

# Construction audit of the new Quantum Matter and Materials Center laboratory building

Paul Scherrer Institute

---

## KEY POINTS

The Paul Scherrer Institute (PSI) is constructing a new laboratory building with state-of-the-art research infrastructure on its campus. The new Quantum Matter and Materials Center will bring materials research together in one building. Construction is scheduled to begin in January 2024 at a cost of around CHF 27 million and should be operational by the end of 2026, or early 2027.

In its audit, the Swiss Federal Audit Office (SFAO) assessed whether PSI's organisation of the construction is suitably professional. Execution requires action, some of which is urgent. The project is around one year behind schedule compared to the 2022 decision on the guarantee credits.

### **The project is organised appropriately, the basic documentation needs revising**

The project organisation for the construction phase is appropriately set up, documented and implemented. The project manual for the execution phase is available and known to the project participants, but requires some updates and corrections. PSI has recognised this and will make adjustments.

The project reports are incomplete and partially incorrect. PSI must make targeted improvements here in order to improve the quality of its reporting and ensure the reliability of the reported content.

### **The transparency and reliability of cost management must be improved**

As PSI has deliberately not yet planned the expansion, it is not possible to make a reliable statement on the final costs of the entire project until the building is occupied. The definitive date for moving into the new building is not known.

The construction project is being financed through three different credits. It is currently not possible to forecast the costs for each of these credits. Overall, the commitments for the construction work lie within the amount of financing allocated, but the existing reserves are not currently disclosed. PSI is urged to create transparency about the financing and cost situation in a timely manner in order to ensure reliable information on credit utilisation, final cost forecasts and the use of reserves.

However, a consistent and binding process for the overall management of all project modifications and additions has not yet been established. One reason for this is the transfer of services from the general planner to the project owner. PSI must make an effort here to ensure complete, timely and reliable cost management.

### **Clarify execution risks, quickly introduce operational implementation of project-related quality management**

PSI has introduced a project-related quality management (PQM) system, established a process-based risk management system and integrated the project participants well. However, the PQM system is regulated inconsistently in various documents. In addition, not all quality tasks have been conclusively defined and assigned. Contradictions need to be ironed out and missing implementation measures added. Furthermore, PSI must clarify the contractually agreed quality certificates to be provided. The planned PQM activities must be put into practice rapidly.

**Original text in German**