**3GPP TSG-RAN WG3 Meeting #116-eR3-22xxxx**

**E-meeting, 09 May – 19 May 2022**

**Title:** [Draft] LS on target key derivation for NPN only cell

**Response to:**

**Release:** Rel-16

**Work Item:** NG\_RAN\_PRN-Core

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

**To:** RAN2

**Cc:**

**Contact Person:**

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

**Attachments:** -

1. **Overall Description:**

In case of Xn Retrieve UE Context procedure for NPN only cell, RAN3 has discovered the following issue:

* The anchor NG-RAN node can not acquire the PCI and ARFCN information based on the targetCellIdentity (corresponding to the *cellIdentity* of the first *PLMN-Identity* included in the *PLMN-IdentityInfoList* ) signalled in the Retrieve UE Context Request to calculate the target key?

The reason is that in case of NPN only cell, the cell identity of the first PLMN Identity may not be signalled over the XN setup/configuration update message.

RAN3 has figured out one potential solution to replicate the cellIdentity-r16 of the first entry in the npn-IdentityInfoList-r16 into the cellIdentity of the first entry of the plmn-IdentityInfoList for NPN only cell.

RAN3 would like to ask RAN2 whether the solution is feasible, and if yes, to update the corresponding specification if needed. If RAN2 answers negative, RAN3 will pursue network based solution instead.

## 2. Actions:

**To RAN2 group:**

ACTION: RAN3 respectfully asks RAN2 to answer the question above, and provide feedback.

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

The upcoming RAN3 meetings can be found in the [RAN3 Meetings calendar](https://portal.3gpp.org/Home.aspx?tbid=381&SubTB=381#/)