062. Revision of S1-230326.

***Conclusion:*** Agreed

[**S1-230188**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230188.zip) from China Mobile: ***Pseudo-CR on TR 22.882 clean-up*** (pCR)

***Conclusion:*** Noted

### 7.10.2 New Use Cases

[**S1-230101**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230101.zip) from ZTE, CMCC: ***Pseudo-CR for new UC: Energy usage information exposure considering QoS*** (pCR)

***Summary:*** This contribution proposes a new use case for FS\_ EnergyServ in which 5G system measures and exposes energy usage information also considers associated QoS together

***Conclusion:*** Revised to S1-230419

[**S1-230419**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230419.zip) **from** ZTE, CMCC: ***Pseudo-CR for new UC: Energy usage information exposure considering QoS*** (pCR)

***Discussion:*** Revision of S1-230101.

Both requirements are asked to be put for FFS

***Conclusion:*** Revised to S1-230790

[**S1-230790**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230790.zip) **from** ZTE, CMCC: ***Pseudo-CR for new UC: Energy usage information exposure considering QoS*** (pCR)

***Summary:*** Replaces S1-230419

***Discussion:*** Revision of S1-230101. Revision of S1-230419. Editors Note: both reqs are FFS. Correct format for the Note in the req.

***Conclusion:*** Agreed

[**S1-230160**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230160.zip) from Toyota Motor Corporation: ***Pseudo-CR on A new use case on the information exposure of renewable*** (pCR)

***Conclusion:*** Revised to S1-230420

[**S1-230420**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230420.zip) **from** Toyota Motor Corporation: ***Pseudo-CR on A new use case on the information exposure of renewable*** (pCR)

***Discussion:*** Revision of S1-230160.

***Conclusion:*** Noted

[**S1-230185**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230185.zip) from China Mobile, ZTE: ***New use case of supporting service-level energy efficiency analysis for*** (pCR)

Summary:

***Conclusion:*** Revised to S1-230422

[**S1-230422**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230422.zip) **from** China Mobile, ZTE: ***New use case of supporting service-level energy efficiency analysis for*** (pCR)

***Discussion:*** Revision of S1-230185.

***Conclusion:*** Revised to S1-230680

[**S1-230680**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230680.zip) **from** China Mobile, ZTE: ***New use case of supporting service-level energy efficiency analysis for*** (pCR)

***Summary:*** Replaces S1-230422

***Discussion:*** Revision of S1-230185. Revision of S1-230422. Req is FFS

***Conclusion:*** Agreed

[**S1-230186**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230186.zip) from China Mobile, ZTE: ***New use case of Energy utilization of network management fault resolution*** (pCR)

Summary:

***Conclusion:*** Revised to S1-230423

[**S1-230423**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230423.zip) **from** China Mobile, ZTE: ***New use case of Energy utilization of network management fault resolution*** (pCR)

***Discussion:*** Revision of S1-230186.

***Conclusion:*** Noted

[**S1-230200**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230200.zip) from Indian Institute of Technology Bombay: ***Energy utilization as service criteria for UE-initiated procedures*** (pCR)

***Summary:*** The document proposes a use case along with requirements to be considered for FS\_EnergyServ in TR 22.882.

***Conclusion:*** Revised to S1-230424

[**S1-230424**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230424.zip) **from** IIT Bombay: ***Energy utilization as service criteria for UE-initiated procedures*** (pCR)

***Discussion:*** Revision of S1-230200.

***Conclusion:*** Withdrawn

[**S1-230202**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230202.zip) from Indian Institute of Technology Bombay: ***Energy utilization as service criteria for areas having affordability and*** (pCR)

***Summary:*** The document proposes a use case along with requirements to be considered for FS\_EnergyServ in TR 22.882.

***Conclusion:*** Noted

[**S1-230249**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230249.zip) from Lenovo: ***new UC: Application energy efficiency monitoring*** (pCR)

***Conclusion:*** Revised to S1-230442

[**S1-230442**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230442.zip) **from** Lenovo: ***new UC: Application energy efficiency monitoring*** (pCR)

***Discussion:*** Revision of S1-230249.

Notes to be added to say the req are FFS

***Conclusion:*** Revised to S1-230791

[**S1-230791**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230791.zip) **from** Lenovo: ***new UC: Application energy efficiency monitoring*** (pCR)

***Summary:*** Replaces S1-230442

***Discussion:*** Revision of S1-230249. Revision of S1-230442. Edtiors note: both reqs are for FFS

***Conclusion:*** Agreed

[**S1-230260**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230260.zip) from Rakuten Mobile Inc: ***Use Case on renewable energy usage information exposure*** (pCR)

***Summary:*** This document proposes a new use-case and requirements to TR 22.882

***Conclusion:*** Revised to S1-230421

[**S1-230421**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230421.zip) **from** Rakuten Mobile Inc, Toyota Motor Corporation, China Mobile: ***Use Case on renewable energy usage information exposure*** (pCR)

***Discussion:*** Revision of S1-230260.

***Conclusion:*** Revised to S1-230683

[**S1-230683**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230683.zip) **from** Rakuten Mobile Inc, Toyota Motor Corporation, China Mobile, [MediaTek Inc]: ***Use Case on renewable energy usage information exposure*** (pCR)

***Summary:*** Replaces S1-230421

***Discussion:*** Revision of S1-230260. Revision of S1-230421.

***Conclusion:*** Revised to S1-230748

[**S1-230748**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230748.zip) **from** Rakuten Mobile Inc, Toyota Motor Corporation, China Mobile, MediaTek Inc: ***Use Case on renewable energy usage information exposure*** (pCR)

***Summary:*** Replaces S1-230683

***Discussion:*** "minimum ratio" -> "above a minimum ratio"

"provide to a 3rd party" (missing the "to")

FFS to be added in 1st req

***Conclusion:*** Revised to S1-230792

[**S1-230792**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230792.zip) **from** Rakuten: ***New use case on Renewable Energy Usage Information Exposure*** (pCR)

***Summary:*** Replaces S1-230748

***Discussion:*** Revision of S1-230260. Revision of S1-230421. Revision of S1-230683. Revision of S1-230748. [PR.5.x.6-1] Subject to operator s policy, the 5G system shall be able to provide to a 3rd party a dedicated NPN or a network slice that operates above a minimum ratio of renewable energy. NOTE 1: This requirement does not imply that the 5G system will actively monitor the dedicated resources. Editors note: this requirements it FFS Req, 2 provide to a 3rd party

***Conclusion:*** Agreed

[**S1-230282**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230282.zip) from MediaTek Inc.: ***A new use case on supporting carbon-aware communication systems*** (pCR)

***Conclusion:*** Revised to S1-230441

[**S1-230441**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230441.zip) **from** MediaTek: ***A new use case on supporting carbon-aware communication systems*** (pCR)

***Discussion:*** Revision of S1-230282.

***Conclusion:*** Withdrawn

[**S1-230283**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230283.zip) from MediaTek Inc.: ***A new use case on supporting carbon-aware communication service*** (pCR)

***Summary:*** This contribution proposes a new use case on supporting carbon-aware communication service for TR22.882 (FS\_EnergyServ: Study on Energy Efficiency as service criteria).

***Discussion:*** Revision of S1-230282.

***Conclusion:*** Revised to S1-230443

[**S1-230443**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230443.zip) **from** MediaTek Inc.: ***A new use case on supporting carbon-aware communication service*** (pCR)

***Discussion:*** Revision of S1-230283.

***Conclusion:*** Revised to S1-230684

[**S1-230684**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230684.zip) **from** MediaTek Inc.: ***A new use case on supporting carbon-aware communication service*** (pCR)

***Summary:*** Replaces S1-230443

***Discussion:*** "this document" ->"this study|"

***Conclusion:*** Revised to S1-230793

[**S1-230793**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230793.zip) **from** MediaTek Inc.: ***A new use case on supporting carbon-aware communication service*** (pCR)

***Summary:*** Replaces S1-230684

***Discussion:*** Revision of S1-230283. Revision of S1-230443. Revision of S1-230684. NOTE 2: The granularity of reporting (e.g., per month) is not discussed in this study.

***Conclusion:*** Agreed

[**S1-230284**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230284.zip) from MediaTek Inc.: ***A new use case on supporting carbon-aware application service*** (pCR)

***Summary:*** This contribution proposes a new use case on supporting carbon-aware application service for TR22.882 (FS\_EnergyServ: Study on Energy Efficiency as service criteria).

***Discussion:*** Revision of S1-230282. Revision of S1-230283.

***Conclusion:*** Revised to S1-230444

[**S1-230444**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230444.zip) **from** Nokia: ***22.882 pCR: Update to NPN use case to expose EE*** (pCR)

***Discussion:*** Revision of S1-230284.

used by mistake by another company

***Conclusion:*** Revised to S1-230449

[**S1-230449**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230449.zip) **from** MediaTek: ***A new use case on supporting carbon-aware application service*** (pCR)

***Summary:*** Replaces S1-230444

***Discussion:*** Revision of S1-230284. Revision of S1-230444.

***Conclusion:*** Withdrawn

### 7.10.3 Former Use cases Updates

[**S1-230063**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230063.zip) from Nokia: ***22.882 pCR: Update to NPN use case to expose EE*** (pCR)

***Summary:*** This document provides an update of the “Energy usage information exposure under NPN RAN sharing” to expose Energy efficiency information.

***Conclusion:*** Revised to S1-230445

[**S1-230445**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230445.zip) **from** Nokia: ***22.882 pCR: Update to NPN use case to expose EE*** (pCR)

***Discussion:*** Revision of S1-230063.

***Conclusion:*** Agreed

[**S1-230280**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230280.zip) from Samsung: ***Pseudo-CR Update of 22.882, 5.1*** (pCR)

***Summary:*** This pCR provides additional information and proposes to remove two Editor's Notes.

***Conclusion:*** Revised to S1-230446

[**S1-230446**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230446.zip) **from** Samsung: ***Pseudo-CR Update of 22.882, 5.1*** (pCR)

***Discussion:*** Revision of S1-230280.

***Conclusion:*** Revised to S1-230685

[**S1-230685**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230685.zip) **from** Samsung: ***Pseudo-CR Update of 22.882, 5.1*** (pCR)

***Summary:*** Replaces S1-230446

***Discussion:*** Revision of S1-230280. Revision of S1-230446.

***Conclusion:*** Agreed

[**S1-230281**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230281.zip) from Samsung: ***Pseudo-CR Update of 22.882, 5.5*** (pCR)

***Summary:*** This pCR proposes to remove an Editor's Note from the use case 5.5.

***Conclusion:*** Revised to S1-230447

[**S1-230447**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230447.zip) **from** Samsung: ***Pseudo-CR Update of 22.882, 5.5*** (pCR)

***Discussion:*** Revision of S1-230281.

***Conclusion:*** Revised to S1-230587

[**S1-230587**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230587.zip) **from** Samsung: ***Pseudo-CR Update of 22.882, 5.5*** (pCR)

***Summary:*** Replaces S1-230447

***Discussion:*** Revision of S1-230281. Revision of S1-230447.

***Conclusion:*** Revised to S1-230589

[**S1-230589**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230589.zip) **from** Samsung: ***Pseudo-CR Update of 22.882, 5.5*** (pCR)

***Summary:*** Replaces S1-230587

***Discussion:*** Revision of S1-230281. Revision of S1-230447. Revision of S1-230587.

***Conclusion:*** Agreed

### 7.10.4 Consolidation & Others

[**S1-230187**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230187.zip) from China Mobile, Samsung: ***Consolidation requirements on FS\_EnergyServ*** (pCR)

***Conclusion:*** Revised to S1-230448

[**S1-230448**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230448.zip) **from** China Mobile, Samsung: ***Consolidation requirements on FS\_EnergyServ*** (pCR)

***Discussion:*** Revision of S1-230187.

***Conclusion:*** Noted

### 7.10.5 FS\_EnergyServ Output

[**S1-230189**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230189.zip) from China Mobile: ***TR 22.882 coversheet for SA information*** (TS or TR cover)

***Conclusion:*** Revised to S1-230805

[**S1-230805**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230805.zip) **from** China Mobile: ***TR 22.882 coversheet for SA information*** (TS or TR cover)

***Summary:*** Replaces S1-230189

***Discussion:*** Revision of S1-230189. Update use case + Requirements involves energy utilization as service criteria, different energy states of network functions and information exposure related to energy usage.

***Conclusion:*** Agreed

[**S1-230732**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230732.zip) **from** Rapporteur (China Mobile): ***TR 22.882v0.3.0 Study on Energy Efficiency as service criteria*** (TR draft)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

***Conclusion:*** Agreed

## 7.11 FS\_SOBOT: Study on Network of Service Robots with Ambient Intelligence [SP-220447]

Work status prior to this meeting:

Rapporteur: Ki-Dong Lee (LGE)

Latest version: TR22.916v0.2.0

Target completion date: SA#99 (03/2023)

Percentage completion: 40%

### 7.11.1 General

[**S1-230302**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230302.zip) from LG Electronics: ***Terminology for SOBOT and General Robotics and Automation Aspects*** (pCR)

***Conclusion:*** Revised to S1-230352

[**S1-230352**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230352.zip) **from** LG Electronics: ***Terminology for SOBOT and General Robotics and Automation Aspects*** (pCR)

***Discussion:*** Revision of S1-230302.

***Conclusion:*** Agreed

### 7.11.2 New Use Cases

[**S1-230104**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230104.zip) from Tencent: ***Pseudo-CR on New Use Cases on Machine-type communication*** (pCR)

***Summary:*** Proposal of 2 use cases related to the incoming LS from MPEG on Video Coding for Machines

***Conclusion:*** Revised to S1-230353

[**S1-230353**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230353.zip) **from** Tencent: ***Pseudo-CR on New Use Cases on Machine-type communication*** (pCR)

***Discussion:*** Revision of S1-230104.

***Conclusion:*** Revised to S1-230383

[**S1-230383**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230383.zip) **from** Tencent: ***Pseudo-CR on New Use Cases on Machine-type communication*** (pCR)

***Discussion:*** Revision of S1-230104. Revision of S1-230353.

***Conclusion:*** Agreed

[**S1-230195**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230195.zip) from China Telecom: ***Pseudo-CR on FS\_SOBOT: Patrol robots in CCRC*** (pCR)

***Conclusion:*** Revised to S1-230354

[**S1-230354**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230354.zip) **from** China Telecom: ***Pseudo-CR on FS\_SOBOT: Patrol robots in CCRC*** (pCR)

***Discussion:*** Revision of S1-230195.

***Conclusion:*** Agreed

[**S1-230285**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230285.zip) from Huawei: ***Pseudo-CR on Real-time conversational robot*** (pCR)

***Conclusion:*** Revised to S1-230355

[**S1-230355**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230355.zip) **from** Huawei: ***Pseudo-CR on Real-time conversational robot*** (pCR)

***Discussion:*** Revision of S1-230285.

***Conclusion:*** Agreed

[**S1-230304**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230304.zip) from LG Electronics: ***SOBOT Use Case: Smart Communication Support for Data Collection and*** (pCR)

***Conclusion:*** Revised to S1-230350

[**S1-230350**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230350.zip) **from** LG Electronics: ***SOBOT Use Case: Smart Communication Support for Data Collection and*** (pCR)

***Discussion:*** Revision of S1-230304.

***Conclusion:*** Revised to S1-230356

[**S1-230356**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230356.zip) **from** LG Electronics: ***SOBOT Use Case: Smart Communication Support for Data Collection and*** (pCR)

***Discussion:*** Revision of S1-230304. Revision of S1-230350.

***Conclusion:*** Agreed

### 7.11.3 Former Use cases Updates

[**S1-230142**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230142.zip) from vivo: ***update on use case of real-time cooperative safety protection*** (pCR)

***Conclusion:*** Revised to S1-230381

[**S1-230381**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230381.zip) **from** vivo: ***update on use case of real-time cooperative safety protection*** (pCR)

***Discussion:*** Revision of S1-230142.

***Conclusion:*** Revised to S1-230398

[**S1-230398**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230398.zip) **from** vivo: ***update on use case of real-time cooperative safety protection*** (pCR)

***Summary:*** Replaces S1-230381

***Discussion:*** Revision of S1-230142. Revision of S1-230381.

***Conclusion:*** Agreed

### 7.11.4 Others

[**S1-230303**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230303.zip) from LG Electronics: ***Fusion Levels for Robotic Applications Use cases*** (pCR)

***Conclusion:*** Revised to S1-230382

[**S1-230382**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230382.zip) **from** LG Electronics: ***Fusion Levels for Robotic Applications Use cases*** (pCR)

***Discussion:*** Revision of S1-230303.

***Conclusion:*** Agreed

### 7.11.5 FS\_SOBOT Output

[**S1-230733**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230733.zip) **from** Rapporteur (LGE): ***TR 22.916v0.3.0 Study on Network of Service Robots with Ambient Intelligence*** (TR draft)

***Discussion:*** First draft by Monday 27th 23:00 UTC Comments till Thursday 2nd 23:00 UTC Final version by Friday 3rd 23:00 UTC

***Conclusion:*** Agreed

## 7.12 Other Rel-19 contributions (e.g. CRs to clean studies completed)

[**S1-230248**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230248.zip) from Lenovo, CMCC, InterDigital, Deutsche Telekom, Samsung, Qualcomm: ***Considerations for application layer service enablement*** (discussion)

***Summary:*** This discussion paper proposes to update the scope and definitions in TS 22.261 to add service enablement layer within 5GS.

It is proposed that SA1 agree on updating the scope and definitions in TS 22.261, to include service enablement and exposure framework in order to clarify the Stage 1 requirements related to 5GS API exposure and service enablement that is used by SA6. The proposal is included in S1-230252.

***Discussion:*** Moved from 9

See actual CR in 252.

***Conclusion:*** Noted

[**S1-230252**](https://www.3gpp.org/ftp/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230252.zip) from Lenovo, CMCC, InterDigital, Deutsche Telekom, Samsung, Qualcomm: ***Scope and definition update for application enablement*** (CR to [22.261](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3107) #0679 cat D v.19.1.0, [Rel-19](https://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=194), WID: [SMARTER](https://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=720005))

***Summary:*** Update of scope to include “service enablement and exposure support framework” and addition of SEES framework definition . Related to discussion in S1-230248

***Discussion:*** Moved from 8 WI SMARTER Rel-19 CR0679R- Cat D Wrong WI code, Wrong category.

Siemens disagree with this CR: this is a solution to existing requirements and should not be introduced to 22.261.

Samsung: this should be cat F. Adding a definition does not introduce any requirement.

This needs further off-line talks.

***Conclusion:*** Revised to S1-230555

[**S1-230555**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230555.zip) **from** Lenovo, CMCC, InterDigital, Deutsche Telekom, Samsung, Qualcomm: ***Scope update for application enablement*** (CR to 22.261 #0679r1 cat F v.19.1.0, Rel-19, WID: SMARTER)

***Summary:*** Replaces S1-230252

***Discussion:*** Moved from 8 WI SMARTER Rel-19 CR0679R- Cat D Wrong WI code, Wrong category Revision of S1-230252.

Siemens cannot agree with such CR. SA6 concerns are understood, but another way to solve these concerns should be found.

The added reference is wrong: it should be 21.205 and not 22.205.

For Nokia, the scope of 22.261 has been the same since its creation. Changing it only for Rel-19 onwards is an odd approach.

Oppo further explained that all requirements would have to be checked again if the scope is changed.

KPN wonder that there might be a misunderstanding on what 5G is.

Lenovo wanted to be added in the minutes that the reason for objection is that SA1 does not have consensus on whether SA6 functionality is part of the 5G System.

***Conclusion:*** Noted

# 8 Other technical contributions

## 8.1 Session information outputs

## 8.2 Work Item/Study Item status update

# 9 Other non-technical contributions

Contribution not treated:

[**S1-230722**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230722.zip) **from** Rapporteur (Samsung): ***Presentation of Specification/Report to TSG: TR 22.856 0.4.0 (will be 1.0.0 as presented to plenary)*** (other)

***Conclusion:*** Not handled

r**S1-230671 from** NOVAMINT, GateHouse, TNO: ***Use case on store and forward emergency report relaying*** (other)

***Summary:*** Replaces S1-230459

***Discussion:*** Withdrawn, 679 used instead

***Conclusion:*** Withdrawn

[**S1-230738**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230738.zip) **from** OPPO: ***pCR on removal of comparison operators in the KPI table*** (other)

***Discussion:*** Submitted too late in the week

***Conclusion:*** Not handled

Unused numbers:

**S1-230380;** [**S1-230384**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230384.zip)**;** [**S1-230399**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230399.zip)**; S1-230594; S1-230595; S1-230596; S1-230597; S1-230598; S1-230599**

# 10 Work Item/Study Item progress

## 10.1 Session information outputs

[**S1-230700**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230700.zip) **from** Rapporteur / Session Chair: ***Sensing drafting report*** (report)

***Discussion:*** All agreed documents in the drafting sessions are agreed by SA1.

***Conclusion:*** Agreed

[**S1-230701**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230701.zip) **from** Rapporteur / Session Chair: ***Ambient IoT drafting report*** (report)

***Discussion:*** All agreed documents in the drafting sessions are agreed by SA1.

***Conclusion:*** Agreed

[**S1-230702**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230702.zip) **from** Drafting group Chairperson: ***Drafting group report for FS\_Metaverse and FS\_EnergyServ*** (report)

***Discussion:*** All agreed documents in the drafting sessions are agreed by SA1.

***Conclusion:*** Agreed

[**S1-230703**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230703.zip) **from** Drafting Group Chairperson: ***Drafting group Agenda for NetShare + AIML\_Ph2*** (report)

***Discussion:*** All agreed documents in the drafting sessions are agreed by SA1.

***Conclusion:*** Agreed

[**S1-230704**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230704.zip) **from** Drafting Group Chairperson: ***Drafting group Report for DualSteer + 5GSAT\_Ph3*** (report)

***Discussion:*** All agreed documents in the drafting sessions are agreed by SA1.

***Conclusion:*** Agreed

[**S1-230705**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230705.zip) **from** Drafting Group Chairperson: ***Drafting group Agenda for SOBOT+UAV\_Ph3*** (report)

***Discussion:*** All agreed documents in the drafting sessions are agreed by SA1.

***Conclusion:*** Agreed

## 10.2 Work Item/Study Item status update

**[S1-230719](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230706.zip) from** Deutsche Telekom: ***FS\_Sensing Status report*** (report)

***Discussion:*** 80% complete

***Conclusion:*** Noted

**[S1-230706](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230706.zip) from** Deutsche Telekom: ***FS\_Sensing Status report*** (report)

**Conclusion: withdrawn (S1-230719 used instead)**

[**S1-230707**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230707.zip) **from** OPPO: ***FS\_AmbientIoT Status report*** (report)

***Discussion:*** 80% complete, but not sent to approval

***Conclusion:*** Noted

[**S1-230708**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230708.zip) **from** Samsung: ***FS\_Metaverse Status report*** (report)

***Discussion:*** 75% complete

***Conclusion:*** Noted

[**S1-230709**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230709.zip) **from** China Unicom: ***FS\_NetShare Status report*** (report)

***Discussion:*** 80% complete

***Conclusion:*** Noted

**S1-230710 from** UIC: ***FS\_FRMCS\_Ph3 Status report*** (report)

***Discussion:*** (Planning has not changed check S1-23XXXX)

***Conclusion:*** Withdrawn

[**S1-230711**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230711.zip) **from** OPPO: ***FS\_AIML\_Ph2 Status report*** (report)

***Discussion:*** 75%

***Conclusion:*** Noted

[**S1-230712**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230712.zip) **from** Ericsson: ***FS\_RVAS Status report*** (report)

***Discussion:*** 100%

***Conclusion:*** Noted

[**S1-230713**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230713.zip) **from** Novamint: ***FS\_ 5GSAT\_Ph3 Status report*** (report)

***Discussion:*** 80%, no change

***Conclusion:*** Noted

[**S1-230714**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230714.zip) **from** China Mobile: ***FS\_UAV\_Ph3 Status report*** (report)

***Discussion:*** 65%

***Conclusion:*** Noted

[**S1-230715**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230715.zip) **from** Qualcomm: ***FS\_DualSteer Status report*** (report)

***Discussion:*** 75%

***Conclusion:*** Noted

[**S1-230716**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230716.zip) **from** China Mobile: ***FS\_EnergieServ Status report*** (report)

***Discussion:*** 70%

***Conclusion:*** Noted

[**S1-230717**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230717.zip) **from** LGE: ***FS\_SOBOT Status report*** (report)

***Discussion:*** 70%, date pushed to SA1#103

***Conclusion:*** Noted

[**S1-230752**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230752.zip) **from** China Mobile: ***Status report XRmobility*** (report)

***Discussion:*** 100%

***Conclusion:*** Noted

[**S1-230753**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230753.zip) **from** Orange: ***Status report Edgindus*** (report)

***Discussion:*** 100%

***Conclusion:*** Revised to S1-230809

r[**S1-230809**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230809.zip) **from** Orange: ***Status report Edgindus*** (report)

***Summary:*** Replaces S1-230753

***Conclusion:*** Noted

[**S1-230807**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230807.zip) **from** China Mobile: ***Status report for PSData off*** (report)

***Discussion:*** 100%

***Conclusion:*** Noted

[**S1-230795**](https://ftp.3gpp.org/tsg_sa/WG1_Serv/TSGS1_101_Athens/Docs/S1-230795.zip) **from** NOVAMINT, b-com, EDF, Intel, Cisco: ***Status report for FS\_ISN*** (report)

***Conclusion:*** Noted

# 11 Next meetings (calendar)

**Warning: the calendar is subject to changes.**

For latest information, consult: <https://portal.3gpp.org/>

2003 meetings:

SA1#102 22-26 May 2023 Berlin (Germany)

SA1#103 21-25 Aug 2023 Gothenburg (Sweden)

SA1#104 13-17 Nov 2023 Chicago (US)

2004 meetings:

SA1#105 26Feb -01 Mar 2024 T.B.D.

SA1#106 27-31 May 2024 T.B.D. (Korea)

SA1#107 19-23 Aug 2024 T.B.D.

SA1#108 18-22 Nov 2024 T.B.D. (US)

# 12 Any other business

There was no contribution for this agenda item.

# 13 Close

The chairman and ETSI MCC closed the meeting at 4:00 PM local time on Friday 24th of February 2023.

They thanked all the delegates for their work and their positive attitude.

# Annexes

## Annex A: List of contribution documents

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tdoc# | Title | Source | Type | Rel | TS/TR | Ver. | WID | CR# | CRrev | cat |
| S1-230000 | 1st Draft Agenda for SA1#101 | SA WG1 Chair | agenda |  |  |  |  |  |  |  |
| S1-230001 | 2nd Draft Agenda for SA1#101 | SA WG1 Chair | agenda |  |  |  |  |  |  |  |
| S1-230002 | Agenda for SA1#101 with tdoc allocation | SA WG1 Chair | agenda |  |  |  |  |  |  |  |
| S1-230003 | Extract of the 3GPP Work Plan for SA1#101 | ETSI MCC | Work Plan |  |  |  |  |  |  |  |
| S1-230004 | Draft minutes of SA1#100 | ETSI MCC | report |  |  |  |  |  |  |  |
| S1-230005 | Minutes of SA1#100 | ETSI MCC | report |  |  |  |  |  |  |  |
| S1-230006 | SA1-related topics at SA#98e | SA WG1 Chair | report |  |  |  |  |  |  |  |
| S1-230007 | MCC info on CR Rules | ETSI MCC | other |  |  |  |  |  |  |  |
| S1-230008 | MCC info on WID names | ETSI MCC | other |  |  |  |  |  |  |  |
| S1-230009 | Planning Stage1 Rel-19 | SA WG1 Chair | other |  |  |  |  |  |  |  |
| S1-230010 | New use case on UAV flight route tracking at Rendezvous points | InterDigital | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230011 | Update to the Use Case for supporting Ambient power-enabled IoT in non-public network for logistics | InterDigital | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230012 | Pseudo-CR on Public Safety indoor search and rescue for Sensing and Communications | FirstNet | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230013 | Pseudo-CR on Public Safety Outdoor search and rescue/apprehend for Sensing and Communications | FirstNet | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230014 | FS\_DualSteer Use Case on a UAV UE connecting to TN+NTN access | Lockheed Martin | other | Rel-19 | 22.841 |  |  |  |  |  |
| S1-230015 | FS\_DualSteer Use Case on Vehicle UE dualsteering via Satellite and TN gNB | Lockheed Martin | other | Rel-19 | 22.841 |  |  |  |  |  |
| S1-230016 | Add Public Warning System Requirement | Charter Communications, Inc | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230017 | New use-case on local AI/ML model split on factory robots | InterDigital, OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230018 | Use Case on Support of PWS in 5G Shared Access Network with Indirect | ZTE Wistron Telecom AB, one2many, Charter Communications Inc., China | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230019 | TR Cleanup | ZTE WistronTelecom AB | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230020 | Requirements Consolidation | ZTE, China Unicom | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230021 | New use case on Inter-PLMN scenario - TN and multiple NTN | InterDigital, Qualcomm, Charter Communications, Lockheed Martin, Futurewei | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230022 | Updates in Considerations section | Deutsche Telekom | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230023 | Clarifications of the use case on End-to-End Logistics | InterDigital | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230024 | Pseudo-CR on Public Safety indoor search and rescue for Sensing and | FirstNet | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230025 | Pseudo-CR on Use Case on access to local NPN services in inter (S)NPN | NEC | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230026 | Update to the use case on Pressure Powered Switch | InterDigital | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230027 | Pseudo-CR on Use Case on a group of devices in intra-(S)NPN scenario | NEC | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230028 | Pseudo-CR on Use Case on a group of devices accessing local NPN services in | NEC | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230029 | Update to the Critical HealthCare Services Use Case | InterDigital | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230030 | Update to the Use Case on Autonomous Virtual Alter Ego | InterDigital | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230031 | Relay LS on service requirement for emergency service support over ProSe relay | vivo | LS out | Rel-18 |  |  |  |  |  |  |
| S1-230032 | Pseudo-CR on simplify the privacy requirements and remove EN | Ericsson | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230033 | New WID on Roaming Value-Added Services | Ericsson, Deutsche Telekom | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230034 | Roaming Value-Added Services | Ericsson, Deutsche Telekom, KPN, AT&T | CR | Rel-19 | 22.261 | 19.1.0 | RVAS | 0668 |  | B |
| S1-230035 | Network selection for specific consumer type mobiles | C1-227136 | LS in |  |  |  |  |  |  |  |
| S1-230036 | Reply LS on the progress and open issues for NPN enhancements in Rel-18 | C1-227157 | LS in |  |  |  |  |  |  |  |
| S1-230037 | Reply LS on SENSE feature | R2-2212997 | LS in |  |  |  |  |  |  |  |
| S1-230038 | Reply LS on GNSS integrity requirement provisioning | R2-2213320 | LS in |  |  |  |  |  |  |  |
| S1-230039 | LS Response on Latency impact for NTN verified UE location | S2-2211199 | LS in |  |  |  |  |  |  |  |
| S1-230040 | LS on service requirement for emergency service support over ProSe relay | S2-2211410 | LS in |  |  |  |  |  |  |  |
| S1-230041 | Reply LS on QoS Sustainability analytics and V2X service adaptations | S2-2211411 | LS in |  |  |  |  |  |  |  |
| S1-230042 | Reply to LS on PIN Management | S2-2301362 | LS in |  |  |  |  |  |  |  |
| S1-230043 | Regarding issues related to SNPN selection for Localized services | S2-2301441 | LS in |  |  |  |  |  |  |  |
| S1-230044 | LS about KPIs for AI/ML model transfer in 5GS | SA2 | LS in |  |  |  |  |  |  |  |
| S1-230045 | LS on PS Data Off for IMS Data Channel service | S2-2301827 | LS in |  |  |  |  |  |  |  |
| S1-230046 | Reply LS on Progress and open issues for NPN enhancements in Rel-18 | S3-224175 | LS in |  |  |  |  |  |  |  |
| S1-230047 | LS reply on SNAAPP requirements clarifications | S6-223488 | LS in |  |  |  |  |  |  |  |
| S1-230048 | Ad hoc group | S6-230288 | LS in |  |  |  |  |  |  |  |
| S1-230049 | LS on initiation of new work item Y.CCO-req: ""Requirements of orchestration supporting confidential computing for network slices in IMT-2020 networks and beyond"" | SG13-LS39 | LS in |  |  |  |  |  |  |  |
| S1-230050 | LS on proposed new draft Recommendation ""Requirements and framework of disaster mitigation and personnel rescue for sudden natural disasters in network"" | sp17-sg11-oLS-00044 | LS in |  |  |  |  |  |  |  |
| S1-230051 | Reply LS on Facilitating roaming adoption across 3GPP NPN deployments | SA | LS in |  |  |  |  |  |  |  |
| S1-230052 | Reply LS on QoS Sustainability analytics and V2X service adaptations | SP-221320 | LS in |  |  |  |  |  |  |  |
| S1-230053 | Reply LS on Use Cases and requirements for industrial factory applications | SP-221322 | LS in |  |  |  |  |  |  |  |
| S1-230054 | LS to GSMA 5GMRR on finalisation of Study on Roaming Value-Added Services | SP-221331 | LS in |  |  |  |  |  |  |  |
| S1-230055 | Update of the use case of intruder detection in smart home | InterDigital | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230056 | Update of the use case on health monitoring at home | InterDigital | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230057 | 22.865 pCR: Updates in use case 5.1 to align service flows and potential new | Nokia | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230058 | 22.865 pCR: Updates in use case 5.2 to align service flows and potential new | Nokia | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230059 | Pseudo-CR on Ambient IoT device permanent deactivation | Sharp | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230060 | Update of use case on sensing in smart cities | InterDigital | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230061 | 22.882 pCR: Clarifications on energy efficiency modes | Nokia | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230062 | 22.882 pCR: TR editorial fixes | Nokia, Nokia Shanghai BellNokia | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230063 | 22.882 pCR: Update to NPN use case to expose EE | Nokia | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230064 | Revision of use-case 5.7 Immersive AR experience | Nokia | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230065 | Use-case proposal on Immersive Tele-Operation in Hazardous Environment | Nokia | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230066 | 22.851 pCR: Clarifications on UE steering | Nokia | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230067 | 22.851 pCR: Editorial changes to quoted text | Nokia | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230068 | 22.843 pCR: Update on UTM pre-/in-flight operation support | Nokia | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230069 | New Rel-19 mini Work Item on Subscribed Network Slice Priority | Nokia, Nokia Shanghai Bell, Verizon, AT&T, CMCC, InterDigital, Vodafone | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230070 | Introducing the Subscribed Network Slice Priority | Nokia, Nokia Shanghai Bell, Verizon UK Ltd., AT&T, CMCC, InterDigital, Vodafone | CR | Rel-19 | 22.261 | 19.1.0 | (New) SNSP | 0680 |  | B |
| S1-230071 | Feasibility Study on Network Sharing Aspect | China Unicom, Charter Communications, ZTE | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230072 | Use case on service continuity for UE-to-UE communication across | ETRI | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230073 | Use case on service continuity for UE-to-UE communication in case of | ETRI | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230074 | PS Data Off for IMS Data Channel Service | Xiaomi, China Mobile, Deutsche Telekom, Qualcomm, KPN | CR | Rel-19 | 22.011 | 18.4.0 | IMSDCDataOff | 0348 |  | B |
| S1-230075 | Reply LS on PS Data Off for IMS Data Channel Service | Xiaomi, China Mobile | LS out | Rel-19 |  |  |  |  |  |  |
| S1-230076 | Health monitoring in care facilities | Nokia, Nokia Shanghai Bell | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230077 | Pseudo-CR on correction to sensing KPI definitions | Nokia, Nokia Shanghai Bell, Deutsche Telekom | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230078 | Updates in use cases 5.13 - 5.26 to align usage of sensing transmitter and | Nokia, Nokia Shanghai Bell, Deutsche Telekom | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230079 | FS\_Netshare Conclusions and Recommendations | China Unicom | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230080 | Clarification of SENSE requirement about the USIM usage | Xiaomi | CR | Rel-18 | 22.011 | 18.4.0 | SENSE | 0349 |  | F |
| S1-230081 | Miscellaneous corrections to Ranging | Lenovo | CR | Rel-18 | 22.261 | 18.8.0 | Ranging | 0669 |  | D |
| S1-230082 | Miscellaneous corrections to Ranging | Lenovo | CR | Rel-19 | 22.261 | 19.1.0 | Ranging | 0670 |  | A |
| S1-230083 | Removal of redundant pointer to LPHAP use cases in TS 22.104 | Lenovo | CR | Rel-18 | 22.261 | 18.8.0 | LPHAP | 0671 |  | F |
| S1-230084 | Removal of redundant pointer to LPHAP use cases in TS 22.104 | Lenovo | CR | Rel-19 | 22.261 | 19.1.0 | LPHAP | 0672 |  | A |
| S1-230085 | Corrections to PALS | Lenovo, Qualcomm | CR | Rel-18 | 22.261 | 18.8.0 | PALS | 0673 |  | F |
| S1-230086 | Corrections to PALS | Lenovo, Qualcomm | CR | Rel-19 | 22.261 | 19.1.0 | PALS | 0674 |  | A |
| S1-230087 | Pseudo-CR on corrections to clause 2 and 5 | Lenovo | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230088 | New WID of Network Sharing | China Unicom, China Telecom?, Charter Communications?, vivo?, | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230089 | New use case: Vehicle Sensing for ADAS | Xiaomi, Qualcomm, OPPO | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230090 | New WID on PS Data Off for IMS Data Channel Service | China Mobile | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230091 | Pseudo-CR on updates to clause 5.16 | CMCC, Huawei, Orange | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230092 | Update on AI Model Transfer Management through Direct Device | China Telecom, OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230093 | FS\_Netshare Overview | China Unicom | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230094 | New use case: eCall Sensing for life detection | Xiaomi | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230095 | Pseudo-CR to update 5.2 | ZTE, Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230096 | Pseudo-CR to update 5.11 | ZTE, Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230097 | Use case on Ambient IoT device acting as a controller in smart agriculture | ZTE | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230098 | pCR to update 5.11 | ZTE | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230099 | Discussion paper on consolidation of service requirement of Sensing | ZTE, China Telecom | discussion | Rel-19 | 22.837 |  |  |  |  |  |
| S1-230100 | pCR on Consolidation of potential service requirement of Sensing | ZTE, China Telecom | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230101 | Pseudo-CR for new UC: Energy usage information exposure considering QoS | ZTE, CMCC | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230102 | Use Case on Support of PWS in 5G Shared Access Network with Indirect | ZTE Wistron Telecom AB, one2many, Charter Communications Inc., China | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230103 | Requirements Consolidation | ZTE Wistron Telecom AB, China Unicom | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230104 | Pseudo-CR on New Use Cases on Machine-type communication | Tencent | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230105 | MPS handling for multiple accesses | Peraton Labs, CISA ECD, AT&T, T-Mobile US, Verizon | CR | Rel-19 | 22.153 | 18.1.0 | TEI19 | 0057 |  | B |
| S1-230106 | (postponed) Reply LS on Facilitating roaming adoption across 3GPP NPN deployments | SP-220985/S1-223277 | LS in |  |  |  |  |  |  |  |
| S1-230107 | (postponed) LS on SNAAPP requirements clarifications | S3-222970/S1-223272 | LS in |  |  |  |  |  |  |  |
| S1-230108 | LS on SNAAPP requirements clarifications | S3-222970 | LS in |  |  |  |  |  |  |  |
| S1-230109 | Draft reply LS on AI-ML KPIs | Qualcomm | LS out | Rel-18 |  |  |  |  |  |  |
| S1-230110 | Clarification on AI-ML KPIs | Qualcomm | CR | Rel-18 | 22.261 | 18.8.0 | AIML-MT, TEI18 | 0675 |  | F |
| S1-230111 | Use case on Malicious UE Transmitter in 5G Sensing | Intel | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230112 | Use case on Sensing 5G Spectrum for Opportunistic Spectrum | Intel | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230113 | Update to Use case on Seamless XR Streaming | Qualcomm, Charter Communications, AT&T Services | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230114 | Use case on Compute Offload for Metaverse MMO Gaming. | Intel | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230115 | Update to Use case on Sensing Assisted Automotive Maneuvering and Navigation | Qualcomm, Charter Communications | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230116 | Update use case on sensing for flooding in smart cities | NTT DOCOMO, NTT | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230117 | Update use case on intruder detection in surroundings of smart home | NTT DOCOMO, NTT | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230118 | [DRAFT] Reply LS on SNAAPP requirements clarifications | NTT DOCOMO | LS out | Rel-18 |  |  | SNA |  |  |  |
| S1-230119 | Use case on 5GS-ambientIoT relay communication for animal health | Intel | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230120 | Use Case on Application Navigation using Gesture Recognition | Qualcomm, Charter Communications | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230121 | Update to use case 5.10 | Qualcomm | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230122 | Update to Use case 5.7 | Qualcomm | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230123 | Update to Use case 5.8 | Qualcomm | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230124 | Pseudo-CR Use case of sensing on Crowd Detection | Rakuten Mobile | pCR | Rel-19 | 22.837 | 0.2.0 | FS\_Sensing |  |  |  |
| S1-230125 | Pseudo-CR Use case of Virtual Emergency Drill over 5G Metaverse | Rakuten Mobile | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230126 | Pseudo-CR Minimization of Service Interruption in case of Satellite Access | Rakuten Mobile | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230127 | 5GS assisted distributed joint inference for intelligent networked vehicles | OPPO, Xiaomi | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230128 | 5GS assisted transfer learning for vehicle trajectory prediction | OPPO, Xiaomi, Tsinghua University | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230129 | Use case on service continuity for UE-to-UE communication across | ETRI, Novamint | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230130 | Use case on service continuity for UE-to-UE communication in case of | ETRI, Novamint | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230131 | Update of Use Case of direct device connection based federated learning | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230132 | Update of Use case Proximity based work task offloading for AI/ML inference | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230133 | Consolidation on Functional Requirement of AIML-Ph2 | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230134 | Addition of feature for Network Sharing | China Unicom, CATT | CR | Rel-19 | 22.261 | 19.1.0 | INS | 0676 |  | B |
| S1-230135 | Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive | Huawei, Xiaomi | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230136 | Text Proposal for the Overview section | Novamint | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230137 | Update of 5.2 | Novamint, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230138 | Update of 5.3 | Novamint, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230139 | Update of 5.4 | Novamint, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230140 | Update of 5.5 | Novamint, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230141 | Update of 5.7 | Novamint, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230142 | update on use case of real-time cooperative safety protection | vivo | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230143 | Update of 5.8 | Novamint,TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230144 | Update of use case on Work delegation to autonomous virtual alter ego | NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230145 | New use case - "Device independent mobile metaverse experience" | NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230146 | New use case: intersection detection for a Smart Traffic Light | CMCC | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230147 | Discussion about Consolidation on Potential Requirement of Sensing | China Mobile | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230148 | Pseudo-CR on security considerations | CATT | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230149 | Pseudo-CR on updates of clause 5.7 | CATT | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230150 | Pseudo-CR on updates of clause 5.5 | CATT | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230151 | Pseudo-CR on updates of clause 5.10 | CATT, China Telecom | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230152 | Pseudo-CR: Use Case on Hand Tracking in XR applications | CATT | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230153 | Pseudo-CR on Updates of clause 5.6 Mobile Metaverse for Immersive Gaming | CATT | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230154 | Correction to MPS requirements | Qualcomm | CR | Rel-18 | 22.153 | 18.1.0 | MPS-WLAN, TEI18 | 0058 |  | F |
| S1-230155 | Text Proposal for the Overview section | Qualcomm | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230156 | Initial consolidation proposal | Qualcomm, Thales, Futurewei, SyncTechno | other | Rel-19 |  |  | FS\_DualSteer |  |  |  |
| S1-230157 | Use Case on UAV simultaneous traffic over two networks | Qualcomm, Futurewei, InterDigital, Lockheed Martin | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230158 | Use Case on UAV traffic over alternative networks | Qualcomm, Futurewei, InterDigital, Lockheed Martin | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230159 | Pseudo-CR on Updating use case 5.4\_NW assisted DAA | Qualcomm | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230160 | Pseudo-CR on A new use case on the information exposure of renewable | Toyota Motor Corporation | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230161 | On the use of comparison operators in the KPI tables | OPPO | discussion | Rel-19 | 22.840 |  |  |  |  |  |
| S1-230162 | New WID on Ambient power-enabled Internet of Things | OPPO | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230163 | Consolidation on Functional Requirement of Ambient IoT | OPPO, vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230164 | Use case categories | vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230165 | Consolidation on KPI for Ambient IoT | OPPO | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230166 | Pseudo-CR on updates to clause 5.12 | China Telecom | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230167 | pCR on overview of TR22840 | OPPO | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230168 | Traffic scenario on Electronic Shelf Label | OPPO | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230169 | Pseudo-CR on Media Negotiation to Achieve Media Delivery Optimization | vivo | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230170 | Pseudo-CR on Metaverse Live Concert | vivo | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230171 | Pseudo-CR on Update of use case on synchronization | vivo | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230172 | Pseudo-CR on update the power consumption for immersive AR Interactive | vivo | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230173 | [Draft] Reply LS on KPIs for AIML model transfer in 5GS | OPPO | LS out | Rel-18 |  |  |  |  |  |  |
| S1-230174 | Update of Use case 5.12 | vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230175 | Discussion on KPI value of R18 AIML Model Transfer (AMMT) | OPPO | discussion | Rel-18 | 22.261 |  |  |  |  |  |
| S1-230176 | Update of Use case 5.20 | vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230177 | Update of KPI table for railway intrusion detection | Huawei | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230178 | Update of Clause 5.13 | Huawei | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230179 | [Draft] Reply LS on Network selection for specific consumer type mobile | SA1 | LS out |  |  |  |  |  |  |  |
| S1-230180 | Discussion paper on KPI definitions about false alarm related use cases | OPPO | discussion |  | 22.837 |  |  |  |  |  |
| S1-230181 | Pseudo-CR on update of definitions in TR 22.837 | KPN | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230182 | Pseudo-CR on quality improvement in clauses 1 and 2 | Huawei, Samsung, Lenovo | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230183 | Pseudo-CR on updates to clause 5.3 | Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230184 | Revised SID on Energy Efficiency as service criteria | China Mobile | SID revised | Rel-19 |  |  | FS\_EnergyServ |  |  |  |
| S1-230185 | New use case of supporting service-level energy efficiency analysis for | China Mobile, ZTE | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230186 | New use case of Energy utilization of network management fault resolution | China Mobile, ZTE | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230187 | Consolidation requirements on FS\_EnergyServ | China Mobile, Samsung | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230188 | Pseudo-CR on TR 22.882 clean-up | China Mobile | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230189 | TR 22.882 coversheet for SA information | China Mobile | TS or TR cover | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230190 | New Rel-19 mini Work Item in Supporting UE Mobility for XR services | China Mobile, NTT Docomo, China Telecom, China Unicom | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230191 | Supporting UE Mobility for XR service | China Mobile, NTT Docomo, China Telecom, China Unicom | CR | Rel-19 | 22.261 | 19.1.0 | (New) SUMXS | 0677 |  | B |
| S1-230192 | Use case of cooperation between metaverse service and network | China Mobile | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230193 | Discussion on consolidation | Huawei | pCR |  | 22.865 |  |  |  |  |  |
| S1-230194 | Definition of rainfall estimation accuracy | China Telecom | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230195 | Pseudo-CR on FS\_SOBOT: Patrol robots in CCRC | China Telecom | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230196 | Use case on relay node onboard UAV, mobility between Terrestrial and | Indian Institute of Technology Bombay | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230197 | Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights | China Mobile Com. Corporation | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230198 | Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights | China Mobile, China Telecom, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230199 | Use case on relay node onboard a UAV, dual steering between Terrestrial | Indian Institute of Technology Bombay | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230200 | Energy utilization as service criteria for UE-initiated procedures | Indian Institute of Technology Bombay | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230201 | new KPI parameter proposal | vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230202 | Energy utilization as service criteria for areas having affordability and | Indian Institute of Technology Bombay | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230203 | Usage of satellite connectivity for AI/ML support in 5GS | Indian Institute of Technology Bombay | SID new | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230204 | Use case on dual steering through Satellite and terrestrial access networks | Indian Institute of Technology Bombay | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230205 | Use Case grouping and priority | Xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230206 | 5G Wireless sensing for automated mobility in partial coverage and out-of-coverage | DENSO CORPORATION | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230207 | pCR on updates KPI on use case on sensing for tourist spot traffic | CMCC | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230208 | pCR on update KPI on use case sensing for UAV intrusion detection | CMCC | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230209 | pCR on update service requirements and KPI table for clause 5.1 | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230210 | pCR on update service requirements and KPI table for clause 5.13 | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230211 | Annex for Communication Modes of Low Power Consumption | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230212 | Consolidated KPI for Ambient IoT | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230213 | New WID on Positioning Services for UEs connecting via dual 3GPP access | CATT | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230214 | Location Service for UE connecting to dual 3GPP access networks | CATT | CR | Rel-19 | 22.071 | 17.0.0 | DualAccessLCS | 0085 |  | B |
| S1-230215 | Positioning Services for UEs connecting via dual 3GPP access networks | CATT | CR | Rel-19 | 22.261 | 19.1.0 | DualAccessLCS | 0678 |  | B |
| S1-230216 | Use case on sensing disturbance/intrusion in maritime scenario. | Indian Institute of Technology Bombay | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230217 | pCR on updates on use case for network-assisted UAV DAA | CMCC | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230218 | New use case: Use case for supporting UTM relocation | CMCC | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230219 | New use case: Supporting UAV service differentiation and prioritization | CMCC | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230220 | TR 22843 coversheet for SA information | China Mobile Com. Corporation | TS or TR cover | Rel-19 | 22.843 | 0.3.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230221 | Discussion on the sensing definitions | Huawei | discussion | Rel-19 | 22.837 |  |  |  |  |  |
| S1-230222 | Update of sensing definitions | Huawei | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230223 | Consolidated potential requirement for intruder detection in FS\_Sensing | Huawei | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230224 | Update definition and usage on motion rate accuracy | vivo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230225 | Updates on Use case 5.18 to delete EN and enable detection of sensing target | vivo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230226 | Update of Use case 5.22 to include sensing assistance information. | vivo, CMCC? | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230227 | Use case on blind spot detection | vivo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230228 | Update to Sensing Security Considerations | Xiaomi | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230229 | Pseudo-CR to add considerations for Mission Critical and other priority services | OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230230 | Pseudo-CR to update considerations for Mission Critical and other priority services | OTD\_US | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230231 | Pseudo-CR add Communication Service Availability KPI to use case | Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230232 | Pseudo-CR add Communication Service Availability KPI to use case | Huawei, Haier | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230233 | Pseudo-CR to update new requirements for identity management and privacy awareness for metaverse services | OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230234 | Pseudo-CR add Communication Service Availability KPI and | Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230235 | Pseudo-CR to update considerations on Privacy for regulatory services | OTD\_US | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230236 | Use Case on a UAV UE connecting to TN+NTN access networks | Lockheed Martin, Qualcomm, InterDigital, SyncTechno Inc, Futurewei | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230237 | Pseudo-CR add Communication Service Availability KPI and | Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230238 | Update to Use Case on Ambient IoT for Museum Guide | Xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230239 | Pseudo-CR add Communication Service Availability KPI and | Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230240 | Use Case on Ambient IoT for Self-service Library | Xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230241 | Use Case on Ambient IoT for underground mining | Xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230242 | Use Case on Ambient IoT in Wild Animal Park | Xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230243 | FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN | Lockheed Martin | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230244 | New use case on sensing-assisted autonomous driving | Xiaomi | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230245 | New use case on sensing-assisted child custody | Xiaomi | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230246 | 22.856 pCR: New Use case on Metaverse Multi Access Scenario | CableLabs, Charter Communications, Futurewei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230247 | Merged potential service requirements on digital asset management | China Telecom, Orange, China Mobile, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230248 | Considerations for application layer service enablement | Lenovo, CMCC, InterDigital, Deutsche Telekom, Samsung, Qualcomm | discussion | Rel-19 |  |  |  |  |  |  |
| S1-230249 | new UC: Application energy efficiency monitoring | Lenovo | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230250 | Update of the use case Geofencing for Visual Line-of-Sight UAV missions | Orange | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230251 | Pseudo-CR on update of use case 5.10 in TR 22.837 | KPN | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230252 | Scope and definition update for application enablement | Lenovo, CMCC, InterDigital, Deutsche Telekom, Samsung, Qualcomm | CR | Rel-19 | 22.261 | 19.1.0 | SMARTER | 0679 |  | D |
| S1-230253 | New Use Case on Location-restricted Access | China Telecom | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230254 | Pseudo-CR on update of use case 5.8 Sensing Assisted Automotive | KPN | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230255 | pCR on updating Sensor Groups use case and proposing new definitions | Deutsche Telekom, Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230256 | Pseudo-CR on update of use case 5.20 in TR 22.837 | KPN | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230257 | Pseudo-CR on Update of 4: Overview | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230258 | Pseudo-CR on Update of 5.1: Localized Mobile Metaverse Service Use Case | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230259 | 22.856 pCR: 5.2 and 5.6 Terminology and Clean Up | Samsung, Tencent, Tencent Cloud, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230260 | Use Case on renewable energy usage information exposure | Rakuten Mobile Inc | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230261 | Pseudo-CR on Update of 5.4: Localized Mobile Metaverse Service Use Case | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230262 | Pseudo-CR on Update of 5.5: Spatial Mapping and Localization Enabler Use | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230263 | 22.856 pCR: update to include an additional requirement for 5.8 | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230264 | 22.856 pCR: editorial clean up proposals for 5.10 | Samsung, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230265 | Pseudo-CR on Update of 5.11: Use case of IMS-based 3D Avatar Communication | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230266 | Pseudo-CR on 5.X: New use case on IMS-based Avatar Call Support for | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230267 | [DRAFT] LS on IMS-based 3D Avatar Call Support for Accessibility | Samsung | LS out | Rel-19 |  |  | FS\_Metaverse |  |  |  |
| S1-230268 | Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230269 | Use Case on Air Pollution Monitoring using Sensing | Rakuten Mobile Inc | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230270 | Pseudo-CR on 6: Relation to other standards activities | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230271 | Pseudo-CR on 7: Considerations | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230272 | FS\_Metaverse Requirement Consolidation except for 'digital assets' | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230273 | Pseudo-CR on Alignment of TR 22.856 Terminology | Samsung, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230274 | pCR on updating use case 5.2 Supporting UAV flight preparation | Deutsche Telekom | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230275 | Presentation of Specification/Report to TSG: | Samsung | TS or TR cover | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230276 | New WID on Feasibility Study on Localized Mobile Metaverse Services | Samsung | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230277 | Use case for prioritizing home RAN over partner operator s RAN | Samsung | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230278 | Use case on Emergency services in a Shared Network | Samsung | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230279 | Pseudo-CR on Update to Use Case 5.4 | Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230280 | Pseudo-CR Update of 22.882, 5.1 | Samsung | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230281 | Pseudo-CR Update of 22.882, 5.5 | Samsung | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230282 | A new use case on supporting carbon-aware communication systems | MediaTek Inc. | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230283 | A new use case on supporting carbon-aware communication service | MediaTek Inc. | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230284 | A new use case on supporting carbon-aware application service | MediaTek Inc. | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230285 | Pseudo-CR on Real-time conversational robot | Huawei | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230286 | Consolidation considerations and proposals | vivo | discussion | Rel-19 | 22.837 |  |  |  |  |  |
| S1-230287 | Consolidation skeleton proposal | vivo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230288 | Use case on store and forward emergency report relaying | Novamint, Gatehouse, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230289 | Use case on store and forward emergency pass-through for UE to UE | Novamint, Gatehouse, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230290 | Discussion on consolidated requirements of FS\_Sensing | Deutsche Telekom | discussion | Rel-19 | 22.837 |  |  |  |  |  |
| S1-230291 | pCR on consolidated requirements section of FS\_Sensing | Deutsche Telekom | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230292 | Draft reply LS on ad-hoc group | Union Inter. Chemins de Fer | LS out | Rel-18 |  |  | MC\_AHGC |  |  |  |
| S1-230293 | Pseudo-CR on update to clause 5.26 | Vodafone | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230294 | Pseudo-CR on Clarification on sensing data processing and entity initiating | Apple | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230295 | New Use case on Simultaneous Sensing Services | Apple | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230296 | Pseudo-CR on Clarification on UE sensing configuration | Apple | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230297 | Discussion of Sensing concepts | Apple | discussion |  |  |  |  |  |  |  |
| S1-230298 | Update to section-5.19 Resolving EN Note. | Intel | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230299 | WID on Edge Computing for Industrial Scenarios | Orange, Verizon, Ericsson, Huawei? | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230300 | Proposed consolidated requirements for UAV Phase 3 | InterDigital | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230301 | Additional clarification on security, privacy for mobile robots using edge cloud | Orange, Verizon, Huawei | CR | Rel-19 | 22.104 | 18.3.0 | ECINDS | 0093 |  | B |
| S1-230302 | Terminology for SOBOT and General Robotics and Automation Aspects | LG Electronics | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230303 | Fusion Levels for Robotic Applications Use cases | LG Electronics | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230304 | SOBOT Use Case: Smart Communication Support for Data Collection and | LG Electronics | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230305 | Pseudo-CR on store and forward messaging for Ambient IoT | KPN | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230306 | New SID on Interconnect of SNPN | Novamint, b-com, EDF, Intel, Cisco | SID new | Rel-19 |  |  |  |  |  |  |
| S1-230307 | Pseudo-CR on definition of Ambient IoT device triggering | KPN | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230308 | Updates in use cases 5.1 5.12 to align usage of sensing transmitter and | Deutsche Telekom, Nokia, Nokia Shanghai Bell | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230309 | Pseudo-CR to clarify terminology in clause 5.28 | KPN | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230310 | Motivation for a SID on Interconnect of SNPN | NOVAMINT, b-com, EDF, Intel, Cisco | SID new | Rel-19 |  |  |  |  |  |  |
| S1-230311 | [draft] LS on clarification for commercial use case supported in 5GS ProSe Service | Beijing Xiaomi Software Tech | LS out | Rel-19 |  |  |  |  |  |  |
| S1-230312 | Use Case of sensing assistance for visually impaired | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230313 | Use Case of sensing assistance for enhanced positioning | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230314 | An additional usecase for Industrial edge cloud regarding digital twin usage | Verizon | CR | Rel-19 | 22.104 | 18.3.0 | ECINDS | 0094 |  | C |
| S1-230315 | Distinguished Engineer | Verizon Switzerland AG | CR | Rel-19 | 22.105 | 17..0 | FS\_IIoT | 0059 |  | C |
| S1-230316 | Addressing Editor s Note in Use Case 5.18 | Philips International B.V. | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230317 | New use case on fall detection using wireless sensing | Philips International B.V. | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230318 | Use Case of sensing assistance for visually impaired | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230319 | Use Case of sensing assistance for enhanced positioning | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230320 | Definition updates compilation | SA1 chair | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230321 | Updates in Considerations section | Deutsche Telekom, OTD\_US, Nokia, Nokia Shanghai Bell | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230322 | Introduction of MCX Service Ad hoc Group Emergency Alert | UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell | CR | Rel-18 | 22.28 | 18.2.0 | AHGC | 0158 |  | B |
| S1-230323 | [Draft] Reply LS on Network selection for specific consumer type mobile | OPPO | LS out |  |  |  |  |  |  |  |
| S1-230324 | LS to SA2 on reply on AI-ML KPIs | SA1 | LS out | Rel-18 |  |  |  |  |  |  |
| S1-230325 | Reply LS on Ad hoc group | Nokia, Nokia Shanghai Bell, Deutsche Telekom | LS out | Rel-18 |  |  | MC\_AHGC |  |  |  |
| S1-230326 | 22.882 pCR: TR editorial fixes | Nokia, China Mobile | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230327 | Use-case proposal on Immersive Tele-Operation in Hazardous Environment | Nokia | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230328 | Relay LS on service requirement for emergency service support over ProSe relay | vivo | LS out | Rel-18 |  |  |  |  |  |  |
| S1-230329 | [DRAFT] Reply LS on SNAAPP requirements clarifications | NTT DOCOMO | LS out | Rel-18 |  |  | SNA |  |  |  |
| S1-230330 | WID on Indirect Network Sharing | China Unicom, China Telecom?, Charter Communications?, vivo?, | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230331 | Addition of feature for Network Sharing | China Unicom, CATT, Charter Communications | CR | Rel-19 | 22.261 | 19.1.0 | INS | 0676 | 1 | B |
| S1-230332 | Revised SID on Energy Efficiency as service criteria | China Mobile | SID revised | Rel-19 |  |  | FS\_EnergyServ |  |  |  |
| S1-230333 | Roaming Value-Added Services | Ericsson, Deutsche Telekom, KPN, AT&T | CR | Rel-19 | 22.261 | 19.1.0 | RVAS | 0668 | 1 | B |
| S1-230334 | New WID on Roaming Value-Added Services | Ericsson, Deutsche Telekom | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230335 | New WID on Feasibility Study on Localized Mobile Metaverse Services | Samsung | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230336 | Addition of feature for Network Sharing | China Unicom, CATT | CR | Rel-19 | 22.261 | 19.1.0 | INS | 0676 | 2 | B |
| S1-230337 | WID on Indirect Network Sharing | China Unicom, China Telecom, Charter Communications, vivo, | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230338 | Use case on Compute Offload for Metaverse MMO Gaming | Intel | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230339 | Introducing the per UE Network Slice Priority | Nokia, Nokia Shanghai Bell, Verizon UK Ltd., AT&T, CMCC, InterDigital, Vodafone, KDDI | CR | Rel-19 | 22.261 | 19.1.0 | Dummy | 0680 | 1 | B |
| S1-230340 | Supporting UE Mobility for XR service | China Mobile, NTT Docomo, China Telecom, China Unicom | CR | Rel-19 | 22.261 | 19.1.0 | TEI19 | 0677 | 1 | B |
| S1-230341 | Pseudo-CR on simplify the privacy requirements and remove EN | Ericsson, OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230342 | WID on Edge Computing for Industrial Scenarios | Orange, Verizon, Ericsson, Huawei? NTTDocomo, China Unicom, Vodafone, | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230343 | Additional clarification on security, privacy for mobile robots using edge cloud | Orange, Verizon, Huawei,NTT Docomo, Vodafone,China Unicom, Nokia,Ericsonn? | CR | Rel-19 | 22.104 | 18.3.0 | ECINDS | 0093 | 1 | B |
| S1-230344 | An additional usecase for Industrial edge cloud regarding digital twin usage | Verizon, Orange, Vodafone, Nokia, Huawei, Deutsche Telekom,T, NTT Docomo, Lenovo, China Unicom, Ericsson, Interdigital, Siemens(?) | CR | Rel-19 | 22.104 | 18.3.0 | EDGINDUSCINDS | 0094 | 1 | C |
| S1-230345 | MPS handling for multiple accesses | Peraton Labs, CISA ECD, AT&T, T-Mobile US, Verizon | CR | Rel-19 | 22.153 | 19.0.0 | TEI19 | 0057 | 1 | B |
| S1-230346 | New WID to cover the CR in 345 | Peraton | Other |  |  |  |  |  |  |  |
| S1-230347 | New SID on Interconnect of SNPN | Novamint, b-com, EDF, Intel, Cisco | SID new | Rel-19 |  |  |  |  |  |  |
| S1-230348 | Miscellaneous corrections to Ranging | Lenovo | CR | Rel-18 | 22.261 | 18.8.0 | Ranging | 0669 | 1 | D |
| S1-230349 | Miscellaneous corrections to Ranging | Lenovo | CR | Rel-19 | 22.261 | 19.1.0 | Ranging | 0670 | 1 | A |
| S1-230350 | SOBOT Use Case: Smart Communication Support for Data Collection and | LG Electronics | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230351 | Discussion paper of FS\_Netshare WID and CR | China Unicom | other |  |  |  |  |  |  |  |
| S1-230352 | Terminology for SOBOT and General Robotics and Automation Aspects | LG Electronics | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230353 | Pseudo-CR on New Use Cases on Machine-type communication | Tencent | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230354 | Pseudo-CR on FS\_SOBOT: Patrol robots in CCRC | China Telecom | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230355 | Pseudo-CR on Real-time conversational robot | Huawei | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230356 | SOBOT Use Case: Smart Communication Support for Data Collection and | LG Electronics | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230357 | New use case on UAV flight route tracking at Rendezvous points | InterDigital, Futurewei | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230358 | Use case on different UAV traffic over two networks | Qualcomm | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230359 | Use Case on UAV traffic over alternative networks | Qualcomm, Futurewei, InterDigital, Lockheed Martin | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230360 | Pseudo-CR on Updating use case 5.4\_NW assisted DAA | Qualcomm, CMCC | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230361 | Use Case on Support of PWS in 5G Shared Access Network with Indirect | ZTE Wistron Telecom AB, one2many, Charter Communications Inc., China | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230362 | Use case for prioritizing home RAN over partner operator s RAN | Samsung | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230363 | Use case on Emergency services in a Shared Network | Samsung | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230364 | New use-case on local AI/ML model split on factory robots | InterDigital, OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230365 | 5GS assisted distributed joint inference for intelligent networked vehicles | OPPO, Xiaomi | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230366 | 5GS assisted transfer learning for vehicle trajectory prediction | OPPO, Xiaomi, Tsinghua University | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230367 | Update on AI Model Transfer Management through Direct Device | China Telecom, OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230368 | Update of Use Case of direct device connection based federated learning | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230369 | Update of Use case Proximity based work task offloading for AI/ML inference | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230370 | New use case: Supporting UAV service differentiation and prioritization | CMCC | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230371 | pCR on New use case on supporting USS UTM relocation | China Mobile | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230372 | New use case: Supporting UAV service differentiation and prioritization | CMCC | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230373 | 22.843 pCR: Update on UTM pre-/in-flight operation support | Nokia | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230374 | Update of the use case Geofencing for Visual Line-of-Sight UAV missions | Orange | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230375 | pCR on updating use case 5.2 Supporting UAV flight preparation | Deutsche Telekom | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230376 | Proposed consolidated requirements for UAV Phase 3 | InterDigital | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230377 | TR 22843 coversheet for SA information | China Mobile | TS or TR cover | Rel-19 | 22.843 | 0.3.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230378 | Pseudo-CR on Updating use case 5.4\_NW assisted DAA | Qualcomm, CMCC | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230379 | pCR on updating use case 5.2 Supporting UAV flight preparation | Deutsche Telekom, Nokia, Futurewei | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230380 | Not used | Not used | other |  |  |  |  |  |  |  |
| S1-230381 | update on use case of real-time cooperative safety protection | vivo | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230382 | Fusion Levels for Robotic Applications Use cases | LG Electronics | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230383 | Pseudo-CR on New Use Cases on Machine-type communication | Tencent | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230384 | Not used | Not used | other |  |  |  |  |  |  |  |
| S1-230385 | 22.851 pCR: Clarifications on UE steering | Nokia | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230386 | Pseudo-CR on updates of clause 5.7 | CATT | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230387 | Requirements Consolidation | ZTE Wistron Telecom AB, China Unicom | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230388 | TR 22.851 FS\_Netshare Conclusions | China Unicom | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230389 | Pseudo-CR on security considerations | CATT | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230390 | Consolidation on Functional Requirement of AIML-Ph2 | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230391 | Requirements Consolidation | ZTE Wistron Telecom AB, China Unicom | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230392 | Pseudo-CR on updates of clause 5.7 | CATT | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230393 | 5GS assisted distributed joint inference for intelligent networked vehicles | OPPO, Xiaomi | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230394 | 5GS assisted transfer learning for vehicle trajectory prediction | OPPO, Xiaomi, Tsinghua University | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230395 | New use-case on local AI/ML model split on factory robots | InterDigital, OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230396 | Update on AI Model Transfer Management through Direct Device | China Telecom, OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230397 | Update of Use Case of direct device connection based federated learning | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230398 | update on use case of real-time cooperative safety protection | vivo | pCR | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |  |  |  |
| S1-230399 | Not used | Not used | other |  |  |  |  |  |  |  |
| S1-230400 | New use case - "Device independent mobile metaverse experience" | NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230401 | Update of use case on Work delegation to autonomous virtual alter ego | NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230402 | Pseudo-CR on Alignment of TR 22.856 Terminology | Samsung, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230403 | Use-case proposal on Immersive Tele-Operation in Hazardous Environment | Nokia | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230404 | Use case on Compute Offload for Metaverse MMO Gaming | Intel | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230405 | Pseudo-CR Use case of Virtual Emergency Drill over 5G Metaverse | Rakuten Mobile | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230406 | New use case - "Device independent mobile metaverse experience" | NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230407 | Pseudo-CR on Media Negotiation to Achieve Media Delivery Optimization | vivo, InterDigital? China Mobile？ | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230408 | Pseudo-CR on Mobile Metaverse Live Concert | vivo | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230409 | Use case of cooperation between metaverse service and network | China Mobile | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230410 | Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights | China Mobile, China Telecom, Huawei, OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230411 | 22.856 pCR: New Use case on Metaverse Multi Access Scenario | CableLabs, Charter Communications, Comcast, Futurewei, | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230412 | New use case on user identities in a digital asset container | China Telecom | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230413 | Pseudo-CR on 5.X: New use case on IMS-based Avatar Call Support for | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230414 | [DRAFT] LS on IMS-based 3D Avatar Call Support for Accessibility | SA1 | LS out |  |  |  |  |  |  |  |
| S1-230415 | Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling | Samsung, AT&T | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230416 | Update to the Use Case for supporting Metaverse for Critical HealthCare | InterDigital | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230417 | Update to the Use Case on Autonomous Virtual Alter Ego | InterDigital, NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230418 | 22.882 pCR: TR editorial fixes | Nokia, China Mobile | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230419 | Pseudo-CR for new UC: Energy usage information exposure considering QoS | ZTE, CMCC | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230420 | Pseudo-CR on A new use case on the information exposure of renewable | Toyota Motor Corporation | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230421 | Use Case on renewable energy usage information exposure | Rakuten Mobile Inc, Toyota Motor Corporation, China Mobile | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230422 | New use case of supporting service-level energy efficiency analysis for | China Mobile, ZTE | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230423 | New use case of Energy utilization of network management fault resolution | China Mobile, ZTE | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230424 | Energy utilization as service criteria for UE-initiated procedures | IIT Bombay | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230425 | Pseudo-CR on simplify the privacy requirements and remove EN | Ericsson, OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230426 | Revision of use-case 5.7 Immersive AR experience | Nokia | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230427 | Pseudo-CR on updates to clause 5.16 | CMCC, Huawei, Orange | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230428 | Update of use case on Work delegation to autonomous virtual alter ego | NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230429 | Pseudo-CR on Updates of clause 5.6 Mobile Metaverse for Immersive Gaming | CATT | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230430 | Pseudo-CR on Update of use case on synchronization | vivo, Interdigital | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230431 | Pseudo-CR to update new requirements for identity management and privacy awareness for metaverse services | OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230432 | Pseudo-CR on Update of 5.1: Localized Mobile Metaverse Service Use Case | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230433 | 22.856 pCR: 5.2 and 5.6 Terminology and Clean Up | Samsung, Tencent, Tencent Cloud, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230434 | Pseudo-CR on Update of 5.4: Localized Mobile Metaverse Service Use Case | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230435 | Pseudo-CR on Update of 5.5: Spatial Mapping and Localization Enabler Use | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230436 | 22.856 pCR: editorial clean up proposals for 5.10 | Samsung, Huawei, Interdigital | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230437 | Pseudo-CR on Update of 5.11: Use case of IMS-based 3D Avatar Communication | Samsung, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230438 | Pseudo-CR to add considerations for clause 7 | OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230439 | Pseudo-CR on 6: Relation to other standards activities | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230440 | Pseudo-CR on 7: Considerations | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230441 | A new use case on supporting carbon-aware communication systems | MediaTek | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230442 | new UC: Application energy efficiency monitoring | Lenovo | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230443 | A new use case on supporting carbon-aware communication service | MediaTek Inc. | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230444 | 22.882 pCR: Update to NPN use case to expose EE | Nokia | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230445 | 22.882 pCR: Update to NPN use case to expose EE | Nokia | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230446 | Pseudo-CR Update of 22.882, 5.1 | Samsung | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230447 | Pseudo-CR Update of 22.882, 5.5 | Samsung | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230448 | Consolidation requirements on FS\_EnergyServ | China Mobile, Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230449 | A new use case on supporting carbon-aware application service | MediaTek | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230450 | Use case on service continuity for UE-to-UE communication across | ETRI, Novamint, Thales, Eutelsat, Lockheed Martin, KT Corporation, | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230451 | FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN | Lockheed Martin | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230452 | Use case on store and forward emergency report relaying | Novamint, Gatehouse, TNO, Sateliot | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230453 | Text Proposal for the Overview section | Qualcomm | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230454 | Text Proposal for the Overview section | Novamint, Huawei | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230455 | 22.865 pCR: Updates in use case 5.1 to align service flows and potential new | Nokia, Novamint, Sateliot, Gatehouse | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230456 | 22.865 pCR: Updates in use case 5.2 to align service flows and | Nokia, Novamint, , Sateliot, Gatehouse | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230457 | Use case on service continuity for UE-to-UE communication across | ETRI, Novamint, Thales, Eutelsat, Lockheed Martin, KT Corporation, | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230458 | Use case on service continuity for UE-to-UE communication in case of | ETRI, Novamint, Lockheed Martin, KT Corporation, Gatehouse | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230459 | Use case on store and forward emergency report relaying | Novamint, Gatehouse, TNO, Sateliot | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230460 | Use case on store and forward emergency pass-through for UE to UE | Novamint, Gatehouse, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230461 | New use case on Inter-PLMN scenario - TN and multiple NTN | InterDigital, Qualcomm, Charter Communications, Lockheed Martin, Futurewei | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230462 | Pseudo-CR on Use Case on access to local NPN services in inter (S)NPN | NEC, Qualcomm, [NOVAMINT, Charter Communications] | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230463 | New use case on a group of devices in intra-(S)NPN scenario | NEC | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230464 | Pseudo-CR on Use Case on a group of devices accessing local NPN services in | NEC, Qualcomm, [NOVAMINT, Lockheed Martin] | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230465 | Use case on dual steering through satellite and terrestrial access networks for AI/ML model transfer | IIT Bombay | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230466 | 22.865 pCR: Updates in use case 5.2 to align service flows and | Nokia, Novamint, , Sateliot, Gatehouse | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230467 | 22.865 pCR: Updates in use case 5.1 to align service flows and potential new | Nokia, Novamint, Sateliot, Gatehouse | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230468 | 22.865 pCR: Updates in use case 5.2 to align service flows and | Nokia, Novamint, Sateliot, Gatehouse | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230469 | Update of 5.3 | Novamint, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230470 | Update of 5.5 | Novamint, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230471 | Pseudo-CR on updates of clause 5.5 | CATT | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230472 | Update of 5.8 | Novamint,TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230473 | Pseudo-CR on updates of clause 5.10 | CATT, China Telecom | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230474 | Pseudo-CR on updates to clause 5.12 | China Telecom | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230475 | Text Proposal for the Overview section | Novamint, Huawei | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230476 | Use Case on a UAV UE connecting to TN+NTN access networks | Lockheed Martin | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230477 | FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN | Lockheed Martin, Novamint, NEC | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230478 | Overview section | Qualcomm | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230479 | New use case on Inter-PLMN scenario - TN and multiple NTN | InterDigital, Qualcomm, Charter Communications, Lockheed Martin, Futurewei | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230480 | Pseudo-CR on Use Case on access to local NPN services in inter (S)NPN | NEC, Qualcomm, [NOVAMINT, Charter Communications] | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230481 | New use case on Inter-PLMN scenario - TN and multiple NTN | InterDigital, Qualcomm, Charter Communications, Lockheed Martin, Futurewei | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230482 | New WID on PS Data Off for IMS Data Channel Service | China Mobile | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230483 | New Rel-19 mini Work Item in Supporting UE Mobility for XR services | China Mobile, NTT Docomo, China Telecom, China Unicom | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230484 | Supporting UE Mobility for XR service | China Mobile, NTT Docomo, China Telecom, China Unicom | CR | Rel-19 | 22.261 | 19.1.0 | XRMobilityTEI19 | 0677 | 2 | B |
| S1-230485 | Revision of use-case 5.7 Immersive AR experience | Nokia | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230486 | Pseudo-CR on Alignment of TR 22.856 Terminology | Samsung, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230487 | Pseudo-CR Use case of Virtual Emergency Drill over 5G Metaverse | Rakuten Mobile | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230488 | New use case - "Device independent mobile metaverse experience" | NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230489 | Pseudo-CR on Updates of clause 5.6 Mobile Metaverse for Immersive Gaming | CATT | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230490 | Pseudo-CR on use case of media negotiation to achieve media delivery optimization | vivo | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230491 | Pseudo-CR on Mobile Metaverse Live Concert | vivo | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230492 | Use case of cooperation between metaverse service and network | China Mobile | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230493 | Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights | China Mobile, China Telecom, Huawei, OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230494 | New use case on user identities in a digital asset container | China Telecom, China Mobile | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230495 | Pseudo-CR on 5.X: New use case on IMS-based Avatar Call Support for | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230496 | Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling | Samsung, AT&T | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230497 | Update to the Use Case on Autonomous Virtual Alter Ego | InterDigital, NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230498 | Pseudo-CR on simplify the privacy requirements and remove EN | Ericsson, OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230499 | Revision of use-case 5.7 Immersive AR experience | Nokia, Kyonggi University | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230500 | Use case on Ambient IoT device acting as a controller in smart agriculture | ZTE | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230501 | Pseudo-CR on Ambient IoT device permanent deactivation | Sharp | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230502 | Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive | Huawei, Xiaomi | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230503 | Pseudo-CR on Public Safety indoor search and rescue for Sensing and | FirstNet | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230504 | Pseudo-CR on Public Safety Indoor/Outdoor search and rescue/apprehend for | FirstNet | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230505 | Health monitoring in care facilities | Nokia, Nokia Shanghai Bell | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230506 | New use case: Vehicle Sensing for ADAS | Xiaomi, Qualcomm, OPPO | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230507 | New use case: vehicle in cabin eCall sSensing in the event of a vehicle collision | Xiaomi | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230508 | Use case on Malicious UE Transmitter in 5G Sensing | Intel | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230509 | Use Case on Gesture Recognition for Application Navigation and Immersive | Qualcomm, CATT | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230510 | Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive | Huawei, Xiaomi, DENSO | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230511 | New use case: intersection detection for a Smart Traffic Light | CMCC | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230512 | Use case on blind spot detection | vivo, KPN, China Mobile | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230513 | Use Case on Air Pollution Monitoring using Sensing | Rakuten Mobile Inc | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230514 | New use case on fall detection using wireless sensing | Philips International B.V. | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230515 | pCR on overview of TR22840 | OPPO | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230516 | Use case categories | vivo, xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230517 | Pseudo-CR on definition of Ambient IoT device triggering | KPN | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230518 | new KPI parameter proposal | vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230519 | Pseudo-CR on Ambient IoT device permanent deactivation | Sharp | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230520 | Use case on Ambient IoT device acting as a controller in smart agriculture | ZTE | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230521 | Traffic scenario on Electronic Shelf Label | OPPO | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230522 | Use Case on Ambient IoT for underground mining | Xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230523 | Use Case on Ambient IoT in Wild Animal Park | Xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230524 | Pseudo-CR to update 5.2 | ZTE, Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230525 | Pseudo-CR to update 5.11 | ZTE, Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230526 | Update to Use case 5.7 | Qualcomm | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230527 | Update of Use case 5.12 | vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230528 | Update to section-5.19 Resolving EN Note. | Intel | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230529 | Use case on 5GS -aAmbient IoT relay communication for animal | Intel | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230530 | Use Case of sensing assistance for visually impaired | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230531 | Use Case of sensing assistance for enhanced positioning | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230532 | Update of sensing definitions | Huawei | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230533 | Use Case of sensing assistance for visually impaired | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230534 | Use Case of sensing assistance for enhanced positioningintegrated sensing | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230535 | Clarification on sensing data processing and entity initiating sensing procedure | Apple | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230536 | Update to Use case on Seamless XR Streaming | Qualcomm, Charter Communications, AT&T Services | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230537 | Update to Use case on Sensing Assisted Automotive Maneuvering and Navigation | Qualcomm, Charter Communications | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230538 | Update use case on intruder detection in surroundings of smart home | NTT DOCOMO, NTT | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230539 | Update use case on sensing for flooding in smart cities | NTT DOCOMO, NTT | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230540 | pCR on updates KPI on use case on sensing for tourist spot traffic | CMCC | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230541 | Addressing Editor s Note in Use Case 5.18 | Philips International B.V. | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230542 | Update of Use case 5.22 to include sensing assistance information. | vivo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230543 | Pseudo-CR on update of use case 5.8 Sensing Assisted Automotive | KPN | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230544 | pCR on updating Sensor Groups use case and proposing new definitions | Deutsche Telekom, Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230545 | Pseudo-CR on Update to Use Case 5.4 | Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230546 | Updates in Considerations section | Deutsche Telekom, OTD\_US, Nokia, Nokia Shanghai Bell, Xiaomi, Peraton Labs | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230547 | Update of Clause 5.13 | Huawei, CMCC | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230548 | New Use case on Simultaneous Active Sensing Services | Apple | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230549 | Update of sensing definitions | Huawei | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230550 | Corrections to PALS | Lenovo, Qualcomm | CR | Rel-18 | 22.261 | 18.8.0 | PALS | 0673 | 1 | F |
| S1-230551 | Corrections to PALS | Lenovo, Qualcomm | CR | Rel-19 | 22.261 | 19.1.0 | PALS | 0674 | 1 | A |
| S1-230552 | CR to correct MPS requirements | Qualcomm | CR | Rel-18 | 22.153 | 18.1.0 | MPS\_WLAN | 0058 | 1 | F |
| S1-230553 | FS\_Netshare Overview | China Unicom, Charter Communications | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230554 | Use case on sensing disturbance/intrusion in maritime scenario. | Indian Institute of Technology Bombay | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230555 | Scope update for application enablement | Lenovo, CMCC, InterDigital, Deutsche Telekom, Samsung, Qualcomm | CR | Rel-19 | 22.261 | 19.1.0 | SMARTER | 0679 | 1 | F |
| S1-230556 | Update of the use case on health monitoring at home | InterDigital | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230557 | Update of the use case of intruder detection in smart home | InterDigital | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230558 | Update of use case on sensing in smart cities | InterDigital | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230559 | pCR to update 5.11 | ZTE | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230560 | Update of Clause 5.13 | Huawei | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230561 | pCR on update KPI of use case sensing for UAV intrusion detection | China Mobile Com. Corporation | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230562 | New use case: intersection detection for a Smart Traffic Light | CMCC | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230563 | pCR on update service requirements and KPI table for clause 5.13 | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230564 | pCR on update service requirements and KPI table for clause 5.1 | CMCC | CR | Rel-19 | 22.011 | 18.4.0 | TEI19 | 0348 | 1 | B |
| S1-230565 | Use Case on Ambient IoT for underground mining | Xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230566 | Use Case on Ambient IoT in Wild Animal Park | Xiaomi | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230567 | Pseudo-CR on updates to clause 5.16 | CMCC, Huawei, Orange | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230568 | Update of use case on Work delegation to autonomous virtual alter ego | NTT DOCOMO, OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230569 | Pseudo-CR on Updates of clause 5.6 Mobile Metaverse for Immersive Gaming | CATT | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230570 | Pseudo-CR on Update of use case on synchronization | vivo, Interdigital | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230571 | Pseudo-CR on Use Case on access to local NPN services in inter (S)NPN | NEC, Qualcomm, [NOVAMINT, Charter Communications] | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230572 | Pseudo-CR on Update of 5.1: Localized Mobile Metaverse Service Use Case | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230573 | Pseudo-CR on Update of 5.4: Localized Mobile Metaverse Service Use Case | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230574 | Pseudo-CR on Update of 5.5: Spatial Mapping and Localization Enabler Use | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230575 | Pseudo-CR on Update of 5.11: Use case of IMS-based 3D Avatar Communication | Samsung, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230576 | Pseudo-CR to update new requirements for identity management and privacy awareness for metaverse services | OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230577 | Pseudo-CR to add considerations for clause 7 | OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230578 | Pseudo-CR on 6: Relation to other standards activities | Samsung | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230579 | FS\_Netshare Overview | China Unicom, Charter Communications | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230580 | 22.851 pCR: Clarifications on UE steering | Nokia, China Unicom | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230581 | Pseudo-CR on updates of clause 5.7 | CATT | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230582 | Requirements Consolidation | ZTE Wistron Telecom AB, China Unicom | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230583 | Pseudo-CR on security considerations | CATT | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230584 | 22.843 pCR: Update on UTM pre-/in-flight operation support | Nokia | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230585 | Pseudo-CR on Updating use case 5.4\_NW assisted DAA | Qualcomm, CMCC | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230586 | Update of the use case Geofencing for Visual Line-of-Sight UAV missions | Orange | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230587 | Pseudo-CR Update of 22.882, 5.5 | Samsung | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230588 | Pseudo-CR on Use Case on access to local NPN services in inter NPN PLMN | NEC, Qualcomm, NOVAMINT, Charter Communications | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230589 | Pseudo-CR Update of 22.882, 5.5 | Samsung | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230590 | LS to SA2 on reply on PS Data Off for IMS Data Channel Service | SA1 | LS out | Rel-19 |  |  |  |  |  |  |
| S1-230591 | LS to SA3, SA6 on reply on SNAAPP requirements clarifications | SA1 | LS out | Rel-18 |  |  | SNA |  |  |  |
| S1-230592 | Supporting UE Mobility for XR service | China Mobile, NTT Docomo, China Telecom, China Unicom, Futurewei, Huawei, ZTE, OPPO | CR | Rel-19 | 22.261 | 19.1.0 | XRMobility | 0677 | 3 | B |
| S1-230593 | New Rel-19 mini Work Item in Supporting UE Mobility for XR services | China Mobile, NTT Docomo, China Telecom, China Unicom | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230594 | Not used | Not used | other |  |  |  |  |  |  |  |
| S1-230595 | Not used | Not used | other |  |  |  |  |  |  |  |
| S1-230596 | Not used | Not used | other |  |  |  |  |  |  |  |
| S1-230597 | Not used | Not used | other |  |  |  |  |  |  |  |
| S1-230598 | Not used | Not used | other |  |  |  |  |  |  |  |
| S1-230599 | Not used | Not used | other |  |  |  |  |  |  |  |
| S1-230600 | Pseudo-CR on correction to sensing KPI definitions | Nokia, Nokia Shanghai Bell, Deutsche Telekom, KPN | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230601 | Definition of rainfall estimation accuracy | China Telecom | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230602 | Update definition and usage on motion rate accuracy | vivo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230603 | Updates in use cases 5.1 5.12 to align usage of sensing transmitter and | Deutsche Telekom, Nokia, Nokia Shanghai Bell | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230604 | Updates in use cases 5.13 - 5.26 to align usage of sensing transmitter and | Nokia, Nokia Shanghai Bell, Deutsche Telekom | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230605 | Update to Use case on Seamless XR Streaming | Qualcomm, Charter Communications, AT&T Services | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230606 | Update to Use case on Sensing Assisted Automotive Maneuvering and Navigation | Qualcomm, Charter Communications | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230607 | Pseudo-CR on Public Safety Indoor/Outdoor search and rescue/apprehend for | FirstNet | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230608 | Update to the Use Case for supporting Ambient power-enabled IoT in non-public | InterDigital | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230609 | Update of Use case 5.20 | vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230610 | Pseudo-CR on updates to clause 5.3 | Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230611 | pCR on update service requirements and KPI table for clause 5.1 | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230612 | pCR on update service requirements and KPI table for clause 5.13 | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230613 | Pseudo-CR add Communication Service Availability KPI to use case | Huawei, Haier | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230614 | Pseudo-CR add Communication Service Availability KPI and | Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230615 | Pseudo-CR add Communication Service Availability KPI and | Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230616 | Pseudo-CR add Communication Service Availability KPI and | Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230617 | Update to section-5.19 Resolving EN Note. | Intel | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230618 | Pseudo-CR on store and forward messaging for Ambient IoT | KPN | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230619 | Pseudo-CR on definition of Ambient IoT device triggering | KPN, Interdigital | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230620 | Pseudo-CR to clarify terminology in clause 5.28 | KPN | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230621 | Pseudo-CR on update to clause 5.26 | Vodafone | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230622 | Consolidation on Functional Requirement of Ambient IoT | OPPO, vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230623 | Consolidation on KPI for Ambient IoT | OPPO, Futurewei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230624 | Pseudo-CR on Ambient IoT device permanent deactivation | Sharp, Apple, Convida Wireless | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230625 | [DRAFT] Reply LS on SNAAPP requirements clarifications | NTT DOCOMO | LS out | Rel-18 |  |  | SNA |  |  |  |
| S1-230626 | Update of Use case 5.22 to include sensing assistance information. | vivo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230627 | Revised SID on Energy Efficiency as service criteria | China Mobile | SID revised | Rel-19 |  |  | FS\_EnergyServ |  |  |  |
| S1-230628 | New SID on Interconnect of SNPN | Novamint, b-com, EDF, Intel, Cisco | SID new | Rel-19 |  |  |  |  |  |  |
| S1-230629 | Roaming Value-Added Services | Ericsson, Deutsche Telekom, KPN, AT&T | CR | Rel-19 | 22.261 | 19.1.0 | RVAS | 0668 | 2 | B |
| S1-230630 | WID on Edge Computing for Industrial Scenarios | Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone, | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230631 | Additional clarification on security, privacy for mobile robots using edge cloud | Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone, Nokia, Deutsche Telekom, InterDigital, Xiaomi | CR | Rel-19 | 22.104 | 18.3.0 | EDGINDUS | 0093 | 1 | B |
| S1-230632 | An additional usecase for Industrial edge cloud regarding digital twin usage | Verizon, Orange, Vodafone, Nokia, Huawei, Deutsche Telekom, NTT Docomo, Lenovo, China Unicom, Ericsson, InterDdigital | CR | Rel-19 | 22.104 | 18.3.0 | EDGINDUS | 0094 | 2 | BC |
| S1-230633 | Pseudo-CR on Public Safety Indoor/Outdoor search and rescue/apprehend for | FirstNet | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230634 | New use case: Vehicles Sensing for ADAS | Xiaomi, Qualcomm, OPPO | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230635 | Use case on Sensing Malicious UE Transmitter | Intel | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230636 | Use Case on Gesture Recognition for Application Navigation and Immersive | Qualcomm, CATT | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230637 | Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive | Huawei, Xiaomi, DENSO | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230638 | pCR on new use case on intersection detection for a Smart Traffic Light | CMDI | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230639 | Use case on blind spot detection | vivo, KPN, China Mobile | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230640 | Use Case of sensing assistance for visually impaired | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230641 | Use Case of sensing assistance for enhanced positioningintegrated sensing | Lenovo, Kyonggi University | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230642 | Update of the use case of intruder detection in smart home | InterDigital | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230643 | Update of the use case on health monitoring at home | InterDigital | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230644 | pCR to update 5.11 | ZTE | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230645 | Use case on service continuity for UE-to-UE communication across | ETRI, Novamint, Thales, Eutelsat, Lockheed Martin, KT Corporation, | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230646 | New use case on fall detection using wireless sensing | Philips International B.V. | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230647 | Update to Use case on Seamless XR Streaming | Qualcomm, Charter Communications, AT&T Services, Xiaomi | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230648 | Update to Use case on Sensing Assisted Automotive Maneuvering and Navigation | Qualcomm, Charter Communications, Xiaomi | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230649 | pCR on updates KPI on use case on sensing for tourist spot traffic | CMCC | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230650 | Pseudo-CR on update of use case 5.8 Sensing Assisted Automotive | KPN | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230651 | pCR on updating Sensor Groups use case and proposing new definitions | Deutsche Telekom, Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230652 | Pseudo-CR on Update to Use Case 5.4 | Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230653 | Updates in Considerations section | Deutsche Telekom, OTD\_US, Nokia, Nokia Shanghai Bell, Xiaomi, Peraton Labs | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230654 | pCR on overview of TR22840 | OPPO | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230655 | Pseudo-CR on Ambient IoT device permanent deactivation | Sharp, Apple, Convida Wireless | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230656 | Pseudo-CR on updates of clause 5.5 | CATT | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230657 | Use case on Ambient IoT device acting as a controller in smart agriculture | ZTE | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230658 | Traffic scenario on Electronic Shelf Label | OPPO | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230659 | Use Case on Ambient IoT for underground mining | Xiaomi | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230660 | Update to the Use Case for supporting Ambient power-enabled IoT in non-public | InterDigital | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230661 | Pseudo-CR on Use Case on a group of devices accessing local NPN services in | NEC, Qualcomm, [NOVAMINT, Lockheed Martin] | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230662 | Pseudo-CR to update 5.2 | ZTE, Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230663 | Pseudo-CR to update 5.11 | ZTE, Huawei | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230664 | Update of Use case 5.12 | vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230665 | Update to section-5.19 Resolving EN Note. | Intel | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230666 | Pseudo-CR on store and forward messaging for Ambient IoT | KPN | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230667 | Pseudo-CR to clarify terminology in clause 5.28 | KPN, Interdigital | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230668 | Pseudo-CR on public safety indoor/outdoor search and rescue/apprehend for | FirstNet | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230669 | Use case on service continuity for UE-to-UE communication across | ETRI, Novamint, Thales, Eutelsat, Lockheed Martin, KT Corporation, | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230670 | Use case on service continuity for UE-to-UE communication in case of | ETRI, Novamint, Lockheed Martin, KT Corporation, Gatehouse | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230671 | Use case on store and forward emergency report relaying | NOVAMINT, GateHouse, TNO | other |  |  |  |  |  |  |  |
| S1-230672 | Use case on store and forward emergency pass-through for UE to UE communication | NOVAMINT, GateHouse, TNO | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230673 | 22.865 pCR: Updates in use case 5.1 to align service flows and potential new | Nokia, Novamint, Sateliot, Gatehouse | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230674 | 22.865 pCR: Updates in use case 5.2 to align service flows and | Nokia, Novamint, Sateliot, Gatehouse | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230675 | Pseudo-CR on updates of clause 5.10 | CATT, China Telecom | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230676 | Pseudo-CR on updates to clause 5.12 | China Telecom | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230677 | Pseudo-CR on Use Case on a groupset of devices accessing local NPN services | NEC, Qualcomm, [NOVAMINT, Lockheed Martin] | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230678 | Use Case on a UAV UE connecting to TN+NTN access networks | Lockheed Martin, Qualcomm, InterDigital, SyncTechno Inc, Futurewei, | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230679 | Use case on store and forward emergency report relaying | Novamint, Gatehouse, TNO, Sateliot | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230680 | New use case of supporting service-level energy efficiency analysis for | China Mobile, ZTE | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230681 | FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN | Lockheed Martin, Novamint, NEC | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230682 | Pseudo-CR on updates to clause 5.16 | CMCC, Huawei, Orange | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230683 | Use Case on renewable energy usage information exposure | Rakuten Mobile Inc, Toyota Motor Corporation, China Mobile, [MediaTek Inc] | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230684 | A new use case on supporting carbon-aware communication service | MediaTek Inc. | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230685 | Pseudo-CR Update of 22.882, 5.1 | Samsung | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230686 | Introduction of MCX Service Ad hoc Group Emergency Alert | UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell | CR | Rel-18 | 22.28 | 19.0.0 | AHGC | 0159 |  | A |
| S1-230687 | New SID on Interconnect of SNPN | Novamint, b-com, EDF, Intel, Cisco | SID new | Rel-19 |  |  |  |  |  |  |
| S1-230688 | Roaming Value-Added Services | Ericsson, Deutsche Telekom, KPN, AT&T | CR | Rel-19 | 22.261 | 19.1.0 | RVAS | 0668 | 3 | B |
| S1-230689 | WID on Edge Computing for Industrial Scenarios | Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone, | WID new | Rel-19 |  |  |  |  |  |  |
| S1-230690 | Additional clarification on security, privacy for mobile robots using edge cloud | Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone, Nokia, LG Electronics, Deutsche Telekom, InterDigital, Xiaomi | CR | Rel-19 | 22.104 | 18.3.0 | EDGINDUS | 0093 | 3 | B |
| S1-230691 | An additional usecase for Industrial edge cloud regarding digital twin usage | Verizon, Orange, Vodafone, Nokia, Huawei, Deutsche Telekom, NTT Docomo, Lenovo, China Unicom, Ericsson, InterDigital, LG Electronics | CR | Rel-19 | 22.104 | 18.3.0 | EDGINDUS | 0094 | 3 | B |
| S1-230692 | Pseudo-CR on public safety indoor/outdoor search and rescue/apprehend for | FirstNet | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230693 | New use case: Vehicles Sensing for ADAS | Xiaomi, Qualcomm, OPPO, Huawei | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230694 | Pseudo-CR on Update to Use Case 5.4 | Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230695 | Use Case on Application Navigation using Gesture Recognition | Qualcomm | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230696 | Use Case of sensing assistance for enhanced positioningintegrated sensing | Lenovo, Kyonggi University | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230697 | pCR to update 5.11 | ZTE | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230698 | Pseudo-CR on update of use case 5.8 Sensing Assisted Automotive | KPN | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230699 | pCR on update service requirements and KPI table for clause 5.1 | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230700 | Sensing drafting report | Rapporteur / Session Chair | report |  |  |  |  |  |  |  |
| S1-230701 | Ambient IoT drafting report | Rapporteur / Session Chair | report |  |  |  |  |  |  |  |
| S1-230702 | Drafting group report for FS\_Metaverse and FS\_EnergyServ | Drafting group Chairperson | report |  |  |  |  |  |  |  |
| S1-230703 | Drafting group Agenda for NetShare + AIML\_Ph2 | Drafting Group Chairperson | report |  |  |  |  |  |  |  |
| S1-230704 | Drafting group Report for DualSteer + 5GSAT\_Ph3 | Drafting Group Chairperson | report |  |  |  |  |  |  |  |
| S1-230705 | Drafting group Agenda for SOBOT+UAV\_Ph3 | Drafting Group Chairperson | report |  |  |  |  |  |  |  |
| S1-230719 | FS\_Sensing Status report | Deutsche Telekom | report |  |  |  |  |  |  |  |
| S1-230707 | FS\_AmbientIoT Status report | OPPO | report |  |  |  |  |  |  |  |
| S1-230708 | FS\_Metaverse Status report | Samsung | report |  |  |  |  |  |  |  |
| S1-230709 | FS\_NetShare Status report | China Unicom | report |  |  |  |  |  |  |  |
| S1-230710 | FS\_FRMCS\_Ph3 Status report | UIC | report |  |  |  |  |  |  |  |
| S1-230711 | FS\_AIML\_Ph2 Status report | OPPO | report |  |  |  |  |  |  |  |
| S1-230712 | FS\_RVAS Status report | Ericsson | report |  |  |  |  |  |  |  |
| S1-230713 | FS\_ 5GSAT\_Ph3 Status report | Novamint | report |  |  |  |  |  |  |  |
| S1-230714 | FS\_UAV\_Ph3 Status report | China Mobile | report |  |  |  |  |  |  |  |
| S1-230715 | FS\_DualSteer Status report | Qualcomm | report |  |  |  |  |  |  |  |
| S1-230716 | FS\_EnergieServ Status report | China Mobile | report |  |  |  |  |  |  |  |
| S1-230717 | FS\_SOBOT Status report | LGE | report |  |  |  |  |  |  |  |
| S1-230718 | Cover page for TR 22.837 on sensing | Rapporteur | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230810 | TR 22.837v0.4.0 Study on Integrated Sensing and Communication | Rapporteur (Deutsche Telekom) | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing | 0.4.0 |  |  |
| S1-230720 | Presentation of Specification/Report to TSG: | OPPO | other |  |  |  |  |  |  |  |
| S1-230721 | TR 22.840v1.1.0 Study on Ambient power-enabled Internet of Things | Rapporteur (OPPO) | Draft TR | Rel-19 | 22.840 | 1.1.0 | FS\_AmbientIoT |  |  |  |
| S1-230722 | Presentation of Specification/Report to TSG: TR 22.856 0.4.0 (will be 1.0.0 as presented to plenary) | Rapporteur (Samsung) | other |  |  |  |  |  |  |  |
| S1-230723 | TR 22.856v0.4.0 Study on Localized Mobile Metaverse Services | Rapporteur (Samsung) | Draft TR | Rel-19 | 22.856 | 0.4.0 | FS\_Metaverse |  |  |  |
| S1-230724 | Cover sheet of the TR22.851 for approval | Rapporteur (China Unicom) | TS or TR cover | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230725 | TR 22.851v1.1.0 Study on Network Sharing Aspects | Rapporteur (China Unicom) | Draft TR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230726 | Presentation of Specification/Report to TSG: | OPPO (Rapporteur) | TS or TR cover | Rel-19 | 22.876 | 0.3.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230727 | TR 22.876v0.3.0 Study on AI/ML Model Transfer\_Phase2 | Rapporteur (OPPO) | Draft TR | Rel-19 | 22.876 | 0.3.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230728 | TR 22.865v0.3.0 Study on Satellite Access Phase 3 | Rapporteur (NOVAMINT) | Draft TR | Rel-19 | 22.865 | 0.3.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230729 | TR 22.843v0.3.0 Study on UAV Phase 3 | Rapporteur (China Mobile) | Draft TR | Rel-19 | 22.843 | 0.3.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230730 | TR 22841 coversheet for SA information | Rapporteur (Qualcomm) | TS or TR cover | Rel-19 | 22.841 | 0.3.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230731 | TR 22.841v0.3.0 Study on Upper layer traffic steering, switching and split over dual 3GPP access | Rapporteur (Qualcomm) | Draft TR | Rel-19 | 22.841 | 0.3.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230732 | TR 22.882v0.3.0 Study on Energy Efficiency as service criteria | Rapporteur (China Mobile) | Draft TR | Rel-19 | 22.882 | 0.3.0 | FS\_EnergyServ |  |  |  |
| S1-230733 | TR 22.916v0.3.0 Study on Network of Service Robots with Ambient Intelligence | Rapporteur (LGE) | Draft TR | Rel-19 | 22.916 | 0.3.0 |  |  |  |  |
| S1-230734 | Use-case proposal on Immersive Tele-Operation in Hazardous Environment | Nokia | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230735 | Feasibility Study on Network Sharing Aspect | China Unicom, Charter Communications, ZTE | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230736 | PS Data Off for IMS Data Channel Service | Xiaomi, China Mobile, Deutsche Telekom, Qualcomm, KPN, Telefonica | CR | Rel-19 | 22.011 | 18.4.0 | IMSDCDataOff | 0348 | 1 | B |
| S1-230737 | Update of Use case Proximity based work task offloading for AI/ML inference | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230738 | pCR on removal of comparison operators in the KPI table | OPPO | other |  |  |  |  |  |  |  |
| S1-230739 | LS to CT1, GCF-CAG (cc CT6, RAN5, PTCRB Plenary, PTCRB IoT WG) on reply on Network selection for specific consumer type mobile | SA1 | LS out |  |  |  |  |  |  |  |
| S1-230740 | LS to SA2 on service requirement for emergency service support over ProSe relay | SA1 | LS out | Rel-18 |  |  |  |  |  |  |
| S1-230741 | Clarification on AI-ML KPIs | Qualcomm | CR | Rel-18 | 22.261 | 18.8.0 | AIML\_MT | 0675 | 1 | F |
| S1-230742 | Update of Use case Proximity based work task offloading for AI/ML inference | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230743 | Use-case proposal on Immersive Tele-Operation in Hazardous Environment | Nokia, Kyonggi University | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230744 | Update of Use case Proximity based work task offloading for AI/ML inference | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230745 | PS Data Off for IMS Data Channel Service | Xiaomi, China Mobile, Deutsche Telekom, Qualcomm, KPN, Telefonica, Huawei, China Unicom | CR | Rel-19 | 22.011 | 18.4.0 | IMSDCDataOff | 0348 | 2 | B |
| S1-230746 | Feasibility Study on Network Sharing Aspect | China Unicom, Charter Communications, ZTE | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230747 | pCR on update service requirements and KPI table for clause 5.13 | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230748 | Use Case on renewable energy usage information exposure | Rakuten Mobile Inc, Toyota Motor Corporation, China Mobile, MediaTek Inc | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230749 | Draft reply LS to SA6 on ad-hoc group | Union Inter. Chemins de Fer | LS out | Rel-18 |  |  | MC\_AHGC |  |  |  |
| S1-230750 | Introduction of MCX Service Ad hoc Group Emergency Alert | UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell | CR | Rel-18 | 22.280 | 18.2.0 | AHGC | 0158 | 1 | B |
| S1-230751 | Introduction of MCX Service Ad hoc Group Emergency Alert | UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell | CR | Rel-19 | 22.280 | 19.0.0 | AHGC | 0159 | 1 | A |
| S1-230752 | Status report XRmobility | China Mobile | report |  |  |  |  |  |  |  |
| S1-230753 | Status report Edgindus | Orange | report |  |  |  |  |  |  |  |
| S1-230754 | pCR on updating Sensor Groups use case and proposing new definitions | Deutsche Telekom, Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230755 | Pseudo-CR on Update to Use Case 5.4 | Samsung | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230756 | Traffic scenario on Electronic Shelf Label | OPPO | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230757 | Use case on Ambient IoT device acting as a controller in smart agriculture | ZTE | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230758 | Traffic scenario on Electronic Shelf Label | OPPO | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230759 | Update of Use case 5.12 | vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230760 | pCR on update service requirements and KPI table for clause 5.1 | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230761 | pCR on update service requirements and KPI table for clause 5.13 | CMCC | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230762 | Consolidation on Functional Requirement of Ambient IoT | OPPO, vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230763 | Pseudo-CR on store and forward messaging for Ambient IoT | KPN | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230764 | Pseudo-CR to clarify terminology in clause 5.28 | KPN, Interdigital | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230765 | Consolidation on Functional Requirement of Ambient IoT | OPPO, vivo | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230766 | Use case of Virtual Emergency Drill over 5G Metaverse | Rakuten | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230767 | Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights | China Mobile, China Telecom, Huawei, OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230768 | New use case on user identities in a digital asset container | China Telecom, China Mobile | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230769 | Pseudo-CR on 5.X: New use case on IMS-based Avatar Call Support for | Samsung, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230770 | Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling | Samsung, AT&T | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230771 | Update to the Use Case on Autonomous Virtual Alter Ego | InterDigital, NTT DOCOMO | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230772 | Revision of use-case 5.7 Immersive AR experience | Nokia, Kyonggi University | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230773 | pCR on updates of clause 5.6 | CATT | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230774 | Pseudo-CR on Alignment of TR 22.856 Terminology | Samsung, Huawei | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230775 | Pseudo-CR to add considerations for clause 7 | OTD\_US | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230776 | Pseudo-CR on updates of clause 5.7 | CATT | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230777 | Requirements Consolidation | ZTE Wistron Telecom AB, China Unicom | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230778 | pCR on updating use case 5.2 Supporting UAV flight preparation | Deutsche Telekom, Nokia, Futurewei, InterDigital | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230779 | Use Case of sensing assistance for visually impaired | Lenovo | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230780 | LS to SA6 on reply on ad-hoc group | SA1 | LS out | Rel-18 |  |  | MC\_AHGC |  |  |  |
| S1-230781 | Pseudo-CR on updates of clause 5.7 | CATT | pCR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |  |  |  |
| S1-230782 | Requirements Consolidation | ZTE Wistron Telecom AB, China Unicom | pCR | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |  |  |  |
| S1-230783 | New use-case on local AI/ML model split on factory robots | InterDigital, OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230784 | Update of Use Case of direct device connection based federated learning | OPPO | pCR | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230785 | Pseudo-CR on updates of clause 5.10 | CATT, China Telecom | pCR | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230786 | 22.843 pCR: Update on UTM pre-/in-flight operation support | Nokia | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230787 | Update of the use case Geofencing for Visual Line-of-Sight UAV missions | Orange | pCR | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230788 | FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN | Lockheed Martin, Novamint, NEC | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230789 | Use Case on a UAV UE connecting to TN+NTN access networks | Lockheed Martin, Qualcomm, InterDigital, SyncTechno Inc, Futurewei, | pCR | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |  |  |  |
| S1-230790 | Pseudo-CR for new UC: Energy usage information exposure considering QoS | ZTE, CMCC | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230791 | new UC: Application energy efficiency monitoring | Lenovo | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230792 | New use case on Renewable Energy Usage Information Exposure | Rakuten | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230793 | A new use case on supporting carbon-aware communication service | MediaTek Inc. | pCR | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230794 | New SID on Interconnect of SNPN | Novamint, b-com, EDF, Intel, Cisco | SID new | Rel-19 |  |  |  |  |  |  |
| S1-230795 | Status report for FS\_ISN | NOVAMINT, b-com, EDF, Intel, Cisco | report |  |  |  |  |  |  |  |
| S1-230796 | Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling | Samsung, AT&T | pCR | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230797 | An additional usecase for Industrial edge cloud regarding digital twin usage | Verizon, Orange, Vodafone, Nokia, Huawei, Deutsche Telekom, NTT Docomo, Lenovo, China Unicom, Ericsson, InterDigital, LG Electronics | CR | Rel-19 | 22.104 | 18.3.0 | EDGINDUS | 0094 | 4 | B |
| S1-230798 | Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive | Huawei, Xiaomi, DENSO, OPPO | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230799 | Cover page for TR 22.837 on sensing | Rapporteur | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230800 | Pseudo-CR to clarify terminology in clause 5.28 | KPN, Interdigital | pCR | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |  |  |  |
| S1-230801 | Presentation of Specification/Report to TSG: | Samsung | TS or TR cover | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |  |  |  |
| S1-230802 | TR 22.865v0.3.0 Study on Satellite Access Phase 3 | Rapporteur (NOVAMINT) | Draft TR | Rel-19 | 22.865 | 0.3.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230803 | cover page for 5gsat | Rapporteur (NOVAMINT) | TS or TR cover | Rel-19 | 22.865 | 0.3.0 | FS\_5GSAT\_Ph3 |  |  |  |
| S1-230804 | TR 22843 coversheet for SA information | China Mobile | TS or TR cover | Rel-19 | 22.843 | 0.3.0 | FS\_UAV\_Ph3 |  |  |  |
| S1-230805 | TR 22.882 coversheet for SA information | China Mobile | TS or TR cover | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |  |  |  |
| S1-230806 | Presentation of Specification/Report to TSG: | OPPO (Rapporteur) | TS or TR cover | Rel-19 | 22.876 | 0.3.0 | FS\_AIML\_MT\_Ph2 |  |  |  |
| S1-230807 | Status report for PSData off | China Mobile | report |  |  |  |  |  |  |  |
| S1-230808 | Use Case on Application Navigation using Gesture Recognition | Qualcomm | pCR | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |  |  |  |
| S1-230809 | Status report Edgindus | Orange | report |  |  |  |  |  |  |  |

## Annex B: List of agreed change requests (sorted by TS then CR#)

Agreed CRs (sorted by Spec, CR#)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **TDoc** | **Title** | **Source** | **Release** | **Spec** | **Version** | **Related WIs** | **CR** | **CR revision** | **CR category** |
| S1-230745 | PS Data Off for IMS Data Channel Service | Xiaomi, China Mobile, Deutsche Telekom, Qualcomm, KPN, Telefonica, Huawei, China Unicom | Rel-19 | 22.011 | 18.4.0 | IMSDCDataOff | 0348 | 2 | B |
| S1-230690 | Additional clarification on security, privacy for mobile robots using edge cloud | Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone, Nokia, LG Electronics, Deutsche Telekom, InterDigital, Xiaomi | Rel-19 | 22.104 | 18.3.0 | EDGINDUS | 0093 | 3 | B |
| S1-230797 | An additional usecase for Industrial edge cloud regarding digital twin usage | Verizon, Orange, Vodafone, Nokia, Huawei, Deutsche Telekom, NTT Docomo, Lenovo, China Unicom, Ericsson, InterDigital, LG Electronics | Rel-19 | 22.104 | 18.3.0 | EDGINDUS | 0094 | 4 | B |
| S1-230688 | Roaming Value-Added Services | Ericsson, Deutsche Telekom, KPN, AT&T | Rel-19 | 22.261 | 19.1.0 | RVAS | 0668 | 3 | B |
| S1-230348 | Miscellaneous corrections to Ranging | Lenovo | Rel-18 | 22.261 | 18.8.0 | Ranging | 0669 | 1 | D |
| S1-230349 | Miscellaneous corrections to Ranging | Lenovo | Rel-19 | 22.261 | 19.1.0 | Ranging | 0670 | 1 | A |
| S1-230550 | Corrections to PALS | Lenovo, Qualcomm | Rel-18 | 22.261 | 18.8.0 | PALS | 0673 | 1 | F |
| S1-230551 | Corrections to PALS | Lenovo, Qualcomm | Rel-19 | 22.261 | 19.1.0 | PALS | 0674 | 1 | A |
| S1-230741 | Clarification on AI-ML KPIs | Qualcomm | Rel-18 | 22.261 | 18.8.0 | AIML\_MT | 0675 | 1 | F |
| S1-230592 | Supporting UE Mobility for XR service | China Mobile, NTT Docomo, China Telecom, China Unicom, Futurewei, Huawei, ZTE, OPPO | Rel-19 | 22.261 | 19.1.0 | XRMobility | 0677 | 3 | B |
| S1-230750 | Introduction of MCX Service Ad hoc Group Emergency Alert | UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell | Rel-18 | 22.280 | 18.2.0 | AHGC | 0158 | 1 | B |
| S1-230751 | Introduction of MCX Service Ad hoc Group Emergency Alert | UIC, Kontron Transportation France, Nokia, Nokia Shanghai Bell | Rel-19 | 22.280 | 19.0.0 | AHGC | 0159 | 1 | A |

## Annex B': List of agreed pCRs (sorted by TR)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **TDoc** | **Title** | **Source** | **Release** | **Spec** | **Version** | **Related WIs** |
| S1-230121 | Update to use case 5.10 | Qualcomm | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230177 | Update of KPI table for railway intrusion detection | Huawei | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230538 | Update use case on intruder detection in surroundings of smart home | NTT DOCOMO, NTT | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230539 | Update use case on sensing for flooding in smart cities | NTT DOCOMO, NTT | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230541 | Addressing Editor s Note in Use Case 5.18 | Philips International B.V. | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230547 | Update of Clause 5.13 | Huawei, CMCC | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230549 | Update of sensing definitions | Huawei | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230558 | Update of use case on sensing in smart cities | InterDigital | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230600 | Pseudo-CR on correction to sensing KPI definitions | Nokia, Nokia Shanghai Bell, Deutsche Telekom, KPN | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230601 | Definition of rainfall estimation accuracy | China Telecom | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230626 | Update of Use case 5.22 to include sensing assistance information. | vivo | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230639 | Use case on blind spot detection | vivo, KPN, China Mobile | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230647 | Update to Use case on Seamless XR Streaming | Qualcomm, Charter Communications, AT&T Services, Xiaomi | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230648 | Update to Use case on Sensing Assisted Automotive Maneuvering and Navigation | Qualcomm, Charter Communications, Xiaomi | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230649 | pCR on updates KPI on use case on sensing for tourist spot traffic | CMCC | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230653 | Updates in Considerations section | Deutsche Telekom, OTD\_US, Nokia, Nokia Shanghai Bell, Xiaomi, Peraton Labs | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230692 | Pseudo-CR on public safety indoor/outdoor search and rescue/apprehend for | FirstNet | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230693 | New use case: Vehicles Sensing for ADAS | Xiaomi, Qualcomm, OPPO, Huawei | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230696 | Use Case of sensing assistance for enhanced positioningintegrated sensing | Lenovo, Kyonggi University | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230697 | pCR to update 5.11 | ZTE | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230698 | Pseudo-CR on update of use case 5.8 Sensing Assisted Automotive | KPN | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230810 | TR 22.837v0.4.0 Study on Integrated Sensing and Communication | Rapporteur (Deutsche Telekom) | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230754 | pCR on updating Sensor Groups use case and proposing new definitions | Deutsche Telekom, Samsung | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230755 | Pseudo-CR on Update to Use Case 5.4 | Samsung | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230798 | Pseudo-CR on out-of-coverage 5G Wireless sensing for automotive | Huawei, Xiaomi, DENSO, OPPO | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230799 | Cover page for TR 22.837 on sensing | Rapporteur | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230808 | Use Case on Application Navigation using Gesture Recognition | Qualcomm | Rel-19 | 22.837 | 0.3.0 | FS\_Sensing |
| S1-230123 | Update to Use case 5.8 | Qualcomm | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230231 | Pseudo-CR add Communication Service Availability KPI to use case | Huawei | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230238 | Update to Use Case on Ambient IoT for Museum Guide | Xiaomi | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230526 | Update to Use case 5.7 | Qualcomm | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230609 | Update of Use case 5.20 | vivo | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230610 | Pseudo-CR on updates to clause 5.3 | Huawei | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230613 | Pseudo-CR add Communication Service Availability KPI to use case | Huawei, Haier | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230614 | Pseudo-CR add Communication Service Availability KPI and | Huawei | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230615 | Pseudo-CR add Communication Service Availability KPI and | Huawei | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230616 | Pseudo-CR add Communication Service Availability KPI and | Huawei | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230619 | Pseudo-CR on definition of Ambient IoT device triggering | KPN, Interdigital | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230621 | Pseudo-CR on update to clause 5.26 | Vodafone | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230654 | pCR on overview of TR22840 | OPPO | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230655 | Pseudo-CR on Ambient IoT device permanent deactivation | Sharp, Apple, Convida Wireless | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230662 | Pseudo-CR to update 5.2 | ZTE, Huawei | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230663 | Pseudo-CR to update 5.11 | ZTE, Huawei | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230665 | Update to section-5.19 Resolving EN Note. | Intel | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230757 | Use case on Ambient IoT device acting as a controller in smart agriculture | ZTE | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230758 | Traffic scenario on Electronic Shelf Label | OPPO | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230759 | Update of Use case 5.12 | vivo | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230760 | pCR on update service requirements and KPI table for clause 5.1 | CMCC | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230761 | pCR on update service requirements and KPI table for clause 5.13 | CMCC | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230763 | Pseudo-CR on store and forward messaging for Ambient IoT | KPN | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230765 | Consolidation on Functional Requirement of Ambient IoT | OPPO, vivo | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230800 | Pseudo-CR to clarify terminology in clause 5.28 | KPN, Interdigital | Rel-19 | 22.840 | 1.0.0 | FS\_AmbientIoT |
| S1-230478 | Overview section | Qualcomm | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |
| S1-230481 | New use case on Inter-PLMN scenario - TN and multiple NTN | InterDigital, Qualcomm, Charter Communications, Lockheed Martin, Futurewei | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |
| S1-230588 | Pseudo-CR on Use Case on access to local NPN services in inter NPN PLMN | NEC, Qualcomm, NOVAMINT, Charter Communications | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |
| S1-230677 | Pseudo-CR on Use Case on a groupset of devices accessing local NPN services | NEC, Qualcomm, [NOVAMINT, Lockheed Martin] | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |
| S1-230788 | FS\_DualSteer Use Case on Vehicle IoT devices dual steering via NTN | Lockheed Martin, Novamint, NEC | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |
| S1-230789 | Use Case on a UAV UE connecting to TN+NTN access networks | Lockheed Martin, Qualcomm, InterDigital, SyncTechno Inc, Futurewei, | Rel-19 | 22.841 | 0.2.0 | FS\_DualSteer |
| S1-230357 | New use case on UAV flight route tracking at Rendezvous points | InterDigital, Futurewei | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |
| S1-230786 | 22.843 pCR: Update on UTM pre-/in-flight operation support | Nokia | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |
| S1-230787 | Update of the use case Geofencing for Visual Line-of-Sight UAV missions | Orange | Rel-19 | 22.843 | 0.2.0 | FS\_UAV\_Ph3 |
| S1-230067 | 22.851 pCR: Editorial changes to quoted text | Nokia | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |
| S1-230361 | Use Case on Support of PWS in 5G Shared Access Network with Indirect | ZTE Wistron Telecom AB, one2many, Charter Communications Inc., China | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |
| S1-230579 | FS\_Netshare Overview | China Unicom, Charter Communications | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |
| S1-230580 | 22.851 pCR: Clarifications on UE steering | Nokia, China Unicom | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |
| S1-230583 | Pseudo-CR on security considerations | CATT | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |
| S1-230746 | Feasibility Study on Network Sharing Aspect | China Unicom, Charter Communications, ZTE | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |
| S1-230781 | Pseudo-CR on updates of clause 5.7 | CATT | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |
| S1-230782 | Requirements Consolidation | ZTE Wistron Telecom AB, China Unicom | Rel-19 | 22.851 | 0.3.0 | FS\_NetShare |
| S1-230182 | Pseudo-CR on quality improvement in clauses 1 and 2 | Huawei, Samsung, Lenovo | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230411 | 22.856 pCR: New Use case on Metaverse Multi Access Scenario | CableLabs, Charter Communications, Comcast, Futurewei, | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230433 | 22.856 pCR: 5.2 and 5.6 Terminology and Clean Up | Samsung, Tencent, Tencent Cloud, Huawei | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230436 | 22.856 pCR: editorial clean up proposals for 5.10 | Samsung, Huawei, Interdigital | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230491 | Pseudo-CR on Mobile Metaverse Live Concert | vivo | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230492 | Use case of cooperation between metaverse service and network | China Mobile | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230498 | Pseudo-CR on simplify the privacy requirements and remove EN | Ericsson, OTD\_US | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230568 | Update of use case on Work delegation to autonomous virtual alter ego | NTT DOCOMO, OTD\_US | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230570 | Pseudo-CR on Update of use case on synchronization | vivo, Interdigital | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230572 | Pseudo-CR on Update of 5.1: Localized Mobile Metaverse Service Use Case | Samsung | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230573 | Pseudo-CR on Update of 5.4: Localized Mobile Metaverse Service Use Case | Samsung | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230574 | Pseudo-CR on Update of 5.5: Spatial Mapping and Localization Enabler Use | Samsung | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230575 | Pseudo-CR on Update of 5.11: Use case of IMS-based 3D Avatar Communication | Samsung, Huawei | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230578 | Pseudo-CR on 6: Relation to other standards activities | Samsung | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230682 | Pseudo-CR on updates to clause 5.16 | CMCC, Huawei, Orange | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230743 | Use-case proposal on Immersive Tele-Operation in Hazardous Environment | Nokia, Kyonggi University | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230766 | Use case of Virtual Emergency Drill over 5G Metaverse | Rakuten | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230767 | Pseudo-CR on New Use Case on Authorization of Avatar Usage Rights | China Mobile, China Telecom, Huawei, OTD\_US | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230768 | New use case on user identities in a digital asset container | China Telecom, China Mobile | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230769 | Pseudo-CR on 5.X: New use case on IMS-based Avatar Call Support for | Samsung, Huawei | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230771 | Update to the Use Case on Autonomous Virtual Alter Ego | InterDigital, NTT DOCOMO | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230772 | Revision of use-case 5.7 Immersive AR experience | Nokia, Kyonggi University | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230774 | Pseudo-CR on Alignment of TR 22.856 Terminology | Samsung, Huawei | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230775 | Pseudo-CR to add considerations for clause 7 | OTD\_US | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230796 | Pseudo-CR on 5.X: New Localized Mobile Metaverse Service Overload Handling | Samsung, AT&T | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230139 | Update of 5.4 | Novamint, TNO | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230141 | Update of 5.7 | Novamint, TNO | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230469 | Update of 5.3 | Novamint, TNO | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230470 | Update of 5.5 | Novamint, TNO | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230472 | Update of 5.8 | Novamint,TNO | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230475 | Text Proposal for the Overview section | Novamint, Huawei | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230656 | Pseudo-CR on updates of clause 5.5 | CATT | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230669 | Use case on service continuity for UE-to-UE communication across | ETRI, Novamint, Thales, Eutelsat, Lockheed Martin, KT Corporation, | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230670 | Use case on service continuity for UE-to-UE communication in case of | ETRI, Novamint, Lockheed Martin, KT Corporation, Gatehouse | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230673 | 22.865 pCR: Updates in use case 5.1 to align service flows and potential new | Nokia, Novamint, Sateliot, Gatehouse | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230674 | 22.865 pCR: Updates in use case 5.2 to align service flows and | Nokia, Novamint, Sateliot, Gatehouse | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230676 | Pseudo-CR on updates to clause 5.12 | China Telecom | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230679 | Use case on store and forward emergency report relaying | Novamint, Gatehouse, TNO, Sateliot | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230785 | Pseudo-CR on updates of clause 5.10 | CATT, China Telecom | Rel-19 | 22.865 | 0.2.0 | FS\_5GSAT\_Ph3 |
| S1-230087 | Pseudo-CR on corrections to clause 2 and 5 | Lenovo | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |
| S1-230393 | 5GS assisted distributed joint inference for intelligent networked vehicles | OPPO, Xiaomi | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |
| S1-230394 | 5GS assisted transfer learning for vehicle trajectory prediction | OPPO, Xiaomi, Tsinghua University | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |
| S1-230396 | Update on AI Model Transfer Management through Direct Device | China Telecom, OPPO | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |
| S1-230744 | Update of Use case Proximity based work task offloading for AI/ML inference | OPPO | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |
| S1-230783 | New use-case on local AI/ML model split on factory robots | InterDigital, OPPO | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |
| S1-230784 | Update of Use Case of direct device connection based federated learning | OPPO | Rel-19 | 22.876 | 0.2.0 | FS\_AIML\_MT\_Ph2 |
| S1-230061 | 22.882 pCR: Clarifications on energy efficiency modes | Nokia | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230418 | 22.882 pCR: TR editorial fixes | Nokia, China Mobile | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230445 | 22.882 pCR: Update to NPN use case to expose EE | Nokia | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230589 | Pseudo-CR Update of 22.882, 5.5 | Samsung | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230680 | New use case of supporting service-level energy efficiency analysis for | China Mobile, ZTE | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230685 | Pseudo-CR Update of 22.882, 5.1 | Samsung | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230790 | Pseudo-CR for new UC: Energy usage information exposure considering QoS | ZTE, CMCC | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230791 | new UC: Application energy efficiency monitoring | Lenovo | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230792 | New use case on Renewable Energy Usage Information Exposure | Rakuten | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230793 | A new use case on supporting carbon-aware communication service | MediaTek Inc. | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230352 | Terminology for SOBOT and General Robotics and Automation Aspects | LG Electronics | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |
| S1-230354 | Pseudo-CR on FS\_SOBOT: Patrol robots in CCRC | China Telecom | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |
| S1-230355 | Pseudo-CR on Real-time conversational robot | Huawei | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |
| S1-230356 | SOBOT Use Case: Smart Communication Support for Data Collection and | LG Electronics | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |
| S1-230382 | Fusion Levels for Robotic Applications Use cases | LG Electronics | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |
| S1-230383 | Pseudo-CR on New Use Cases on Machine-type communication | Tencent | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |
| S1-230398 | update on use case of real-time cooperative safety protection | vivo | Rel-19 | 22.916 | 0.2.0 | FS\_SOBOT |

## Annex C: Lists of liaisons

Incoming LSs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TDoc** | **Title** | **Source** | **TDoc Status** | **Reply to** |
| S1-230035 | Network selection for specific consumer type mobiles | C1-227136 | replied to | S1-230739 |
| S1-230036 | Reply LS on the progress and open issues for NPN enhancements in Rel-18 | C1-227157 | Noted |  |
| S1-230037 | Reply LS on SENSE feature | R2-2212997 | Noted |  |
| S1-230038 | Reply LS on GNSS integrity requirement provisioning | R2-2213320 | Noted |  |
| S1-230039 | LS Response on Latency impact for NTN verified UE location | S2-2211199 | Noted |  |
| S1-230040 | LS on service requirement for emergency service support over ProSe relay | S2-2211410 | replied to | S1-230740 |
| S1-230041 | Reply LS on QoS Sustainability analytics and V2X service adaptations | S2-2211411 | Noted |  |
| S1-230042 | Reply to LS on PIN Management | S2-2301362 | Noted |  |
| S1-230043 | Regarding issues related to SNPN selection for Localized services | S2-2301441 | Noted |  |
| S1-230044 | LS about KPIs for AI/ML model transfer in 5GS | SA2 | replied to | S1-230324 |
| S1-230045 | LS on PS Data Off for IMS Data Channel service | S2-2301827 | replied to | S1-230590 |
| S1-230046 | Reply LS on Progress and open issues for NPN enhancements in Rel-18 | S3-224175 | Noted |  |
| S1-230047 | LS reply on SNAAPP requirements clarifications | S6-223488 | replied to | S1-230591 |
| S1-230048 | Ad hoc group | S6-230288 | replied to | S1-230780 |
| S1-230049 | LS on initiation of new work item Y.CCO-req: ""Requirements of orchestration supporting confidential computing for network slices in IMT-2020 networks and beyond"" | SG13-LS39 | Noted |  |
| S1-230050 | LS on proposed new draft Recommendation ""Requirements and framework of disaster mitigation and personnel rescue for sudden natural disasters in network"" | sp17-sg11-oLS-00044 | Noted |  |
| S1-230051 | Reply LS on Facilitating roaming adoption across 3GPP NPN deployments | SA | Noted |  |
| S1-230052 | Reply LS on QoS Sustainability analytics and V2X service adaptations | SP-221320 | Noted |  |
| S1-230053 | Reply LS on Use Cases and requirements for industrial factory applications | SP-221322 | Noted |  |
| S1-230054 | LS to GSMA 5GMRR on finalisation of Study on Roaming Value-Added Services | SP-221331 | Noted |  |
| S1-230106 | (postponed) Reply LS on Facilitating roaming adoption across 3GPP NPN deployments | SP-220985/S1-223277 | Withdrawn |  |
| S1-230107 | (postponed) LS on SNAAPP requirements clarifications | S3-222970/S1-223272 | Withdrawn |  |
| S1-230108 | LS on SNAAPP requirements clarifications | S3-222970 | replied to | S1-230591 |

Approved outgoing LSs

|  |  |
| --- | --- |
| **TDoc** | **Title** |
| S1-230324 | LS to SA2 on reply on AI-ML KPIs |
| S1-230590 | LS to SA2 on reply on PS Data Off for IMS Data Channel Service |
| S1-230591 | LS to SA3, SA6 on reply on SNAAPP requirements clarifications |
| S1-230739 | LS to CT1, GCF-CAG (cc CT6, RAN5, PTCRB Plenary, PTCRB IoT WG) on reply on Network selection for specific consumer type mobile |
| S1-230740 | LS to SA2 on service requirement for emergency service support over ProSe relay |
| S1-230780 | LS to SA6 on reply on ad-hoc group |

Draft outgoing LSs

|  |  |  |  |
| --- | --- | --- | --- |
| **TDoc** | **Title** | **Source** | **TDoc Status** |
| S1-230031 | Relay LS on service requirement for emergency service support over ProSe relay | vivo | Revised |
| S1-230075 | Reply LS on PS Data Off for IMS Data Channel Service | Xiaomi, China Mobile | Revised |
| S1-230109 | Draft reply LS on AI-ML KPIs | Qualcomm | Revised |
| S1-230118 | [DRAFT] Reply LS on SNAAPP requirements clarifications | NTT DOCOMO | Revised |
| S1-230173 | [Draft] Reply LS on KPIs for AIML model transfer in 5GS | OPPO | Noted |
| S1-230179 | [Draft] Reply LS on Network selection for specific consumer type mobile | SA1 | Revised |
| S1-230267 | [DRAFT] LS on IMS-based 3D Avatar Call Support for Accessibility | Samsung | Revised |
| S1-230292 | Draft reply LS on ad-hoc group | Union Inter. Chemins de Fer | Revised |
| S1-230311 | [draft] LS on clarification for commercial use case supported in 5GS ProSe Service | Beijing Xiaomi Software Tech | Noted |
| S1-230323 | [Draft] Reply LS on Network selection for specific consumer type mobile | OPPO | Revised |
| S1-230325 | Reply LS on Ad hoc group | Nokia, Nokia Shanghai Bell, Deutsche Telekom | Revised |
| S1-230328 | Relay LS on service requirement for emergency service support over ProSe relay | vivo | Revised |
| S1-230329 | [DRAFT] Reply LS on SNAAPP requirements clarifications | NTT DOCOMO | Revised |
| S1-230414 | [DRAFT] LS on IMS-based 3D Avatar Call Support for Accessibility | SA1 | Noted |
| S1-230625 | [DRAFT] Reply LS on SNAAPP requirements clarifications | NTT DOCOMO | Revised |
| S1-230749 | Draft reply LS to SA6 on ad-hoc group | Union Inter. Chemins de Fer | Revised |

## Annex D: List of agreed/endorsed new and revised Work Items

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TDoc** | **Title** | **Source** | **Type** | **Release** |
| S1-230334 | New WID on Roaming Value-Added Services | Ericsson, Deutsche Telekom | WID new | Rel-19 |
| S1-230482 | New WID on PS Data Off for IMS Data Channel Service | China Mobile | WID new | Rel-19 |
| S1-230593 | New Rel-19 mini Work Item in Supporting UE Mobility for XR services | China Mobile, NTT Docomo, China Telecom, China Unicom | WID new | Rel-19 |
| S1-230627 | Revised SID on Energy Efficiency as service criteria | China Mobile | SID revised | Rel-19 |
| S1-230689 | WID on Edge Computing for Industrial Scenarios | Orange, Verizon, Ericsson, Huawei NTT DOCOMO, China Unicom, Vodafone, | WID new | Rel-19 |
| S1-230794 | New SID on Interconnect of SNPN | Novamint, b-com, EDF, Intel, Cisco | SID new | Rel-19 |

## Annex E: List of agreed/approved new versions of TR/TS

And corresponding Cover page when applicable

Sorted by TS/TR number

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **TDoc** | **Title** | **Source** | **Type** | **Release** | **Spec** | **Version** | **Related WIs** |
| S1-230799 | Cover page for TR 22.837 on sensing (pCR) | Rapporteur (Deutsche Telekom): | TS or TR cover | Rel-19 | 22.837 | 0.4.0 | FS\_Sensing |
| S1-230810 | TR 22.837v0.4.0 Study on Integrated Sensing and Communication (pCR) | Rapporteur (Deutsche Telekom): | TS or TR cover | Rel-19 | 22.837 | 0.4.0 | FS\_Sensing |
| S1-230721 | TR 22.840v1.1.0 Study on Ambient power-enabled Internet of Things | Rapporteur (OPPO) | Draft TR | Rel-19 | 22.840 | 1.1.0 | FS\_AmbientIoT |
| S1-230731 | TR 22.841v0.3.0 Study on Upper layer traffic steering, switching and split over dual 3GPP access | Rapporteur (Qualcomm) | Draft TR | Rel-19 | 22.841 | 0.3.0 | FS\_DualSteer |
| S1-230730 | TR 22841 coversheet for SA information | Rapporteur (Qualcomm) | TS or TR cover | Rel-19 | 22.841 | 0.3.0 | FS\_DualSteer |
| S1-230729 | TR 22.843v0.3.0 Study on UAV Phase 3 | Rapporteur (China Mobile) | Draft TR | Rel-19 | 22.843 | 0.3.0 | FS\_UAV\_Ph3 |
| S1-230804 | TR 22843 coversheet for SA information | China Mobile | TS or TR cover | Rel-19 | 22.843 | 0.3.0 | FS\_UAV\_Ph3 |
| S1-230725 | TR 22.851v1.1.0 Study on Network Sharing Aspects | Rapporteur (China Unicom) | Draft TR | Rel-19 | 22.851 | 1.0.0 | FS\_NetShare |
| S1-230723 | TR 22.856v0.4.0 Study on Localized Mobile Metaverse Services | Rapporteur (Samsung) | Draft TR | Rel-19 | 22.856 | 0.4.0 | FS\_Metaverse |
| S1-230801 | Presentation of Specification/Report to TSG: | Samsung | TS or TR cover | Rel-19 | 22.856 | 0.3.0 | FS\_Metaverse |
| S1-230802 | TR 22.865v0.3.0 Study on Satellite Access Phase 3 | Rapporteur (NOVAMINT) | Draft TR | Rel-19 | 22.865 | 0.3.0 | FS\_5GSAT\_Ph3 |
| S1-230803 | cover page for 5gsat | Rapporteur (NOVAMINT) | TS or TR cover | Rel-19 | 22.865 | 0.3.0 | FS\_5GSAT\_Ph3 |
| S1-230727 | TR 22.876v0.3.0 Study on AI/ML Model Transfer\_Phase2 | Rapporteur (OPPO) | Draft TR | Rel-19 | 22.876 | 0.3.0 | FS\_AIML\_MT\_Ph2 |
| S1-230806 | Presentation of Specification/Report to TSG: | OPPO (Rapporteur) | TS or TR cover | Rel-19 | 22.876 | 0.3.0 | FS\_AIML\_MT\_Ph2 |
| S1-230732 | TR 22.882v0.3.0 Study on Energy Efficiency as service criteria | Rapporteur (China Mobile) | Draft TR | Rel-19 | 22.882 | 0.3.0 | FS\_EnergyServ |
| S1-230805 | TR 22.882 coversheet for SA information | China Mobile | TS or TR cover | Rel-19 | 22.882 | 0.2.0 | FS\_EnergyServ |
| S1-230733 | TR 22.916v0.3.0 Study on Network of Service Robots with Ambient Intelligence | Rapporteur (LGE) | Draft TR | Rel-19 | 22.916 | 0.3.0 |  |

## Annex F: Registered Participants list

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