

3GPP TSG CT WG1 Meeting #121

C1-198453

Reno (NV), USA, 11-15 November 2019

Source: Nokia, Nokia Shanghai Bell

Title: Comparison between solutions to include S-NSSAIs in the
REGISTRATION REQUEST message for various mobility scenarios

Agenda item: 16.2.4.1

Document for: Information

Contents

1. Reference solutions

2. 5GS → 5GS

- A. VPLMN A → VPLMN B
- B. (E)HPLMN → VPLMN X
- C. VPLMN Y → (E)HPLMN

3. EPS → 5GS

- A. VPLMN A → VPLMN B
- B. (E)HPLMN → VPLMN X
- C. VPLMN Y → (E)HPLMN

1. Reference solutions

Based on papers submitted in 3GPP-TSG CT WG Meeting #120

- C1-196769
 - Source: MediaTek Inc., Nokia, Nokia Shanghai Bell, Ericsson, Huawei, HiSilicon
 - Solution 1
- C1-196986
 - Source: Qualcomm Incorporated, InterDigital, vivo
 - Solution 2

2. 5GS → 5GS

A. VPLMN A → VPLMN B

- Clarifications
 - The UE had a PDU session associated with {S-NSSAI 31, S-NSSAI 49} in VPLMN A.
 - S-NSSAI 49 for HPLMN is mapped to S-NSSAI 27 in VPLMN B.
 - Only the S-NSSAIs related to the PDU session are of interest.

		Solution 1	Solution 2
C/A-NSSAI available in VPLMN B	Requested NSSAI	{S-NSSAI 27, S-NSSAI 49}	Unclear (from C/A-NSSAI)
	Requested mapped NSSAI	None	-
	Requested session NSSAI	-	S-NSSAI 49
C/A-NSSAI not available in VPLMN B	Requested NSSAI	None	Unclear (from DC-NSSAI, if any)
	Requested mapped NSSAI	S-NSSAI 49	-
	Requested session NSSAI	-	S-NSSAI 49

2. 5GS → 5GS

B. (E)HPLMN → VPLMN X

- Clarifications
 - The UE had a PDU session associated with S-NSSAI 49 in (E)HPLMN.
 - S-NSSAI 49 for HPLMN is mapped to S-NSSAI 27 in VPLMN X.
 - Only the S-NSSAIs related to the PDU session are of interest.

		Solution 1	Solution 2
C/A-NSSAI available in VPLMN B	Requested NSSAI	{S-NSSAI 27, S-NSSAI 49}	Unclear (from C/A-NSSAI)
	Requested mapped NSSAI	None	-
	Requested session NSSAI	-	S-NSSAI 49
C/A-NSSAI not available in VPLMN B	Requested NSSAI	None	Unclear (from DC-NSSAI, if any)
	Requested mapped NSSAI	S-NSSAI 49	-
	Requested session NSSAI	-	S-NSSAI 49

2. 5GS → 5GS

C. VPLMN Y → (E)HPLMN

- Clarifications
 - The UE had a PDU session associated with {S-NSSAI 31, S-NSSAI 49} in VPLMN A.
 - Only the S-NSSAIs related to the PDU session are of interest.

		Solution 1	Solution 2
C/A-NSSAI available in VPLMN B	Requested NSSAI	S-NSSAI 49	Unclear (from C/A-NSSAI)
	Requested mapped NSSAI	None	-
	Requested session NSSAI	-	S-NSSAI 49
C/A-NSSAI not available in VPLMN B	Requested NSSAI	S-NSSAI 49	Unclear (from DC-NSSAI, if any)
	Requested mapped NSSAI	None	-
	Requested session NSSAI	-	S-NSSAI 49

3. EPS → 5GS

A. VPLMN A → VPLMN B

- Clarifications
 - The UE had a PDN connection associated with a HPLMN S-NSSAI “S-NSSAI 49”.
 - S-NSSAI 49 for HPLMN is mapped to S-NSSAI 27 in VPLMN B.
 - Only the S-NSSAIs related to the PDU session are of interest.

		Solution 1	Solution 2
C/A-NSSAI available in VPLMN B	Requested NSSAI	{S-NSSAI 27, S-NSSAI 49}	Unclear (from C/A-NSSAI)
	Requested mapped NSSAI	None	-
	Requested session NSSAI	-	S-NSSAI 49
C/A-NSSAI not available in VPLMN B	Requested NSSAI	None	Unclear (from DC-NSSAI, if any)
	Requested mapped NSSAI	S-NSSAI 49	-
	Requested session NSSAI	-	S-NSSAI 49

3. EPS → 5GS

B. (E)HPLMN → VPLMN X

- Clarifications

- The UE had a PDN connection associated with a HPLMN S-NSSAI “S-NSSAI 49”.
- S-NSSAI 49 for HPLMN is mapped to S-NSSAI 27 in VPLMN X.
- Only the S-NSSAIs related to the PDU session are of interest.

		Solution 1	Solution 2
C/A-NSSAI available in VPLMN B	Requested NSSAI	S-NSSAI 49	Unclear (from C/A-NSSAI)
	Requested mapped NSSAI	None	-
	Requested session NSSAI	-	S-NSSAI 49
C/A-NSSAI not available in VPLMN B	Requested NSSAI	S-NSSAI 49	Unclear (from DC-NSSAI, if any)
	Requested mapped NSSAI	None	-
	Requested session NSSAI	-	S-NSSAI 49

3. EPS → 5GS

C. VPLMN Y → (E)HPLMN

- Clarifications
 - The UE had a PDN connection associated with a HPLMN S-NSSAI “S-NSSAI 49”.
 - Only the S-NSSAIs related to the PDU session are of interest.

		Solution 1	Solution 2
C/A-NSSAI available in VPLMN B	Requested NSSAI	S-NSSAI 49	S-NSSAI 49
	Requested mapped NSSAI	None	-
	Requested session NSSAI	-	S-NSSAI 49
C/A-NSSAI not available in VPLMN B	Requested NSSAI	S-NSSAI 49	S-NSSAI 49
	Requested mapped NSSAI	None	-
	Requested session NSSAI	-	S-NSSAI 49

The background of the image is a dark, scenic night landscape. In the center, a small town or village is nestled in a valley, its streets and buildings glowing with warm yellow light. The surrounding mountains are steep and rocky, their slopes partially illuminated by the town's lights and some distant, smaller lights. In the foreground, a bright yellow tent is pitched on a grassy, rocky slope. The tent is illuminated from within, casting a warm glow onto the surrounding ground. The overall atmosphere is peaceful and adventurous.

NOKIA