

The vivo logo is positioned in the top left corner of the slide. The background of the entire slide is a vibrant, abstract image of a flower, possibly a daisy, with its petals radiating from a dark center, all rendered in shades of blue and cyan.

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AI: 9.0.2

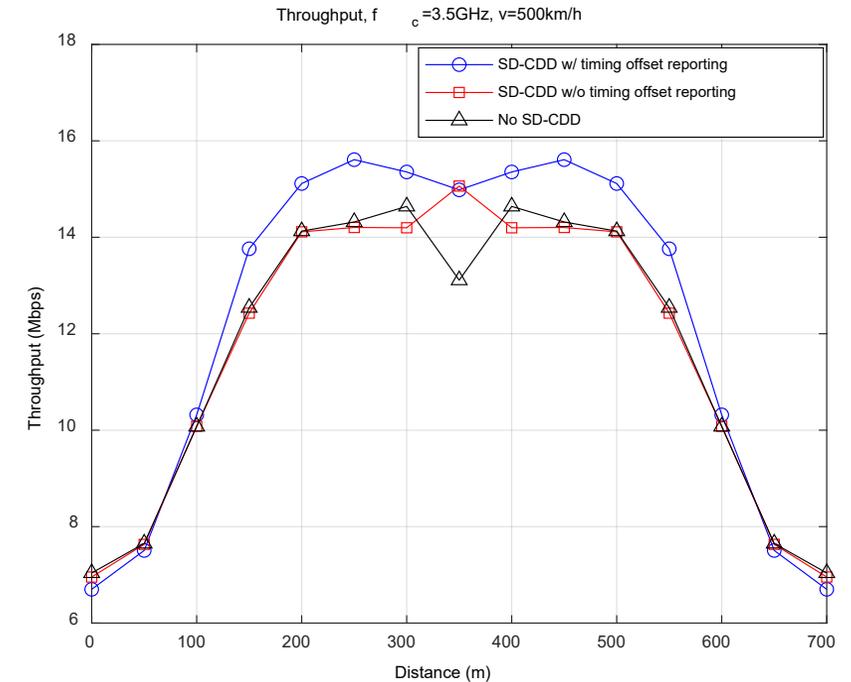
On Rel-18 DL MIMO enhancement

Background

- Following example areas were identified in Rel-18 RWS:
 - Further enhancements for CSI (e.g., mobility, overhead, etc.)
 - Evolved handling of multi-TRP (Transmission Reception Points) and multi-beam
 - CPE(customer premises equipment)-specific considerations

Further enhancement for high-speed scenario

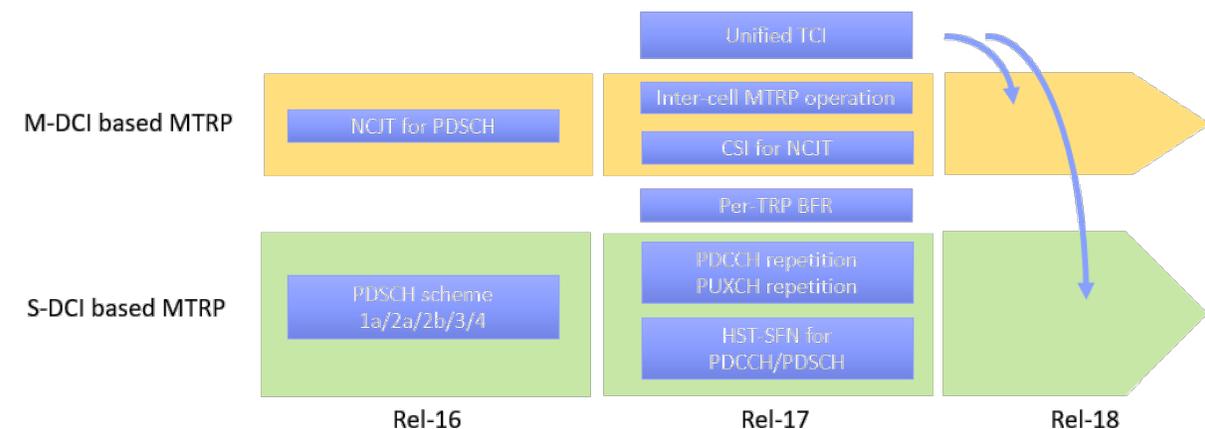
- Motivation
 - MIMO performance degrades significantly in moderate to high speed scenario due to mismatch in CSI feedback
- Potential enhancement
 - Consider further CSI enhancement to improve system performance in high speed scenario
 - HST-SFN CSI enhancement, e.g., phase/timing offset reporting for MTRP CDD transmission
 - Other potential enhancement, e.g., Doppler information feedback, etc.
 - SRS based enhancement for high speed scenario
 - SRS transmission to facilitate Doppler information estimation and downlink channel prediction



Observation: Small delay CDD can improve the UE demodulation performance, but is sensitive to the timing offset added between the two TRPs.

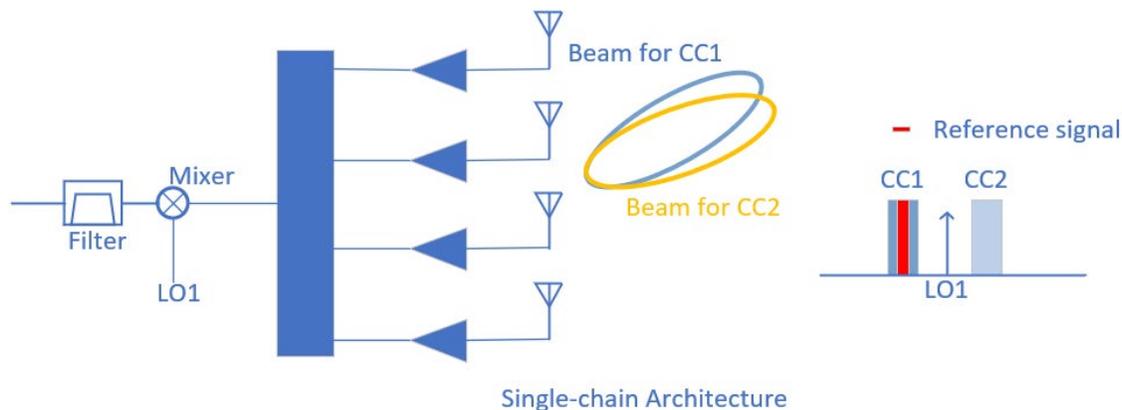
Further enhancement on multi-TRP operation

- Motivation
 - Only basic unified TCI framework design in Rel-17
 - CSI enhancement only for S-DCI based MTRP scheme 1a in Rel-17
- Potential enhancement
 - MTRP operation under Rel-17 unified TCI framework
 - Consider both M-DCI based MTRP and S-DCI based MTRP with enhanced PDCCH, PDSCH, PUCCH and PUSCH
 - CSI enhancement for following transmissions
 - M-DCI based MTRP for non-ideal backhaul
 - SFN scheme
 - Other S-DCI based MTRP schemes



Further enhancement on multi-beam operation

- Motivation
 - Inter-band CBM (common beam management) to apply the selected beam in one band to other bands discussed in RAN4 to reduce the overhead of beam management.
 - Non-optimized performance for UE-friendly inter-band CBM operation
- Potential enhancement
 - Beam management enhancement for inter-band CBM operation under Rel-17 unified TCI framework to improve beam selection in other bands with reduced overhead of beam management.



Observation: Current inter-band CBM performance can be further optimized.

THANK YOU.

谢谢。