3GPP SA4#120-e TDoc S4-221192

E-Meeting, 17 – 26 Aug, 2022

**Title: DRAFT Reply LS to 3GPP SA2 on VoLTE Roaming GBR Handling**

**Response to: LS S2-2204724 on VoLTE Roaming GBR Handling from 3GPP SA2**

**Release: Rel-17**

**Work Item: TEI17**

**Source: SA4**

**To: SA2**

**Cc: CT3, CT4, GSMA NRG**

**Contact person: Bo Burman**

**bo <dot> burman <at> ericsson <dot> com**

**Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

**Attachments:** DocNumber(s) [Description e.g.. Draft TS 29.414 v0.1.0].   
**!! WARNING !!** Do not insert the file directly as an object in this Word document.

# 1 Overall description

SA4 thanks SA2 for the LS on VoLTE Roaming GBR Handling.

SA4 has discussed the issue and can confirm the SA2 understanding that a RAN GBR (in HPLMN or VPLMN) that is lower than what is needed to support the lowest voice codec mode the UE is configured to use (by the HPLMN), would result in voice packets being delayed and/or dropped. It cannot be assumed that a UE would adapt below the lowest configured voice codec mode, even in the presence of substantial packet loss and even if the specific voice codec technology supports lower modes than what is included in the current UE configuration.

Furthermore, the current TS 26.114 specification provides several optional and recommended speech adaptation procedures and possibilities to detect the need for speech adaptation. Currently, only one speech adaptation procedure is normative for the UE; adjusting speech codec mode based on received speech Codec Mode Request (CMR). However, neither sending CMR based on observed RTP voice packet losses nor adjusting speech codec mode based on (RTCP) reported voice packet losses are normative to support in the UE. This is true both for Initial Codec Mode (ICM) procedures and dynamic adaptation during an ongoing session. The lack of normative UE reaction to observed packet losses thus decreases the probability that any two communicating UE would jointly detect and adapt the used voice codec mode, even if existing technology would clearly allow for such adaptation.

Therefore, SA4 considers it of utmost importance to ensure that the used RAN GBR (in HPLMN or VPLMN) is never set lower than the lowest configured voice codec mode in the UE.

This reply LS is provided for information.

# 2 Actions

None. <It seems SA4 would not require any actions in response to this LS?>

**To SA2**

**ACTION:** SA4 asks SA2 to take the above information into account.

**To CT3 / CT4**

**ACTION:** SA4 asks CT3 / CT4 to take the above information into account.

**To GSMA NRG**

**ACTION:** SA4 asks GSMA NRG to take the above information into account.

# 3 Dates of next TSG SA WG 4 meetings

SA4#121 November 9 – 18, 2022 Europe or e-meeting

SA4#122 February 20 – March 1 Europe or e-meeting