## Inputs on version 00

Please share your inputs, if any, in the following table

Table 1 Inputs: Initial version

|  |  |
| --- | --- |
| **Company** | **Input** |
| vivo | **In section 6.12 add “can be” as highlighted below**An UE can be configured with multiple cells with different PCIs depending on capability however only one can be activate at a time.  |
| Futurewei | 1. **Some small changes to Sec. 6.12 below, mostly editorial. We added “on a carrier” since the M-TRP cells should be on the same carrier (not to be confused with CA/DC on a different carrier).**

For inter-cell mulit-TRP operation, for multi-DCI PDSCH scheduling, one or more TCI states can be associated with SSB from cell associated with PCI different than serving cell PCI. A~~n~~ UE can be configured with multiple cells with ~~different~~ PCIs different than serving cell PCI on a carrier depending on UE capability, however at most only one can be activated at a time. 1. **In Section 9.2.3.1, we suggest the following modifications:**

**Beam Level Mobility** does not require explicit RRC signalling to be triggered. Beam level mobility can be within a cell, or between cells, the latter is referred to as inter-cell beam management (ICBM). For ICBM, a UE can receive or transmit UE dedicated channels/signals via a TRP associated with a PCI different from the PCI associated with a serving cell, while non-UE-dedicated channels/signals can only be received on a TRP assiociated with a PCI of the serving cell. The gNB provides via RRC signalling the UE with measurement configuration containing configurations of SSB/CSI resources and resource sets, reports and trigger states for triggering channel and interference measurements and reports. In case of ICBM, a measurement configuration includes SSB resources associated with PCIs different from the PCI of a serving cell. Beam Level Mobility is then dealt with at lower layers by means of physical layer and MAC layer control signalling, and RRC is not required to know which beam is being used at a given point in time.1. **In Section 9.2.8, we suggest the following modifications to make the terminologies used consistent (e.g., “reference signals” instead of “resources”):**

For beam failure detection, the gNB configures the UE with beam failure detection reference signals (SSB or CSI-RS) and the UE declares beam failure when the number of beam failure instance indications from the physical layer reaches a configured threshold before a configured timer expires. For beam failure detection in multi-TRP operation, the gNB configures the UE with two sets of beam failure detection reference signals each associated with a TRP, and the UE declares beam failure for a TRP when the number of beam failure instance indications associated with the corresponding set of beam failure detection reference signals from the physical layer reaches a configured threshold before a configured timer expires. |
| OPPO | 1. Section 6.2, the suggested modifications are highlighted by Yellow*An UE can be configured ~~with multiple cells~~ with different PCIs depending on capability however only one can be activate at a time*2. Inter-cell beam managementSection 9.2.1.1: “*For inter-cell beam management (see clause 9.2.3.1), the cell quality is additionally derived amongst the beams corresponding to TRPs associated with PCIs different from the PCI of a serving cell*”This description is not proper here because inter-cell beam management is only for RRC\_CONNECTED but not used for cell selection. 3. Inter-cell beam managementSection 9.2.1.2: “*For inter-cell beam management (see clause 9.2.3.1), the cell quality is additionally derived amongst the beams corresponding to TRPs associated with PCIs different from the PCI of a serving cell.*”It is not proper description and shall be deleted. Inter-cell beam management does not involve cell selection/re-selection.4. Section 9.2.8, suggest to add the yellow part*selects a suitable beam for this TRP (if available), indicator on whether the new beam is found or not and indicates it along with the information about the beam failure in the BFR MAC CE for this TRP*5. Section 9.2.3.1, Correct a type in the paragraph starting with “**Beam Level Mobility**”… received on a TRP ~~assiociated~~ associated with a PCI of the serving cell. The gNB provides via RRC signaling … |
| ZTE | 1. **In section 6.1.2, we suggest to replace “beam” with “TCI state” as the mTRP PDCCH can be used for FR1:**

There are two different operation modes for multi-TRP PDCCH: PDCCH repetition as in Clause 5.2.3 and SFN based PDCCH transmission. In PDCCH repetition mode, UE can receive two repetitive PDCCHs from two linked search space sets associated with corresponding CORESETs which each is activated by the corresponding TCI state. In SFN based PDCCH transmission mode, UE can receive a PDCCH from a CORESET which is activated by two TCI states1. **In section 6.1.2, we suggest to modified the part of inter-cell MTRP as follows:**

For inter-cell mulit-TRP operation, for multi-DCI PDSCH scheduling, one or more TCI states can be associated with SSB from cell associated with PCI different than serving cell PCI. A UE can be configured with multiple additional cells with PCIs different from the serving cell PCI depending on capability however only one can be activate at a time. |
| LG | **6.12**1. Since this section is to describe multi-TRP operation, it may be better to add ‘from two TRP’ as below:There are two different operation modes for multi-TRP PDCCH: PDCCH repetition as in Clause 5.2.3 and SFN based PDCCH transmission. In PDCCH repetition mode, UE can receive two repetitive PDCCHs from two linked search space sets associated with corresponding CORESETs which each is activated by the corresponding beam. In SFN based PDCCH transmission mode, UE can receive a PDCCH from a CORESET which is activated by two beams from two TRPs.2. A typo found: For inter-cell multi-TRP operation, for multi-DCI PDSCH scheduling, one or more TCI states can be associated with SSB from cell associated with PCI different than serving cell PCI.3. In the document, only above text use ‘TCI state’ instead of ‘beam’ (as highlighted in yellow) with no explanation of its meaning. The terms need to be aligned.**6.13** has no content so needs to be deleted?**9.2.1**: As OPPO commented, the added texts in **9.2.1.1** and **9.2.1.2** are not appropriate because section 9.2.1 desribes RRC\_Idle mobility which is not impacted by Rel-17 ICBM. We suggest to delete them**9.2.3**: some wording suggestion as below: **Beam Level Mobility** does not require explicit RRC signalling to be triggered. Beam level mobility can be within a cell, or between cells, the latter is referred to as inter-cell beam management (ICBM). For ICBM, a UE can receive or transmit UE dedicated channels/signals via a TRP associated with a PCI different from the PCI of a serving cell, while non-UE-dedicated channels/signals can only be received on a TRP assiociated with a PCI of the serving cell. The gNB provides via RRC signalling the UE with measurement configuration containing configurations of SSB/CSI resources and resource sets, reports and trigger states for triggering channel and interference measurements and reports. In case of ICBM, a measurement configuration includes SSB resources associated with PCIs different from the PCI of a serving cell. Beam Level Mobility is then dealt with at lower layers by means of physical layer and MAC layer control signalling, and RRC is not required to know which beam is being used at a given point in time. |
| Mod V06 | **All inputs have been incorporated (some with wording refinement for better readability)****TP V02\_Mod** |
| Ericsson | Section 6.12 (inter-cell mTRP). It would seem unnecessary to add the statement about capability: that is true for many features. Also, it is unclear what an activated PCI is. Propose the following reformulation:For inter-cell multi-TRP operation, for multi-DCI PDSCH scheduling, one or more TCI states can be associated with SSB from cell associated with PCI different than serving cell PCI. A UE can be configured with PCIs different from serving cell PCI on a carrier. However, the activated TCI states can be associated with at most one PCI different from the serving cell PCI. at a time. Section 9.2.3.1: small typo:**Beam Level Mobility** does not require explicit RRC signalling to be triggered. Beam level mobility can be within a cell, or between cells, the latter is referred to as inter-cell beam management (ICBM). For ICBM, a UE can receive or transmit UE dedicated channels/signals via a TRP associated with a PCI different from the PCI of a serving cell, while non-UE-dedicated channels/signals can only be received via a TRP associated with a PCI of the serving cell. The gNB provides via RRC signalling the UE with measurement configuration containing configurations of SSB/CSI resources and resource sets, reports and trigger states for triggering channel and interference measurements and reports. In case of ICBM, a measurement configuration includes SSB resources associated with PCIs different from the PCI of a serving cell. Beam Level Mobility is then dealt with at lower layers by means of physical layer and MAC layer control signalling, and RRC is not required to know which beam is being used at a given point in time. |
| Mod V08 | **Accepted Ericsso’s comment** |
|  |  |
|  |  |
|  |  |

## Inputs on version xx

Please share your inputs, if any, in the following table

....