Modelado de TCP en un entorno celular con Dual Connectivity

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This paper proposes a TCP implementation in a system-level simulator. This LTE-Advanced simulator provides Dual Connectivity (DC), which allows user equipments (UEs) to receive data simultaneously from two evolved NodeBs (eNBs) in order to boost the performance in a heterogeneous network. In this work, a TCP abstraction is described to predict TCP version Reno performance in an accurate and computationally efficient way. The proposed model is used to show the impact of DC on the user throughput and dropped packets when UEs are downloading a file through TCP.