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Report on

TO ENHANCE THE PERFORMANCE OF QOS IN WIMAX USING OPNET SIMULATOR

A Project report submitted for the partial full fillment of the requirements for award of Degree of

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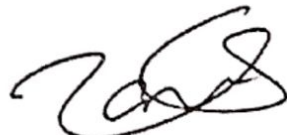2018-2022

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CERTIFICATE

This is to certify that the project entitled "TO ENHANCE THE PERFORMANCE OF QO IN WINMAX USING OPNET SIMULATOR " is the record of the work carried out by P. THANUSHA, (18811A0550) G. K. LAHARI, (18811A0523) B. PADMA, (18811A0501) K. SAI GANESH, (18811A0537) B. PRANAY, (18811A0506) students of final year B. Tech in the department of Computer Science And Engineering. This work is done for the partial full fillment for the award of BACHELOR OF TECHNOLOGY during the year 2021-2022.

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ABSTRACT

In last few years there has been significant growth in the area of wireless communication. Quality of Service (QoS) has become an important consideration for supporting variety of applications that utilize the network resources.

In this project study of the WiMAX QOS fairness and its architecture is considered and understandig the mechanism of QoS deployment in WiMAX under fairness.These applications include voice over IP, multimedia services, like, video streaming, video conferencing etc. IEEE 802.16/WiMAX is a new network which is designed with quality of service in mind. This thesis focuses on analysis of quality of service as implemented by the WiMAX networks

A simulation based study is performed in OPNET by deploying a WiMAX network model in subjective sharing same bandwidth to all the users in the network. The simulation considers a simple network topology with three traffic source and destination each of them uses different application the QoS configuration is applied by defining three different classes that are Gold, Silver, and Bronze. And the applications used is the HTTP, VoIP, and Video conference. And then the evaluation is performed by comparing the result with QoS. And from the simulation result it's obvious that QoS mechanism represent the solution of future needs of networking and communication..