



UNIVERSITI TEKNOLOGI MARA

PERFORMANCE ANALYSIS OF VOIP OVER
MOBILE WIMAX

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With the name of ALLAH Most Gracious Most Merciful

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ABSTRACT

Abstract— In recent years, Voice over Internet Protocol (VoIP) has become a popular technology as an alternative to public switched telephone network (PSTN). Skype, Viber and KaKaoTalk are the examples of VoIP applications. Worldwide Interoperability for Microwave Access (WiMAX) is a network technology that supports VoIP. The target of this project is to evaluate the VoIP performance over mobile WiMAX. The performance metrics such as jitter, delay and Mean Opinion Score (MOS) value are critically analyzed using different codecs. The comparison is also being made between the pedestrian and vehicular environment. OPNET 14.5A is chosen as the simulation tool since it resembles real environment simulation. It can be concluded that VoIP performance is affected by the codecs used as well as the network environment.

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