3GPP TSG-RAN WG2 #109-e R2-200xxxx

24 February – 6 March 2020

Agenda Item: 6.8.2.2

Source: Ericsson

Title: [AT109e][614][POS] Running CR to 38.331 on positioning

Document for: Discussion, Decision

# Introduction

During online session, companies raised the concern on the terminology “Type2” that has been used in the current running RRC CR. It was agreed to proceed with the offline discussion to find consensus.

* [AT109e][614][POS] Running CR to 38.331 on positioning (Ericsson)

 Intended outcome: Agreeable CR in R2-2001938

 Deadline: Wednesday 2020-03-04 1300 CET

# Discussion

## 2.1 Terminology

The running RRC CR uses the terminology “Type2” which is unclear since “Type1” which does not exist in the specification. From Rapporteur perspective, the intention is to provide a generic name rather than specific name. In general, it is desired to have generic naming convention to be future proof. Besides, the existing Rel-15 configuration can be also used for positioning purpose. Hence, rather than a specific a generic terminology for Rel-16 may be preferred.

-- TAG-SRS-CONFIG-START

SRS-Config ::= SEQUENCE {

 srs-ResourceSetToReleaseList SEQUENCE (SIZE(1..maxNrofSRS-ResourceSets)) OF SRS-ResourceSetId OPTIONAL, -- Need N

 srs-ResourceSetToAddModList SEQUENCE (SIZE(1..maxNrofSRS-ResourceSets)) OF SRS-ResourceSet OPTIONAL, -- Need N

 srs-ResourceToReleaseList SEQUENCE (SIZE(1..maxNrofSRS-Resources)) OF SRS-ResourceId OPTIONAL, -- Need N

 srs-ResourceToAddModList SEQUENCE (SIZE(1..maxNrofSRS-Resources)) OF SRS-Resource OPTIONAL, -- Need N

 tpc-Accumulation ENUMERATED {disabled} OPTIONAL, -- Need S

 ...,

 [[

 srs-Type2-ResourceSetToReleaseList-r16 SEQUENCE (SIZE(1..maxNrofSRS-ResourceSets)) OF SRS-Type2-ResourceSetId-r16 OPTIONAL, -- Need N

 srs-Type2-ResourceSetToAddModList-r16 SEQUENCE (SIZE(1..maxNrofSRS-ResourceSets)) OF SRS-type2-ResourceSet-r16 OPTIONAL, -- Need N

 srs-Type2-ResourceToReleaseList-r16 SEQUENCE (SIZE(1..maxNrofSRS-Resources)) OF SRS-Type2-ResourceId-r16 OPTIONAL, -- Need N

 srs-Type2-ResourceToAddModList-r16 SEQUENCE (SIZE(1..maxNrofSRS-Resources)) OF SRS-Type2-Resource-r16 OPTIONAL -- Need N

 ]]

Editor’s Note: The name of the IE is FFS.

**Question** 1**: Companies are requested to express their view on the terminology to use.**

|  |  |
| --- | --- |
| **Company** | **Comments** |
| **Huawei, HiSilicon** | SRS-PosResource, and SRS-PosResourceSet |
| **Qualcomm** | Proposal from Huawei is fine. Alternatives would be SRSforPositioningResource, SRSforPositioningResourceSet.  |
| **Nokia** | Proposal from Huawei is fine, but I would keep the “Pos” close to SRS without hyphen as shortcut for SRS for positioning. Example names shown below:srsPos-ResourceSetToReleaseList-r16srsPos-ResourceSetToAddModList-r16 srsPos-ResourceToReleaseList-r16srsPos-ResourceToAddModList-r16SRSPos-ResourceSetId-r16 SRSPos-ResourceId-r16SRSPos-Resource-r16SRSPos-ResourceSet-r16maxNrofSRSPos-ResourceSetsmaxNrofSRSPos-Resources |
| **Ericsson** | We would prefer a generic name: Example:SRS-ResourceExt-r16 and SRS-ResourceSetExt-r16Mainly because:* Also, legacy SRS can be used for position
* RAN1 made a naming mistake that RAN2 could override
* Radio interface SRS has nothing to do with positioning
 |
| **vivo** | We suggest to introduce “SRS-config-positioning” . A lot of work are needed in RAN1 specifications if we introduce the wording such as “SRS-PosResource” or “SRS-Type2-Resource”. |
| **CATT** | We have no strong opinion. Slightly prefer to use SRSforPositioningResource, SRSforPositioningResourceSet as QC suggested. |
| **Apple** | We agree with vivo that a new IE “SRS-config-positioning” is to be added separately. It will be much more clear. If there is indeed a reason to juxtapose two SRS configurations in the same IE, we think “type2” kind of naming shall be avoided, and use the “positioning” instead. |
| **Intel** | We should make it clear, the SRS is used for positioning. Huawei’s approach is ok.  |
| **LG** | Share Apple and Vivo views that a separate IE “SRS-config-positioning” would be useful for readability and clarity. Also fine with Nokia’s revised naming, or another suggestion could be “SRSPositioning- … -r16”. |
| **Ericsson** | We are fine to have a Positioning specific name.Below may not be correct in terms of naming rule as hypen would be needed between srs and PossrsPos-ResourceSetToReleaseList ->srs-Pos-ResourceSetToReleaseListAs per RRC Rapporteur, suggestion is basically for SRS-Resource; to add “Pos-r16 “ in the end; thus have SRS-ResourcePos-r16 and thus;srs-ResourcePosSetToAddModList-r16       srs-ResourcePosToReleaseList-r16srs-ResourcePosToReleaseList-r16srs-ResourcePosToAddModList-r16 SRS-ResourcePosSetId-r16  SRS-ResourcePosId-r16SRS-ResourcePos-r16SRS-ResourcePosSet-r16 maxNrofSRS-ResourcePosSetsmaxNrofSRS-ResourcesPos   |

# Conclusion

9 companies participated in the email discussion. 6 companies suggested to change the current name from Type 2 to reflect positioning. 2 companies expressed the need of separate SRS-Config for positioning. One company expressed the need of generic name.

Based on the discussion in section 2 we propose the following:

Proposal 1 The current name from Type2 shall be changed to reflect “Pos”. Use baseline as per RRC Rapporteur suggestion below.

srs-ResourcePosSetToAddModList-r16

srs-ResourcePosToReleaseList-r16

srs-ResourcePosToReleaseList-r16

srs-ResourcePosToAddModList-r16

SRS-ResourcePosSetId-r16

SRS-ResourcePosId-r16

SRS-ResourcePos-r16

SRS-ResourcePosSet-r16

maxNrofSRS-ResourcePosSets

maxNrofSRS-ResourcesPos

# References

[1] [R2-2001333](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_109_e/Docs/R2-2001333.zip)**,** Running CR for the introduction of NR positioning, Ericsson