

LHC RF Meeting 13th August 2003

Present: Luca Arnaudon, Andy Butterworth, Olivier Brunner, Edmond Ciapala, Eric Montesinos Roberto Losito, Volker Rödel, Daniel Valuch.

Excused/Absent: Thomas Bohl, Philippe Baudrenghien, Elena Chapochnikova, Wolfgang Höfle, Trevor Linnecar Eric Montesinos, Joachim Tückmantel, .
(Reduced participation due to SPS MD)

Agenda:

- 1) News on ACS couplers (Eric)
- 2) Status of power equipment in SM18 (Olivier)
- 3) Assembly and conditioning of Module 3 in SM18 (Roberto)
- 4) News on integration (Volker)
- 5) Other follow up from last meeting
- 6) AoB

1) Power Couplers: (Eric)

- Conditioning of the second pair of ACS couplers in SA2 successfully reached 550 kW, progress having been rapid in the last week. The couplers can be taken to SM18 next week for fitting to module 3. There is some delay in the supply of ceramics for the next set of couplers. In the meantime tests can be done in SA2 with a second ceramic mounted on a kovar coupler.

2) SM18 Power Equipment (Olivier)

- Power cables were wrongly connected on the power converter. The cabling will be re-done by ST-EL. A first power test will take place next week.
- All other equipment – HV bunker, waveguides, klystron etc. is ready. Water has been safely connected to klystron and load. First RF power tests will be done with a short in the waveguide, after the power converter test.

3) Assembly and conditioning of Module 3 in SM18 (Roberto)

- The couplers will be prepared for fitting in module 3, by the end of August. VA group will decide if the bake-out of the couplers once fitted should be done in parallel or consecutively. The completed module should be in the bunker by the second week in September.

4) News on integration (Volker)

- **Tunnel Ventilation:** From the [integration meeting](#) on 13th August, the latest version of the cooling layout for the tunnel on the platform shows the inlet duct passing through hole in the shielding wall, rather than along the outside of the tunnel and round the chicane as recently agreed. This is totally unacceptable from radiation considerations and should be changed back. (**Action:** Volker via ST-CV)

- **Racks on Cryo side of UX45:** The RF racks will be finally mounted on a normal floor and could be moved if needed. They have to be installed before the cryo line; we should confirm the exact layout and obtain the racks (from ISR ?) **before** the end of this year (say November)

(**Action:** Volker, Olivier)

- **A first installation planning discussion:** has been held with M. Vitasse. The dossier on installation prepared by Olivier provided useful input.

- **Integration of RF side of UX4:** We will have to rely on Autocad drawings made by Sylvain for this as no support will be available from EST in the near future.

- **Earthing:** J. Pedersen informed us that the earthing in the UX45 tunnel are will be by an earth cable along the tunnel in the general services cable tray. He would like feedback on our

proposed layout in UX45 and as discussed in our previous meeting with him, would be prepared to do short-circuit simulations. (**Action:** Olivier)

- **Crash Barrier next to ACS;** This is not planned in the integration. We should check why this is not possible. (**Action:** Volker via Claude Ruivet)

- **Water connections for ADT:** are being looked at by J-F Malo. Guy Yvon could also give assistance.

5) Other follow-up from last meeting

i) Radiation in UX45:

- Simulation programs have been run; now the results have to be looked at. Andy can already study the Fluka output data.

ii) SC Cavity Cycling:

- Cavity B of module 2 will be retuned again.

iii) VME modules and crates (Ed)

- We still have to provide a brief spec to W. Heinze.

iv) Warm recovery line and routing:

- Further information (on connections, heaters etc.) has been supplied by L. Serio and drawings have been completed by Sylvain and given to the integration team. (They have not yet been included in the integration). Roberto will prepare a proposal outlining the advantages and cost of the scheme (**Action:** Roberto)

v) Vacuum Layout in IP4: A short meeting was held with M. Jimenez on 7th August and the [status of outstanding items](#) reviewed.

vi) EVM and CtoC (Volker)

- The cost cuts and budget changes have now been introduced. We remain a small amount above the CtoC cost.

6) AoB:

Equipping of second bunker in SM18.

The cost of controls equipment will be estimated by Luca

Next Meeting:

Wednesday 27th. August. Exact time and place to be announced

E. Ciapala, 15th August 2003