Minutes of the 174th EATM Meeting held on 3rd September 2024

Minutes and slides available at https://indico.cern.ch/event/1448029/

Present: D. Banerjee (BE-EA, chair), C. Ahdida (HSE-RP), J. Devine (EP-DI), M. V. Dijk (BE-EA), R. Folch (BE-EA), Y. Gaillard (SY-EPC), L. Gatignon (EP-UFT), X. Genillon (SY-EPC), S. Girod (BE-EA), M. Jaekel (EP-DT), V. Kyrgiannaki (BE-GM), D. Lazic (EP-UCM), M. Lazzaroni (BE-EA), B. Maksiak (EP-SME), F. O. Marceau (BE-EA), M. Mentink (EP-ADO), L. Nevay (BE-EA), A. Onnela (EP-DT), P. Podlaski (EP-SME), B. Rae (BE-EA), F. Ravotti (EP-DT), S. Schuh-Erhard (BE-EA), P. Schwarz (TE-MSC), B. S. Sulpice (EN-EL), I. A. Vaquero (EN-ACE), B. M. Veit (EP-UFT).

Action items (D. Banerjee) - Slides

The revised procedure for gallery access will be addressed at the next EATM. The vacuum implementation in F61 will also be presented at the next EATM. The ATEX ventilation works have been tested with some minor revision works pending.

Key information from Different Meetings

SBA Highlights (D. Banerjee) – Slides

For the replacement of the false floors in EHN1, one action is pending for the replacement of the lights and it is planned for the end of September.

A visual inspection of H8 XTDV on the 28th of August was carried out. M. van Dijk confirmed the final checks will be done tomorrow (4th September) with the access matrix change planned afterwards.

A visit has taken place to plan the retention roof for the protection of NA61 electronics against water leaks and the installation will now be scheduled.

For AMBER, a platform was required behind SM2 and this was completed on the 28th of August with only stairs and a safety railing to be installed on Wednesday, 4th of September.

For the AD, a DSO test was performed on the 28th of August successfully for TELMAX.

ECRs (G. Romagnoli) - Slides

The status of the ECRs for information and future approval was summarised and the full list can be found in the slides. Of note, there are new guidelines for the preparation of documents that can be found here: https://edms.cern.ch/document/2907365

Two documents are presented for approval.

- 1) Installation of Multi-Wire Proportional Chamber (MWPC) in IRRAD Zone 1.
 - **F. Ravotti** confirmed it will be installed on Wednesday 4th of September. **D. Banerjee** asked if it will be integrated in CESAR correctly to which **F. Ravotti** responded that yes, this is being actively followed. **Approved**.
- 2) Asset Replacement Request Elevator Building 911. Planned for YETS 24/25. Approved.
- 3) Asset Replacement Request TT84 Ventilation.
 - **D. Banerjee** asked to postpone until the next EATM. **Postponed.**
- 4) Protection Against Accidental Contacts for Normal Conducting Magnets in the NA. Postponed.

Planning and Important Dates (B. Rae)

The planning of the YETS 24/25 will be done in September and will be presented to the IEFC at the end of September.

ASM Tool Introduction and Status (S. Schuh-Erhard) - Slides

ASM is a tool used for planning in the accelerator complex, such as for machine development (MD) time in various machines. This has been extended to cover the coordination of the experimental areas. An overview of the required workflow involved in previous years was presented, highlighting the various channels of

contact between the users, the physics coordinator, the beam line physicists, and the technical coordination teams. The new workflow since 2024 is focussed on coordinating these exchanges in one place through ASM that also, in effect, maintains a record.

Since the collaboration between BE-CSS and BE-EA started, ASM now has many features including a full schedule, infrastructure links to tables, power, instrumentation, as well as task management for EA. Recently, the protons-on-target requested for each target from the beamline physicists has been added. In future, it is also planned to add links to EP-Safety forms. Feedback is greatly appreciated. It is foreseen that in future, it will be possible to link ASM to the Layout Database and potentially CESAR control software.

The ASM website was demonstrated including how users can comment on a beam slot and contact the technical team and physicist related to that slot. The tool is not reachable from outside CERN, however, with a remote connection to the CERN network it is accessible.

- **R. Folch** asked about the status of each beam time slot and how this is handled. Currently, it is manually validated by **S. Schuh-Erhard**, but in future it is hoped to link with the scheduling tool of the PS SPS Physics Coordinator to synchronise information between the two systems.
- **D. Lazic** commented that HGCAL for example will require several services. **S. Schuh-Erhard** commented that the installation schematics are available also and that these are preserved making it easier for users to suggest an installation similar to a past one.
- **D. Banerjee** asked if the work notification for each week is automatically generated. Not currently, but it will be by the end of September.
- **M.** Jaekel thanked **S.** Schuh-Erhard and **B.** Rae for the nice development of the tool with BE-CSS. He highlighted how each system (ASM and the coordination tool) started from different data models but are now both in a stable state and an automatic exchange between them is highly supported.
- **J. Devine** noted that from the point of EP-Safety, the link with ASM is strongly supported and they highly encourage users to make use of it. Over the next year, the EP-Safety Drupal website will be migrated. Some special ISEIC forms will remain separate until fully integrated.
- J. Devine asked whether the TELMAX (the new AD test beam zone) will be included. To be discussed offline.

Integration and Configuration Management Status (G. Romagnoli) - Slides

An overview of ECR and ARR (Asset Replacement Request) documents relevant for the YETS 24/25 was shown. Many are still in progress and must be completed shortly. This summary was presented for each major area including the East Area, the AD, HiRadMat / TT61, and the North AreaSimilarly, an extensive overview was presented for integration studies for each of the listed areas as can be found in the slides. In each case, the relevant author and status as well as the required inputs were listed in a table.

Going forward, the ECRs will be followed at the EATM, IEFC and coordination meetings as required. For integration, studies will go through ICEA, ICL and then the EATM.

The currently planned activities have sufficient people power to do them, but any new significant tasks should be first discussed with **M. Lazzaroni**.

The deadline for first circulation for ECRs relevant for YETS 24/25 is the end of September 2024.

The deadline for first circulation for ECRs relevant for LS3 is 17th November 2025.

M. Lazzaroni commented that even if the ECRs are not finished, the activities really must be immediately entered in IMPACT. Please review the list of ECRs in the slides and contact **B.** Rae and **M.** Lazzaroni to inform about any new activities.

The EATM will add an action for the authors and stakeholders to check the relevant ECRs and maintain the deadlines for the YETS 24/25 activities. This will be followed up regularly.

Report on the M2 MBPL Cooling Issue (P. Schwarz) - Slides

MBHE.X061108 in M2 was found on the 6th of August to be overheating with coil temperature alarms occurring frequently. During an inspection with a thermal camera, the magnet was overall found to be at too high a temperature. A broken strainer was found, which was replaced. The circuit was backflushed and operation resumed.

On the 11th of August, the temperature alarm was again triggered. A thermal camera inspection was again performed but no clear difference was found. The manifold was reassembled and a restart requested. However, the magnet again tripped after 30 minutes operation. Further investigation showed that the water inlet temperature was 31°C instead of the prescribed 27°C.

- **D. Banerjee** asked if the filters are systematically checked during each YETS. No, only during a long shutdown as this requires significant resources.
- **S. Schuh-Erhard** asked if the water quality is good or monitored. Yes, it's demineralised and the conductivity is regularly monitored.
- **R. Folch** commented that the analysis of the material found in the filters currently being done and should be presented in future.
- **J. Devine** noted that the MBPLs have an electrical non-conformities where the cable is accessible. Yes, several different magnets have different non-conformities, and these are being systematically assessed and tackled. This is happening across the whole of the CERN complex and most will be fixed during LS3 with priority given to the most serious cases.

F61 Vacuum Modification for CHIMERA/HEARTS – Postponed to 24th of September.

News From Experiments

AMBER: B. Moritz Veit – AMBER will shortly start with the high intensity and preparations are underway for the dismantling of the liquid hydrogen target. **B. Moritz Veit** asked what the status of the CEDARs is to which **D. Banerjee** responded there will be a presentation at the next EATM.

NA62: no report

NA64: no report

NA61: P. Podlaski – since the liquid hydrogen target will not be ready in time for the upcoming beam time, extra regular time will be used. Use of the delay wire chambers will therefore be requested.

CLOUD: A. Onnela – preparations are underway for the next CLOUD run that will commence on the 23rd of September. As of Monday, 9th of September, instruments will start arriving to be installed and there will be several crane operations near T11. New electrical sockets will be installed in T11 by EN-EL but this should have no effect on other nearby users and zones. **D. Banerjee** commented to please keep **A. Ebn Rahmoun** informed as the TSO for the East Area.

GIF++: P. Martinengo (offline report) – that there was a water leak in PPE172. **M. Lazzaroni** reported that the leak was fixed and it was a small leak.

IRRAD/CHARM: F. Ravotti – beam time progressing well. From the 18th of September there will be a week of beam time for RP tests.

HiRadMat: no report.