3GPP TSG-RAN WG4 #98bis-e R4-21xxxx

Electronic meeting, 12th – 20th April 2021

Source: Ericsson

Title: Way Forward on TDD repeaters

Agenda Item: 8.11.1

Document for: Approval

# Introduction

This document captures a Way Forward for TDD repeater issues, including agreements and issues to be studied for the next meeting.

# Agreements

This section contains agreements on some aspects of TDD repeater operation:

Synchronization requirement:

The following was agreed in GTW:

There is no need for an explicit synchronization requirement

* It’s FFS whether sync can be implicitly captured/verified in some requirements i.e. TDD switching requirements.

There is no need to explicitly capture any synchronization method. During the test, SSB can be provided in the test.

* Whether repeater will use SSB signal for sync or not up to repeater implementation; no mandating on repeater side to use SSB signal with the present SSB signals during test

Dynamic TDD:

The following was agreed in GTW:

No RAN4 requirements impact on dynamic TDD for repeater in Rel-17 RAN4 repeater WI.

* It’s not precluded dynamic TDD can be supported with implementation

Requirements for NSA support:

The following was agreed in the 1st round discussion:

There is no need to discuss support for NSA and no impact to RAN4 requirements.

# WF on topics not completely agreed

This section lists decisions on topics where there is not yet agreement:

Group delay requirement:

There is not yet agreement on whether a group delay requirement is needed or not. The following was agreed in GTW:

Further analysis required to see what's achievable performance on group delay for repeater and the potential impact on NW performance.

* FFS whether group delay requirements needed or not

TDD Switching requirement:

It was agreed that a TDD switching requirement is needed at least for on/off mask. The following was agreed in the GTW. It is also notes that discussion on detailed requirements should take place under the RF requirements agenda in future.

TDD Switching Requirement is needed, and detailed requirements will be further discussed under RF requirements agenda.

* At least On/Off mask requirements will be introduced, FFS whether other additional requirements needed or not
* FFS how to cover both UL and DL directions for repeater
* FFS both directions jointly tested or not if repeater support both DL and UL