**3GPP TSG-RAN WG3 Meeting #111-e R3-211106**

**E-meeting, 25 Jan – 5 Feb 2021**

**Title: [draft]** LS on the TNL address of the AMF received from the source 5G-AN node during Xn handover

**Response to:**

**Release:** Rel-15

**Work Item:** NR\_NewRAT-Core

**Source:** Nokia [will be RAN3]

**To:** SA2

**Cc:** -

**Contact Person:**

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1. **Overall Description:**

RAN3 discovered an inconsistency between the RAN3 specification and SA2 specification, regarding the TNL address of the AMF received from the source 5G-AN node during Xn handover. TS23.502 Section 4.2.7.2.2 states:

During an Xn-based inter NG-RAN node handover, the following applies

- If an NGAP UE-TNLA-binding exists for a UE, the source 5G-AN node supplies the target 5G-AN node with the corresponding TNL address of the AMF for the currently used TNL association.

- If the target 5G-AN receives the TNL address of the AMF from the source 5G-AN node, the target 5G-AN node establishes a TNL association towards the TNL address received from the source 5G-AN node, creates an NGAP UE-TNLA-binding to this TNL association and sends the N2 Path Switch Request via this TNL association.

- If the target 5G-AN does not receive the TNL address of the AMF from the source 5G-AN node, the 5G-AN node creates an NGAP UE-TNLA-binding for the UE by selecting a TNL association from the available TNL associations permitted for the initial N2 message for the AMF identified by the UE's GUAMI.

- The AMF may decide to use the TNL association selected by the 5G-AN or the AMF may modify the NGAP UE-TNLA-binding by triangular redirection.

The case in the 3rd sub-bullet does not exist, the source NG-RAN node always provides an TNL address of the AMF. 38.423 specifies (in a Note in 9.1.1.1 for the *Signalling TNL association address at source NG-C side* IE that “*If no UE TNLA binding exists at the source NG-RAN node, the source NG-RAN node indicates the TNL association address it would have selected if it would have had to create a UE TNLA binding.*”. source.

This affects also the text in the 2nd sub-bullet,

* When the target 5G-AN node does not have a TNL association towards the TNL address, the target 5G-AN node establishes a TNL association towards the TNL address.
* When the target 5G-AN node has a TNL association towards the TNL address but not available, the target 5G-AN should select other available TNL association towards the same AMF or an AMF from the same AMF set.

RAN3 would like to ask SA2 to align with RAN3 specification and update TS 23.502 accordingly.

**2. Actions:**

**To SA2:**

**ACTION:** RAN3 respectfully ask SA2 to take the above into account and update the related specification.

**3. Date of Next TSG-RAN3 Meetings:**

TSG-RAN3 Meeting #112-e 17th – 28th May 2021

TSG-RAN3 Meeting #113-e 23th – 27th Aug 2021