

Possible Network Slicing Cooperation Topics

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KI-1 Network Slicing



Some observations:

- Based on diverse 5G Network Slicing requirements, 3GPP SA2 studied instance selection and association, isolation, architecture, roaming support, terminology & definitions.
- SA2 agreements include:
 - Network Slice: a complete logical network (providing Services and Network Capabilities) including AN and CN. Whether RAN is sliced is up to 3GPP RAN WGs to determine.
 - Network Slice Instance: offers an end-to-end service, incl. at least both (R)AN & CN parts (potentially other entities as required)
 - NSSAI: a UE may provide Network Slice Selection Assistance Information



Some Recommendations

- Alignment between BBF and 3GPP towards a common understanding of network slicing makes sense in the light of FMC, given
 - Network slices represent complete logical networks, spanning across core and access,
 - The access network can be common to multiple network slices,
 - Slice selection mechanisms applicable to both 3GPP and non-3GPP access networks may be needed.
- Define the FMC scenario/architecture that can be enabled by network slicing



Open Issues and Questions

- Develop a “fixed” access slice, where wireline access is supported and as well wireless access of IoT services is supported that do not require mobility management or are served as part of the residential/business “fixed” service
- Develop a FMC slice
- Determine whether the common BBF-3GPP functions defined in BBF document SD-357 (3GPP - BBF Common Functions) should be promoted in the FMC activities and for network slicing

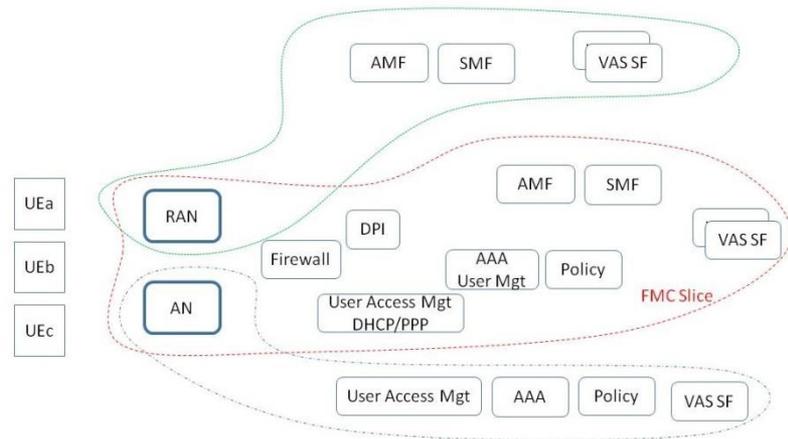
“Fixed” access slice and FMC Network Slicing

“fixed” access slice, where the Untrusted N3GPP is equivalent to Untrusted WLAN defined in 4G

- 2 overall networks
- NE/WF entity
- Associated interfaces: NWu, Y1, N2, N3
 - Nwu ?= SWu
 - Y2 ?= S2b
- **What is the required work in BBF and in 3GPP?**

3GPP-BBF FMC slice:

- 3GPP architecture may need to provide hooks for FMC slices



Possible hooks to allow 3GPP –BBF FMC Network Slicing in 3GPP SA2 Architecture



3GPP architecture may need to provide hooks:

- Include AN in addition to RAN terminology
- If required describe FMC related information is included/specified in e.g.:
 - Network Slice Selection Assistance Information (NSSAI) to include FMC Slice/Service Type (SST)
 - Network Slice Selection Policy (NSSP)
 - Network Subscription Data (NSD)
- If required update relevant network selection entities, e.g., SSF, NAS Routing Function

Thank You

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