3GPP TSG RAN WG1 #104b-e R1-210xxxx

e-Meeting, April 12th – 20th, 2021

**Agenda item:** 7.1

**Source:** Moderator (Qualcomm Incorporated)

**Title:** [104b-e-NR-7.1CRs-06] Timelines for SRS carrier switching

**Document for:** Discussion and Decision

# Background

In RAN#104-e, the following conclusion was reached.

**Conclusion**

For the dropping rules for SRS carrier switching, at least for Rel-16, the UE may only be able to take into account

* the DCI(s) received *SRS-SwitchingTime* + *N2* before the SRS transmission and N2 before the conflicting channel transmission, and
* the SP-CSI and SP-SRS considered active *SRS-SwitchingTime* + *N2* before the SRS transmission and N2 before the conflicting channel transmission

N2 is the time interval corresponding to the smaller subcarrier spacing between the source and target CCs, and the corresponding scheduling cells.

Discuss in RAN1#104b-e whether and how to capture the above in the specification for Rel-16.

In R1-2103141, the following change is proposed to capture the above conclusion:

6.2.1.3 UE sounding procedure between component carriers

For an SRS transmission starting in symbol $\_{\_{}}$ of a carrier $\_{}$ with slot formats comprised of DL and UL symbols, not configured for PUSCH/PUCCH transmission, and with $\_{}$ carrier the UE is configured to switch from according to higher layer parameters *srs-SwitchFromServCellIndex* and *srs-SwitchFromCarrier*, for a conflicting transmission in $\_{}$ starting in symbol$\_{\_{}}$ the UE shall apply the rules in the remaining of this subclause based on:

* DCI(s) for which the time interval between the last symbol of PDCCH and $\_{\_{}}$ is at least$\_{}$symbols and an additional time duration $\_{\_{}}$, and the time interval between the last symbol of PDCCH and $\_{\_{}}$ is at least $\_{}$ symbols*;* and
* semi-persistent CSI reports or SRS for which the HARQ-ACK information on PUCCH in response to the activation command would be transmitted in slot $$, and $\_{}$ being the first symbol of the first slot which is after slot $\_{}^{}$, and the time interval between $\_{}$ and $\_{\_{}}$ is at least $\_{}$ symbols and an additional time duration $\_{\_{}}$, and the time interval between $\_{}$ and $\_{\_{}}$ is at least $\_{}$ symbols, where $$ is the SCS configuration of the PUCCH.

where $\_{\_{}}$, and the time interval unit of OFDM symbol is counted based on the minimum subcarrier spacing given by $\_{\_{}}\_{\_{}}\_{\_{}}\_{\_{}}$, with $\_{\_{}}$ the SCS configuration for the PDCCH carrying the triggering commands for the SRS in $\_{}$, $\_{\_{}}$ the SCS configuration for SRS in $\_{}$, $\_{\_{}}$ the SCS configuration for the PDCCH that schedules PUSCH in $\_{}$, and $\_{\_{}}$ the SCS configuration for the PUSCH in $\_{}$.

1. Discussion

**Do you agree with the change in 3141? Please provide justification for your answer:**

|  |  |  |
| --- | --- | --- |
| **Company** | **Agree with 3141?** | **Comments** |
| **FUTUREWEI** | No | As we stated in previous meeting, gNB can handle the situation by proper implementation and the CR is not needed.  |
| **ZTE** | No | We also think the previous conclusion is enough. |