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

**Online, Oct 10th – Oct 18th 2022**

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

**Release:** Rel-18

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

**Source:** RAN3

**To:** RAN2

**Cc:** -

**Contact Person:**

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**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 also support T304 trigger for inter-RAT SHR from NR to LTE. Considering this might impact RAN2 specifications (including LTE specifications), RAN3 has the following questions:

Q1. Is RAN2 planning to impact LTE specifications to support inter-RAT SHR?

Q2. If yes to Q1, whether T304 trigger for inter-RAT SHR from NR to LTE is to be supported?

Q3. If yes to Q2, whether the inter-RAT SHR is always encoded in source RAT format or can be encoded based on the RAT format which generates the inter-RAT SHR trigger condition (e.g., inter-RAT SHR encoded in NR format for T310/T312 triggers and in LTE format for T304 triggers for inter-RAT HO from NR to LTE)?

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

Q4. If yes to Q2, and if inter-RAT SHR is collected due to T304 triggers (configured by target LTE node), what is RAN2’s preference on the following two options:

* Option 1: It is sufficient for UE to report the inter-RAT SHR once UE is back to NR
* **Option 2: The LTE node should have the capability to retrieve the inter-RAT SHR**

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

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RAN3 further agreed that all CHO related information in intra-NR SHR (e.g., time from CHO configuration to execution) is not applicable for inter-RAT SHR.as there is no inter-RAT CHO.

**Q6. Can RAN2 confirm the above agreement about the absence of CHO related information in inter-RAT SHR?**

Successful PSCell Change Report (SPCR)

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

Q7. 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?

Q8. 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).

Q9. Can RAN2 take the above RAN3 agreement into consideration and confirm?

**2. Actions:**

RAN3 respectfully asks RAN2 to provide responses to Q1-Q9 and provide necessary specification support.

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

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