

# Facilities Operation Meeting – Minutes

11/07/2023 FOM #39 (reports for Week 44), via Zoom

**Chair:** A. Rodriguez

**List of participants (46):** Akroh A., Albright S., Sanchez Alvarez J. L., Antoine A., Asvesta F., Barbet V., Bellodi G., Borglund A., Bozzolan M., Li K. S. B., Chapuis D., Comblin J. F., Cotte D. G., Demarest P., Damerau H., Di Giovanni G. P., Findlay A., Gourber-Pace M., Haase M., Hans O., Jorgensen L. V., Kuchler D., Lasheen A., Mahner E., Malyzhenkov A., Mataguez S., Maclean E. H., Mikulec B., Papotti G., Petrika G., Piselli E., Pittet S., Ponce L., Pozzi F., Pruneaux C. D., Rae B., Ramberger S., Rodriguez J. A., Salvant B., Scrivens R., Skowronski P. K., Turner, M., Wegner R., Zamantzas C.

**Indico:** <https://indico.cern.ch/event/1330120/>

## Agenda

1. Approval minutes of previous meeting & action follow-up (*A. Rodriguez*)
2. Summary of the reports from Accelerators & Facilities (*A. Rodriguez*)
3. Requests to run during the LS3 (*A. Rodriguez*)
4. MD Requests and Injectors Schedule Outlook (*B. Salvant & F. Asvesta*)
5. Short-term injectors schedule outlook (*A. Rodriguez*)
6. AOB

## 1. Minutes approval and actions follow-up (*A. Rodriguez*)

The Minutes from the previous week were accepted without further comment ([hyperlink](#)).

**Open Actions:** There were no open actions.

## 2. Summary of the reports from Accelerators & Facilities (*A. Rodriguez*)

The summary of the Weekly Machine Reports from the machines that are still operating TI, LINAC4, PSB, ISOLDE, PS, AD/ELENA, SPS, AWAKE, LINAC3, LEIR and CLEAR is in the slides ([hyperlink](#)).

### Summaries of the physics campaign:

- **ISOLDE** (*H. Heylen*):  
Last week was a successful week for physics with the first Winter Physics run at ISOLDE this year.  $^7\text{Be}$  is produced from a pre-irradiated target which is carefully heated during the run. The  $^7\text{Be}$  was post-accelerated and sent to the ISS setup to study high-lying rotational bands in  $^8\text{Be}$ . A good amount of statistics could be collected and the users were very happy.

### Questions and comments:

#### LINAC3

*Bellodi G.*: The MD's are planned to carry on until the end of this week. The transfer line (more on the LEIR side) is setting up and they will take beam from tomorrow until Friday.

*Rodriguez A.:* Ok, and when will you finish the Oxygen run?

*Bellodi G.:* I would have to ask LEIR. The LINAC3 side will stop Monday morning.

## **PS**

*Maclean E. H.:* These were a few brief issues tied to the end of the SPS/LHC runs. When the transfer line magnets were turned off, the automatic trims of the CHIMERA cycle stopped changing. We needed a new procedure for that.

Additionally, the supercycle POPS went to standby when only the ion cycle went to T8, because there was nothing beyond a certain threshold. That was solved by playing some other cycle.

Thank you for the MD time last week.

## **CLEAR**

*Rodriguez A.:* Can you increase the bunch length?

*Malyzhenkov A.:* A length of 12 ps is pretty much the limit. We do not have a bunch compressor chicane at CLEAR. If we use one laser arm, the separation between two bunches will be 666 ps. If we use two laser arms, it is 333 ps. To conclude, we cannot have very long bunches, but we can have two bunches (one after another) to test these parameters.

## **3. Request to run during the LS3** (*A. Rodriguez*)

The IEFM requests the FOM to collect all the requests to run during the LS3:

- For that, a template will be distributed which people will be asked to fill with information including information e.g., on the requested run periods, the operational conditions and the services needed.
- FOM will combine all of them and give them to the IEFM and the LS3 committee for analysis.
- A template will be sent to the FOM email list.
- We will discuss requests that have already been submitted during the next FOM (which is also the last FOM of this year). The rest of the facilities will be discussed per email.

### **Questions and comments:**

*Mikulec B.:* Thank you for the announcement. This concerns also smaller test facilities, and it will be important to get an overall picture.

*Wegner R. (chat):* Is the start and end date of LS3 already fixed. If yes, what are the dates?

*Mikulec B. (response clarified per email):* In principle yes, the start date has been defined as 17th November 2025, but the precise dates for all the injectors are still being worked on. The latest long-term schedule including LS3 can be found here: [https://edms.cern.ch/ui/file/2311633/2.1/ATS-PM-MS-0004\\_2\\_1.pdf](https://edms.cern.ch/ui/file/2311633/2.1/ATS-PM-MS-0004_2_1.pdf)

## **4. MD Requests and Dedicated MDs** (*F. Asvesta & B. Salvant*)

A summary of the PSB dedicated MDs was presented ([hyperlink](#)).

### **Questions and comments:**

*Rodriguez A.:* Any thoughts on the semi-dedicated LS4-PSB MD's for next year suggested on slide 12?

*Di Giovanni G. P.:*

- These MDs have been very successful, but they also left us with a lot of open questions. We need time to study these configurations, especially if this is the future for the complex.
- We would like to have a few blocks throughout the year to compare the stability of the configurations and for some more in-depth checks and studies.
- We mitigated (as much as possible) the impact on the downstream machines. Most optimistically, we change configurations within 1 hr. I think that we need to at least try next year to see how good we are in this kind of configuration and maybe revise and reassess.

*Rodriguez A.:* What are the pieces of equipment that are especially stressed when working in this mode (RF systems in LINAC4, the source itself)? Could pushing these result in downtime that would not happen otherwise?

*Di Giovanni G. P.:*

- This is something that we need evaluate together with the experts and ensure that everybody feels reasonably comfortable. If there are bottlenecks, they need to be sorted out. Maybe we can find an operational configuration plus another one that would be limited in time.
- There was no trip during in the last few days of operation with this configuration. However, there is always a risk we can never ensure that there won't be any fault.
- It was a lot of effort to have an excellent transmission to the RFQ (reaching 79-80%).

## **5. Short-term Injectors Schedule Outlook (*A. Rodriguez*)**

Version 1.5 of the schedule ([hyperlink](#)).

## **6. AOB**

There was no other business.

*Minutes by M. Turner*