

LHC RF Meeting 2nd April 2003

Present:

Luca Arnaudon, Thomas Böhl, Olivier Brunner, Elena Chapochnikova, Edmond Ciapala, Wolfgang Höfle, Trevor Linnecar, Roberto Losito, Joachim Tückmantel, Volker Rödel, Daniel Valuch.

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

i) EVM and follow up:

Everything for the project is now uploaded and can be checked with respect to the Cost-to-Completion. (**Action:** Volker, Ed, Trevor)

A general EVM meeting with Project Management will be held on 11th April at 10:30 in the LHC Amphitheatre. Details on implementation will be explained. All WU holders are asked to participate.

ii) Integration at Point 4

The first meeting was held on 26th March. Positioning of all elements in UX45 cryo side and tunnel is to be fixed in this and coming meetings, which will be held every Wednesday a.m.

Some points to note and/or follow up:

- Shielding wall construction will start July 2004. The drawing is out for approval by 15th April. Because of the way the wall is to be constructed the waveguide holes cannot be changed afterwards. The shift in cavity positions will be taken up by the waveguide system. Updated waveguide drawings and parts list are in preparation (**Action:** Olivier)
- Space has been found for the RF racks on the platform in the cryo side, arranged in groups of four as requested. The cost of this solution compared to the original 'in line' arrangement was raised by CE.
- The routing of the flexible cryo lines has still to be done (**Action:** Volker/Roberto)
- The platform will put out to tender by CE. Final drawings are needed. The load is under 5 tons. This is insignificant for the type of structure to be used. A final drawing should be made and the planning dates should be checked. (**Action:** Olivier & Volker)
- Supports for waveguides in tunnel roof need to be defined (Olivier)
- UPS supply for ACS is not yet in drawings (Volker)
- Positioning of cable trays – We are responsible for defining the routing of cables, but compatibility of certain cables sharing the same trays should be checked with ST-EL. J-C Perrier is responsible for compiling cabling lists but we should also provide routing schematics. (**Action:** ?)
- Waveguides in the tunnel are part of the present study – e.g. wall clearances at the extremities of waveguide system.
- The integration drawing team will not be able to provide 3-D drawing assistance for the RF side of UX45 till January 2004.
- We should check that once all other equipment is in place, space will remain to displace the tunnel roof and move the SC modules in and out, if needed.

iii) Storage space

The total volume needed for waveguide storage is 40 cubic metres

2) Round Table

i) Planning (Trevor)

An RF specific view of the planning is needed, clearly identifying our installation milestones, the constraints from other installation activities and at what time we can start the commissioning of the various parts of the LHC RF systems. This should be prepared in the coming week or two.

ii) ADT (Wolfgang)

The tender opening for drive amplifiers is 15th April.

iii) ACN cavities (Roberto)

Cavity 4 has been vacuum tested; Cavity 3 will be done next. Cavity 1 has been cleaned and is ready for chemical treatment then pump-down and test.

iv) SM18 (Roberto)

Helium should be available today and thermal cycling of the first module will begin.

v) Radiation in UX45. (Andy)

Large concrete shielding blocks in UX 45 near the tunnel openings do not appear on the plans. These will make a difference to radiation studies. We should confirm rapidly that these will remain in-situ before doing the calculations. (**Action:** Andy). Cable ducts and access holes are generally not good from a radiation viewpoint but the fact that these are in transverse directions helps.

vi) News from the TCC (Volker)

The recent ECRs on ACN staging and ACS cavity positioning have received no comment and approval will be closed.

vii) LHC Technical Review (Trevor)

A technical review, to which we will contribute, is planned for October. An updated design report will follow.

viii) EDMS documentation (Trevor)

We are being encouraged to update our documentation in EDMS, as part of an accelerator wide effort. A fair amount of documentation does exist e.g. for ACS and ACN cavities, which could be put in, perhaps without too much effort (Roberto)

Next Meeting

Wednesday 9th April 09:00 in 864 1 C 01

E. Ciapala, 4th April 2003