**SA WG2 Meeting #143E S2-20xxxxx**

**24 February-09 March 2021, Elbonia (revision of S2-20xxxx)**

**Source: Ericsson (Rapporteur)**

**Title: eNPN moderated email discussion for normative work**

**Document for: Information**

**Agenda Item: TBD**

**Work Item / Release: eNPN / Rel-17**

*Abstract of the contribution: This contribution includes the moderated email discussions for the open issues related to the eNPN normative work.*

# 1. Introduction

Some open issues were left to be resolved during the normative work for eNPN as detailed in the TR conclusion clauses, and/or as part of the cover sheet in S2-2009250.

NOTE: Issues that arises during discussions of normative work can be added, but if possible a resolution without the need for moderated email discussion is preferred.

To make the resolution of those open issues as smooth as possible and spend as little meeting time as possible on these issues during the normative work at SA2#143E, this documents includes a request for companies to provide their opinion on the mentioned open issues.

The result will be used as an input to the drafting of CRs for SA2#143E, and if not possible to resolve an open issue possibly we will target a working assumption at CC#1.

# 2. Issues

## KI#1-Q3: AMF selection and UE identities

The TR includes the following note in clause 8.1.2 " Conclusions for mobility scenarios ":

NOTE: Needed updates to find the correct source or target AMF and what are the applicable UE identities in the registration message will be determined in normative phase.

**Question**: Is there any specific updates needed for AMF selection and for UE identities, and if yes, what updates are needed?

|  |  |  |
| --- | --- | --- |
| **Company name** | **Answer**  **(Y/N)** | **Comments (optionally more details e.g. reasoning and what needs to be updated, if any)** |
| vivo | See comment | Need to consider how to obtain the NID of the H-SNPN. |
|  |  |  |

## KI#2-Q1: How existing mechanisms and information can be used to enable support for VIAPA services

It has been discussed that existing 5GS functionality can be used to enable support for VIAPA services.

NOTE: Issues left for further studies are not part of the scope of this open issue, see TR cover sheet S2-2009250

**Question**: Is there a need for a separate description of how to enable support for VIAPA services, and if yes, which aspects benefit more description on how to enable support for VIAPA services?

|  |  |  |
| --- | --- | --- |
| **Company name** | **Answer**  **(Y/N)** | **Comments (optionally more details e.g. reasoning and what needs to be updated, if any)** |
| vivo | N |  |
|  |  |  |
|  |  |  |

## KI#4-Q1: Need for additional SIB information

KI#4 includes a conclusion indicating that the UE can discover and select an appropriate O-SNPN based on an indication for Onboarding enabled in the SIB. However, a note questions whether this is sufficient information i.e.:

NOTE 2: Whether the indication for Onboarding is sufficient or more SIB information is needed can be further discussed in the normative phase.

**Question**: Is there a need for additional information in SIB in addition to the Onboarding enabled indication?

|  |  |  |
| --- | --- | --- |
| **Company name** | **Answer**  **(Y/N)** | **Comments (optionally more details e.g. reasoning and what needs to be updated, if any)** |
| vivo | Neutral |  |
|  |  |  |

## KI#4-Q2:Instructions to the UE for using CP or UP provisioning in PNI-NPN

In relation to the provisioning of SNPN credentials, an Editor’s Note in the TR states:

“How the network instructs the UE whether to use control plane or user plane provisioning is for FFS”

However, there is no such EN stated for PNI-NPN even though it has been agreed to support both provisioning via UP and CP for PNI-NPN i.e. there is a need for a selection of which method to use.

**Question**: How does the network instructs the UE whether to use control plance or user plane provisioning?

|  |  |  |
| --- | --- | --- |
| **Company name** | **Answer**  **(Y/N)** | **Comments (optionally more details e.g. reasoning and what needs to be updated, if any)** |
| vivo | Y | An O-network need to know UE capability for provisioning since the PS address from the O-network is only configured for the UP provisioning-enabled UE.  Besides, if a UE supports CP provisioning only and the network support UP provisioning only. Both UE and network are just waiting for each other if no instruction. |
|  |  |  |

## KI#4-Q3: Signalling used when ON is a PLMN

The conclusions for UE onboarding for SNPN includes the option that the ON is a PLMN which is for component #1 described as:

*- Using PLMN credentials for UE onboarding and PLMN as Onboarding Network (ON) is already possible.*

*- When Onboarding network is a PLMN, the functionality to restrict usage is activated for the UE by AMF based on received operator subscription from the UDM. How the subscription profile is defined, e.g. using DNN, S-NSSAI or other information dedicated for onboarding, is up to operator's decision.*

When ON is an SNPN there are extensions to RRC, NAS and NGAP, but it is not clear if those extensions are also used when ON is a PLMN.

**Question**: If the ON is PLMN, should the UE and NG-RAN use the same Onboarding procedures as when the ON is an SNPN?

|  |  |  |
| --- | --- | --- |
| **Company name** | **Answer**  **(Y/N)** | **Comments (optionally more details e.g. reasoning and what needs to be updated, if any)** |
| vivo | N | It is assumed the UE is allowed to access the O-PLMN based on UE’s normal subscription and/or roaming agreement. Based on this understanding, the extension is not needed. |
|  |  |  |

# 3. Summary

## 3.1 KI#1

## 3.2 KI#2

## 3.3 KI#4

# 4. Proposed Way Forward