5.1.3 Modulation order, target code rate, redundancy version and transport block size determination

To determine the modulation order, target code rate, and transport block size(s) in the physical downlink shared channel, the UE shall first

- read the 5-bit modulation and coding scheme field (*IMCS*) in the DCI to determine the modulation order (*Qm*) and target code rate (*R*) based on the procedure defined in Clause 5.1.3.1, and

- read '*redundancy version'* field (*rv*) in the DCI to determine the redundancy version.

and second

- the UE shall use the number of layers (ʋ), the total number of allocated PRBs before rate matching (*nPRB*) to determine to the transport block size based on the procedure defined in Clause 5.1.3.2.

The UE may skip decoding a transport block in an initial transmission if the effective channel code rate is higher than 0.95, where the effective channel code rate is defined as the number of downlink information bits (including CRC bits) divided by the number of physical channel bits on PDSCH.

The UE is not expected to handle any transport blocks (TBs) in a 14 consecutive-symbol duration for normal CP (or 12 for extended CP) ending at the last symbol of the latest PDSCH transmission within an active BWP on a serving cell whenever

where, for the serving cell,

- S is the set of TBs belonging to PDSCH(s) that are partially or fully contained in the consecutive-symbol duration

- for the *i*th TB

*- Ci'* is the number of scheduled code blocks for as defined in [5, 38.212].

*- Li* is the number of OFDM symbols assigned to the PDSCH

*- xi* is the number of OFDM symbols of the PDSCH contained in the consecutive-symbol duration

- based on the values defined in Clause 5.4.2.1 [5, TS 38.212]

- is the starting location of RV for the th transmission

- of the scheduled code blocks for the transmission

- is the circular buffer length

- is the current (re)transmission for the *i*th TB

- corresponds to the subcarrier spacing of the BWP (across all configured BWPs of a carrier) that has the largest configured number of PRBs

- in case there is more than one BWP corresponding to the largest configured number of PRBs, *µ'* follows the BWP with the largest subcarrier spacing.

- corresponds to the subcarrier spacing of the active BWP