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Seamless Mobility in Heterogeneous Mobile Networks

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Abstract : The objective of this paper is to introduce a vertical handover (VHO) algorithm between wireless LANs (WLANs) and LTE mobile networks. The proposed algorithm is based on the fuzzy control theory and takes into consideration power level, subscriber velocity, and target cell load instead of only power level in traditional algorithms. Simulation results show that network performance in terms of number of handovers and handover occurrence distance is improved.

Keywords: vertical handover, fuzzy control theory, power level, speed, target cell load

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