| Definitions for parameters | Per | M | FDD-TDD  DIFF | FR1-FR2  DIFF |
| --- | --- | --- | --- | --- |
| ***codebookParameters***  Indicates the codebooks and the corresponding parameters supported by the UE.  Parameters for type I single panel codebook (type1 singlePanel) supported by the UE, which are mandatory to report:  - *supportedCSI-RS-ResourceList*;  - a UE shall support a minimum value of 4 for codebook type I single panel in FR1 in the case of a single active CSI-resource across all bands in a band combination;  - a UE shall support a minimum value of 8 in case of wideband CSI report for codebook type I single panel in FR1 in the case of a single active CSI-resource across all bands in a band combination;  - a UE shall support a minimum value of 2 for codebook type I single panel in FR2 in the case of a single active CSI-resource across all bands in a band combination.  - *modes* indicates supported codebook modes (mode 1, both mode 1 and mode 2);  - *maxNumberCSI-RS-PerResourceSet* indicates the maximum number of CSI-RS resource in a resource set.  Parameters for type I multi-panel codebook (type1 multiPanel) supported by the UE, which are optional:  - *supportedCSI-RS-ResourceList*;  - *modes* indicates supported codebook modes (mode 1, mode 2, or both mode 1 and mode 2);  - *maxNumberCSI-RS-PerResourceSet* indicates the maximum number of CSI-RS resource in a resource set;  - *nrofPanels* indicates supported number of panels.  Parameters for type II codebook (type2) supported by the UE, which are optional:  - *supportedCSI-RS-ResourceList*;  - *parameterLx* indicates the parameter "Lx" in codebook generation where x is an index of Tx ports indicated by *maxNumberTxPortsPerResource*;  - *amplitudeScalingType* indicates the amplitude scaling type supported by the UE (wideband or both wideband and sub-band);  - *amplitudeSubsetRestriction* indicates whether amplitude subset restriction is supported for the UE.  Parameters for type II codebook with port selection (type2-PortSelection) supported by the UE, which are optional:  - *supportedCSI-RS-ResourceList*;  - *parameterLx* indicates the parameter "Lx" in codebook generation where x is an index of Tx ports indicated by *maxNumberTxPortsPerResource*;  - *amplitudeScalingType* indicates the amplitude scaling type supported by the UE (wideband or both wideband and sub-band).  *supportedCSI-RS-ResourceList* includes list of the following parameters:  - *maxNumberTxPortsPerResource* indicates the maximum number of Tx ports in a resource;.  - *maxNumberResourcesPerBand* indicates the maximum number of resources across all CCs within a band simultaneously;  - *totalNumberTxPortsPerBand* indicates the total number of Tx ports across all CCs within a band simultaneously.  For each codebook type, the UE may report another list of supported CSI-RS resources via *supportedCSI-RS-ResourceListAlt*. In this alternative list;  - The UE shall report at least one triplet in *supportedCSI-RS-ResourceListAlt* with *maxNumberTxPortsPerResource* greater than or equal to 8 for FR1;  - The UE shall report at least one triplet in *supportedCSI-RS-ResourceListAlt* with *maxNumberTxPortsPerResource* greater than or equal to 2 for FR2. | Band | FD | No | No |

---------------------------------------------END OF CHANGE---------------------------------------------