3GPP TSG-RAN WG1#86 R1-167647

Gothenburg, Sweden 22nd - 26th August 2016

ERICSSON

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TITLE: FECOMP EVALUATION ASSUMPTION OMISSIONS AND ERRATA

AGENDA ITEM: 7.2.14.1

DOCUMENT FOR: DISCUSSION

SUMMARY

- **Agreed evaluation parameters [1][2] have a number of small omissions and incorrect references**
  - **Missing assumptions on overhead, polarized antenna modeling, and feedback**
    - Suggest to use assumptions from EBF/FD-MIMO study 36.897 (Table A.1-2)
  - **Scenario A: Indoor Hotspot**
    - Should use 36.814 rather than 36.872
      - 36.872 has ‘scenario 3’, including multi-floor settings.
  - **Scenario B: Macro**
    - 36.897 does not define 3D UMi; 36873 does
    - Does not have small cells
  - **Scenario A: Indoor Hotspot**
      - 36.897 does not define 3D UMa/UMi; 36873 does
- **Proposed revisions shown with change marks on following slide**
  - **Rows with no changes to simulation assumptions are omitted**

PROPOSED PARAMETER REVISIONS

Parameters	Scenario A	Scenario B	Scenario C (Co-channel) Scenario D (Non co-channel)
Channel model	Indoor Hotspot (see TR 36.814~~72~~ section A.2.1.1.5) 3D distance used between eNB and UE	Macro: 3D UMi (see TR 36.873~~97~~)	Macro layer: 3D UMa Small cell layer: 3D UMi (see TR 36.873~~97~~)
TP antenna pattern	2D omni with 5dBi gain (According to TR 36.814~~72~~ section A.2.1.1.5)	3D directional with 8dBi gain (According to TR 36.873)	Macro layer: 3D directional with 8dBi gain (According to TR 36.873) Small cell layer: 3D directional with 5dBi gain, θetilt=90 deg, HPBWv= 40 degrees (According to TR 36.819)
Small cell TP dropping	According to TP layout	n/a ~~According to TP layout~~	According to TR 36.872
Overhead	3 symbols for DL CCHs, 2 CRS ports and DM-RS with 12 REs per PRB		
Polarized antenna modelling	Model -2 from 36.873		
Feedback	PUSCH 3-2 for non-reciprocity operation (PUSCH 3-0 for reciprocity based operation)		
	CQI, PMI and RI reporting triggered per 5ms		
	Feedback delay is 5 ms		
	Rel-10 8Tx codebook based for non-reciprocity based operation (SRS for reciprocity based operation only for TDD*)		

From 36.897

REFERENCES

- [1] R1-165852, “Way Forward on Evaluation Assumptions for FeCoMP”, ZTE, ZTE Microelectronics, Intel, Ericsson, Nokia, ASB, Huawei, HiSilicon, LGE, Samsung, CATT, ASTRI, Xinwei, KT Corporation, 3GPP TSG RAN WG1 Meeting #85, May 23-27, 2016, Nanjing, China
- [2] Draft Report of 3GPP TSG RAN WG1 #85 v0.1.0, MCC Support, June 3, 2016

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