Successfully tested GAB and Front end system in Lab

Date of Testing: 5th September 2014 to 23rd September 2014

During September month, we have successfully tested GAB & FE sub-systems in respective Labs. The command for FE & GAB setting was sent from :

- 1. GUI environment ONLINE V2 Rabbit MCM FE / GAB hardware.
- 2. Terminal environment ONLINE V2 Rabbit MCM FE / GAB hardware.
- Front End system testing: The first level control of Front end system has been tested by interfacing Rabbit MCM with front end system hardware in FE lab. The control setting values were set by sending command to Rabbit MCM card. All changes were reflected on spectrum analyzer.

Commands tested for Front end system:

1. Frequency band
2. Solar attenuation
3. Channel
4. Sub band selection
50-1420 MHZ
0 db-terminate
swap/unswap
swap/unswap
subband1-subband4
subband1-subband4

5. RF On/Off On/Off

6. calibrator noise Low/High/Med/ExHigh Low/High/Med/ExHigh

• GAB System Testing: The first level control GAB system has been tested by interfacing Rabbit MCM with GAB system hardware in ABR lab. The control setting values were set by sending command to Rabbit MCM card. All changes were reflected on spectrum analyzer. The FE and GAB system group was involved in setting up GAB & FE system and successful completion of testing.

Commands tested for GAB system:

 1. Reference LO
 10-105 MHZ
 10-105 MHZ

 2. LO
 600-17000 KHZ
 600-17000 KHZ

 3. Attenuation
 10 db
 10 db

3. Attenuation
 4. Filter
 5. LPF
 10 db
 8
 8
 0
 0

6. Source Siggen Synthesizer
7. Signal Antenna Noise
8. Path Direct Mixer
9. Channel 1 2