**Notes of SA2#139E\_CC#4**

# Opened: 12 June 2020, 13.00 UTC = 15.00 CEST

~ 130 people attended the conference call

**Attendees**: The following companies were recorded as present (list not exhaustive or verified)

Apple

ASTRI

AT&T

Broadcom

BT

Cablelabs

CATT

Charter

China Mobile

China Telecom

China Unicom

Cisco

Convida Wireless

Deutsche Telekom

DOCOMO

Ericsson

FirstNet

Frauenhofer

Futurewei

Huawei

Intel

Interdigital

IPCom

KPN

Kyocera Corporation

Lenovo

LGE

MediaTek

Motorola Mobility

NEC

Nokia

NTT DOCOMO

OPPO

Orange

OTD

Perspecta Labs

Philips

Qualcomm

Sandvine

Samsung

Sony

Spreadtrum

Telefonica

Tencent

T-Mobile USA

TNO

Vivo

Vodafone

ZTE

Puneet Jain (SA WG2 Chairman) chaired the conference call. Notes were taken by Maurice Pope (MCC).

NOTE: Meeting notes are not exhaustive and may not contain all the comments made during the conference call.

Opening statements by SA WG2 Chairman: It is intended to go through the documents marked at "for CC#4" in the Chairman’s notes.

**S2-2004329:** (P-CR) 23.700-20: KI#X, New Sol: Survival Time for Deterministic Applications. Nokia, Nokia Shanghai Bell, CATT, Samsung

NOTED? R14 provided in draft folder For CC#4

**Discussion and conclusion:**

Nokia explained what the small change was for this revision. S2-2004329r14 was agreed. Revised in S2-2004701, which was approved.

**S2-2003788:** (P-CR) 23.700-93: New Sol: MPQUIC-LL steering functionality. Motorola Mobility, Lenovo, Broadcom, Tencent, Deutsche Telekom

Approve r07? For CC#4

**Discussion and conclusion:**

Motorola Mobility commented that they also provided r08, but were happy also with r07. S2-2003788r07 was agreed. Revised in S2-2004702, which was approved.

**S2-2004012:** (P-CR) 23.700-93: New Sol: New steering method MP-QUIC for UDP. Huawei, Hisilicon

Approve r06? Rev5.5 in draft? For CC#4

**Discussion and conclusion:**

Deutsche Telekom commented that r05.5 had been provided in the drafts folder. S2-2004012r05.5 was agreed. Revised in S2-2004703, which was approved.

**S2-2004013:** (P-CR) 23.700-93: New Sol: New steering method QUIC for UDP. Huawei, Hisilicon

Approve r05? Revision 5.5 in drafts? For CC#4

**Discussion and conclusion:**

Version r05.5 had been provided in the drafts folder. S2-2004013r05.5 was agreed. Revised in S2-2004704, which was approved.

**S2-2003516:** (LS In) LS from RAN WG2: LS on dependencies on AS design for mobility management aspects of NTN in 5GS. RAN WG2 (R2-1916470)

POSTPONED? For CC#4

**Discussion and conclusion:**

Nokia suggested that the conclusions and updated solution papers are reviewed before deciding whether to postpone or note these LSs.

This LS was noted.

**S2-2003833:** (CR) 23.737 CR0008 (Rel-17, 'F'): Conclusion update on KI #5. Samsung

Approve r03? For CC#4

**Discussion and conclusion:**

CATT had proposed some modification to the text which was captured in the Chairman’s notes comments: "Whether and when QoS limitation defined in Solution #11 needs to be considered for UPF selection may be discussed in the normative work." Nokia commented that there should then be a limitation put on this in order to be able to progress with normative phase of the work. CATT did not accept r03 if there can be no further study during the normative phase. This update, based on S2-2003833r03 with these changes, was agreed. Revised to S2-2004705, which was approved.

**This issue should be concluded within the next meeting where this agenda item is included, otherwise multiple backhaul types, etc. may not be supported in the Release.**

**S2-2004031:** (CR) 23.737 CR0012 (Rel-17, 'F'): Key Issue 10 conclusions. Nokia, Nokia Shanghai Bell, Thales, TNO

Approve r03? For CC#4

**Discussion and conclusion:**

Nokia commented that there were revisions in the drafts folder, from Qualcomm and Vodafone and the Vodafone r07 was preferable. Qualcomm commented that this was not acceptable, but r09 from Ericsson was acceptable to them. Ericsson clarified that this adds that feasibility needs to be verified by the RAN WGs. S2-2004031r09 was agreed. Revised in S2-2004706, which was approved.

**S2-2004696:** (WID REVISED) Change of rapporteur on WID 'Integration of satellite systems in the 5G architecture'. THALES

OPEN For CC#4

**Discussion and conclusion:**

The SA WG2 Chairman commented that the SID update in TD S2-2004026 has been noted as the TR is already under change control and only the WID updated should be considered. S2-2004696 was approved.

**S2-2004688:** (LS OUT) [DRAFT] LS on SA WG2 assumptions from conclusion of study on architecture aspects for using satellite access in 5G. Qualcomm

OPEN For CC#4

**Discussion and conclusion:**

This is a revision of S2-2004633r01. S2-2004688 was approved.

**S2-2003517:** (LS In) LS from RAN WG2: LS on LS on system level design assumptions for satellite in 5GS. RAN WG2 (R2-1916620)

POSTPONED? For CC#4

**Discussion and conclusion:**

This LS was noted.

**S2-2003520:** (LS In) LS from SA WG3LI: Response LS on the 'LS OUT on Location of UEs and associated key issues'. SA WG3LI (S3i200056)

POSTPONED? For CC#4

**Discussion and conclusion:**

This LS was noted.

**S2-2003556:** (LS In) LS from RAN WG3: Response LS on Location of UEs and associated key issues. RAN WG3 (R3-202824)

POSTPONED? For CC#4

**Discussion and conclusion:**

This LS was noted.

**S2-2003565:** (LS In) LS from RAN WG2: Response LS on Location of UEs and associated key issues. RAN WG2 (R2-2004266)

POSTPONED? For CC#4

**Discussion and conclusion:**

This LS was noted.

**S2-2004632:** (LS In) LS from CT WG1: Reply to LS on PLMN selection solutions for satellite access

POSTPONED? For CC#4

**Discussion and conclusion:**

This LS was noted.

**S2-2003965:** (P-CR) 23.757: KI1: Update to Solution #3: Add support for UE leaving MBS. Huawei, HiSilicon

Approve r05? For CC#4

**Discussion and conclusion:**

S2-2003965r07 was agreed. Revised in S2-2004699, which was approved.

**S2-2004185:** (P-CR) 23.757: KI #1, Sol #3: Update to address editor´s notes. Nokia, Nokia Shanghai Bell

Approve r14 + changes agreed offline? For CC#4

**Discussion and conclusion:**

S2-2004185r15 was provided in the drafts folder and was agreed. Revised in S2-2004707, which was approved.

**S2-2003679:** (P-CR) 23.757: KI #1, Sol #2: Solution 2 update. Ericsson

Approve r06? For CC#4

**Discussion and conclusion:**

S2-2003679r06 was revised to S2-2004700, which was approved.

**S2-2004177:** (P-CR) 23.757: KI #2, Sol #1: Update to clarify service levels. CATT

Merged into S2-2004104? Postpone? For CC#4

**Discussion and conclusion:**

Merged into S2-2004708.

**S2-2004277:** (P-CR) 23.757: KI#2, sol 1, update the solution to fix the EN. ZTE

Merged into S2-2004104? Postpone? For CC#4

**Discussion and conclusion:**

Merged into S2-2004708.

**S2-2004104:** (P-CR) 23.757: KI #7, Sol #1: Update of service level. Vivo, Huawei

For CC#4

**Discussion and conclusion:**

S2-2004104r13 was provided in the drafts folder by Samsung and was proposed to be agreed. Huawei asked to remove note 2 from this. S2-2004104r13 with note 2 removed was agreed. Revised in S2-2004708, which was approved.

**S2-2003635:** (P-CR) 23.761: KI #1, Sol #1: Update to remove ENs. Intel

Approve r09? Objection from OuYang(Huawei). For CC#4

**Discussion and conclusion:**

Intel commented that S2-2003635r12 was provided in the drafts folder which had been agreed off-line with Huawei. S2-2003635r12 was agreed. Revised to S2-2004709, which was approved.

**S2-2004206:** (P-CR) 23.761: KI#1, Paging cause usage. Charter Communications

Noted? Objection from OuYang(Huawei). For CC#4

**Discussion and conclusion:**

This was merged into S2-2004709.

**S2-2003893:** (P-CR) 23.761: Update solution #1 of Handling of MT service with Paging Cause. Qualcomm Incorporated

Approve r04 + EN? For CC#4

**Discussion and conclusion:**

Qualcomm provided draft S2-2003893r04plus which was agreed. This was revised to S2-2004710, which was approved.

**S2-2003764:** (P-CR) 23.761: KI#1: New solution: Operator controlled Handling of Paging Cause code. Nokia, Nokia Shanghai Bell

Revision needed? For CC#4

**Discussion and conclusion:**

This (original version) was approved.

**S2-2003895:** (P-CR) 23.761: Solution for scheduling gap. Qualcomm Incorporated

Approve r01? Guillaume (MediaTek) objects For CC#4

**Discussion and conclusion:**

S2-2003895r01 was agreed. Revised to S2-2004711, which was approved.

**S2-2003981:** (P-CR) 23.761: Architectural Assumption for MUSIM support. NTT DOCOMO, Orange, Telecom Italia, Deutsche Telekom

Approve r04? Dieter: + remove 'to deploy in a PLMN' For CC#4

**Discussion and conclusion:**

Deutsche Telekom provided a S2-2003981r05 in the drafts folder, which was agreed. Revised to S2-2004712, which was approved.

**S2-2004248:** (LS OUT) [DRAFT] LS on Potential RAN impact for support of Multi-USIM devices. Intel

Approve r09? Alessio (Nokia) Objects? For CC#4

**Discussion and conclusion:**

Nokia sustained their objection as it informs RAN WGs that we have a TR to include feedback on, but this work is not stable at present. Intel commented that it was debatable whether feedback could be obtained in time anyway. This was then noted.

**S2-2004017:** (P-CR) 23.752: KI#3, New Solution for service continuity via UE-to-Network Relay. Huawei, HiSilicon, Mediatek Inc.

Approve r02? Objections from Ericsson and Qualcomm For CC#4

**Discussion and conclusion:**

Huawei reported that S2-2004017r06 in the drafts folder had gained support, Nokia commented that they had made a small change to this in S2-2004017r07 in the drafts folder. S2-2004017r07 was agreed. Revised in S2-2004713, which was approved.

**S2-2004298:** (P-CR) 23.776: New Solution: QoS aware power efficient PC5 communication. Qualcomm Incorporated

Approve r06? Objection from Guillaume (MediaTek) For CC#4

**Discussion and conclusion:**

MediaTek reported that they withdrew their objection. S2-2004298r06 was agreed. Revised in S2-2004714, which was approved.

## Other documents raised at the CC:

**S2-2004270:** (P-CR) KI #1, New Sol: Informing network two USIMs belongs to same device. Samsung, NEC, Airtel, InterDigital

**Discussion and conclusion:**

This had been marked as noted due to 3 objections received. InterDigital asked to further discuss this. NEC commented that this was a CN coordination key issue update rather than a solution and this is why there was objection to including this in the TR. Samsung commented that this was a solution to an existing Key Issue existing in the TR. There were some procedural issues raised and technical comments were not continued during the revisions phase. Intel asked to clarify whether this issue can be handled at the August meeting. The SA WG2 Chairman clarified that if MUSIM is on the agenda and it is an e-meeting, this can be brought back to the next meeting. This was then left as noted.

**S2-2004098:** (P-CR) Architectural Requirements and Assumptions for ATSSS. Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Broadcom, Deutsche Telekom

**Discussion and conclusion:**

Nokia commented that S2-2004098r13 had been revised but r12 was more acceptable. The SA WG2 Chairman replied that there were no objections provided against r13 so it was chosen as the agreed version. ZTE asked to add to the notes that the extensions to IETF protocols are expected to be limited. Ericsson suggested adding 'and minimised' to r12: '*Any additional steering functionality shall be based on IETF protocols or extensions of such protocols (i.e. QUIC/MP-QUIC), any differences from the existing IETF drafts shall be clearly specified and minimized*'. S2-2004098r12 with these changes was agreed. Revised in S2-2004656, which was approved.

**S2-2004094:** (P-CR) KI #3, Sol #6: Update to clarify non-IP and LI aspects. CATT, LG Electronics, Qualcomm Incorporated(?)

This had been noted due to an objection from Interdigital. S2-2004094r09 was provided in the drafts folder which was agreed. Revised to S2-2004715, which was approved.

**S2-2003967:** (P-CR) KI #1 and KI#7: New Sol: MBS Session Management in IPTV. Huawei, HiSilicon

Marked as noted in the combined notes, but was for CC#4 in Session notes (Huawei has raised this in another email).

**Discussion and conclusion:**

The objection was sustained by Ericsson, and this remained noted.

# AoB

Ericsson suggested that additional proposals for the CC#s should be placed in the CC# folders instead of Drafts to allow easier identification of them and storage for documents discussed. The SA WG2 Chairman acknowledged that this will be followed next time.

ZTE also asked to ensure the links are provided in the e-mails to uploaded documents after the deadlines. Deutsche Telekom commented that revision number should be followed. Ericsson asked whether the comments tags should be continued after the deadline as currently they do not get captured. The SA WG2 Chairman did not want to give the impression that the meeting is extended after the final deadlines, by formalising this as this may result in more and more documents to be pushed to Friday. Friday CC is mainly for limited controversial topics. Therefore, this would not be included as part of the e-meeting process.

Delegates were asked to take care that the start and end tags are included in the e-mails and hyperlinks to documents are outside of the comment tags.

**S2-2004717:** (P-CR) Add 5G ProSe UE-to-UE Relay Definition. ZTE

**Discussion and conclusion:**

Qualcomm commented that there were many comments made after the deadline that the definitions need to be revisited at the next meeting, which they would like to see in the Chairman’s notes files. This was added to the Chairman’s notes.

**S2-2004734:** (P-CR) KI #3, Sol #7: Update to address editor's notes. Huawei, HiSilicon, MediaTek Inc.

**Discussion and conclusion:**

InterDigital commented that they had objected to S2-2004019r03, but it was used as the agreed version for revision. Interdigital suggested keeping the original editor’s note on connection management to this and removing the inserted table in 6.7.2.5.2. OPPO objected to this and preferred to keep S2-2004019r03 as it is. The SA WG2 Chairman suggested adding a note in the report that this will be further discussed at the next meeting. Interdigital could not accept this. MediaTek suggested keeping the table and reinstating the editor's note. This was agreed and S2-2004019r03 with the editor's note reinstated was agreed. The revision in in S2-2004734, remained approved.

Nokia asked how the SIDs completion rates and status will be provided. The SA WG2 Chairman clarified that the Rapporteurs will be asked to provide information for the Chairman’s report to TSG SA and this will be circulated on the e-mail list.

There was some discussion on the criteria for sending TRs to TSG SA for information. This is usually done on a basis of the stability of the work and reduction or stopping of any new Solution and Key Issues in the TR so that evaluation can be efficiently done.

The SA WG2 Chairman reported that Work Planning will be done during the week July 6 2020 and Rapporteurs are welcome to participate. A Conference Call was arranged for **8 July 2020, 13:00 - 15:00 UTC** and the S WG2 Chairman will provide details over the e-mail list.

# Closed: 12 June 2020, 15:00 UTC = 17.05 CEST