A Decomposition Method for MIMO OTA Performance Evaluation
ABSTRACT

• For achieving these, this paper proposes a decomposition method for the measurement of multi input multi output devices’ over-the-air performance.

• By using the proposed method, the antenna active envelope correlation coefficient, the radiated sensitivity of each receiver, the total isotropic sensitivity, the self-interference, and the desensitization can all be achieved separately, and in OTA working mode.
EXISTING SYSTEM

• Diagnosis and troubleshooting are critical to efficiently detecting the imperfections and improving the radio frequency designs for wireless systems in research and development stage.

• The current standard methods for MIMO OTA measurement are not able to meet the technical requirements for troubleshooting MIMO devices under test.

PROPOSED SYSTEM

• In consideration of the MIMO system’s complex array antennas and radio frequency receivers, the parameters obtained.

• A decomposition MIMO OTA test method for MIMO terminals is proposed in this contribution. By using the proposed method, the ECC, the radiated sensitivity, the TIS, and the self-interference are all measured separately.

• All the measurements are carried out in the radiated working mode, without intrusive connections and in the conditions of multiple receivers’ coexistence.
HARDWARE REQUIREMENTS

- Processor: Intel core i3
- RAM: 2B
- Hard Disk: 20 GB
SOFTWARE REQUIREMENTS

• Operating System : LINUX
• Tool : Network Simulator-2
• Front End : OTCL (Object Oriented Tool Command Language)
REFERENCES


