**3GPP TSG-RAN RAN2 #124 R2-23xxxxx**

**Chicago, USA, 13 – 17 November, 2023**

**Agenda Item:**  **7.13.7**

**Source: Huawei (email rapporteur)**

**Title:** **Open issue list for RRC running CR for NPN**

**Document for: Discussion and Decision**

# 1 Introduction

Based on the scope of the following email discussion, this paper is to identify open issues that would help CR finalization.

* **[Post123bis][667][R18 SON/MDT] RRC Running CR for Rel-18 for logged MDT enhancements and NPN (Huawei)**

Scope: Use endorsed versions as baselines to continue the running 38.331CR and 36.331 CR for R18 logged MDT enhancements and NPN and list of open issues

Intended outcome: Running CRs baseline for R18 logged MDT enhancements and NPN

Deadline: Friday October 27th, 2023

For the feature of logged MDT enhancements, there should be no open issues and the changes for this feature are stable for now.

For the feature of SONMDT enhancements for NPN, there are still some open issues, and two categories are suggested:

* Issues related to running 38.331 CR, e.g. signalling details, parameter values. For this category, companies can directly make comments in the running CR, or if the issue is controversial, companies can provide suggestions in section 2 in this Tdoc
* Issues that need to be solved for WI completion in RAN2#124 meeting. This Tdoc tries to summarize these issues and to be used for more RAN2 discussions

For the open issue list, please provide your comments by Thursday October 26th 12:00 UTC to allow 24h for the email rapporteur to prepare a summary and update the CR.

Companies providing input to this email discussion are requested to leave contact information below.

|  |  |  |
| --- | --- | --- |
| **Company** | **Delegate name** | **Email address** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# 2 Running 38.331 CR for R18 SONMDT for NPN

In the RAN2#123bis chair note, RAN2 agreed to introduce some information for SNPN area configuration, and details can be discussed.

2 Include the 3 cases of cell based/TAI based/SNPN list based SNPN related area scopes in the logged MDT configuration and a critical extension (i.e. AreaConfiguration-r18) can be considered in R18. FFS how to optimize the signalling structure to avoid much overhead.

In the latest running 38.331 CR, the CR rapporteur has provided some ASN.1 changes (and changes to procedural text).

**Q1: For SNPN area configuration information in the running 38.331 CR, please companies indicate if the singalling structure can be optimized, and suggested ASN.1 changes.**

|  |  |
| --- | --- |
| **Company name** | **Comments** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# 3 Identified open issues

At RAN2#123bis, some open issues were identified, and here is a summary:

**Open issue#1: MHI, CEF, RA report enhancements for NPN**

=> Consider MHI, CEF and RA report enhancements for NPN networks in Rel-18. Similar conclusions should be reached rapidly and repetitive discussions should be avoided.

Based on companies’ contributions, RAN2#124 can continue discussing solution details and hopefully can agree on some proposals later. After that, the NPN related stage-3 changes may be updated.

**Open issue#2: OCC details for NPN**

=> Consider to introduce enhancements for OOC analysis involving NPN network.

Based on companies’ contributions, RAN2#124 can continue discussing possible enhancements. After that, the NPN related stage-3 changes may be updated.

**Open issue#3: SNPN id details for RLF/HOF report (considering ESNPN)**

FFS: Waiting for RAN3 related progress: Proposal 2: RAN2 to discuss whether ESNPN can be applied to RLF/HOF report besides the Logged MDT:

- Option 1: Limit RLF/HOF record and report to the registered SNPN, one nid is enough;

- Option 2: ESNPN is supported for RLF/HOF report, and separate nid(s) may need in the RLF/HOF report to identify the other part of SNPN IDs for different usage, together with the different PLMN ID part in e.g. previousPCellId-r16, failedPCellId-r16, reconnectCellId-r16 and reestablishmentCellId-r16.

For issue#3, RAN2 can firstly check the latest RAN3 progress, and then discuss options. After that, the NPN related stage-3 changes may be updated.

**Open issue#4: RAN2 impacts due to the scenario of UE mobility among different SNPNs (i.e. ESNPN)**

Based on the following minutes from RAN2#123bis meeting, for the scenario of UE mobility among different SNPNs (i.e. ESNPN), RAN2 has identified some options, but more discussions are needed at RAN2#124 (based on companies’ contributions). After that, the NPN related stage-3 changes may be updated.

R2-2311527 Offline report of [At123bis][654][R18 SON/MDT] RAN2 decision on SONMDT for NPN (Huawei)

=> Noted and the issues can be discussed next meeting.

**Q2: Do companies agree that RAN2#124 can focus on open issue#1, 2, 3, 4 listed above? (detailed technical discussion can be provided in company Tdoc to RAN2#124)**

|  |  |  |
| --- | --- | --- |
| **Company name** | **Y/N** | **Comments (if any)** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Q3: Do you think that anything essential related to NPN for WI completion is missed? Please elaborate on the missing issues if any.**

|  |  |  |
| --- | --- | --- |
| **Company name** | **Open issue** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# 3 Conclusion

[To be added]