**3GPP TSG-RAN WG4 Meeting # 97e DRAFT R4-2016926**

**Electronic Meeting, 2 – 13 Nov., 2020**

**Agenda item:** 13.2.1

**Source:** Qualcomm Incorporated

**Title:** WF on Phase noise mask and PTRS

**Document for:** Approval

# Topic #2: PN Models for use in RAN4

*Discussion of which PN models are appropriate for LS and for use in RAN4. Interested delegates please comment on which of the PN models are appropriate for use in RAN4 and in any LSout*

## UE Phase Noise Models

|  |  |  |  |
| --- | --- | --- | --- |
| Company | TR 38.803 ex 23GPP | 6533Huawei | 4976Ericsson |
| Company A | Position on use in RAN4 and in LSout | Position on use in RAN4 and in LSout | Position on use in RAN4 and in LSout |
| Company B | Position on use in RAN4 and in LSout | Position on use in RAN4 and in LSout | Position on use in RAN4 and in LSout |
|  |  |  |  |

## BS Phase Noise Models

|  |  |  |  |
| --- | --- | --- | --- |
| Company | TR 38.803 ex 23GPP | 6533Huawei | 4976Ericsson |
| Company A | Position on use in RAN4 and in LSout | Position on use in RAN4 and in LSout | Position on use in RAN4 and in LSout |
| Company B | Position on use in RAN4 and in LSout | Position on use in RAN4 and in LSout | Position on use in RAN4 and in LSout |
|  |  |  |  |

WF on PN models: TBD

# Topic #2: Phase tracking reference signal information in LSout

*Company views on what PTRS content should be in a potential LSout to RAN1.*

## PTRS content

|  |  |
| --- | --- |
| Company | PTRS content for potential LSout |
| Qualcomm | As PTRS enhancement for assisting ICI compensation, increasing the frequency domain PTRS density for small RB allocation can be considered. New PTRS patterns other than the Rel-15 design, such as the block PTRS pattern is not necessary. Further it is up to RAN1 and not RAN4 to decide on the PTRS design. |
| Company B | Position on use in RAN4 and in LSout |
|  |  |

WF on PTRS: TBD