**Notes of SA2#140E\_CC#3**

# Opened: 27 August 2020, 13.00 UTC = 15.00 CEST

~ 145 people attended the conference call

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

Apple

Allot Ltd

AT&T

Broadcom

BT

CATT

Charter

China Mobile

China Telecom

Cisco

Convida Wireless

Deutsche Telekom

Dish

Ericsson

FirstNet

Frauenhofer

Futurewei

Huawei

Hughes Network Systems

Intel

Interdigital

ITRI

KDDI

Lenovo

LGE

Mavenir

MediaTek

NEC

Nokia

NTT DOCOMO

OPPO

Orange

OTD

Perspecta Labs

Qualcomm

Sandvine

Samsung

Shanghai Jiao Tong University

Sharp

Siemens

Sony

Spirent

Tencent

Telecom Italia

THALES

T-Mobile USA

Vivo

Vodafone

Volkswagon

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: A general list of issues to be discussed was distributed by the SA WG2 Chairman:

# Agenda:

# 1. SA6 LS on IP address translation to GPSI

SA2#140E CC2 S6 LS on AF request targetting an IP address.pptx: <https://www.3gpp.org/ftp/tsg_sa/WG2_Arch/TSGS2_140e_Electronic/INBOX/CCs/SA2%23140E_CC%233/SA2%23140E%20CC2%20S6%20LS%20on%20AF%20request%20targetting%20an%20IP%20address.pptx>

SA WG6 LS (S2-2004784 = S6-200947) Proposals for endorsement:

1. there is a requirement for 5GC to support API from AF targeting a UE only identified by IP addressing information? :

 Decision: yes/no

2. IP addressing information provided by AF may correspond to NATed IP addressing information ? :

 Decision: yes/no

3. there is a requirement for 5GC to support providing a GPSI back to an AF that that has issued an API targeting a UE only identified by IP addressing information ? :

 Decision: yes/no

4. (how to discuss the SA WG2 solution (the question is NOT on what the technical solution should be):

- Either via (draft R17 CR(s))

- Or via PCR to 23.748 (for example associated with KI 3)

 Decision: draft R17 CR / PCR to 23.748

5. A LS is to be sent back to SA WG6 telling that

1. SA WG2 will work on the requirement for 5GC to support API from AF targeting a UE only identified by IP addressing information where the IP addressing information provided by AF may be NATed?

2. SA WG2 will not work further on providing a GPSI back to an AF that that has issued an API targeting a UE only identified by IP addressing information as long as the requirement has not been clarified by SA WG6 and the security aspects analysed by SA WG3

**Discussion and conclusion:**

Huawei asked for clarification on the need for Rel-17 work, as the LS does not ask SA WG2 to do anything, but only to provide clarifications, so no WID/SID should be started in SA WG2 based on this. Intel commented that this is a valid use case and understood the concern from Huawei on whether this can be done in Rel‑17. Samsung suggested identifying what is already done in SA WG2 before deciding on whether to do any further work. Vodafone suggested further checking what SA WG6 are asking. Ericsson agreed that we should only provide information on what we currently have support for at this stage. Huawei asked whether there was still time to add a new Key Issue on this.

**Way forward:** Send a LS to SA WG6 stating what is supported in SA WG2 specifications.

# 2. 5MBS way forward proposal

SA2#140E 5MBS Way forward.ppt: <https://www.3gpp.org/ftp/tsg_sa/WG2_Arch/TSGS2_140e_Electronic/INBOX/CCs/SA2%23140E_CC%233/SA2%23140E%205MBS%20Way%20forward.ppt>

**Alternative #1 (recommended by the rapporteur):** Make progress on KI#9 at this meeting: handle the submitted documents, also allows companies to submit new solutions on this KI in the next meeting.

**Alternative #2:** Postpone all the KI#9 related documents until KI#1 has been concluded.

**Way forward proposal (other topics)**

- Architecture:

- Take S2-2005409 (New Consolidate Architecture) as the baseline.

- KI#1:

- Take S2-2005413 (Principles for categorization of Solutions for KI1) as the baseline.

- KI#5 and KI#8:

- Take S2-2005278 (Conclusion for 5MBS KI#2, KI#5, KI#8, and KI#9) as the baseline.

- KI#5 and KI#8 were once agreed to not be addressed in Rel-17 (see the NOTE in KI description).

- KI#3:

- Take S2-2005274 (Conclusion for 5MBS KI#3) as the baseline.

- Revision of each conclusion proposal could be further provided.

**Discussion and conclusion:**

Ericsson preferred Alternative #1. Nokia preferred Alternative #1.

**Way forward:** Alternative #1 (Make progress on KI#9 at this meeting: handle the submitted documents, also allows companies to submit new solutions on this KI in the next meeting) was agreed.

Ericsson suggested that SA WG2 should focus on the differences between the two architecture options and how to reach a consolidated architecture. Nokia suggested a consolidated architecture can reduce the complexity of solutions. Huawei commented that as some solutions can fit into both architectures, a consolidation will help in evaluations. Samsung commented that they agreed with the Ericsson proposal, as option 1 leaves some architecture optional and option 2 makes it mandatory.

Huawei clarified that this proposed taking solutions based on the suggested documents and noting other proposals for the KI#. Ericsson commented that if this is adopted it does not imply that any conclusion needs to be agreed.

**Way forward:** For solution evaluation/conclusion take one paper as a baseline (as suggested by the Rapporteur). The baseline choice does not imply all content is agreeable; it needs to be further discussed and agreed following normal procedures.

For solution evaluation/conclusion documents, please make a comment if the papers are merged to avoid marking them as approved at the revision deadline. It was clarified that proposals for merge may be made by any company, but the merge proposal will need to be confirmed by the author company by e-mail comment.

# 3. Way forward on LDNSR

SA2#140E EC Way forward on LDNSR placement v7.ppt: <https://www.3gpp.org/ftp/tsg_sa/WG2_Arch/TSGS2_140e_Electronic/INBOX/CCs/SA2%23140E_CC%233/SA2%23140E%20EC%20Way%20forward%20on%20LDNSR%20placement%20v7.ppt>

Way Forward (via show hands)

Show hands on LDNSR placement in CC#2

Way forward on update solution 22:

**Discussion and conclusion:**

The SA WG2 Chairman commented that show of hands is used to resolve long-standing issues which have been discussed for some meetings without resolution. It was confirmed that this was the case.

**Show hands on LDNSR placement in CC#2**

- Option 1: LDNSR in SMF

- Support: (1) Ericsson

- Option 2: LDNSR as standalone AF, may be collocated with PSA UPF

- Support: (12) NTT DOCOMO, ZTE, Vodafone, Intel, Samsung, Deutsche Telekom, T-Mobile USA,
 InterDigital, Futurewei, Qualcomm, Orange, Lenovo

- Option 3: LDNSR in PSA UPF

- Support: (11) Huawei, ZTE, FutureWei, Tencent, China Mobile, Lenovo, China Telecom, CATT,
 Nokia, Vivo, Ericsson

- Option 4: DNS proxy in SMF, Decryption in UPF

- Support: (3) Ericsson, Nokia, Sandvine

Option 1 and Option 4 were discounted and will not be progressed further The choice was then between Option 2 and Option 3. Companies who have supported both options should consider their preference for reaching a conclusion.

# 4. New TD Allocation for Rel-17 LS Out

SA2#140E Security Concern about option 2 and option 3b for Solution 22 and a LS out is proposedv1.ppt.pptx: <https://www.3gpp.org/ftp/tsg_sa/WG2_Arch/TSGS2_140e_Electronic/INBOX/CCs/SA2%23140E_CC%233/SA2%23140E%20Security%20Concern%20about%20option%202%20and%20option%203b%20for%20Solution%2022%20and%20a%20LS%20out%20is%20proposedv1.ppt.pptx>

**Question:** whether there is security risk for the option 2 and option 3b of solution 22, considering that the DNS query originated by the application client in the UE is handled by a DNS resolver in the MNO network, which can forward the DNS query to an Authoritative DNS Server outside the MNO network with changing the DNS query IP address; the Authoritative DNS Server belongs to the service provider of the application installed on the UE.

**Proposal:** A LS should be sent to SA3 to check whether there is security risk for option 2 and option 3b of solution 22.

**Discussion and conclusion:**

CATT commented that they also support sending an LS to SA WG3 but would like to add secutiry concerns on sending Query outside the MNO network. A LS OUT document was allocated as TD S2‑2005918.

Ericsson asked for a document to send an LS to SA WG1 on Use Cases for providing IMS services to SNPN. A LS OUT document was allocated as TD S2‑2005919.

Intel commented that SA WG5 are meeting the same week as the next SA WG2 meeting and suggested attempting to agree a response to TD S2‑2005876 rather than postponing it. A LS OUT document was allocated as TD S2‑2005920.

# 5. AoB

TD S2‑2005917 (LS OUT) [DRAFT] LS on 5G RG that support MA PDU Session with a 3GPP leg over NR but don't support MA PDU Session with a 3GPP leg over EPC (Nokia)

**Discussion and conclusion:**

A draft was provided and the title shortened and meeting venues clarified. This was then approved.

TD S2‑2004897 (LS OUT) [DRAFT] LS Response on Bulk operation of LCS-service (Ericsson)

**Discussion and conclusion:**

S2‑2004897R04 was reviewed and agreed. This was revised to clean up in TD S2‑2005921, which was approved.

# Closed: 27 August 2020, 14.50 UTC = 16.50 CEST