

## **Successfully tested two antenna sub-system at C06 antenna**

Date of Testing : 4<sup>th</sup> April 2014

Date of closed loop testing : 7<sup>th</sup> April 2014

During April-2014 MTAC period, we have successfully tested two antenna sub-systems at C06 antenna. We have installed HP make L2 Ethernet switch and two Rabbit MCM cards at C06 for control and monitor of Broadband OF system and Sentinel system.

### **1. Broadband OF system testing:**

The first level control and monitoring of Broadband OF system has been tested by interfacing Rabbit MCM with OF system hardware. The command for RF attenuation was send from all three paths,

- 1.1. Python environment - ONLINE-V2 - Rabbit MCM - OF hardware.
- 1.2. GUI environment - ONLINE-V2 - Rabbit MCM - OF hardware.
- 1.3. Terminal environment - ONLINE-V2 - Rabbit MCM - OF hardware.

The attenuation value was set by sending command to Rabbit MCM card in range of 0 to 31 dB, in step size of 1 dB. The RF power was going down by 2dB for entire range of attenuation values. This test was done in telemetry lab as well as C06 antenna shell. The changes in attenuation were reflecting in RF power at antenna base (OF Tx output port) and receiver room OF system (OF Rx Mon port) on spectrum analyzer.

### **2. Sentinel System Testing:**

The control port of Rabbit MCM for sentinel system was tested by connecting 32 bit LED test jig. The digital mask was send to Rabbit MCM by three paths mentioned above. The shell temperature was monitored by connecting temperature sensor to channel 1 of MCM monitoring port. The temperature reading was displayed on ONLINE-V2 shared memory.

The OF system group was involved in setting up OF system and successful completion of testing.