

# Assessment of 3.5G Network and Wireless Broadband in Developing World: Jordan as a Case Study

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**Abstract-** The number of 3.5G (beyond third generation) users was emerged throughout the world during the last few years. This is because it provides very advanced services such as Wireless Internet broadband and good quality video/voice telephone calls. In developing countries, this service is still at the initial phase. There are still some obstacles facing people of these countries to use this new service. This paper provides an overview about 3.5G in these countries: Jordan as a case study. It also discusses people's expectations about this service via conducting a questionnaire targeted Internet users. The paper also presents a network assessment experimental test carried out to evaluate the network QoS at selected places of the area where this service is provided. The test was performed on three main network performance metrics: throughput, delay and packet loss.

**Keywords-** *Wireless Broadband; 3.5G; HSDPA; Network QoS; Jordan.*

## CONCLUSION

Two main tasks were performed within this research work: Questionnaire and real time experiments. The outcomes of the questionnaire showed that people of developing countries are willing to use the 3.5G service and are well prepared to enter this world. It showed also that their expectations are very high according to their

knowledge about this service. Afterwards, a group of tests was carried out to evaluate the performance of this service and to check if the Network QoS will meet people's expectations or not.

The experimental test results showed that the QoS of the HSDPA network is irregular. Therefore, it would be accepted by users at some locations only. Users might prefer the wired service (DSL) at the locations where the wireless service is poor.

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