

Innovation-07

1. Brief Name of the Innovation:

Energy efficient rate control mechanism for multimedia delivery over the wireless Internet (WP2A).

2. Contact Information:

Dr. Sudipta Mahapatra, Associate Professor,
E&ECE Department, IIT Kharagpur, West Bengal.

a. Residence: B-88, IIT Campus, Kharagpur 721302.

b. Phone: +91 - 3222 – 283560(office); +91 - 3222 - 283561 (residence);

Email: sudipta@ece.iitkgp.ernet.in

3. What is the technology?

The scheme helps in achieving a smooth variation in the rate of multimedia delivery over the wireless Internet.

4. What does the technology do?

Helps in improving the throughput while ensuring fairness in data delivery while reducing the energy consumption at the mobile nodes for multimedia delivery.

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

Addresses the problem of ensuring smooth rate variation, guaranteeing fairness and energy efficiency in multimedia delivery to wireless devices connected to the Internet.

6. Why is it better? How much better?

Results in improving the throughput

Reduces the energy consumption at the mobile nodes for multimedia delivery.

Ensures fairness to existing traffic flows.

7. Have you filed for Intellectual Property (IP)?Have Patent Cooperation Treaty (PCT) applications filed? No, not yet.

8. What is the development stage of this innovation

Results obtained through simulation in NS2 illustrate the superiority of the proposed scheme.

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

Interested people haven't been contacted yet.

10. Who do you consider competitors or competing technology?

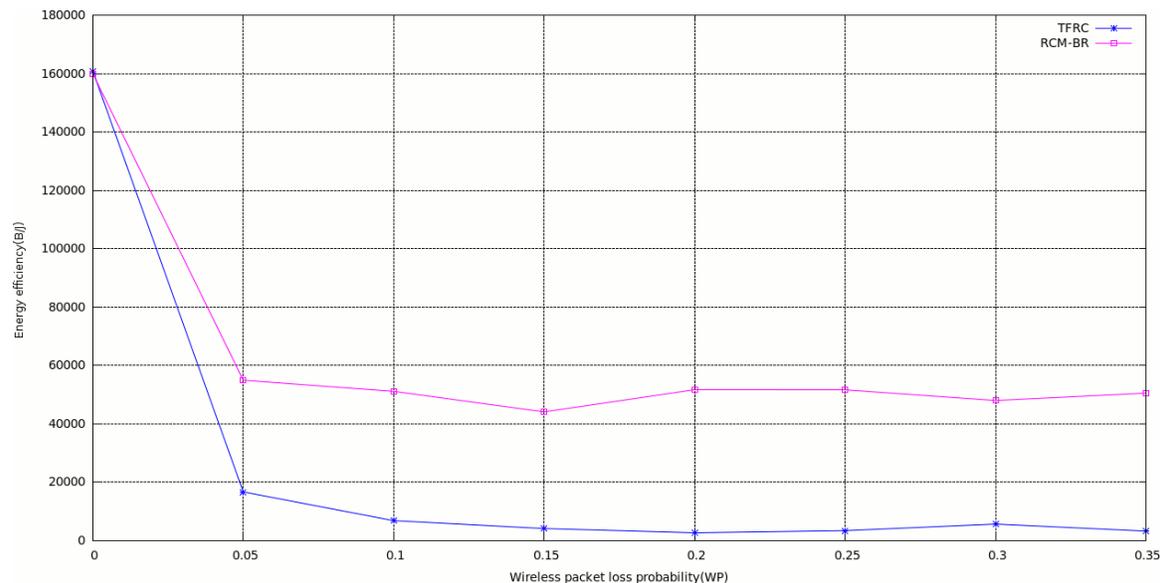
11. List the milestones remaining to be accomplished to bring your technology to full development and ready for the intended end-user?

Testing of the scheme by integrating it within mobile devices remains to be accomplished, through already attempts are underway to test the scheme through a more realistic implementation.

12. Broad Technical Specifications:

Can be integrated with any mobile devices/platforms.

13. Diagram or Pictures if any



Energy efficiency Vs Wireless loss probability Comparison of the developed protocol (RCM_BR) with TFRC, an existing rate control protocol