Work Report (period 1.1.2013 to 30.06.2013) by RRU

1. Implemented a new system program which can directly communicates with New Rabbit MCM over TCP/IP based socket communication.
   All command and response is written in a shared memory block which is read by a shared memory client.
   Also command and response is written in CS.xml and RS.xml file.

2. Implemented a user selection program which takes user number,sub array number ,number of antenna and antenna name as input, check for any duplicate entries and writes all data on shared memory.
   User selection program can takes input from terminal as well as input file.

3. Combined both the system and user selection program which form the first prototype model of Online_v2 software.

4. Implemented a Readline system server program which takes command from user like start,stop, close and communicates with dedicated MCM program. Used standard readline library for this program. It is being used by Santaji for database entry.

5. Setup a network switch in Telemetry lab with the help of Shri Mangesh which is being used for lab testing.

6. Implemented a dispatcher program which takes command from Online_v2 and send to MCM program. It acts like a interface between Online_v2 program and MCM device.

7. Implemented a multi-threaded dispatcher which can communicates to multiple MCM device. This dispatcher program open one antenna thread which continuously listen for command from Online_v2. Once it gets command,check the commands using antenna name whether it is meant for this particular dispatcher. Send the acknowledge back to Online_v2 that I have got command. Check for which system it is and put that command in a particular system queue. That particular system thread continuously check own system queue for any command. If any command is there,system thread takes out the command and send it to MCM device and get back the response. Then dispatcher sends the response to Online_v2.

8. Implemented a stand alone servo tracking program using ABCCOM software algorithm.

9. Implemented a Message queue server which can send command to DAS-Server and gets the ACK from DAS server.

10. Implemented a Message queue server which can send command to bblo client.

11. Implemented a prototype Online_v2 program which uses Readline library for user input. Online_v2 prototype model is based on multi threading concept. Through prototype Online_v2 user can give command to DAS/ANTENNA/USER.
    Through this Online_v2 program we can communicate to multiple antenna by giving command like
    >> C00 sentinel set
    >> C01 front_end mon

12. Fixed the socket_timeout bug by trimming the antenna command structure.

13. Updated the shared memory server/client program which can now display the antenna name for which command/response has been sent/received.

14. Tested the Online_v2 prototype with C00 and C01 dispatcher by connecting 8 MCM in Lab switch.