

Minutes of the aMUSE Management Board Meeting 8 September 2023 - 2:30 pm CEST

Attendees: A. Ferrari (HZDR), G. Gautier (SGB), F. Giordano (CAEN), S. Giovannella (*chair*, INFN-LNF), D. Lucchesi (UniPD), M. Martini (FS), M. Silarski (JU)

Excused: G. Cavoto (UniRM), M. Fertl (JGU), M. Gallinaro (LIP), A. Papa (PSI), D. Stöckinger (TU), G. Venanzoni (INFN-Pisa)

Agenda:

1. Minutes approval for 18 April 2023 MB meeting
2. Status of milestones and deliverables
3. Outcome of Mid-Term Meeting
4. Status of secondments
5. a.o.b.

The first point in agenda is the approval of the minutes of the Management Board meeting held on 18 April 2023. Minutes were previously circulated by the chair. No corrections are requested, so that they are approved and uploaded on the aMUSE website.

The board reviews the status of milestones and deliverables. In 2023, there are ten milestones to be achieved, distributed among all Work Packages involved in scientific activities. There are delays on three of the seven milestones with due date within August 2023:

- MS2 – “Mu2e calibration tools” (WP4) – Due date: August 31st 2023
Six months of delays expected due to a delayed start-up. Calorimeter laser calibration runs have been implemented and tested, source runs are not yet functional, as the plumbing in the pit is not yet completed.
- MS4 – “Technical choice of Mu2e-II scintillators” (WP2) – Due date: August 31st 2023

Selection of crystal options based on optical properties completed. Irradiation test at HZDR in October will complete the milestone.

- MS6 – “Muon surface beamline” (WP2) – Due date: August 31st 2023
Affected by delays in the Mu2e schedule, which is drawing most of the FNAL manpower. A more innovative option is being pursued, requiring an increased effort.

There is also a possible delay in the completion of milestone MS7 – “Light tracker gas mixture” (WP2), due to renovation works in the Sapienza/INFN laboratory where the activity is carried on. While delays on MS4 and MS6 can be recovered, being connected to deliverables expected for the end of the project, the delay on the Mu2e calibration tools have to be closely monitored, as the next deliverable connected to it is expected by the end of February 2024.

Concerning deliverables, there is a delay of D1.1 – “Measurement of a_μ ” (WP1), due on 30 June 2023. This is due to the decision of the Muon ($g-2$) Collaboration to perform additional checks before the release of the result on the anomalous magnetic moment. We expect that the deliverable will be submitted with three month delay. All the other deliverables due in 2023 have been submitted or are predicted to be submitted on time.

The official report from the REA on the Mid-Term Meeting (MTM) is not yet available. However, we received informal feedback during the MTM and soon after by emails from the Project Officers. They congratulate with the consortium for the high quality of the research, the implementation of best practices and the management of the project, but on the other hand are very worried for the small fraction of the secondments done so far (~40%). They claimed that we will be subjected to a scientific audit if the fraction of the secondments will be below 70% at the end of the First Periodic Report (PR1), on December 2023.

The board discuss possible solutions to increase travels:

- aMUSE funds can be used for conferences/meetings in US to present and discuss results connected to aMUSE activities, if this is planned together with the host institute. A good practice is to visit the US laboratory before or after the meeting, but occasionally direct travels can be accepted;
- travels of US colleagues from hosting labs to aMUSE institutes can be encoded in the EU Portal, although they will not receive funds;
- we can add new partners in the project.

Angela Papa mentions an interest of PSI to include the TRIUMF National Laboratory, Vancouver, Canada. PSI collaborates with it for the cooling of low energy muon beams, which is of interest for Task 3.1, WP3. A PSI colleague is going to visit TRIUMF in the next weeks, and he will discuss with his contacts at the lab to understand if they are interested to join the project.

The board reviews the status of secondments. The fraction of actual secondments with respect to initial planning is stable, at the level of 40%. Still there are seven institutes that have not yet start their travels. A detailed secondment planning is presented by each institute, foreseeing the expected number of secondments at the end of PR1 (Dec. 2023). According to this, the fraction of secondments will remain stable, with first travels from University of Rome “Sapienza”, Jagellonian University and Frascati Scienza. The coordinator stressed that it is very important to maintain this schedule and to start travels from institutes not yet involved in secondments.

The meeting is adjourned at 4:30 pm CEST. The next Management Board meeting will be held in December 2023.