**3GPP TSG-RAN WG2 Meeting #112-e R2-20xxxxx**

**Online, 2-13 November 2020**

**Agenda Item: 6.1.1**

**Source: MediaTek Inc.**

**Title: Summary of email discussion [AT112-e][045][NR16] Extension of ToAddMod lists (MediaTek)**

**Document for: Discussion, decision**

1 Introduction

This document summarises the following email discussion related to document R2-2009976:

* [AT112-e][045][NR16] Extension of ToAddMod lists (Mediatek)

Scope: Continue discussion on P10, P11, converge to agreements if possible. Review and agree CR.

Intended outcome: Report, agreed CR (if possible)

Deadline: EOM, intermediate deadlines by the Rapporteur.

To allow time for CR preparation, the discussion will take place in two phases.

- Phase 1: Collect comments on the proposals and summarise potential agreements; deadline Tuesday 2020-11-10 1200 UTC

- Phase 2: Draft and agree a CR capturing the conclusions; deadline EOM (Friday 2020-12-13 1100 UTC).

R2-2009982 is taken as an initial proposed CR for discussion.

2 Discussion

## 2.1 Background and examples

The proposals for discussion refer to “examples 1 and 3”, which originate from the proposed text in R2-2009982 for section A.4.3 of 38.331.

Example 1 addresses the case where only the size of a list is extended, i.e. there are no changes to the contained structure (not even to extend an ID field):

-- /example 1/ ASN1START

ContainingStructure ::= SEQUENCE {

listElementToAddModList SEQUENCE (SIZE (1..maxNrofListElements)) OF ListElement OPTIONAL, -- Need N

listElementToReleaseList SEQUENCE (SIZE (1..maxNrofListElements)) OF ListElementId OPTIONAL, -- Need N

...,

[[

-- Non-critical extension lists

listElementToAddModListSizeExt-rN SEQUENCE (SIZE (1..maxNrofListElementsDiff-rN)) OF ListElement OPTIONAL, -- Need N

listElementToReleaseListSizeExt-rN SEQUENCE (SIZE (1..maxNrofListElements-rN)) OF ListElementId OPTIONAL -- Need N

]]

}

-- ASN1STOP

Example 3 addresses the case where the list size is extended and fields are added to the list element structure:

-- /example 3/ ASN1START

ContainingStructure ::= SEQUENCE {

listElementToAddModList SEQUENCE (SIZE (1..maxNrofListElements)) OF ListElement OPTIONAL, -- Need N

listElementToReleaseList SEQUENCE (SIZE (1..maxNrofListElements)) OF ListElementId OPTIONAL, -- Need N

...,

[[

-- Non-critical extension lists

listElementToAddModListSizeExt-rN SEQUENCE (SIZE (1..maxNrofListElementsDiff-rN)) OF ListElement OPTIONAL, -- Need N

listElementToReleaseListSizeExt-rN SEQUENCE (SIZE (1..maxNrofListElements-rN)) OF ListElementId-rN OPTIONAL, -- Need N

-- Parallel lists with maxNrofListElements-rN = maxNrofListElements + maxNrofListElementsDiff

listElementToAddModListExt-rN SEQUENCE (SIZE (1..maxNrofListElements-rN)) OF ListElementExt-rN OPTIONAL, -- Need N

listElementToReleaseListExt-rN SEQUENCE (SIZE (1..maxNrofListElements-rN)) OF ListElementId-rN OPTIONAL -- Need N

]]

}

ListElement ::= SEQUENCE {

elementId ListElementId,

field1 INTEGER (0..3),

field2 ENUMERATED { value1, value2, value3 }

}

ListElementExt-rN ::= SEQUENCE {

-- Field description should indicate that if the elementId-vNxy is present, the elementId (without suffix) is ignored

elementId-vNxy ListElementId-vNxy OPTIONAL, -- Need S

field3-rN BIT STRING (SIZE (8)) OPTIONAL -- Need R

}

ListElementId ::= INTEGER (0..maxNrofListElements-1)

ListElementId-rN ::= INTEGER (0..maxNrofListElements-rN-1)

ListElementId-vNxy ::= INTEGER (maxNrofListElements..maxNrofListElements-rN-1)

-- ASN1STOP

The remaining proposals from the previous email discussion are on the size of the extended ToRelease lists (proposal 10) and the possibility of omitting one of the extended ToRelease lists in example 3 (proposal 11).

## 2.2 ToRelease list size (Proposal 10)

During the discussion, two approaches to dimensioning the listElementToReleaseSizeExt-rN were considered, summarised as “short” and “long”. In the “short” approach, the SizeExt list contains only the “new” entries, i.e. its size is maxNrofListElementsDiff-rN, and in example 3 its entry type is ListElementId-vNxy (so that it can release only the entries that were added to the list by the listElementToAddModListSizeExt-rN). In the “long” approach, the SizeExt list has size maxNrofListElements-rN (as shown in the current examples) and it can release any of the list entries.

Both approaches were suggested in the email discussion; it appears that some companies feel there is a convenience in allowing a single ToRelease list to release any entry of the combined list, while others think there should be a structure for releasing only the extended entries.

**Q1: Should the size-extended ToRelease list use the “short” or “long” structure?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Short/Long** | **Comment** |
|  |  |  |

## 2.3 Omission of a ToRelease list in example 3 (Proposal 11)

It was observed in the email discussion that in example 3, one of the ToRelease lists could be seen as redundant. There are a total of three ToRelease lists:

- listElementToReleaseList, the original non-extended list that can release only entries from the original portion of the list;

- listElementToReleaseListSizeExt-rN, the size-extended list that can release any list entry (in case of the “long” structure) or only the extended entries (in case of the “short” structure);

- listElementToReleaseListExt-rN, the full-length list that can release any list entry.

Functionally, either of the second and third lists could be omitted, while still making it possible to release any entry of the list. It could be desirable to eliminate one of the lists to avoid redundancy. There does not seem to be a functional reason to choose one list over the other—it is a question of preferred style.

**Q2: In the “example 3” scenario, should one of the extended ToRelease lists be omitted? If so, which one?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Company** | **Yes/No** | **Which list** | **Comment** |
|  |  |  |  |

## 2.4 Additional comments on R2-2009982

Any additional comments on R2-2009982 are invited.

|  |  |
| --- | --- |
| **Company** | **Comment** |
|  |  |

3 Conclusion

To be populated.