**Indian Institute of Information Technology (IIIT) Chittoor, Sricity Questionnaire for BTP-Progress Evaluation**

**Wednesdays, 3:30 – 5pm**

**Spring 2016**

1. Describe what you have done in the last 3 weeks.

Literature study on Self Organising networks (SON ), small cells , algorithms related to SONs and analytics

2. How many times did you meet / talk with your faculty / guide?

3 times a week.

3. How many papers / articles / technical materials have you read in the last 3 weeks?

6 papers

4. Provide a brief summary of your learning?

Rapid forecast growth in mobile broadband data demand is becoming a reality. Strong take-up of

smart phones, tablets and other data devices is reflected by the high levels of data traffic carried on mobile

networks today. The mobile industry has established a consensus that Heterogeneous Networks (HetNets), comprising a mix of small and large cells, will be essential to satisfy the capacity, speed and performance requirements of the future. Small cells are installed at dense areas to increase the accessibility of network to users during high data traffic and low signal connectivity at the macro cell. These small cells are organised in such a way to manage the mobility of users, signal interference, self healing, self learning, self configure and reliable. Data packets are sent through backhaul network and also through core network using this small cells.

5. What development / programming / practical activity did you do in the last 3 weeks.

We haven't started using any development technologies since we are still exploring the area to get a clear understanding of the concepts.

6. How close/far are you from the milestone set by your Guide?

We are pretty close to the milestones (able to reach 8/10).

7. What specific challenges are you facing/you faced in the last 3 weeks?

* Getting data related to telecom networks.
* As this is budding field collecting data related to small cells, Self organising networks , Analytical algorithms and understanding it is quite a challenge.

8. Propose your plan for the next 3 weeks; as agreed with your supervisor. It would be verified in the next round (Q1).

Planning to Implement algorithms on a homogeneous network in OMNet++