**3GPP TSG-RAN WG3 Meeting #117bis-eR3-22xxxx**

**Online, Oct 10th – Oct 18th 2022**

**Title:** LS on inter-RAT SHR and SPCR

**Response to:**

**Release:** Rel-18

**Work Item:** NR\_ENDC\_SON\_MDT\_enh2-Core

**Source:** RAN3

**To:** RAN2

**Cc:** -

**Contact Person:**

**Name:**  Shankar Krishnan

**E-mail Address:** shakrish@qti.qualcomm.com

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

**Attachments:** -

**1. Overall description:**

RAN3 discussed inter-RAT Successful Handover Report (SHR) and Successful PSCell Change Report (SPCR) and have the following questions:

Inter-RAT SHR

RAN3 agreed to support T310 and T312 related triggers for inter-RAT SHR from NR to LTE. But there was no consensus on whether to support T304 trigger as well for inter-RAT SHR from NR to LTE. Considering this might impact RAN2 specifications (including LTE specifications), RAN3 has the following questions:

Q1. Whether T304 trigger for inter-RAT SHR from NR to LTE is also to be supported

Q2: If yes to Q1, whether the inter-RAT SHR is always encoded in source RAT format or will be encoded based on the RAT format in which it received the inter-RAT SHR configuration

Further RAN3 is not sure on the retrieval and reporting of inter-RAT SHR and would like to ask RAN2 the following question:

Q3: Whether it is sufficient for UE to report the inter-RAT SHR collected during a successful NR to LTE handover once UE is back to NR (i.e., no need to report to LTE node) or whether the LTE node should have the capability to retrieve the inter-RAT SHR from NR to LTE

RAN3 further discussed on the potential contents for inter-RAT successful handover and agreed on the following:

1. Source NR cell information
2. Target LTE cell information
3. Measurement results for source, target and neighbours
4. Cause to indicate which inter-RAT SHR triggering condition was met
5. Target C-RNTI (only needed if T304 trigger is supported)
6. UE location Information

RAN3 further agreed that the **time from CHO configuration to execution currently part of intra-NR SHR should not be included in inter-RAT SHR** as there is no inter-RAT CHO. Considering there might be parallel discussion in RAN2, RAN3 would like to check the following:

Q4: Can RAN2 confirm the support for above parameters for inter-RAT SHR from NR to LTE? Whether the existing IEs defined in Rel-17 for intra-NR SHR can be reused is up to RAN2 decision.

RAN3 is also not sure whether intra-LTE SHR is to be supported in Rel-18 and therefore would like to check the following with RAN2:

Q5: Whether intra-LTE Successful HO Report is to be supported in Rel-18

Successful PSCell Change Report (SPCR)

RAN3 also discussed different aspects related to SPCR and have the following questions to RAN2:

Q6. Whether the SPCR can be stored at the UE and sent later to the gNB or is sent immediately after the successful PSCell change or addition.

Q7. Which node (MN or SN) retrieves the SPCR from the UE?

RAN3 further discussed different triggers for SPCR (T310/T312/T304 of SCG) and came to the following agreement:

T310 of SCG and T312 of SCG are not considered as SPCR triggers for classic PSCell addition or CPA (since there is no source SN undergoing RLF).

Q8. Can RAN2 take the above RAN3 agreement into consideration and confirm?

**2. Actions:**

RAN3 respectfully asks RAN2 to provide responses to Q1-Q8 and necessary specification support as required.

**3. Date of next TSG RAN WG3 meetings:**

RAN3#118-e 14th - 18th Nov 2022 Toulouse, France