



## Minutes, CLEAR Politburo

24th January 2022

**Members:** E. Adli, R. Corsini (President), S. Curt, S. Doebert, D. Gamba, W. Farabolini, L.A. Dyks (Secretary), A. Malyzhenkov, G. Mcmonagle, K. N. Sjobaek, P. Korysko,

**Absent:** E. Adli, S. Curt

### Agenda

1. Status of the Winter Shutdown
2. Any Other Business.

## 1 Machine status and planning

The meeting began with Pierre running through the updated list of shutdown actions sent to the group by Wilfrid. The full details of each action can be found on the Indico page.

- Wilfrid has confirmed with Anthony that the new quadrupole will be ready for the first week of February. There are some tasks that need to be completed. The first is the cabling, which Alan should be able to do. However, there will need to be an agreement on an amount of support that will be used by CLEAR from Nuria's section. Roberto will talk to her about this. It is also necessary to adapt the plate to support the magnet and connect it to the breadboard. Wilfrid will manufacture this in the workshop. Loic will be able to connect the power supply when needed/
- It will important to maintain access to the workshop in future. Gerry has confirmed that when the workshop is moved access should be maintained, although this needs to be checked. Office space may also need to be found in future.
- The CLIC structure has been removed. A replacement beampipe has been connected in the space. BTV620 has been moved closer to the CLIC BPMs, where the structure was, to ensure we are well aligned in the narrow aperture. The pumping group was started on Friday, although the vacuum is not very good. Therefore, a leak check will need to be performed. All of the cables have been tagged to allow quicker re-installation.
- The in-vacuum Cherenkov BPM setup cannot be installed until early March.

- Russian soft x-ray will not come to CERN this year, although we could install at short notice.
- The new camera software has not been finalised and is still undergoing testing. We have to decide when we will use the new software for the cameras, as the GUI is not ready yet. The new digital cameras will need new cables to be pulled. Additional new cables should be pulled for future cameras. The whole system needs reviewing, with the location of cameras decided and the cables done. A meeting will have to be held in the future as the analogue cameras have no spares and are no longer being built, so will need to be replaced by digital ones when they break.
- The fibres for the BLM experiment will be attached directly to the beam pipe to take beam loss measurements. If the experiment is successful, it may be possible to turn this into a permanent setup.
- The meeting about the uniform beam scattering experiment has not been held yet.
- There have been no updates on the photocathode renewal.
- The laser staff are working on improving the current setup. It will be ready and working well by the start of operation.
- There have been several new drawings produced for the robot. Furthermore, additional communications material will be produced to show to other sections and external people. A new rotating filter arm has been installed. The arm will need to be connected with cables to the control system and the code must be updated.
- A glass printing plate and several different material rolls were bought for the 3D printer. The parts should arrive by early February.
- The parts needed to replicate the robot still need to be bought, the cost will be \$552.
- Wilfrid has not yet met with Jose about vacuum consolidation, however, this will be done in the coming weeks. It is known that some cables will have to be pulled.
- The new screens for the control room have been fully installed, although the USB control switch has not yet arrived. A deep cleaning will be held this morning. The new chairs have not been received yet as there are several supply delays at present.

## 2 Any Other Business

- There will be visit to CTF3 from B. Goddard et al, on Wednesday the 9th February.
- When the leak detection is done a check should be done on the integrity of the kapton window.
- It was noted that the drawings of the beamline were done in preparation for the Cherenkov experiment. However, they are now out of date due to beamline changes. It will be useful to keep an updated drawing in future, therefore, a yearly update should be done.

- There will be a meeting scheduled next Monday, following the Politburo, to discuss our operation with CHUV, with a view to meeting with them.
- Thyatron replacement will be done with solid state parts in future, these will be ordered soon.

## Actions

- **Wilfrid:** Provide an update on the installation of the temporary quadrupole.
- **Wilfrid, Pierre + Alexander:** Perform a leak check of the new beampipe section.
- **Wilfrid:** Check the integrity of the kapton window.
- **Roberto:** Hold a meeting with Nuria to discuss staffing issues. and problems with the move of the workshop.
- **Pierre:** Investigate the damage to the 3D printer and find a solution.
- **Pierre:** Install the optical fibres for the BLM experiment.
- **All:** Complete the calibration of the inductive BPMs.
- **Wilfrid + Pierre:** Prepare for the refurbishment of the photocathode with Eric Chevally.
- **Pierre:** Continue work on the improvements to the robot.
- **Wilfrid + Kyrre:** Investigate controls and cabling issue with the plasma lens turbo pump.  
**All:** Provide updates to potential experiments and circulate any new requests.
- **Steffen:** Decide the best strategy for spares for the gun solenoid.

## Long-Term Actions

- **Wilfrid:** Work with the vacuum group to consolidate the vacuum systems.
- **Davide, Kyrre + Wilfrid:** Decide the way forward to deal with the phasing out of the Oasis cards currently used on CLEAR.
- **All:** Investigate ways of logging beamtime data.
- **All:** Investigate ways of collecting operational statistics in a more systematic way.
- **Wilfrid:** Follow up with the drawing department and gain an idea of the costs of necessary improvements to the beamline diagrams.
- **Roberto:** investigate the collaboration request from INFN.
- **Roberto:** Meet with Edu to discuss future work needed for the laser and to discuss the feasibility of higher than 10 Hz operation.

It was decided that there should be a politburo meeting every Monday, at 9 am until the beginning of operation. An Indico page will be set up to store the minutes and other Politburo documents.

**Next Meeting: Monday 31st January 2022**