# 1 List of RAN2 Agreements

|  |
| --- |
| RAN2#116bis-e agreements:Agreements:Proposal 4: The pre-configured Measurement Gap Configurations for Positioning are provided via RRCReconfiguration message. The pre-configured Measurement Gap Configurations for Positioning are included in IE MeasGapConfig.Proposal 5: The content of the pre-configured Measurement Gap Configurations for Positioning includes at least the existing measurement gap parameters together with an ID identifying each Measurement Gap Configuration for Positioning.Proposal 6: The existing RRC LocationMeasurementIndication procedure to request the positioning measurement gaps can still be used by a UE, even when pre-configured measurement gaps are provided to the UE.Agreements:Proposal 7: The PRS processing window configuration is provided via RRCReconfiguration message. Whether PRS processing window configuration is provided per BWP or not is up to RAN1 to decide.Proposal 8: A new DL MAC CE for PRS Processing Window activation and deactivation command is introduced.Proposal 9: The new DL MAC CE for PRS Processing Window activation and deactivation command includes at least the ID of the pre-configured PRS Processing Window configuration, at least in the case when multiple PRS Processing Windows can be configured.Proposal 10: The UE behaviour related to the PRS Processing Window feature is captured in the MAC specification.Agreements:- On the concurrent measurement gap, RAN2 wait for further input from RAN1/RAN4. - On the Network-Controlled Small Gap, RAN2 wait for further input from RAN1/RAN4. - An LMF needs to provide "assistance information" to a gNB to support measurement gap (pre-)configuration.- The information that needs to be transferred between LMF and gNB to support the positioning measurement gap (pre-)configuration can be decided by RAN3.- Whether UL MAC CE can also be used for PRS processing window activation/deactivation should be decided by RAN1.- The information that needs to be transferred between LMF and gNB to support the PRS Processing Windows configuration can be decided by RAN3. |

### List of RAN1 Agreements

|  |
| --- |
| * *For UL-TDOA, supporting the following for the serving gNB to request a UE to report the Tx TEG association information between UE Tx TEG IDs and SRS resources for positioning, subject to UE capability of supporting UE Tx TEG:*
	+ *Based on a configured periodicity, a UE may report the UE Tx TEG association for the SRS resources for positioning that have already been transmitted during the configured period*
		- *It is up to RAN2 to decide how to indicate the change of the Tx TEG association during the configured period (e.g., using the timestamps)*
		- *It is up to RAN4 to decide when the Tx TEG association is changed*
	+ *The values of the configurable periodicities are up to RAN2*
	+ *Note: Tx TEG association information reporting by single request/response mode is assumed already supported with the previous agreement.*
* For PRS processing window configuration and indication, at least the following mechanism is supported
	+ RRC (pre-)configuration for PRS processing window configuration and DL MAC CE activation for PRS processing window, respectively.
	+ Include it in the LS to RAN2 and request RAN2 to decide whether DL MAC CE is feasible for this indication.
* Preconfiguration of MG(s) in RRC is supported from RAN1 perspective.
	+ Each MG in the preconfiguration is associated with an ID
	+ The information in the UL MAC CE for MG activation request by the UE can be one ID associated with the preconfiguration of the MG
	+ Send an LS to RAN2 and RAN3
 |

# 2 RAN1 Parameter list

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   |   |   |   |   |   |
| NR\_pos\_enh | Latency improvements | preconfigMG\_ID | Each MG in the preconfiguration is associated with an ID |   | AgreementPreconfiguration of MG(s) in RRC is supported from RAN1 perspective.○ Each MG in the preconfiguration is associated with an ID○ The information in the UL MAC CE for MG activation request by the UE can be one ID associated with the preconfiguration of the MG○ Send an LS to RAN2 and RAN3 |
|   |   |   |   |   |   |
| NR\_pos\_enh | Latency improvements | PRS priority indicator | Indication of the PRS priority |   | AgreementThe following options are supported subject to UE capability for priority handling of PRS when PRS measurement is outside MG.• Option 1: UE may indicates support of two priority states.− State 1: PRS is higher priority than all PDCCH/PDSCH/CSI-RS− State 2: PRS is lower priority than all PDCCH/PDSCH/CSI-RS• Option 2: UE may indicate support of three priority states− State 1: PRS is higher priority than all PDCCH/PDSCH/CSI-RS− State 2: PRS is lower priority than PDCCH and URLLC PDSCH and higher priority than other PDSCH/CSI-RSo Note: The URLLC channel corresponds a dynamically scheduled PDSCH whose PUCCH resource for carrying ACK/NAK is marked as high-priority.− State 3: PRS is lower priority than all PDCCH/PDSCH/CSI-RS• Option 3: UE may indicate support of single priority state− State 1: PRS is higher priority than all PDCCH/PDSCH/CSI-RSNote: SSB is a separate issue.AgreementThe priority of PRS for UE supporting two priority states and three priority states can at least be indicated in RRC. |
| NR\_pos\_enh | Latency improvements | PRSProcessingWindow  | PRS processing window information |   | AgreementAt least the following parameters for PRS processing window from the gNB to the UE are supported.· Starting slot· Periodicity· Duration/length· Cell and SCS information associated with the above parametersDiscuss during the maintenance phase on the necessity of other parameters including but not limited to· Processing type (associated with the corresponding UE capability 1A/1B/2)· Band/CC-ID as needed depending on each scenario on which the PRS processing window is applied· The above cell and SCS information to determine where/when the PRS processing window is appliedNote: Indication of processing type does not suggest UE indication of multiple capabilities among (1A/1B/2) is already supported, which is a separate discussion.Note: Some of the parameters above may not be mandatory for a PRS processing windowAgreementFor PRS processing window configuration and indication, at least the following mechanism is supported· RRC (pre-)configuration for PRS processing window configuration and DL MAC CE activation for PRS processing window, respectively.Include it in the LS to RAN2 and request RAN2 to decide whether DL MAC CE is feasible for this indication. |
| NR\_pos\_enh | Latency improvements | startingSlot | Starting slot of the PRS processing window  | in "PRSProcessingWindow" |   |
| NR\_pos\_enh | Latency improvements | periodicity | Periodicity of the PRS processing window  | in "PRSProcessingWindow" |   |
| NR\_pos\_enh | Latency improvements | length | PRS processing window length | in "PRSProcessingWindow" |   |
| NR\_pos\_enh | Latency improvements | Cell ID | Cell ID for the starting slot of the PRS processing window  | in "PRSProcessingWindow" |   |
| NR\_pos\_enh | Latency improvements | SCS | Subcarrier spacing for the starting slot of the PRS processing window  | in "PRSProcessingWindow" |   |
| NR\_pos\_enh | Latency improvements | PRSProcessingWindowRequest | PRS processing window request to the gNB by the LMF  |   | AgreementPRS processing window request to the gNB by the LMF is supported from RAN1 perspective.· It is up to RAN3 to design the necessary information to be transferred in the NRPPa message.· Note: It is up to gNB to determine the usage of measurement gap or PRS processing window· Include it in the LS to RAN2 and RAN3. |