SGP.22 v2.2.2 eSIM Application Note

5G support in Remote SIM Provisioning

Overview
The purpose of this Application Note is to provide guidance for the SM-DP+ to provision 5G profiles.

This applications note applies to an SM-DP+ that communicates with eUICCs and Devices according to SGP.22 version 2.2.2 and higher.

Details of Issues
SGP.22 v2.2.2 defines new fields, i.e., eUICC Capability (uiccCapability) and Device Capability (deviceCapability) denoting 5G support. SIMalliance Profile Package specification [SAIP] v2.3.1 defines the 5G profile package format and Subscription Concealed Identifier (SUCI) calculation by USIM. However it is not explicitly described in SGP.22 how the SM-DP+ performs eligibility check regarding the 5G support of the eUICC and Device.

Recommendations
The following recommendations apply to the SM-DP+.

- The SM-DP+ should check if the eUICC supports GET IDENTITY, i.e., getIdentity bit is set in uiccCapability. If it is not supported, the SM-DP+ should not configure service n°125 in EF_{UST}, and should not provide D{SAIP in the profile package.

- The SM-DP+ should check if the eUICC supports SAIP v2.3.1 (or higher). If it is not supported and the profile is intended to contain DF_{5GS}, the SM-DP+ should provide the DF_{5GS by using Generic File Management PE.

- The SM-DP+ may provide a profile with additional 5G features even if the Device does not support 5G core access (neither eutran5gcSupportedRelease nor nr5gcSupportedRelease is present in deviceCapability).