

# 5<sup>th</sup> R2E Mitigation Project Meeting

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*26<sup>th</sup> May 2011*

Present: M. Brugger (MB), M. Calviani (MC), J. C. Bisquert (JCB), C. Jach (CJ), K. Roed (KR), G. Spiezia (GS), Y. Thurel (YT), A.-L. Perrot (ALP), M. Pojer (MP)

## **Agenda ([link to INDICO](#)):**

- Minutes of the last R2E Project Meeting
  - Patch solution required by the LMC
  - R2E Review in November
  - Round-Table and WP reports
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## **Important follow-ups:**

### **From the minutes ([link](#))**

- Clarification by ALP with C. Bertone concerning the support for the mobile shielding in P8.
- Important to stress that the additional shielding in front of UJ13/17 which will be installed during the 2011/2012 Xmas break will have to be dismantled again during LS1

### **From the Project ([link](#))**

- High priority to test PLCs in H4IRRAD to check their sensitivity to radiation (list of CRYO PLC possibly failing due to SEU getting longer...)
- To be understood the sensitivity of the microFIP to radiation...
- Follow-up of the PCs failures in RR57
- Follow-up of biometry system failure → seems to be more risky to turn the biometry system off and on at each intervention rather than let the system fails due to radiation.
- Follow-up on the Ethernet switches failures, observed in CNGS but not yet in LHC
- Follow-up of the radiation levels in P4 as they are driven by beam-gas interaction
- Follow-up on the startup of the H4IRRAD installation, of great importance to evaluate the sensitivity of the PCs to radiation.
- R2E safety structure is put in question by DSOs/RSOs and HSE: full safety files are requested, but MB not in agreement due to the fact that indeed these are not new installations → modification to the existing safety structure shall be inserted in the ECRs
  - o MB to rediscuss the aspect on safety as the ECRs cannot contain a full review of the safety situation (given the time constraint it means that they will be blocked) but only address what is different with respect to the past
  - o John Pedersen accepts to participate in the next ICL meetings

### From the Integration team

- Discussion about the chicane vs. plug solution for the UJ14/16 → the baseline is to use the chicane solution but MB asks for the plug solution to be anyhow studies to check the implications in terms of safety (SW mentions that the plug will change the safety measures; a full study of the compensatory safety measures will need to be completed)
- MB mentions that the importance of the shielding implementation for P1 is even higher with respect to the P8 mobile shielding (important for the UW)

### R2E Review ([link](#))

- First structure of the R2E review has been shown → the idea is to have it during W44 (end of October/beginning of November). MB asks the various responsible to produce a list of names for the topics and presentations.

### Various roundtable open questions ([link](#)):

- MC concerning MCWG: follow-up of P4 radiation levels ([link](#)), stable version of the radiation report reached and evolution of radiation levels in the past week shown
- MC on H4IRRAD → facility almost ready to start irradiation testing in June and July
- ALP points out that Y. Muttoni received a message from R. Trant concerning his presence at the ICL → John Pedersen should be present instead as the ICLs are technical meetings.
- P5 and P8 relocation and shielding ECR have been put in the approval loop
- P1 ECR cannot be done for the 8<sup>th</sup> June as initially scheduled → there will be probably a delay of 1 week; roughly middle of June and afterwards P7 study could be launched.
- YT will discuss with EN/STI a list of radiation tests to be performed at PSI; GS underlines that the July slot at PSI will be skipped → a new meeting needs to be fixed to address the August tests.
- YT concerning PCs operation in the LHC → no special hints for SEU around the machine.