**Sub-thread 1 (L12XCM)**

**Proposal 2.1**: On Rel.17 beam indication enhancements for L1/L2-centric inter-cell mobility, support the following:

* Rel-17 MAC-CE-based and DCI-based beam indication (at least using DCI formats 1\_1/1\_2 with and without DL assignment including the associated MAC-CE-based TCI state activation)
	+ FFS (to be decided in RAN1#106-e): Whether this also applies to PDSCH/PUSCH associated with UE-dedicated CORESETs only or additional target channels (e.g. UE-dedicated PDCCH/PUCCH)
	+ FFS: Whether the above is supported only for joint TCI, or both joint TCI and separate DL/UL TCI (including that, if separate DL/UL TCI is supported, the DL TCI and UL TCI associated with a same cell)
	+ FFS: Whether to support activation of TCI states for more than one cells simultaneously
* The DL QCL and UL spatial relation rules already agreed for intra-cell scenario
* The use of SSB associated with a physical cell ID different from that of the serving cell as an indirect QCL reference for UE-dedicated PDSCH
	+ FFS (to be decided in RAN1#106-e): Whether this also applies to UE-dedicated PDCCH
	+ Note: When RS X is an indirect QCL reference of a target channel, there exists at least one other source signal on the QCL chain between RS X and the target channel
	+ FFS (to be decided in RAN1#106-e): Whether SSB associated with a physical cell ID different from that of the serving cell can also be used as a direct QCL reference (source RS) for UE-dedicated PDCCH/PDSCH

**Proposal 2.2**: On Rel.17 L1-RSRP multi-beam measurement/reporting enhancements for L1/L2-centric inter-cell mobility and inter-cell mTRP, decide by RAN1#106-e whether to support the following RS types as measurement RS or not:

* CSI-RS for mobility/RRM associated with a non-serving cell
* CSI-RS for BM associated with a non-serving cell
* CSI-RS for tracking associated with a non-serving cell

Note: If another beam metric other than L1-RSRP is supported (e.g. L3-RSRP is still FFS), the above also applies

**Sub-thread 2 (CA)**

**Proposal 1.3**: On Rel.17 unified TCI framework, for common TCI state ID update and activation to provide common QCL information at least for UE-dedicated PDCCH/PDSCH and/or common UL TX spatial filter(s) at least for UE-dedicated PUSCH/PUCCH across a set of configured CCs/BWPs

* The source RS determined from the indicated common TCI state ID to provide QCL Type-D indication and to determine UL TX spatial filter for a target CC can be configured in the target CC or other CC
* Note: For intra-band CA, the following configurations can be supported without additional QCL rules:
	+ One source RS across CCs can be determined from the indicated common TCI state ID to provide QCL Type-D indication and to determine UL TX spatial filter for the set of configured CCs
	+ One source RS per CC can be determined from the indicated common TCI state ID to provide QCL Type-D indication and to determine UL TX spatial filter for the set of configured CCs, and the CC-specific source RSs are further associated with a same QCL-TypeD RS
* “A set of configured CCs/BWPs” includes all the BWPs in the set of configured CCs

**Proposal 1.4**: For common TCI state ID update and activation to provide common QCL information at least for UE-dedicated PDCCH/PDSCH and/or common UL TX spatial filter(s) at least for UE-dedicated PUSCH/PUCCH across a set of configured CCs /BWPs:

* An RRC-configured TCI state pool can be configured in the PDSCH configuration (*PDSCH-Config*) for each BWP /CC as in Rel-15/16
	+ Note: Such TCI state pool configuration doesn’t imply that separate DL/UL TCI state pool is excluded
* An RRC TCI state pool can be absent in the PDSCH configuration (*PDSCH-Config*) for each BWP/CC, and replaced with a reference to an RRC-configured TCI state pool in a reference BWP/CC
	+ In the PDSCH configuration (*PDSCH-Config*) of the reference BWP/CC, a TCI state pool shall be configured
	+ For a BWP/CC where the PDSCH configuration contains a reference to the TCI state pool in a reference BWP/CC, the UE applies the RRC-configured TCI state pool in the reference BWP/CC
* When the BWP/CC ID (*cell*) for QCL-Type A/D source RS in a *QCL-Info* of the TCI state is absent, the UE assumes that QCL-Type A/D source RS is in the BWP/CC to which the TCI state applies
* [Working assumption:] Introduce a UE capability to report maximum number of TCI state pools it can support across BWPs and CCs in a band, and the candidate value at least includes 1
* FFS: Introduce a UE capability to report maximum number of configured TCI states that it can support across BWPs and CCs in a band

**Sub-thread 3 (switching)**