

Coexistence Test Methodology Framework

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System 1

performance params $P_{S11}, P_{S12}, \dots, P_{S1n}$



R_1

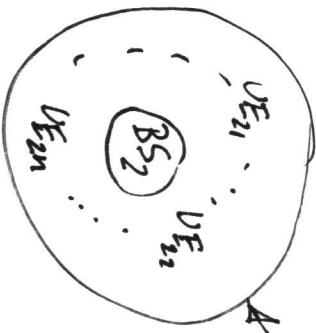
R_2

distance

R_3

System 2

Performance params: $P_{S21}, P_{S22}, \dots, P_{S2n}$



VE_{21}

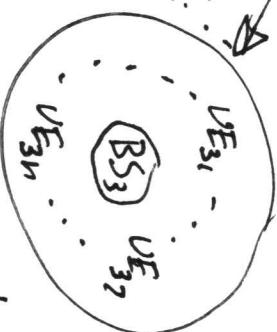
VE_{22}

VE_{2n}

BS_2

System 3

Performance params: $P_{S31}, P_{S32}, \dots, P_{S3n}$



VE_{31}

VE_{32}

VE_{3n}

BS_3

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- 1) Establish a system, S_n , that fully occupies the available unlicensed spectrum and is operating at maximum capacity. It is also free of external interference.
- 2) Measure the performance of S_n according to an agreed upon set of parameters (e.g., throughput, PER latency, etc.)
- 3) Establish a second + third systems, $S_k + S_e$, operating under the same conditions as in (1) above + measure performance as in (2) above
- 4) Gradually bring systems $S_n, S_k + S_e$ "closer together" (i.e., increasing the interferences $S_{n \rightarrow k}, S_{n \rightarrow e}, S_{k \rightarrow e}$)

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- 5) Measure the effect on the performance parameters in (z) as the systems get "closer"
- 6) Document the results. End of Test

Example result:

