

WF on UL 256QAM UE capability

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Background

- Per UE and per band approaches have each different pros and cons
- Options discussed
- **Proposal 1: 256QAM in UL is defined as per UE**
- However, it may be attractive and feasible to find a point of compromise considering that 256QAM is mostly expected to be applicable in the beginning in higher frequency bands and the use of multimode-multiband PAs
- **Proposal 2: 256QAM in UL is defined in group of bands. Group 1: bands $f > 1.7\text{GHz}$, Group 2: bands $f < 1.7\text{GHz}$. If 256QAM is supported in the device, the device will signal which group/s of bands UE supports 256QAM in UL**
- Another option would be to select a set of bands as a middle ground point between all bands and an undefined (and possibly growing) group of bands like in Proposal 2. We propose 1, 2, 3, 7, 38, 39, 40, 41, 42,43, 46, 66
- **Proposal 3: select a set of bands**

Agreement

- Follow proposal 3 considering the following bands as part of the group of bands to support 256QAM in UL if any of these bands are supported in the phone and phone supports 256QAM in UL:
 - Baseline group of bands: [1, 2, 3, 7, 38, 39, 40, 41, 42,43, 46, 66]
 - Note: These bands have been collected from Operator's interest and focus on key bands targetting
- From a RAN2/signalling point of view, the signalling shall allow to signal the support of the baseline group and any other band, on a per-band basis, not present in the list above