1. Baseline performance for FR1

Table 1-1: PUSCH for eMBB for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-2: PUSCH for VoIP for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

[Table 1-2a: PUSCH for CSI for FR1]

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-3: PUCCH for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-4: SSB for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-5: PRACH for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-6: PDCCH of Msg.2 for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-6a: PDSCH for Msg.2 for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-7: PUSCH of Msg.3 for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-8: PDSCH of Msg.4 for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

[Table 1-8a: PDSCH with HARQ-ACK for Msg.4 for FR1]

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-9: PDCCH for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

Table 1-10: PDSCH for eMBB for FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urban 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDSU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| DDDSUDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Urban 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | | MCL | | | MIL | | MPL | | Key assumptions | |
| DDDDDDDSUU | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Others | Company 1 |  | |  | | |  | |  | |  | |
| Company 2 |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
|  |  | |  | | |  | |  | |  | |
| Rural 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2.6 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 2 GHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 700 MHz FDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| UUUUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Rural with long distance 4 GHz TDD | | | | | | | | | | | | |
| Frame structure | Company name | The required SNR | MCL | | MIL | MPL | | LOS/ NLOS | | O2I/ O2O | | Key assumptions |
| DDDSU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| DDDSUDDSUU | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
| Others | Company 1 |  |  | |  |  | |  | |  | |  |
| Company 2 |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |
|  |  |  | |  |  | |  | |  | |  |

2）Baseline performance for FR2

Table 2-1: PUSCH for eMBB for FR2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-2: PUSCH for VoIP for FR2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

[Table 2-2a: PUSCH for CSI for FR2]

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-3: PUCCH for FR2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | | |
| Format type | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Format 1 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Format 3 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | | |
| Format type | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Format 1 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Format 3 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | | |
| Format type | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Format 1 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Format 3 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-4: SSB for FR2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-5: PRACH for FR2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | | |
| Format type | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Format B4 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Format C2 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | | |
| Format type | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Format B4 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Format C2 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | | |
| Format type | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Format B4 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Format C2 | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-6: PDCCH of Msg.2 for FR2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-6a: PDSCH of Msg.2 for FR2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-7: PUSCH of Msg.3 for FR2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-8: PDSCH of Msg.4 for FR2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

[Table 2-8a: PDSCH with HARQ-ACK for Msg.4 for FR2]

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-9: PDCCH for FR2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | |
| Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 2-10: PDSCH for eMBB for FR2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indoor 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Urban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Suburban 28 GHz TDD | | | | | | |
| Frame structure | Company name | The required SNR | MCL | MIL | MPL | Key assumptions |
| DDDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| DDSU | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Others | Company 1 |  |  |  |  |  |
| Company 2 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |