## Innovation-10

1. **Brief Name of the Innovation**

   Method and tool for Measurement, modeling and forecasting of wireless Internet traffic

2. **Contact Information:**

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3. **What is the technology?**

   Measurement framework has been developed and a Java based tool to measure QoS parameters of traffic in wireless Internet

   A joint parametric Hidden Markov model (HMM) has been developed for forecasting of wireless Internet traffic.

4. **What does the technology do?**

   Measures the QoS parameters for traffic in wireless Internet and forecasts the future traffic using the developed model.

5. **Explain the specific problem this technology has created to address or solve**

   The technology is in terms of developing a low cost solution for traffic measurement in the wireless Internet and a tool for prediction of future traffic.

6. **Why is it better? How much better?**

   The QoS parameters such as end-to-end delay and inter-packet delay variation can be predicted with a fair amount of accuracy within 5 to 10 % tolerance limit.

7. **Have you filed for Intellectual Property (IP)?Have Patent Cooperation Treaty (PCT) applications filed?**

   No.

8. **What is the development stage of this innovation**

   The method has been developed and verified offline though a set of tools. The technology has just been developed.

9. **Have any prospective users or buyers shown interest in this technology?**

   It has been discussed in conferences and people are keen to know about it.

10. **Who do you consider competitors or competing technology?**

    It will be a useful tool for forecasting to be added to s asset of internet wide testing tools – which give some performance parameters.

11. **List the milestones remaining to be accomplished to bring your technology to full development and ready for the intended end-user?**

12. **Broad Technical Specifications**

    Test tool developed to measure Inter packet delay and delay variation for realtime traffic in wireless internet. Server side software and Client side software are in Java J2ME and client version can run on Java enabled mobile phones. Server side tools with measurement, modeling and forecasting run on customized servers now.

## 13. Diagram or Pictures if any

**Wireless IP QoS Testbed**



**Predictions within Tolerance Limit**