

Audit of the construction defects on the Raron-Gampel section of the A9

Federal Roads Office

Key facts

With the implementation of the new system of financial equalization and division of tasks between the Confederation and the cantons (NFE) in 2008, ownership of the motorways was transferred from the cantons to the Confederation. As project owner, the canton of Valais is building the remaining sections of the A9 motorway and will hand them over to the Federal Roads Office (FEDRO) after completion. The Confederation is providing 96% of the funding for the completion of the network. The motorway construction service (SCRN/DNSB) is carrying out the work for the canton. The total cost of completing the A9 between Sierre East and Visp East is estimated at around CHF 4.4 billion (as of 2019).

In the spring of 2022, it became publicly known that the width of the carriageway surface installed on a section of the A9 motorway was too narrow. The Finance Delegation (FinDel) then commissioned the Swiss Federal Audit Office (SFAO) to conduct an audit to clarify the facts.

At the time of the audit, the construction defects to be investigated had been eliminated and the stretch of road was being prepared for acceptance and handover to FEDRO. No additional costs have been claimed to date.

Disagreement exists over the cause of the error

There is significant disagreement between the project participants about the cause of the construction defects. The various explanations are sometimes contradictory and not fully comprehensible to the SFAO. No root cause analysis has been made available at this time.

In the SFAO's view, a possible source of error lies in the digital planning and the transfer of the data records from the planner to the contractor, or the data processing by the contractor. The SFAO was unable to conclusively examine this process due to a lack of technical capabilities and without insight into internal company processes.

The contracted companies plan to charge the project owner for the costs of analysing and correcting the road width. A conclusive investigation into the causes must therefore be in the project owner's interest, as without clarification there is a risk both in terms of costs and of recurrence.

Defect could have been detected earlier

The construction defect occurred during the laying of the unbound base course in the outer area, beyond the carriageway and the hard shoulder. The installation of asphalt layers that were too narrow in this area is a consequential defect.

The incorrect laying of the asphalt layer would have been visually recognisable, since this layer does not go all the way to the edge of the embankment according to the plans. In

addition, a simple measurement of the width would have detected the construction error at an early stage without any significant additional effort.

The SFAO has made a recommendation to the motorway construction service to improve quality assurance.

Immediate measures are defined, systematic adjustments are still pending

After discovering the construction defect, the commissioned engineering consortium defined emergency measures involving additional width measurements.

As no conclusive root cause analysis has been carried out to date, no systematic improvement measures have yet been defined by the motorway construction service.

Situation regarding the completion of the A9 continues to give cause for concern

The SFAO has been following the completion of the A9 motorway since 2015 in close cooperation with FEDRO and its internal audit department. FEDRO's work has regularly revealed significant deficiencies, some of which have a considerable financial impact on the construction sites in the Upper Valais. The SFAO found that FEDRO is encountering considerable difficulties in monitoring the implementation of its recommendations.

The majority of FEDRO's findings which lead to significant financial corrections are disputed by the motorway construction service. For example, FEDRO's non-recognition of costs amounting to CHF 50 million for the Eyholz tunnel was brought before the Federal Supreme Court. FEDRO has similar problems with the Riedberg tunnel, for which the motorway construction service commissioned a legal opinion from a law firm and a technical report from an engineering firm. The SFAO considers the situation to be particularly worrying and will continue to provide regular information on this to the Finance Delegation.

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