

Minutes PSB Upgrade WG Meeting 30th April 2015

Participants: T. Birtwistle, J. Coupard, J. Devine, G.P. Di Giovanni, R. Froeschl, G.M. Georgiev, M. Haase, K. Hanke, D. Hay, C. Mitifiot, B. Mikulec, A. Newborough, S. Pittet, G. Rumolo.

Agenda (<https://indico.cern.ch/event/390048/>):

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1. Approval of Minutes

- The minutes of the last LIU-PSB WG meeting #146, available [here](#), were approved.

2. Communications

- No LIU-PT meeting was held this morning.
- **New templates for the LIU-PSB documentation are available:**
 - From now on the working group members should use these templates for the LIU-PSB related documentation.
 - They are currently available using the version of Windows WORD installed through CERN:
 - Some instructions on how to retrieve the templates are available [here](#).
 - An email will be circulated among the working group mailing list, providing instructions.
- **Budget rebaselining:**
 - Received new budget baseline from the EPC group, LIU-PSB 5.
 - Received new budget baseline from the ABT group, LIU-PSB 9.2.
 - Currently missing information from the BI group (LIU-PSB 6) and the LLRF group (LIU-PSB 4.2).
 - The rebaselining of EN-EL and CV groups could be done only once all the requests to their groups have been collected.
- **Rack allocation in BRF2/BAT:**
 - A meeting was chaired by D. Hay this week in order to discuss the possible layouts
 - D. Hay will present **the final layout to be approved at the next LIU-PSB WG meeting**, which is tentatively scheduled for the **7th May 2015**.
 - **All the WP-holders are warmly invited to attend the meeting. In particular the presence of representatives from the RF, EPC, CV and EN/EL groups is fundamental.**

3. Follow-up of Open Actions

- D. Aguglia on "Approve document with the functional specifications of the rack space for both the LIU-PSB and the Half-Sector test in Linac4." → D. Aguglia sent the final version of the document → **Action closed**
- All the WP-holders are reminded to verify that their group requests for EN-MME have been propagated to B. Riffaud.
- All the WP-holders are reminded to verify that their group requests for EN-EL have been propagated to G.M. Georgiev.
- All the WP-holders are reminded to verify that their group requests for CV have been propagated to S. Moccia.
- All the WP-holders are reminded to verify that their group requests for work activities during the technical stops have been propagated to D. Hay.
- A. Findlay on "Make sure that the ECR to clean-up the PSB from the unused pick-ups for is submitted". → The deadline is expired (27-04-2015), but A. Findlay was not present at the meeting to report about it. T. Birtwistle did not receive any ECR, so it is likely the action needs to be finalized. G.P. Di Giovanni will contact A. Findlay.
- R. Froeschl on "Evaluate the required cool-down time for remachining of the ring BCTs-BR.TMD in 8L1". → R. Froeschl investigated and the area does not seem particularly hot from a radiation point of view. A standard cool-down time would be probably sufficient, but as R. Froeschl is not aware of the planning details of the work to be done on the BCTs, another iteration with J. Tan would be needed before closing the action.

4. Progress on LIU-PSB Upgrade Work Activities

- D. Hay reported that he did not receive any more request since last week, so the planning is currently unchanged.

5. Collect Needs for Cooling And Ventilation

- S. Moccia did not attend at the meeting to report about the status.
- K. Hanke reminded that the requests for CV should have been finalized by the end of April.
- K. Hanke added that during next LIU-PSB WG meeting there will be a discussion about rack space for BR2/BAT and finally the needs for CV should be clear. Afterwards the planning and budget for CV should be reviewed in view of the new input received.

6. Requests to EN/EL for the LIU-PSB

- G.M. Georgiev and J. Devine presented respectively the current status of cabling and power requests for the LIU-PSB, see [here](#).
- G.M. Georgiev reported that **J. Devine is the contact person for the LV power requests as given by the EN-EL section leader:**
 - K. Hanke raised the issue about the status EN-EL representatives within the LIU-PSB group to change very often and generate confusion.
 - G.M. Georgiev clarified that:
 - He is indeed responsible for the cabling requests for the whole LIU project, including LIU-PSB.
 - J. Devine is responsible to collect the LV power requests for the LIU-PSB.

- C. Bovet is responsible to collect the HV power requests for the LIU-PSB. * The reason why C. Bovet was appointed as WP-holder is because originally the workpackage (WP) was mostly concerned about the infrastructure of B245. Therefore the HV section took the responsibility of the entire WP. Since this is not the case anymore, the WP-holder lists should be updated to reflect the changes.
- **G.M. Georgiev presented a tables with all the current cabling requests:**
 - The group did not receive any additional cables request since the last couple of weeks.
 - There is the plan to add an extra column about the racks requests. The different members need to provide racks installation request (DIR) and cable length limitation, if any. The rack name will be given by EN/EL:
 - So far only members of the ABT group contacted G.M. Georgiev to discuss the rack location and naming details.
 - B. Mikulec asked if, once the rack layout is defined, the EN-EL group could deduce the power needed. G.M. Georgiev explained that **the power needed for each rack has to be provided by the user as remark in the template the user needs to provide.**
 - Concerning the **DEC, there are two options: DEC for unused cables (follow up on dedicated meeting) and DEC for replacement (when the system will be upgrade). The table shown in Georgi's presentation observes DEC for replacement. The users need to clarify when (YETS, EYETS, L2) the cables can be removed.**
 - Several names of the WP holders are outdated. → G.P. Di Giovanni will send the updated list to G.M. Georgiev.
 - Several requests are still missing:
 - G.M. Georgiev will update the tables correcting the contact person and adding the new columns about the rack.
 - An email to all the WP-holders will be circulated again, asking to fill the missing information and/or make sure their requests is propagated to G.M. Georgiev.
 - S. Pittet commented about the cabling for the interlock of BI.BVT saying that there is not yet a decision taken about what to do. B. Mikulec added that indeed she contacted B.Puccio and C. Martin to sort out the issue. An ideal scenario would be to have the old magnet interlock systems replaced by the WIC for all lines: LT, LTB, LBE, LBS, BI, BR, BT, BTM and BTP.
 - B. Mikulec asked about the status of the requests for the HST:
 - G.M. Georgiev replied that all the cabling requests submitted for the HST have been processed.
 - G.M. Georgiev will send back to the HST users the list of the cables with their numbers.
 - The only missing item is the DC cables which should arrive in two weeks.
 - A new cabling campaign will be organized with J. Coupard, so if any new request for the HST has to be added, now it would be the right time.
 - B. Mikulec proposed to get the list from G.M. Georgiev, verify that indeed all the requests are there and in case inform the WU-holders and G.M. Georgiev of any missing request.
 - K. Hanke asked about the possible scenario to remove all the cables of the PSB in case the DEC requests received will not be enough to allow the cabling of the new equipment:

- G.M. Georgiev mentioned that they are now receiving more and more information, so before such a decision is taken it would be better to collect all the information available.
 - K. Hanke reminded that a radical solution like this one could be implemented only during LS2.
- **J. Devine presented the current requests for LV power:**
 - **Power requirements for Installation of new control racks for Linac4 connection is to be defined.**
 - Request for B245 and the new MPS. Power requirements have been estimated for machine loads and general services within the building. Detailed design is ongoing.
 - Upgrade of LV general services distribution:
 - Currently the refurbishment of 3 switchboards is planned: ERD16*25A, ERD17*25A, ERD18*25A, with additional supplies for the RF Racks 15C to 17A, 58C to 59C and 250 to 257.
 - This plan has to be revised to include all power requirements for the PSB.
 - Installation of new racks for 2 GeV upgrade:
 - Power requirements for significant number of additional racks (TE-EPC) is currently undefined.
 - Once the requirements are defined, this item can be incorporated into the upgrade of the LV general services.
 - S. Pittet commented that he sent out the power requirements, but probably it got lost during the transfer of responsibilities within the EN-EL group. He will send them again to J. Devine.
 - K. Hanke commented that the main users for EN/EL are RF, CV and EPC:
 - J. Devine confirmed that the information from RF were already received.
 - K. Hanke reminded J. Devine to make sure he attends the meeting next week where the rack allocation for the BRF2/BAT will be discussed for approval:
 - S. Pittet commented that despite the rack allocation of the BRF2/BAT will be soon finalized, there are still pending work-units (WU) for which the rack allocation has to be defined.
 - B. Mikulec asked if there is a plan to perform some of the work during the upcoming YETS:
 - **J. Devine replied that there is not yet a clear planning.**
 - The planning is to be discussed with D. Hay who, in turns, commented that with all the planned changes the schedule seems to be tight.
 - **K. Hanke re-iterated the statement that all the work that can be advanced during YETS/EYETS should be advanced in order to reduce the amount of work to be done during LS2.**

7. AOB

- The next meeting is tentatively scheduled for the 7th May 2015 where the BRF2/BAT rack space allocation will be reviewed.
- The 21st May 2015 there will be a follow-up of the review about the end-2016 deadline for the items needed for the Linac4 connection, see [here](#).
- T. Birtwistle mentioned that there is a new ECR submitted by F. Roncarolo for the SEM grids to be installed in section 4L1:

- B. Mikulec commented that there is still a radiation hot-spot in this section and the electronics to be installed is very sensitive to radiation damage. This issue should be carefully considered before approving the ECR.
 - J. Coupard confirmed that the ECR will be approved only after having resolved this issue.
- J. Coupard mentioned that there will be a Linac4 new coordination meeting at the end June. Additionally a fellow will start working on the Linac4 integration:
 - The work is progressing well but there are still issues with the delay of the delivery of the couplers. This should affect the beam commissioning at 50 MeV and maybe at 100 MeV. For the time being, this does not have an impact on the HST.