

## LHC RF Meeting 30<sup>th</sup> April 2003

### **Present:**

Luca Arnaudon, Thomas Bohl, Andy Butterworth, Olivier Brunner, Elena Chapochnikova, Edmond Ciapala, Wolfgang Höfle, Trevor Linnecar, Roberto Losito, Jean-Claude Perrier, Joachim Tückmantel, Volker Rödel.

The meeting was devoted to cabling – Follow up from meeting 9<sup>th</sup> April and other subjects will be brought up at the next meeting.

### **Volker's presentation:**

- “Phase 1” A list of cables (based on CtoC estimates) has been given to ST-EL – specifying cable types and total lengths. ‘Appel d’offres’ are handled by ST-EL. Flexwell cables still to be ordered – handled also by ST-EL ?
- “Phase 2” now in preparation – Detailed compilation of cabling lists.
- Estimation of cable tray requirements needed urgently.
  - ACN is included in this, also damper upgrade.
- Deadlines – Cabling will be done in 2005. Need all input well before then!

### **Jean-Claude's review and discussion:**

- Cables of similar type (coax, HV Controls) will share trays (No need to separate different systems – ACS ADT ACN)
- PUs and LL RF Coax cables: All defined in lists provided to Jean-Claude. Flexwell 3/8 is preferred over CK50 due to its better shielding (Thomas)
- WG coupler cables to UX45 RF side racks – use CK50 (Olivier)
- HV cables SR4 to ACS Bunkers – routing and extension box still to be settled (Olivier)
- Patch panel for cavities – The layout and positioning of this should be fixed as soon as possible, so that it can be included in the integration. (**Action:** Maurice Prax)
- ACS cavity Antenna 1 should go direct to LLRF control crate on cryo platform. It should be supported such that there is no risk of accidental damage to the feed through on the cavity.
- Decisions need to be taken on ACS cavity HOM cables & loads – CK50 is probably adequate: however the cables from the observation multiplexer to the surface are 3/8 Flexwell:- 1NB+1WB per ring. (**Action:** Roberto, Joachim)
- Infrastructure considered in other cable trays – Actual cables must be defined with the respective groups and the respective RF contact man i.e.
  - \* Vacuum: *J-C Billy + Maurice*
  - \* Cryo: *L. Serio + Maurice*
  - \* Controls Infrastructure: Ethernet, Timing: *CO group rep? + Luca*
  - \* Fibres *L. de Jonge + Ed.*
  - \* Access and RP: *J-M Juget + Maurice*
  - \* Machine Protection: *B. Puccio + Luca*
- Fibre Optics: L. de Jonge has confirmed our requests. Included are 2 ducts of 24 fibres each from SR4 to UX45. This is sufficient for timing and fibre data links, planned from Faraday cage to UX45 LLRF. Routing and patching in SR4 and UX45 will need to be specified (**Action:** Philippe + Ed.)
- Jean-Claude is now in a position to put the information collected into “Demande Installation Cables” format **in Excel**. Missing information, such as rack and crate positions, will be added as the detailed layouts become available.

***Next Meeting***

Wednesday 7th May 09:00 in 864 1 C 01

**Agenda**

- EVM experience so far (All)
- Vacuum:
  - Layout (Volker + Equipment responsables)
  - Controls (Luca)
- AoB etc.

E. Ciapala, 30<sup>th</sup> April 2003