3GPP TSG-RAN Meeting #90-eRP-20xxxx

Electronic Meeting, 7-11 December 2020

Agenda Item: 9.11

Source: Email discussion moderator (Intel)

Title: Report from Email Discussion [90E][36][SUL\_UL-DL]

Document for: Discussion and decision

# 1 Introduction

This documents reports on the following email discussion during RAN#90-e:

**[90E][36][SUL\_UL-DL]**

Goal: Generate an agreeable way forward.

Input contributions covered: RP-202747.

## 2 Initial Round

The tdoc RP-202747 makes 2 proposals:

**Proposal 1:**

* **RAN to decide between Option 1 and Option 2**
  + **Option 1: DL/UL configuration will not be introduced for SUL**
  + **Option 2: DL/UL configuration will be introduced for SUL**

**Proposal 2:**

* **In case Option 1 is chosen**
  + **From the capabilities, and all other perspectives, SUL is treated as FDD**
* **In case Option 2 is chosen** 
  + **From the capabilities and all other perspectives, SUL is treated the same as the band it shares frequency with (in case there are multiple such bands, RAN4 can make the determination which duplex mode is to be considered)**

Proposal 2 is reliant on the outcome of Proposal 1 and so for the initial round of discussion companies are requested to provide their views on Proposal 1 only. After making some conclusion on proposal 1 the discussion can be expanded to cover proposal 2.

Companies feedback related to Proposal 1.

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| **Company** | **Comments** |
| Huawei | Option 1.  In RAN4 it is clear that SUL, SDL, FDD and TDD are four different duplex mode and the corresponding bands are specified. And in WID for SUL on 2.3GHz and 1.9GHz, it is clear that those bands are purely uplink.  And RAN4 finalized all the SUL bands with the frequency range corresponding to TDD bands based on the assumption that all slots are available for UL on the SUL band as clearly shown in the agreed CRs. So only Option 1 is aligned with RAN4 assumption in Rel-16.  We do not see there is any agreement to introduce Option 2. Option 2 seems new and can only be considered for later releases, but for Rel-16 there is only one possible choice, i.e., Option 1. |
| Qualcomm | We somewhat prefer Option 1 but would not object to either.  Choosing Option 1 will require overturning a RAN1 decision on considering SUL as TDD when SUL is in a TDD band. |
| vivo | We think option 1 is more straightforward thus preferred. But the question we have is do we make such clarification from Rel-15 or Rel-16?? |
| OPPO | This is tightly coupled with the discussion of [90e][38], where [38] goes for a CR to treat the SUL as FDD, and [36] proposes to add a DL/UL configuration to handle the SUL for TDD case.  In our understanding, although so far the SUL for TDD case is currently not so critical as analysed in 2569, option-2 in proposal-1 is more future proof. Considering the reasoning in 2569, even if we go for introduction of D/U configuration as in option-2 of proposal-1, would the intention of 2569/2570 be also covered, if a full UL configuration is defined / allowed for SUL of TDD band? |
| CATT | Option 1.  Although SUL in TDD band was introduced in Rel-16 but it is clearly stated in the WIDs that the band is dedicated for SUL so there is no co-existence issue. |
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## Annex: Contacts

Please provide a company contact that the email discussion moderator can contact if required.

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| **Company** | **Contact name and email** |
| Huawei | Xizeng Dai, daixizeng@huawei.com |
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