

Plenary RRB

May 2024

Minutes of the 58th Plenary Session of the LHC Resources Review Boards CERN, Geneva, 22nd April 2024

Documents and slides of all presentations can be found on the RRB Indico pages, accessible via the LHC-RRB home page http://cern.ch/committees/LHCRRB

The minutes of the last Plenary Session, CERN-RRB-2023-116, were approved.

CERN Status and News. J. Mnich, Director for Research and Computing

J. Mnich informed about the M&O budget requests for 2025, the termination of the international cooperation agreement with Russia and Belarus, the upcoming CERN Council discussion on the international cooperation agreement with JINR in Dubna, the status and progress of Phase II upgrades for ATLAS and CMS, and the Phase II upgrade plans for ALICE and LHCb. The composition of the M&O Resources Scrutiny Group was also highlighted, with new members from the US, France, and the UK. The presentation detailed the immediate consequences of terminating the agreements with Russian and Belarusian institutes, including restrictions on user status and visits to CERN. Measures were discussed to address issues such as authorship and data access for individuals affiliated with Russian institutes. Other updates included Brazil becoming an associated member state, new applications for associate membership from Chile and Ireland, the completion of the Prevesin data center, and the success of the Science Gateway. The presentation also mentioned the upcoming 70th anniversary celebration of CERN, the mid-term report of the FCC feasibility study, and the launch of the next update of the European strategy for particle physics. Additionally, notable events such as the visit of the French and Swiss presidents and the celebration of Herwig Schopper's 100th anniversary were highlighted.

There were no questions following this presentation.

Status of the Accelerator Complex post LS2. M. Solfaroli Camillocci, on behalf of the Director for Accelerators

M. Solfaroli presented an overview of the status of the 2024 run of the LHC, highlighting issues faced during the 2023 operation that may impact 2024. These included problems with the vacuum model, superconducting magnets, and injection protection devices. Solutions and mitigation plans were discussed, such as replacing faulty components and implementing new systems. The presentation also covered the current status of the 2024 run, including successful beam commissioning and intensity ramp-up. Changes in the machine to manage heat load and optimize beam quality were detailed. The presentation concluded with updates on injector performance, schedule changes to increase physics production, and the importance of availability for achieving performance targets. Overall, the 2024 run has started without identified limitations, with plans to optimize performance and address potential issues before the LS3 upgrade.

There were no questions following this presentation.

Status of the Experiments, including Phase II Upgrades. J. Mnich, Director for Research and Computing

- J. Mnich provided an overview of the status of experiments at the LHC, focusing on the 24-run and various upgrades and repairs undertaken. The experiments, including ATLAS, CMS, ALICE, and LHCb, were reported to be running efficiently and producing good data. Physics highlights from the experiments were also shared, showcasing advancements in various measurements and observations. The presentation highlighted challenges and progress in phase II upgrades for ATLAS and CMS, emphasizing tight schedules and potential funding issues. Additionally, detector R&D collaborations and computing preparations for the 2024 LHC run were mentioned. The presentation concluded with a thank you to funding agencies for their support.
- R. Tenchini inquires if the DRDs will have individual finance boards and when the first meetings with the funding agencies will take place.
- J. Mnich explains that the DRDs will be treated as individual collaborations similar to smaller CERN experiments. They will have finance review committees instead of a single finance board, where funding agencies will be invited to approve budgets and projects. He also suggests having an annual presentation to funding agencies alongside the RRB.
- S. Verth asks if the FRC for DRDs will include prospective funding agencies or how additional funding agencies can contribute in the future.
- J. Mnich explains that new funding agencies can be engaged through proposals from the collaborations.
- P. Wells adds that new funding agencies can also get involved through direct contact with the DRD collaboration spokesperson.

Computing Resources Scrutiny Group Report. P. Sinervo, Chairperson, CRSG

- P. Sinervo discussed the utilization reports from the spring CRSG meeting, focusing on proposals for computing resources in 2025. The group has maintained the same membership over the last six months, with Andrea Valassi doing a good job as the Scientific Secretary. They met with LHCC WLCG referees to discuss computing issues and received reports from collaborations on resource utilization and future plans. P. Sinervo presents data on CPU, disk, and tape utilization in 2023 and 2024, highlighting trends and collaboration-specific details. They discussed resource requests for 2025, noting changes in allocations based on Run3 schedules and collaboration needs. P. Sinervo mentioned recommendations for collaborations to optimize CPU efficiency, reduce data sizes, and adapt to new architectures. He emphasizes the importance of funding agencies supporting the development of software for new architectures. Overall, he expresses gratitude to the collaborations for their cooperation and efforts to improve efficiency.
- S. Crépé-Renaudin remarked that the hardware prices are no more decreasing, but even increasing this year.

Summary. J. Mnich

The composition of the scrutiny group was accepted. The dates for the next RRB are 28-30 October 2024. The dates for 2025 are tentatively fixed to 28-30 April 2025 and 27-29 October, subject to confirmation at the October 2024 session. J. Mnich announces to incorporate the special upgrade meetings into the standard ones as of April 2025.

There being no further questions, the Chairperson closed the meeting.

Reported by: F. Glege