Discussion on NSSRG procedure on pending NSSAI

Related CR

C1-223680: Handling of pending NSSAI in NSSRG procedure

Scenario:

UE is configured with Slice A, B (Subject to NSSAA), C and

NSSRG = {(A, B), (A, C)}

1) Registration request with requested NSSAI A+B.

2) Registration accept (allowed A and pending B).

3) UE gets trigger to additional slice C.

Question: Shall the UE check whether C share a common NSSRG group with A+B?

Proposal in CR: Since a pending is implicit requested NSSAI then the UE will check whether A+B shall share the common NSSRG or not.

Detailed comparisons are given below between existing specification, solution in 223680 and proposal from Sung.

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| Existing Specification  All NSSAI of requested NSSAI shall share at least on NSSRG.  Pending NSSAI is implicit Requested NSSAI. | Original proposal of C1-223680  Requested and pending NSSAIs shall share at least on NSSRG as the pending NSSAI is implicit requested NSSAI. | Proposed solution by Sung  NSSRG restriction doesn’t apply for pending NSSAI. |
| A, B and C are not subject to NSSAA.  NSSRG = {(A, B), (A, C)} | A, B (NSSAA), C  NSSRG = {(A, B), (A, C)} | A, B (NSSAA), C  NSSRG = {(A, B), (A, C)} |
| 1) First registration trigger: Requested NSSAI A+B:  A and B shall be in same NSSRG group. | 1) First registration trigger: Requested NSSAI A+B:  A and B shall be in same NSSRG group. B pending. | 1) First registration trigger: Requested NSSAI A+B:  A and B shall be in same NSSRG group. B pending. |
| 2) Second Registration trigger due to additional slice C,  The UE checks if A+B+C is allowed or not, in this case A+B+C is not allowed because it doesn’t share common group.  The UE doesn’t send registration request with requested NSSAI = A+B+C | 2) Second Registration trigger due to additional slice C,  The UE checks if A+B (pending)+C is allowed or not, in this case A+B+C is not allowed because it doesn’t share common group.  The UE doesn’t send registration request with requested NSSAI = A+B+C | 2) Second Registration trigger for additional slice C,  UE excludes NSSRG check for B in second trigger,  only check if A+C belongs to same NSSRG.  New requested NSSAI = A+C which share common NSSRG, so it allowed.  Why not checking A+B+C?? what is difference between requested NSSAI in the first column side (existing specificaition)? |
| 3) Network doesn’t get requested NSSAI which is out of sync in terms of NSSRG. no need to update. | 3) Network doesn’t get requested NSSAI which is out of sync in terms of NSSRG. no need to update. | 3) when the network receives A+C and NSSAA is completed  successfully and B is allowed. then we have three allowed S-NSSAI A+B+C.  **A+B+C doesn’t belong to same group.   What the network is going to do? accept A+C? or A+B? it needs to reject one S-NSSAI what is the cause value it needs to send to the UE for the rejected S-NSSAI?** |