**RAN1#110bis-e: Email Endorsement 2**

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| **Proposal 1.E.2**: On the SD basis selection for Type-II codebook refinement for CJT mTRP, support the following on the *L* parameter:   * Per-CSI-RS-resource *Ln* parameter   + TBD: Whether {*Ln*, *n*=1, ..., *N*} are higher-layer configured by gNB, or the total is higher-layer configured by gNB while {*Ln*, *n*=1, ..., *N*} are reported by the UE, one L configured and {*Ln*} determined from configured L   + FFS: The value of *Ln* is taken from a pre-defined set ~~(possible values FFS)~~   **FL Note**: This is based on Alt1. Apple stated preference on Alt2. Could Apple accept this proposal based on super-majority view? 🡪 **RESOLVED**   * **Support/fine**: Samsung, NEC, ZTE, Ericsson, MediaTek, vivo, Qualcomm, DOCOMO, LG, OPPO, Huawei/HiSi, Intel, Spreadtrum, CATT, Fraunhofer IIS/HHI, Sharp, Xiaomi, AT&T, Apple (ok), Qualcomm * **Not support**: |
| **Conclusion 1.C**: On the Type-II codebook refinement for CJT mTRP, regarding W2 quantization group and Strongest Coefficient Indicator (SCI) design, there is no consensus on supporting “strongest” CSI-RS resource indicator in addition to the agreed SCI.   * Note: This doesn’t preclude any (future) proposal on reference CSI-RS resource(s) for other purpose(s)   **FL Note**: No consensus on this issue hence no support. Note that the conclusion simply states a fact. The context of this conclusion is strongest TRP indicator for W2 quantization – not for other purposes. There is no need to wait until proposal 1.B.2 is finalized since in proposal 1.B the SCI issue (1 SCI) has been settled. |
| **Proposal 1.G.2**: For the Rel-18 Type-II codebook refinement for CJT mTRP, following legacy, support both aperiodic and semi-persistent CSI reporting on PUSCH.  **FL Note**: This follows legacy spec for Type-II   * **Support/fine:** Apple, Lenovo, Samsung (ok), DOCOMO, ZTE, Intel, MediaTek, Nokia/NSB, Ericsson * **Not support:** |
| **Conclusion 2.F**: On the usage of CSI reporting and measurement for the Rel-18 Type-II codebook refinement for high/medium velocities, there is no consensus in *supporting any specification enhancement* for the following assumptions:   * Legacy UE procedure for CSI measurement/calculation (equivalent to the combination of *l* = (*n* – *nCSI,ref* ) and WCSI=1) * gNB-side prediction   + Note: This doesn’t preclude any gNB implementation   **FL Note**: No consensus on this issue hence no support. Note that the conclusion simply states a fact. |
| **Proposal 2.H**: For the Type-II codebook refinement for high/medium velocities, only CSI reporting over PUSCH is supported   * Following legacy, support both aperiodic and semi-persistent CSI reporting on PUSCH.   **FL Note**: This follows legacy spec for Type-II   * **Support/fine:** Lenovo, Samsung (ok), Intel, Nokia/NSB, Ericsson, DOCOMO * **Not support:** |
| **Proposal 2.J:** For the Type-II codebook refinement for high/medium velocities, the selection of DD basis vectors is layer-specific   * The number of selected DD basis vector (denoted as *Q*) is layer-common   **FL Note**: This doesn’t seem controversial from Tdocs   * **Support/fine:** Intel, Qualcomm, Samsung, Apple, Google, ZTE, CMCC, Huawei/HiSi, DOCOMO * **Not support:** |