

On finalizing Rel-16 UE capabilities

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Background

Rel-16 UE capability is still under discussion in RAN1/RAN2/RAN4

- RAN2 took the approach to only capture stable feature groups from RAN1/RAN4
 - This is to avoid non-backward compatible changes and back and forth changes of UE capabilities
 - Only a small amount of UE capabilities will be captured in the June specifications
- RAN1/RAN4 feature list still has a considerable amount of FFSs
 - The FFS might impact ASN.1 signaling in 38.331 and field description in 38.306
 - The Feature Groups (FG) with FFS might impact other FGs if they are prerequisite of other FGs
- The basic FG definition is not clear so basic FGs are not currently reflected in RAN2 specifications
 - RAN1 responded to RAN2 with LS R1-2005096 (See below).
 - RAN1 also followed the summary of RAN#87e discussion in RP-200502: *“Irrespective of defining a set of feature groups for a purpose, capability bit(s) should be defined for each of feature groups independently”*
 - The RAN1 response is general across basic and non-basic features groups, and RAN1’s intent is that each FG has its own capability bit, whether basic or not.

6.2 FG interpretation in RAN1 and RAN4 UE feature lists:

It is the view of RAN2 (from RP-200502 [1]) that a UE supporting a feature group should support all the components of the feature group. Based on the UE feature list content, this appears to be not applicable to all the FGs from the lists, and so request RAN1 and RAN4 to clearly indicate the relation among components within a FG when it is not according to the RAN guidance.

RAN1 view: RAN1 view is aligned with RAN2’s view that a UE supporting a feature group should support all the components of the feature group according to the RAN guidance. In the updated version of NR UE features list, RAN1 defined FGs and components in such a way.

Discussion and Proposal

- Rel-16 UE capability shall be completed by September.
- Proposal
 - RAN1 and RAN4 shall strive to complete all FFS on Rel-16 UE capabilities impacting RAN2 specification by the end of their first week of August e-meeting
 - Confirm that each basic Feature Group (FG) defined by RAN1 has its own capability bit, as for any FG