

Analysis of Transparent and non-Transparent relay modes in IEEE 802.16j Mobile Multi-Hop relay networks *

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Abstract

Two different relay modes are defined in IEEE 802.16j WIMAX standard: transparent mode and non-transparent mode. The non transparent mode is used to extend the coverage area of base stations, where low cost relay station of equal capacity as that of base station is placed at suitable position. Time taken to accept mobile stations and Bandwidth allocation are main problems in non transparent mode.

In this we have studied the IEEE 802.16j standard multi hop relay WIMAX networks. We have used relay stations to extend the coverage of base stations. We have also analyzed the throughput between mobile stations with in the coverage area and outside coverage area of base stations. We have simulated the IEEE 802.16j transparent and non transparent mode multi hop WIMAX relay networks using NCTUns Tool

Keywords: *IEEE 802.16j, non-transparent mode, WIMAX, NCTUns, throughput etc*