**Proposal 1.G**: On the spatial-domain (SD) and frequency-domain (FD) basis design for the Rel-16 Type-II codebook refinement for CJT mTRP, down-select from the following alternatives:

* Alt1 (separate, legacy DFT): SD basis and FD basis are separate, each fully reusing the legacy Rel-16 DFT-based design
* Alt2 (joint, DFT): joint SD-FD DFT-based basis
  + FFS: Details on DFT parameters, e.g. length, oversampling (if any), rotation (if any)
* Alt3 (joint, eigenvector): joint SD-FD eigenvector-based basis
  + FFS: eigenvector codebook design, parametrization
* Alt4 (separate, eigenvector): SD basis and FD basis are separate, using eigenvector-based basis
  + FFS: eigenvector codebook design, parameterization

**Proposal 1.H**: On the W2 coefficient quantization scheme for the Type-II codebook refinement for CJT mTRP:

* At least for N=2, reuse *the following components* of the legacy Rel-16/17 per-coefficient quantization scheme:
  + Alphabets for amplitude and phase
  + Quantization of phase and quantization of differential amplitude relative to a reference, reference amplitude (with SCI determining the location of one reference amplitude), where the reference is defined for each layer and each “group” of coefficients
* Further study the following:
  + For larger N values, if supported, whether/how to improve throughout-overhead trade-off using, e.g. lower-resolution alphabets for amplitude and/or phase than legacy, or higher/same resolution alphabets but smaller number of coefficients than legacy
  + What constitutes a “group” (e.g. per polarization across TRPs/TRP-groups, per polarization per TRP/TRP-group, per TRP/TRP-group, combination of the two), the number of “groups” per layer for phase and amplitude (1 ≤*C*group,phase ≤ 2N, 1 ≤ *C*group,amp ≤ 2N), and how to indicate/configure “grouping”

**Proposal 2.G**: On the CSI reporting and measurement for the Type-II codebook refinement for high/medium velocities, *at least for discussion purposes*, define the following:

* Assume a CSI report in slot *n*, and let the length of the DD/TD basis vector be *N*4
  + Note that basis vector has no span/window in time-domain, only length
* CSI-RS measurement window of [*k*,*k*+*W*meas –1], representing the window in which CSI-RS occasion(s) are measured for calculating a CSI report
  + *k* is a slot index and *W*meas is the measurement window length (in slots)
  + Note: In the legacy Rel-16/17 CSI, the CSI-RS occasion(s) are configured in *CSI-ReportConfig*
* CSI reporting window of [*l*,*l*+*W*CSI –1], associated to the CSI report in slot n
  + *l* is a slot index and *W*CSI is the reporting window length (in slots)
* CSI reference resource(s) in time-domain
  + The location of a CSI reference resource is denoted as *n*ref (slot index)

**Proposal 2.H**: On the CSI reporting and measurement for the Type-II codebook refinement for high/medium velocities, consider *at least* the following alternatives for potential down-selection:

* Alt1: *n*ref (CSI reference resource slot) as boundary
  + Alt1.A: *l* + *W*CSI –1 ≤ *n*ref
  + Alt1.B: *l* ≥ *n*ref
  + Alt1.C: *l* < *n*ref and *l* + *W*CSI –1 > *n*ref
* Alt2: *n* (report slot) as boundary
  + Alt2.A: *l* + *W*CSI –1 ≤ *n*
  + Alt2.B: *l* ≥ *n*
  + Alt2.C: *l* < *n* and *l* + *W*CSI –1 > *n*
* Alt3: End slot of *W*meas (*k* + *W*meas –1) as boundary
  + Alt3.A: *l* + *W*CSI –1 ≤ *k* + *W*meas –1 with the following as a special case: *l=k,* *W*CSI = *W*meas
  + Alt3.B: *l* ≥ *k* + *W*meas –1
  + Alt3.C: *l* < *k* + *W*meas –1 and *l* + *W*CSI –1 > *k* + *W*meas –1 with the following as special cases:
    - *l=k,* *l* + *W*CSI = *n*
    - *l=k,* *l* + *W*CSI = *nf* > *n*

FFS: whether *n*ref represents the slot index of Rel-15 CSI reference resource or a newly defined CSI reference resource

FFS: whether/how the CSI measurement window and reporting window are configured