

Innovation-15

1. Brief Name of the Innovation

Energy Saving in OFDMA cellular systems

2. Contact Information:

Dr. Suvra Sekhar Das, G. S. S. S. T., IIT Kharagpur, India

Email id: suvra@gssst.iitkgp.ernet.in

3. What is the technology?

Energy Efficiency

4. What does the technology do?

Reduces the power consumption of the BS

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

The power consumption of a BS is high even during low load conditions so this work aims to reduce the power consumed in proportion to the reduction in traffic load by switching off a few intermediate BS.

6. Why is it better? How much better?

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

In the process.

In progress.

8. What is the development stage of this innovation

Tested on software test bed

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

10. Who do you consider competitors or competing technology?

Base station network maintenance companies, Base station manufacturers/ Base Station Chip manufacturers

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

Dynamic algorithm for on the fly RAN configuration.

12. Broad Technical Specifications

As per 3GPP LTE.

13. Diagram or Pictures if any

