A study on handoff issues in radio over fiber network at 60 GHz

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Abstract: As the demand of high-speed multimedia services increases, several wireless technologies have been considers for broadband wireless applications. The 60GHz band is an obvious candidate due to its 5 GHz of available spectrum globally. However, the 60 GHz channels face many challenges such as attenuation and NLOS propagation. The high reduction in signal strength leads to a small coverage area, which in turn causing frequent handoffs for mobile terminals and requiring more the cost for antennas. Radio over Fiber technique is introduced to help the 60GHz in reducing the cost deployment. In this paper, we present an overview about the issues related handoff techniques in Radio over Fiber networks at 60GHz and discuss about it in such networks. ©2010 IEEE.

Index Keywords: 60 GHz band; Broadband wireless applications; Coverage area; High-speed; Mobile terminal; Radio over fiber; Radio-over-fiber techniques; Signal strengths; Wireless technologies; Fiber optic networks; Mobile antennas; Multimedia services; Receiving antennas; Wireless telecommunication systems; Cost reduction

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