|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Channel condition** | **Frequency** | **NW configures below criteria and when fulfilled** | **Measurement approach (or with relaxation)** | **Use case ID** |
| **For inter-frequency / inter-RAT frequency measurement, this part is deduced from RAN4 LS** |
| When Srxlev > SnonIntraSearchP and Squal > SnonIntraSearchQ(According to following proposal 5, not-at-cell-edge criterion is fulfilled always, if it is configured.) | Higher priority carriers | Low mobility(i.e. when NW only configures low mobility, and it is fulfilled) | ~~FFS:~~If *highPriorityMeasRelax* is configured:~~Option 1: The UE shall perform measurements with the requirement of T~~~~higher\_priority\_search~~ ~~according to TS 38.133.~~Option 2: UE can stop high priority inter-freq/inter-RAT measurements with a minimum measurement time interval of 1 hour. ~~Option 3: UE can stop high priority inter-freq/inter-RAT measurements. No minimum measurement time interval applies in that case.~~ | A-1 |
| If *highPriorityMeasRelax* is not configured:Option 1: The UE shall perform measurements with the requirement of Thigher\_priority\_search according to TS 38.133.(i.e. legacy behavior) | A-2 |
| Not at cell edge (i.e. when NW only configures not-at-cell-edge, and it is fulfilled) | The UE shall perform measurements with the requirement of Thigher\_priority\_search according to TS 38.133.Note: this criterion is always fulfilled, if it is configured. (i.e. legacy behavior) | B |
| When NW configure both while *combineRelaxedMeasCondition* is not configured, not at cell edge is fulfilled but low mobility is not fulfilled | The UE shall perform measurements with the requirement of Thigher\_priority\_search according to TS 38.133.(i.e. legacy behavior) | B-2 |
| Low mobility and Not at cell edge(i.e. when NW configure both, and both are fulfilled, regardless whether *combineRelaxedMeasCondition is configured* ) | ~~FFS:~~If *highPriorityMeasRelax* is configured:Option 1: UE can stop high priority inter-freq/inter-RAT measurements with a minimum measurement time interval of 1 hour. ~~Option 2: The UE shall perform measurements with the requirement of T~~~~higher\_priority\_search~~ ~~according to TS 38.133.~~~~Option 3: UE can stop high priority inter-freq/inter-RAT measurements. No minimum measurement time interval applies in that case.~~ | C-1 |
| If *highPriorityMeasRelax* is not configured:The UE shall perform measurements with the requirement of Thigher\_priority\_search according to TS 38.133.(i.e. legacy behavior) | C-2 |
| Equal/Lower priority carriers | All scenario | UE may choose not to perform measurements of NR inter-frequencies or inter-RAT frequency cells. (According to current TS 38.304) (i.e. legacy behavior) | D |
| When Srxlev ≤ SnonIntraSearchP or Squal ≤ SnonIntraSearchQ | Higher priority carriers, Equal/Lower priority carriers | Low mobilityincluding: case 1) when NW only configures low mobility, and it is fulfilled;case 2) When NW configure both while *combineRelaxedMeasCondition* is not configured, low mobility is fulfilled but not at cell edge is not fulfilled; | UE may choose to perform relaxed measurements with longer intervals. | E |
| Not at cell edgeincluding: case 1) when NW only configures not at cell edge, and it is fulfilled;case 2) When NW configure both while *combineRelaxedMeasCondition* is not configured, not at cell edge is fulfilled but low mobility is not fulfilled; | UE may choose to perform relaxed measurements with longer intervals. | F |
| Low mobility and Not at cell edge(i.e. when NW configure both, and both are fulfilled, regardless whether *combineRelaxedMeasCondition is configured* ) | ~~FFS for higher priority:~~If *highPriorityMeasRelax* is configured:Option 1: UE can stop high priority inter-freq/inter-RAT measurements with a minimum measurement time interval of 1 hour. ~~Option 2: The UE shall perform measurements with the requirement of T~~~~higher\_priority\_search~~ ~~according to TS 38.133.~~~~Option 3: UE can stop high priority inter-freq/inter-RAT measurements. No minimum measurement time interval applies in that case.~~For equal/lower priority frequency: UE can stop both equal/low priority and high priority inter-freq/inter-RAT measurements with a minimum measurement time interval of 1 hour. (Note: for higher/equal/lower carriers) | G-1 |
| If *highPriorityMeasRelax* is not configured:Legacy behavior is applied to high priority inter-freq/inter-RAT measurements;For equal/lower priority frequency: UE can stop both equal/low priority and high priority inter-freq/inter-RAT measurements with a minimum measurement time interval of 1 hour. (Note: for higher/equal/lower carriers) | G-2 |
| **For intra-frequency measurement, this part is deduced from RAN2/RAN4 conclusion**  |  |
| Srxlev> SIntraSearchP and Squal > SIntraSearchQ | N/A | All scenarios | UE may choose not to perform intra-frequency measurements. (According to current TS 38.304) (i.e. legacy behavior) | H |
| Srxlev≤ SIntraSearchP or Squal ≤ SIntraSearchQ | N/A | Low mobility | UE may choose to perform relaxed measurements with longer intervals. | I |
| N/A | Not at cell edge | UE may choose to perform relaxed measurements with longer intervals. | J |
| N/A | Low mobility and Not at cell edge | UE can stop intra-frequency measurement with a minimum measurement time interval of 1 hour.  | K |