

# Facilities Operation Meeting – Minutes

16/07/2024 FOM 2024 #24 (reports for Week 28), via Zoom

**Chair: Piotr K. Skowronski**

Scientific secretary: Marlene Turner

**List of participants (37):** Albert M., Albright S., Arrutia P., Asvesta F., Bellodi G., Chapuis D., Damerau H., Deleval S., Dutheil Y., Findlay A., Di Giovanni G. P., Goillot A. M., Haase M., Heylen H., Holzer B., Korysko P., Kuchler D., Lallement J.-B., Ledru R., Mataguez S., Mikulec B., Milazzo P. M., Nevay L., Nisbet D., Papotti G., Pittet S., Ponce L., Rae B., Roncarolo F., Scrivens R., Skowronski P. K., Steerenberg R., Stopa W., Turner M., Valentin P., Vincke H., Zannini C.

**Indico:** ([link](#))

## Agenda

1. Minutes approval and actions follow up (*P. K. Skowronski*)
2. Summary of the reports from Accelerators & Facilities (*P. K. Skowronski*)
3. MD requests and dedicated MDs (*F. Asvesta*)
4. Short-term injector schedule outlook (*P. K. Skowronski*)
5. AOB (*P. K. Skowronski*)

### 1. Minutes Approval and Actions Follow Up (*P. K. Skowronski*)

Slides ([link](#)).

The minutes of the last meeting were approved without further comments.

There were no open actions.

### 2. Summary of the Reports from Accelerators & Facilities (*P. K. Skowronski*)

Slides ([link](#)).

#### TI

*Arret urgence 15.07.2024*

*Ledru R.:* I would like to comment on the incident yesterday where we had an emergency stop button ('arret urgence') being pressed in building 358. The button was pressed by mistake, cutting the 18kV on the Meyrin site, mainly around that building.

*Skowronski P. K.:* Do we already know why?

*Ledru R.:* I have to ask SY about the dismantling of the generator. We should know more tomorrow. From our side, this issue was resolved fairly quickly (~30 minutes), but the restart of the machines took much longer. There were problems with the flow switch in buildings 251 and 557, if I remember correctly.

*Skowronski P. K.:* Many problems indeed, and we are still not fully recovered on the booster. The beams still have higher losses than normal. How can we prevent such an incident in the future? We need to find the reason and raise awareness. We are waiting for more news in the coming days.

*Ledru R.:* Yes, we will discuss the details of the problem on TIOC, as well as the restart, tomorrow.

## **ISOLDE**

*Heylen H.:* [Physics report](#) provided per email.

On HRS, the first HIE-ISOLDE run of the year took place. Post-accelerated  $^{108}\text{Sn}$  beams were sent to ISS to study evolution of single-particle states towards  $^{100}\text{Sn}$  via (d,p) transfer reactions. The experiment ran smoothly when  $^{108}\text{Sn}$  was available. Unfortunately,  $^{108}\text{Sn}$  wasn't produced for part of the weekend and Monday and therefore they couldn't collect the required statistics and they would need to come back next year to finish the run, as well as study  $^{106}\text{Sn}$ .

*Skowronski P. K.:* What caused the problem in the  $^{108}\text{Sn}$  production and is it understood now? Because energy still needs to be measured.

*Heylen H.:* I think the energy measurement is independent of the problems with the disappearance of the  $^{108}\text{Sn}$ , but at the moment it is not really understood.

## **PS**

[East TOF beam](#)

*Holzer B.:* Could you please clarify what is meant by "accommodate longer bunch length for big EAST parasitic TOF beam"?

*Dutheil Y.:* There is a prospect of having a big TOF beam at  $800 \times 10^{10}$  on the same cycle as an EAST slow extracted one. Currently, only a small TOF beam can be accelerated together with the EAST, and we are working to also accommodate the big one. We are looking at doing this for 44ns bunch lengths. I started looking at the optics of the FTN line last week, but I did not achieve as good a transmission as with the current 28ns one.

## **nTOF**

*Milazzo P. M.:* The line 'many interventions are in program during the Technical stop' is old and should be removed from the slide.

*Skowronski P. K.:* Indeed, thank you.

## **AD**

[Damaged horn](#)

*Ponce L.:* We had a horn inspection yesterday afternoon, and unfortunately, the diagnosis is the same as we had last year. We had a flashover into the horn and some bolts got destroyed. Now we have to decide how to proceed in the near future. Last year, this occurred at the end of the run; now, it is at the beginning.

The situation is mainly in the hands of SY-STI for now. We still have the option to change the horn, but first, we need to understand the origin of the problem to ensure that changing the horn will solve it.

*Skowronski P. K.:* How much time does it take to change and recondition the horn?

*Ponce L.:* It's not necessarily the reconditioning; it's mainly the cooldown to extract the horn. The estimate is three days. However, we don't have many spares—only four, to my knowledge, and of the same type as the one that was already exchanged during the YETS. We cannot afford to change it every month.

*Skowronski P. K.:* So, the rate is every six months?

*Ponce L.:* Yes, but there was an inspection during the technical stop one month ago, and there was no sign of degradation. We have a horn pulsing on the test bench with no issues. So, in one month, something happened, and we need to understand what.

*Skowronski P. K.:* You said it's a flashover, so it's a single event that eventually destroys the device?

*Ponce L.:* It looks like we have a flashover per bolt. We have 16 bolts, and there is a 5% loss of antiproton yield per bolt.

## **NA**

*Rae B.:* Concerning the H4 Cerenkov problems, they have been tested now and work perfectly, I forgot to update that. And I wanted to ensure that the high intensity tests on the 19<sup>th</sup> are still ok for SPS? For Friday, we plan a test on T6 where we need 250 units and I just wanted to make sure that this is still ok for you.

*Arrutia P.:* Yes.

*Vincke H.:* On the slide it says AMBER continues until Friday 10<sup>th</sup> of July, which is not a Friday.

*Rae B.:* I think this is a typo and it should be 19<sup>th</sup> of July.

*Holzer B.:* I thought AMBER is going out on Wednesday.

*Rae B.:* That is true, AMBER leaves on Wednesday.

*Holzer B.:* Ok, then the RP tests are on Friday when there is already the installation of other users, ok.

## **LHC**

*Skowronski P. K.:* Is the low tail beam we produced indeed better? Do you see improvement of losses?

*Nisbet D.:* There is no specific observation yet, we didn't note a particular change on the LHC side. If there is a change its probably marginal and needs closer analysis. We will follow up today to see how its looking.

### **3. MD Requests and Dedicated MDs ([F. Asvesta](#)/[B. Salvant](#))**

Slides ([link](#)). Note: this agenda item was moved after the minutes approval and follow up.

*Rae B.:* Concerning the octupole-assisted extraction to TT20 MD, yesterday I understood that the beam will be stopped at the TED until 2 pm, in which case there could be an access. After 2 pm, the beam goes to P42.

*Asvesta F.:* Yes, this is what was announced. To my knowledge, this has been confirmed in the North Area MD mailing list.

*Rae B.:* Yes, just to comment that extraction to TT20 and extraction to TED changes a lot for us in terms of access. If we could specify that in the MD reports, it would be appreciated.

*Asvesta F.:* Yes, I will change it.

*Rae B.:* Thank you, and also thank you for arranging the MDs during the week of July 30th when there is the magnet exchange, to minimize the impact on physics.

#### **4. Short-term Injectors Schedule Outlook** (*P. K. Skowronski*)

Slides ([link](#)).

*Holzer B.*: So, this week there is no access from 2pm onwards. What is the access situation next week, where the MD sounds similar?

*Rae B.*: I have to check, probably the same, but needs to be discussed.

*Nevay L.*: To be confirmed, but I think it would be similar. We do a different MD in TT20 and P42, ideally, we would use the extracted beam in the afternoon also.

#### **5. AOB** (*P. K. Skowronski*)

There was no other business.

*Minutes by M. Turner*