

Controlling of work performed in the construction sector, horizontal audit of:
Federal Office for Buildings and Logistics
Swiss Federal Institute of Technology Zurich
armasuisse Real estate

Key facts

The horizontal audit sought to reveal whether the work contracts issued by the Federal Office for Buildings and Logistics (FBL), the Swiss Federal Institute of Technology Zurich (ETHZ) and armasuisse Real Estate (armasuisse) are being adhered to by the parties concerned and whether the contractors are being properly managed and supervised by the mandated site managers and the building owner.

To this end, 15 construction projects from various regions of Switzerland were analysed, each of which is in the execution phase. The analysis was conducted on the basis of work contracts for core and shell work by the prime contractor, with a financial volume totalling around CHF 62 million. This selection does not constitute a representative sample of all construction projects.

The horizontal audit shows that many of the contractual arrangements reached between the owners and the mandated site managers and contractors are fit for purpose.

- In all the work contracts which were audited, the work recording system pursuant to SIA 118 (a standard of the Swiss Association of Engineers and Architects) had been agreed upon as a contractual component and the construction administration was supported by means of specific IT applications. Thus, a sound basis had generally been established in all the audited work contracts for the proper, contract-compliant recording and billing of the work/services performed.
- The construction material quality requirements had been properly defined for all projects. The invitations to tender explicitly required the preparation of, and compliance with, a construction inspection plan.
- The requirements for the commissioning and billing of work measured on a time and material basis were well formulated in the work contracts. It is customary for such orders to be placed in writing. The distinction between fixed-price work and cost-reimbursable work (performed on a time and material basis) was observed and the rates set forth in the contract were applied.
- SIA 118 was an agreed contractual component of the projects analysed and, as a rule, also SIA 112 Service Model with regard to site managers. The respective work contracts additionally grant the site managers the power of representation, with the "Special Provisions" of the work contract also applying to the site managers.

The horizontal audit also revealed that there is considerable room for improvement among the private-sector site managers and contractors.

- In general, the fixed-price work actually performed was neither recorded in a timely manner nor in full. No binding dimensional documentation was produced. Preliminary specifications or cost estimates were not made in accordance with the agreed standards and a binding recognition of performance was generally neglected. The recording of the fixed-price work actually performed

did not meet the qualitative requirements of the contractually agreed SIA 118 standard. In addition, the existing documentation on the work completed to date was not readily understandable by third parties in all cases. The site managers were often unable to present daily reports and construction journals.

- Moreover, in the majority of projects analysed, new items were billed without a corresponding offer having been made in writing. As a rule, these were directly integrated into the main contract. No single project kept an overview in the form of a schedule of the new prices. Where orders had been subject to change, the legally binding signatures were partly missing and standard procedures were not followed for the offering, ordering and approval of the additional work to be carried out. In most cases, a proper quote was not made for the price of the additional work by the contractors.
- Proof that construction materials of the required quality were actually used was only available in individual cases, despite clearly agreed requirements.
- The site managers lacked the daily reports necessary to monitor the work performed on a time and material basis.

These findings apply in equal measure to the construction projects of all owners. The owners thus lack the certainty that the correct payments have been made.

To avoid these defects in future, the owners should:

- Ensure strong management on their part, such that the monitoring of the private-sector contractors and the strict implementation of the terms of the contract are guaranteed. The Swiss Federal Audit Office (SFAO) recommends issuing more precise execution instructions, for example by adopting the provisions of SIA 118, which are to be integrated within the contract, along with any project-specific requirements that may be necessary.
- Make adjustments within their own organisation, such as introducing control mechanisms.
- Conduct training sessions for the owner's representatives involved in the projects.

On the basis of the information from the final discussion with the audited federal offices and their response to the audit report, it can be seen that the implementation of these measures is being driven forward at a fast pace. The responsible parties have been named and the deadlines fixed.

At its ordinary meeting in June 2012, the Finance Delegation took note of the SFAO report.

Original text in German