LHC RF Meeting
12th March 2003

Present:
Luca Arnaudon, Andy Butterworth, Elena Chapochnikova, Edmond Ciapala, Wolfgang Höfle; Trevor Linnecar, Roberto Losito, Eric Montesinos, Joachim Tückmantel, Volker Rödel.

1) Follow up actions from the last meeting 26th Feb 2003.

i) Budget LHC RF:
Budget request for 2003 has been circulated. Volker distributed paper copies of the Start-to-Completion LHC RF budget estimate.

ii) Earthing for HV equipment in UX45
A special meeting, including ST-EL, was held just after the present meeting. This will be reported separately (**Action:** Olivier & Volker)

iii) EVM and follow up:
Five systems have been uploaded from a common Excel file derived from the Microsoft project plannings: SC cavities & SM18, ACS HV & klystrons, ACS Power Couplers, ADT and ACS Controls Electronics. A meeting was held on 11th March with EVM specialists to explain the facilities offered and the methods of downloading and uploading data. The EVM system requires a WBS of not more than 4 levels and the existing deeper structure will have to be changed before the data will be visible correctly in EVM, allowing us to check it. A possible solution has been worked out with the EVM team. Trevor underlined the urgency to complete the exercise by the planned finish date of 31st March.
For the above systems we need to check that all WUs and data have been entered correctly:
(**Action:** Luca, Olivier, Eric, Roberto, Wolfgang, Ed)
For the remaining work:

- ACN is done in Project form and needs converting to Excel (**Action**: Ed.)
- Software and diagnostics needs completion in Project (**Action:** Andy, then Ed)
- ACS low level needs completion in Project (**Action**: Philippe and Ed)
- Infrastructure and layout contains work units:
  1) Defining RF requirements (ours)
  2) Doing the actual installation (civil engineering, electricity, cooling, installing racks (others)
  3) Installing and testing RF equipment (ours)

The comprehensive list of all the required work compiled by Olivier could be integrated into Volker's existing planning to produce a more detailed planning, based on the above.
(**Action:** Olivier & Volker)
We will report our status at the next official EVM meeting on Monday 17th March
(**Action:** Volker & Ed)

iv) Integration at Point 4
The special meeting is now planned for 20th March.

v) UX45 Layout & Installation
We are still waiting on feedback about the use of ex-LEP racks. (**Action:** Olivier)
The relevant document defining electricity requirements for all systems together with a layout are available via \\cern.ch\dfs\Divisions\SL\DIV_SL\RF\LHC\ACS\Technical\Installation

vi) Radiation in UX45
Andy and Alfredo Ferrari (AB-ATB) are now studying our installation. The longitudinal holes in the LEP dipoles are a worry.

vii) Storage space
The problem of storage space for waveguides, now that SG4 is unavailable, still needs to be followed up (**Action:** Volker)

viii) ADT
A market survey for power supplies is out and a specification meeting will be held soon.

ix) ACN cavities
A further two cavities have been received. A vacuum test will be carried out to ensure that minor scratches on flanges have no adverse effects. Two more cavities will be tested at beginning of May and will arrive at the end of May. The final two cavities will be delivered by the end of June.

2) Other Items:

i) LHC Planning
Roberto pointed out that the latest release of the planning shows that QRL and magnet commissioning in sectors 3-4-5 will be finished several months earlier than previously planned. Our planning could therefore also be brought forward to allow more time for commissioning. This should be brought up at the forthcoming P4 integration meeting and if necessary at the TCC (**Action:** Volker)
(Since the meeting Pierre Bonnal has replied to Roberto on some of the implications for our installation planning)

ii) Power Supply performance with mains disturbances (Trevor)
Following Olivier's presentation at Chamonix, a study should be made to see if the power supply control loop could be modified to reduce the overshoot produced on a 100 ms drop of one 18kv phase. We should try to withstand a 20% drop. This can be tested in SM18 and Hall112. (**Action:** Olivier)

iii) *ECRs:*
The ECR for the staging of the installation of ACN is requested for the next TCC in 2 weeks time. Some comments on performance issues should be included (**Action:** Elena)
Another ECR concerns wrong positioning (by 45cm) of the ACS cavities on the existing drawings. A new drawing LHCLJ4GA0010 is in the CDD and should be checked.
(**Action:** all)

Next Meeting

Wednesday 19h March 09:00 in 864 1 C 01
Agenda
- Follow up from last meeting
- Round table

E. Ciapala, 12th March 2003