

LHC RF Meeting

28th July 2006

Participants: Luca Arnaudon, Thomas Bohl, Olivier Brunner, Andy Butterworth, Edmond Ciapala, Eric Montesinos, Joachim Tückmantel, Daniel Valuch.

1. ACS Couplers (Eric)

✚ **SA2 conditioning:** Couplers MC 125 and MC 125 (Ex MC130 re-assembled) are progressing well, full power has been reached but so far only at one reflected phase value.

2. ACS Modules and SM18

✚ **Coupler mechanics (Eric):** All four modules to be installed have had their coupler mechanics removed for transport. The interiors of the antennas of module 5 have been successfully cleaned, following the overheating during the last power tests.

✚ **Tuner bellows:** The remaining bellows have been received. These are presently being fitted to the six tuner remaining tuner assemblies. These will be refitted to modules 2 (AMERICA) and 5 (OCEANA) during the next two weeks.

✚ **Installation:** Following the above, module 3 (ASIA) can be taken to P4 in week 33 and the remaining three the following week, as originally planned.

3. ADT (Eric)

✚ **Dubna visit:** The amplifier has been accepted. All 16 should be received by the end of October.

✚ **Resistors & B867 tests:** Four new resistors have been successfully tested in an amplifier at 14 kV and 8.8 A total, i.e. at full power. The series will now be ordered.

4. UX45/RUX45 installation status

✚ **Planning:** Note that the June 06 LSS planning is now available in EDMS (**Doc 753875**). The [part concerning RF](#) has for the moment simply been based on the estimates provided by ourselves for equipment availability. The overall planning will be discussed with M. Jimenez on his return next week.

✚ **UX45/RUX45 Floor painting:** The areas have been cleaned and painting should have started this week, but this was not done as paint had not been obtained (!). Short circuit tests will start on the RA43 side next week and the only remaining option to maintain our schedule is to have the RUX45 painting done during the evenings. The SU team will again mark the beam lines allowing us to do the drilling for the equipment supports.

✚ **VIC (Visite d'Inspection Commune)** The VIC for the installation of the tunnel equipment will be held in the next week or two (Olivier, S Grillot, E. Paulat)

✚ **ACS HV equipment (Olivier):** Work is continuing on the mounting of connectors and the installation of the HV box in UX45. It should be complete next week. Installation of equipment in the four UX45 HV bunkers will then start.

✚ **Flexwell cables to klystrons:** The connectors need to be fitted to the cables before the klystrons are put in place. We are waiting on ST-EL for this.

✚ **ADT Water:** All the equipment and parts are ready, waiting to be finally mounted and connected.

✚ **Earthing:** This has been agreed with J. Gomez (ST-EL). The earth bars in the trenches will be connected by cables having the same section as the bars to earth points in the RBs.

✚ **Ethernet connection:** This is nearing completion in all areas, including SR4. Network equipment can therefore be installed soon. It would be useful to have it operational quite soon, in order (amongst other things) to have fixed telephones for personnel without mobile phones. This will be followed up and phones ordered. **(Action: Luca)**

5. Controls and LLRF

✚ **VME Cavity Controllers:** Orders have been made for all non-standard power supplies and for the VME crate mechanics. We now have to follow these through with FI department to get them all approved and out asap. Additional CPUs are required - 55 initially ordered with AB-CO, 70 now needed. AB-CO will in any case need to order extra CPUs and are presently discussing a new contract with FI department.

✚ **Software in VME systems:** FESA software installed in Lab systems appears to be stable and reliable. Work is ongoing on alarms and logging.

✚ **ACS Power Converters.** PO group need to do some further tests on the network controls interface; this will be done on the SM18 supply.

6. AoB

✚ **MTF data** – A discussion was held with Z. Zaharieva on MTF for RF. Initially we need to include the main tunnel and RUX45 equipment. A structure is gradually being put in place in EDMS. The motivations are 1) INB traceability and 2) clear archival of equipment data for our own needs. There will also be a hardware commissioning MTF, but this should follow the equipment MTF as closely as possible.

✚ **UX45 upper areas access:** Discussions are ongoing with G. Roy; the final proposal is in preparation and will be presented at a future meeting.

Next Meeting: Friday 4th August at 08:45 in the JBA room.

Special Topic: "The ACS RF Distribution Systems," Daniel.

E. Ciapala, 28th July 2006.