Analysis of handover based on the use of femtocells in LTE networks

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***Abstract*— One of the key elements in the networks LTE (Long Term Evolution) is the possibility of deploying multiple femtocells for the improvement of coverage and data rate. However, arbitrary overlapping coverage of these cells makes the handover mechanism complex and challenging. In this paper, simulations of deploying LTE femtocells in a scenario were evaluated. With this objective, measure impact and correlation of the use of femtocell parameters of QoS (Quality of Service) and handover. Possible limitations of this integration are discussed. Will be the integration of LTE femtocell a panacea? Despite this promising alternative estimates are fraught with uncertainty. The results show that the use of femtocell got worse on indicators of handover, impact on indicators of QoS.**

***Keywords:* LTE, handover, femtocell, simulation, *OPNET*.**

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