

Summary

Procurement of roads and railways
by the Swedish Transport
administration – does it lead to high
productivity (RiR 2013:1)



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Procurement of roads and railways by the Swedish Transport Administration – does it lead to high productivity? RiR 2012:14

The Swedish National Audit Office has audited the Transport Administration's procurement of roads and railways.

Audit background

The Swedish Transport Administration is one of the largest public sector clients in Sweden, buying goods and services to an annual amount of approximately SEK 40 billion. The procurement process is a common and recurring core activity. The Swedish Parliament has urged the Government to create better conditions for an effective competition and increased productivity.

Alternative contract forms are expected to lead to higher productivity, i.e. more roads and railways for the money. With more freedom to the contractor, the aim is to create conditions for a more efficient use of resources and lower costs. As part of its new procurement strategy, the Swedish Transport Administration recommends an increased use of design-build contracts rather than traditional, design-bid-build contracts. Consequently, an important question is how much higher productivity design-build contracts have delivered to date.

The purpose of the audit has been to examine the Transport Administration's and the Swedish Government's initiatives to secure that the Transport Administration's procurement lead to high productivity and competition.

The audit was divided into the following questions:

1. What type of contract has led to the highest productivity?
2. Has the Transport Administration followed up its procurements?
3. Has the Transport Administration achieved effective competition?
4. Has the Government followed up appropriately?

Audit results

The audit does not support the latest procurement strategy. The analyses indicate that design-build contracts have not led to higher productivity than design-bid-build contracts in the past. An improved experience transfer process is required to learn how procurements should be developed to generate higher productivity and competition.

Insufficient evidence to support that the procurement strategy has led to more road and railway for the money

The Swedish Transport Administration has decided on a procurement strategy in support of a

more unmitigated client role. A design-build contract gives the contractor greater freedom by incorporating both design and build in the same contract.

However, the strategy to increase the volume of design-build contracts has poor empirical support. The Swedish National Audit Office has measured the obtained productivity in the most recently completed road and railway projects. The design-build contracts have been compared with a randomized selection of design-bid-build contracts during the same time period. The design-build contracts have not delivered more road and railway for the money, contrary to the hopes and expectations of the Parliament, Government and the Swedish Transport Administration.

In the long term there are further risks of inefficiencies, since the quality and life cycle costs may suffer as a consequence of the wider range of alternative solutions that design-build permit. The variation can be expected to lead to a less homogenous network of roads and railways with less opportunity for standardisation. This risk for the client is to be balanced, however, against the contractor's increased opportunities for innovation and industrial production, as well as the degree to which such an increased productivity is forwarded to the client. Which effect that will outweigh the other can only be determined by measurements.

The audit by the Swedish National Audit Office does also not indicate that the Transport Administration has achieved economies of scale. Without higher productivity in large contracts, there are advantages with small contracts, since more companies can participate.

Insufficient follow-up of procurements

The Swedish Transport Administration has high ambitions and numerous systems to secure experience feedback and transfer.

However, the systems are not used as intended and the Transport Administration has not effectively followed-up and analysed the finally obtained result. This has hampered the emergence of organisational know-how and consensus on best practices. Therefore, also in the next few years, the Transport Administration will not know what the most effective procurement strategy is. This includes what contract form to use but also the other factors that the Swedish Transport Administration has control over and decides on before each procurement.

The Swedish Transport Administration has not achieved sufficient competition

The Transport Administration has comprehensive procedures in place to attain a high degree of competition. It also appears to adequately comply with relevant procurement regulations. This is positive, especially with regard to the complex environment in which it operates.

However, the achieved competition is insufficient. Almost half of the procurements have attracted less than three bidders. According to the Transport Administration, this is because of current market structures. However, it is the opinion of the Swedish NAO that the Transport Administration has contributed to the weak competition.

Marketing and contract obligations have often been adapted to the few large corporations. The number of bidders is likely to have been reduced by comprehensive contract terms and requirements. Selective procurement procedures limiting the potential number of bidders are used even though, so far, too many bids has been uncommon. Standard forms of construction

contracts may have weakened the competition and slowed down the development of alternative ways to procure and implement contracts.

Evaluations of the cooperative atmosphere between client and contractor, with a large element of self-evaluation, have been more common than evaluating the outcome in terms of quality and productivity. The evaluation criteria and forms of remuneration used entail a risk of fading competition pressure after the contract has been awarded. The contractor is often able to compensate for a low bid with additional remuneration arising from change orders. Lacking follow-up of contract requirements and difficulty to evaluate the competence of consultants may further contribute to weak competitive pressure in the execution phase. The control systems to detect irregularities have deficiencies since 2005 that have not been remedied.

By using consultants, the client risks to gradually lose the knowledge of its facilities. This can lead to private knowledge monopolies difficult to challenge with alternative bidders in the future when the facilities need maintenance. A corresponding situation can be envisaged with contractors having delivered design-build projects. Uncommon spare parts and competence requirements can lead to higher operation and maintenance costs and create a dependency to the design-build contractor that supplied the initial facility.

The Government has been too passive and uncritical

The Swedish Government has acknowledged the impact of the procurement activities on overall efficiency and has recently brought forward the target of three bids per procurement. But the Government has not asked for empirical evidence supporting that the measures recommended in the Transportation Administration's procurement strategy has previously resulted in higher productivity. Hence, the reports to the Swedish Parliament have not been well grounded and comprehensive. Furthermore, the Government's measure of competition, the average number of bids per procurement, puts too little focus on the large number of contracts that do not attract a sufficient number of bids.

The Productivity Committee appointed by the Government has also not carried out measurements despite decades of trials with design-build contracts. In one of its background reports, the report on international experiences, the Productivity Committee mentions the absence of objective quantitative studies on economic savings.

Recommendations

Based on the above analysis, the Swedish National Audit Office recommends the Government and the Transport Administration to analyse factors that may influence productivity, to secure effective transfer and storage of experience, to improve the conditions for competition and to improve the documentation for decision-making. The recommendations are further explained below.

Analyse factors that may influence productivity

The Swedish Transport Administration should continue to develop its client role. It should base its development on evaluations of how productivity and efficiency depend on different circumstances related to procurement and in particular those which the Swedish Transport Administration has control over. The audit results of the Swedish NAO give reason to further

examine why the design-build contracts have often not lead to higher productivity and smaller contracts have been most effective.

The Swedish Government should monitor that the Transport Administration carries out measurements and evaluations systematically and objectively and supplement these with evaluations and follow-ups by other parties.

Achieve effective experience retransfer

The Swedish Transport Administration should continue to develop its experience retransfer and storage systems and routines. It should improve its databases so that performance, cost and procurement data and any other experiences are recorded in a more systematic, objective and quality-assured manner than before. Aggregated results and conclusions should be made easily accessible to decision makers so that this general experience can be weighed against the special conditions at local level in conjunction with future procurements.

The Swedish Government should ensure that the Transport Administration develops experience storage systems and that they are used. The systems should also be accessible by external researchers and auditors. Open access and transparency at the same time narrow the room for corruption and irregularities.

Improve the conditions for competition

The Swedish Transport Administration should consider how to develop procurement advertising and invitation procedures, in order to reach and encourage additional and new categories of contractors and suppliers. It should simplify its bid documents and develop its evaluation models so that the lowest overall long term cost and high quality is obtained. It should ensure that procurement requirements can be monitored, are checked and are met at no extra cost to narrow the room for unfair competition. It should consider developing its own general conditions for procurement rather than relying on standard contract conditions owned and developed by another party.

The Swedish Government should monitor that the Transport Administration's efforts to improve competition are effective. It may be necessary to make changes of conditions that the Transport Administration cannot influence.

Improve bases for decisions

The Swedish Government should insist on empirical evidence from the Transport Administration that justifies strategies and decisions taken and supplement these with its own or third-party evaluations and analyses. The Government should inform the Parliament of the competitive situation with more precise measures, for instance the share of procurement, in which satisfactory competition has been achieved. The Swedish Government should also inform Parliament of the achieved effectiveness achieved with the different forms of procurement and contracts.