

# The COVID-19 crisis and bus contract renegotiation in Sweden<sup>1</sup>

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## **ABSTRACT**

In principle, competitively tendered contracts in the Swedish public bus transport system are not supposed to be renegotiated during the contract period. In practice, it happens quite frequently. The need for renegotiations became overwhelmingly evident during the COVID-19 crisis. This external shock was unusually strong and affected all local and regional public bus services in a similar way. Demand dropped abruptly, affecting revenues of procuring authorities and, depending on the contract type, also contracted bus operators. To make the situation even worse, costs typically remained constant, as frequent services were supposed to be upheld to avoid the spreading of the virus in crowded buses.

The contract renegotiations during the COVID-19 crisis were clearly caused by unexpected exogenous changes. Contracts with passenger incentives, linking a substantial part of the compensation to the number of carried passengers, have been more likely to be subject to renegotiations than gross cost contracts. Typically, renegotiations were triggered by the contracted operators. While being a pragmatically rational response to an extreme situation, the renegotiations and their outcome may not always be fully compliant with the legal framework for public procurements. The COVID-19 crisis could also have a long-term impact on contracts and procurements in the industry, affecting how effective the competition will be in future competitive tenders.

## **1. Introduction**

Contracts for local and regional bus services have been tendered by public transport authorities (PTAs) in Sweden since the late 1980s. Today, 21 regional PTAs are responsible for planning and procuring these services. The related costs are supposed to be covered

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partially by ticket revenues and partially by subsidies (taxes), with an average of 50% cost coverage as the general norm.

A contract between a Swedish regional PTA and a bus operator often has a duration of ten years or more. In principle, competitively tendered contracts in the Swedish public transport system are not supposed to be renegotiated during the contract period. This means that the parties must make assumptions about the future that may turn out to be considerably erroneous, either to the advantage or the disadvantage of one or both of the parties signing the contract, implying a certain distribution of risk between them. The contracts often include descriptions of how the contract should be interpreted if some changes occur in the future – for example wage increases, inflation, and service quality. However, no contract covers all future occurrences that may impact the fulfilment of the terms of the contract.

Despite the fact that two economic crises (1991-94 and 2008-2010) resulted in far-reaching effects for the Swedish public transport system, subsequent public transport contracts have not included renegotiation clauses in case external shocks affected the sector. However, the public transport industry has developed different approaches to making changes in the contracts when a bus operator or railway operator encountered financial difficulties. In addition, the Swedish law on public procurement (SFS 2016:1145) does allow some changes to a concluded contract if certain conditions are fulfilled.

During the last twenty years the contents of the agreements between transport operators and PTAs have changed on many occasions and for various reasons. For example, we have seen the following examples of changes in the contracts (before the COVID-19 pandemic):

- 1) Changes in the amount of traffic - most often it has been about more buses to run. These changes in volumes are typically regulated in the standard contract to allow for increases of up to 20 percent compared to the original volume. Under certain conditions, the legal framework also allows some changes in contract value.
- 2) Clarifications on how the bus traffic is to be carried out. In one case, the procuring PTA clarified that the bus operator could not replace direct express lines with buses that made more stops in order to increase the number of passengers. This is an ad hoc clarification that has no legal or contractual foundation.
- 3) Changes in compensation to perform a given amount of traffic. This is an ad hoc clarification that has no legal or contractual foundation.
- 4) Clarifications of quality requirements. This type of issue is regulated in the standard contract.
- 5) Early termination of contracts without compensation being paid. This is not regulated in the law or in the standard contract.
- 6) Early termination of contracts with compensation and/or claims for damages. This is not regulated in the law or in the standard contract.

The need for renegotiations became overwhelmingly evident during the external shock of the COVID-19 crisis. In a guidance document on COVID-19, the European Commission held that the events of COVID-19 and especially their specific impact had to be considered an unforeseen circumstance for all tendering authorities (European Commission, 2020, and Sanchez-Graells, 2020). Although the Swedish Government did not impose any hard lockdown, the

recommendations on social distancing and working from home meant that demand for public transport services dropped abruptly. This affected revenues of procuring authorities and, depending on the contract type, also contracted bus operators. To make the situation even worse, costs typically remained constant, in particular as frequent services were supposed to be upheld to avoid the spreading of the virus in crowded buses. Eventually, substantial amounts of financial support were provided by the Government to regional PTAs, but still insufficient to cover the lost revenues. Moreover, this support rarely reached the bus operators. Instead, they sought to renegotiate the contracts or ask for amendments.

Research on renegotiated contracts in the public sector have mainly studied renegotiations on price and completion time and how they alter the content of the terms in the contract (Decarolis and Palumbo, 2015). Suggested causes for contract renegotiation in public contracts are bidder asymmetry during the tendering process (with one weaker, more aggressive bidder), failure to design a multidimensional evaluation framework, hold-up of relation specific investments, unexpected exogenous changes, the complexity of the contractual relationship, winner's curse and rent seeking behaviour (Estache et al., 2009 and Gifford et al, 2014). The contract renegotiations during the COVID-19 crisis clearly appear to have been caused by unexpected exogenous changes.

The renegotiations merit studying for two reasons: 1) the external shock was unusually strong and affected all local and regional public bus traffic in a similar way, and 2) the effects can have a far-reaching impact on future contracts and procurements in the industry, with significance for how effective the competition will be in future competitive tenders. Moreover, few if any academic treatises have so far discussed the renegotiations in the public transport sector during and after the COVID-19 crisis. Focus has been directed towards the impact of the pandemic on travel demand in the short and medium term and the possibility that public transport will become very different after the pandemic (Vickerman, 2020, and Gkiotsalitis & Cats, 2021).

## **1.1 Research questions and aims**

In this paper we investigate the renegotiation of contracts for public local and regional bus services in Sweden during the COVID-19 crisis 2020-2021. The research questions we pose are the following:

- What impact did COVID-19 have on demand and costs for public bus services in Sweden?
- How did COVID-19 impact contracts in public bus transport?
- To what extent were contracts renegotiated or amended?
- Which actor initiated the renegotiations or amendments?
- Can we observe differences in the renegotiations depending on contract type?
- Can we observe differences in how contracts were amended depending on contract type?

The aim of this work is to get a better understanding of the impact of an external shock on contracts and renegotiations, the functioning of the relevant legal framework, and how the experiences may affect contracts and tendering in the future.

## 2. Theoretical framework

Incomplete contract theorizing assumes a market with actors that have imperfect knowledge about other actors' knowledge and intentions and uncertainty about the future. The most complete contract feasible in such a market is the optimal contract that specifies an outcome conditional on all relevant information that is observable by a court (Segal, 1999).

The fundamental uncertainty of the future explains why the parties in nearly all long-term contract agreements decide not to detail and regulate all feasible complications that may occur when the contract is carried out.<sup>2</sup> This signifies that the contract is incomplete, which can result in unforeseen consequences (Maskin & Tirole, 1999). No unforeseen event is big enough to change a contract agreement if one of the parties is unwilling to alter the content of the agreement. Sometimes not even a force majeure event – pandemics, wars, natural disasters etc. – makes a contract null and void if there is no force majeure clause in a contract that specifically itemize the cause that disrupts the carrying out of the contract after it is signed (Legal Information Institute, 2021). While both parties may individually invoke a force majeure clause to suspend their obligations in a contract, the buyer is presumably less likely to do so in a buyer-seller-contract. This is because the buyer is mainly obliged to pay a certain price, while a seller may have many more reasons to invoke force majeure.

An incomplete contract can in many cases be regarded as a considered efficiency seeking decision of the parties, because bounded rationality and transaction costs prevent some aspects of the future trade from being contracted ex ante (Williamson, 1975), or there exist too many possible future trade opportunities (Segal, 1999). A contract must balance on the one hand the search for efficiency and on the other hand abide to legally binding rules and regulations. In ex-ante incomplete contracts, the parties decide to postpone some of the contractual obligations to when the contract is being executed. They can decide to do that either because they are uncertain about future events, or they are uncertain about how bounded rationality and transaction costs can impact the fulfilment of the terms of the contract. An ex-ante incomplete contract is at hand whenever unspecified terms of the contract will be adjusted after it has been agreed upon.

It has been put forward that in a constructed contractual context, transaction costs and uncertainty about future states may be managed by simple decision rules. Maskin & Tirole (1999) suggest that transaction costs need not interfere with optimal contracting. They claim that the parties ex ante can avoid the problems of formulating exhaustive contracts that attempt to cover all eventualities if they have symmetric verifiable information and are able to specify possible future payoffs from the contract (Hart & Moore, 2007). To create such a contract there can be no uncertainty about revenue and cost streams and the parties can't behave opportunistically (Williamson, 1975). If the information sets overlap incompletely, one of the parties must be continuously truthful for the parties to find an efficient joint profit maximization (Williamson, 1975). Another approach to managing economic uncertainty of the future in a contract is to include renegotiations during the contract period. In this theoretical

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<sup>2</sup> Coal and natural gas contracts often precisely specify quantities and prices for many decades by making references to the international price of similar products and verifiable measures of the seller's cost (Segal, 1999, and Joskow, 1988).

approach it is assumed that the economic effects of the contract can be observable by the parties after the contract has come into effect, but they are supposed to be so complex that state-contingent contracts cannot be written at the start (Hart & Moore, 1988).

We note that payoff contracts, renegotiated contracts and even contracts conditional on all relevant information observable by a court, attempt to mimic a theoretical complete contract by inserting a simple rule that covers all non-regulated aspects in the contract. These three incomplete contract models draw on some basic assumptions that underpin the mechanism that will steer the outcome of the contract towards an optimal contract. The optimal contract model assumes that linking the contract to a presumed stable reference market avoids the problem of renegotiating the contents of the contract. In this context it needs to be noted that the optimal contract model depicts the functioning of markets for standardized raw materials. In the payoff model it is assumed that a clause on profit and loss sharing during the contract period avoids the problems of transaction costs and unforeseen events. By using different postulates, the renegotiated contract model finds that recurrent renegotiations are an efficient way of running long-term contracts. Segal (1999) points out that the treatment of bounded rationality in the payoff model and the renegotiation model is problematic, because the modelling of bounded rationality in the models' simplified environments describes the decision makers as either "completely dumb" or "perfectly rational". In a complex environment with many possible trade opportunities (Segal, 1999) it is not possible to identify an optimal contract or explain why parties decide to either write a renegotiable imperfect contract or a non-renegotiable contract.

Another type of renegotiation is to exit the contract. Exit is the last resort for a disenchanted provider if there exists no feasible way of continuing to run for example a public bus service. We have identified three types of exits in the Swedish public transport market: 1) bankruptcy of a subsidiary of the private transport firm, 2) negotiated termination of the contract, with or without compensation and no forced bankruptcy, and 3) bankruptcy of the private transport firm to avoid any risks of being forced to pay compensation.

### **3. Public procurement legislation and tendered contracts in Swedish public transport**

The Swedish law on public procurement (SFS 2016:1145), LOU, based on EU directive 2014/24/EU, provides a legal framework for procurement by means of competitive tendering performed by public authorities such as the PTAs. As a general rule, contracts established after a public procurement process are not to be altered without performing a new tender. This is because such changes, had they been known during the tendering process, could e.g. have affected the participation of bidders and the outcome of the tender. Nevertheless, the law defines the exemptions when changes are possible to make, without a complete re-tendering of the contract. Simultaneously, the law also prescribes that the changes made must not be so profound that they "alter the overall character of the contract". This condition generally must be fulfilled even when exemptions allow for changes.

One of the exemptions is if the contract already includes clauses on changes and these were known during the tendering process.<sup>3</sup> Such clauses need to be very specific and exactly

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<sup>3</sup> Chapter 17, section 10 LOU.

define the circumstances of their application. Planned changes in volume over time, but also force majeure clauses, may fall into this category of exemptions.

Another exemption is the occurrence of unforeseen circumstances.<sup>4</sup> A change may be made if the need is caused by circumstances that the procuring authority neither anticipated nor should have foreseen in awarding the contract. Consequently, this section is directed at the procuring authority and is enabling a change if the authority and the contractor agree on it. As mentioned earlier, COVID-19 was deemed an unforeseen circumstance for all procuring authorities by the European Commission in 2020.

Changes are also allowed if they are considered non-substantial.<sup>5</sup> This is however not the case if they introduce new conditions that could have attracted other or additional bidders in the original tender, or if the economic equilibrium of the contract is changed to the benefit of the contractor.

A tendered contract in Swedish public transport may, somewhat simplified, be of two different types. The first type is a gross cost contract where the contractor is paid for its costs of performing the services (plus a margin). It typically also includes some quality incentives, but the number of passengers carried do not have an impact on the compensation. The other type is a contract with a passenger incentive, i.e. the number of passengers carried affect the compensation to at least some degree, either indirectly or directly.<sup>6</sup> If the contractor's compensation is directly and fully dependent on the number of passengers carried, and the authority is only paying a pre-defined amount which is supposed to cover the difference between total costs and revenues (plus a margin), the contract can be considered to be a net cost contract. Quality incentives may apply also in this case.

Typically, both these types of contracts may include clauses to handle changes and disruptions. The amount paid to the transport company changes annually depending on both changes in cost levels and the performance of the transport company. Changes in costs are linked to an index that is calculated using changes in normalized costs for salaries, fuels, vehicles, interest on capital and average inflation (Indexrådet, 2016). The compensation to the transport company also depends on the service quality. In case of poor performance, the firm is expected to pay penalties. If the firm performs better than a stipulated norm the company can receive a bonus. Both the penalties and the bonus payments are indexed using the same index used for the annual payments.

The contracts can be changed, renegotiated, or terminated for a number of reasons according to clauses in the contracts. First, the public authority can increase the number of demanded bus services with up to 20 per cent during the contract period. Second, each party can terminate the contract if they find that the other party substantially breaches the contract and doesn't rectify this within 30 days of a written complaint. A contracting party can also ask for a renegotiation of the contract if changes occur in laws, taxes, charges, local environmental regulations or in the business conditions affecting the possibilities to fulfill the

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<sup>4</sup> Chapter 17, section 12 LOU.

<sup>5</sup> Chapter 17, section 14 LOU.

<sup>6</sup> The growing importance of passenger incentive contracts in Swedish public transport, and their intended and actual impact, is discussed by Alexandersson et al (2020).

contract. The contracts typically also include a general force majeure clause that states that any major event that is beyond a contracting party's control – for example war, natural disaster, fire, industrial action and decisions by public authorities – constitutes a reason to escape a fulfilment of the undertaking in the contract. An industrial action caused by the actions of the transport company is not considered to be a force majeure.

All the listed reasons for making changes in the completion of a contract should be known by the firms competing for the contract, since they are either codified in Swedish law or referred to during the tender. Nonetheless, the actual changes that occur due to changes in cost levels, demands from the opposing party in the contract, force majeure, unforeseen circumstances etc. are probably impossible to accurately predict by the parties.

#### **4. Methods and data**

Our empirical study on the renegotiations of bus transport contracts builds on several types and sources of data. Firstly, we have looked at the information provided by the 21 regional Public Transport Authorities (PTAs) in Sweden through their websites and other published material. Similar information has also been collected from some bus operators.

Secondly, we have gathered more specific information from the PTAs by means of a written questionnaire. In order to stimulate detailed responses, the submitted information was promised to be presented in anonymous form. The original questionnaire was completed by 15 (71 percent) of the PTAs. By means of adding information from targeted, more limited requests, as well as other sources, the study includes 19 PTAs (90 percent) for at least some of the questions. None of the major PTAs are missing from the study.

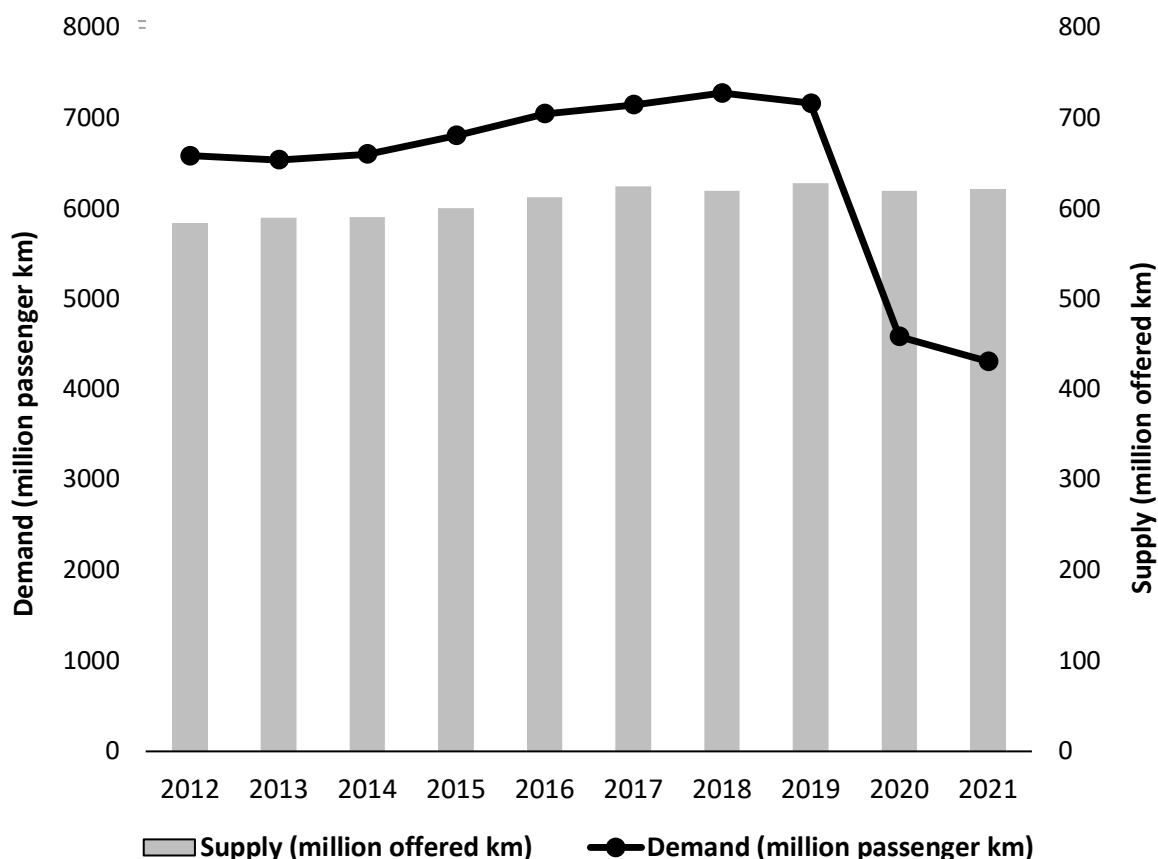
Thirdly, we have performed a selection of interviews with people in the industry, covering both representatives of the PTAs and of the bus operators.

#### **5. Results**

##### **5.1 Public transport operations during the COVID-19 crisis**

When COVID-19 hit Sweden in spring 2020, the Government did not impose any hard lock-down of society, but various soft and hard measures nevertheless imposed considerable restrictions on movement and daily life. An early recommendation from health authorities was to avoid unnecessary journeys by public transport and, if possible, to work from home. Many companies implemented policies that would minimise travelling to and from office locations for staff that could work remotely instead. In combination with other voluntary precautions made by the general public, the effect was a very sharp downturn in patronage. At the same time, public transport authorities, as well as commercial transport operators, were recommended to maintain supply and frequency at high levels in order to avoid crowded buses and trains for those that had to travel by public transport. Some long-distance bus and train operators reduced the number of seats available for booking, a policy that later (between February and July 2021) became mandatory by law. Unlike many other countries, Swedish health authorities held back on recommendations on the use of face masks. It was not until January 2021 that a soft recommendation on face masks was introduced for public transport.

Figure 1 shows the aggregated numbers of both supply (measured as offered kilometres by public buses) and demand (measured as passenger bus kilometres) in Sweden for the period 2012 to 2021. As can be seen, the supply remained more or less constant, dropping only 1 percent between 2019 and 2020. In contrast, demand was reduced by 36 percent and the downward trend continued during 2021.

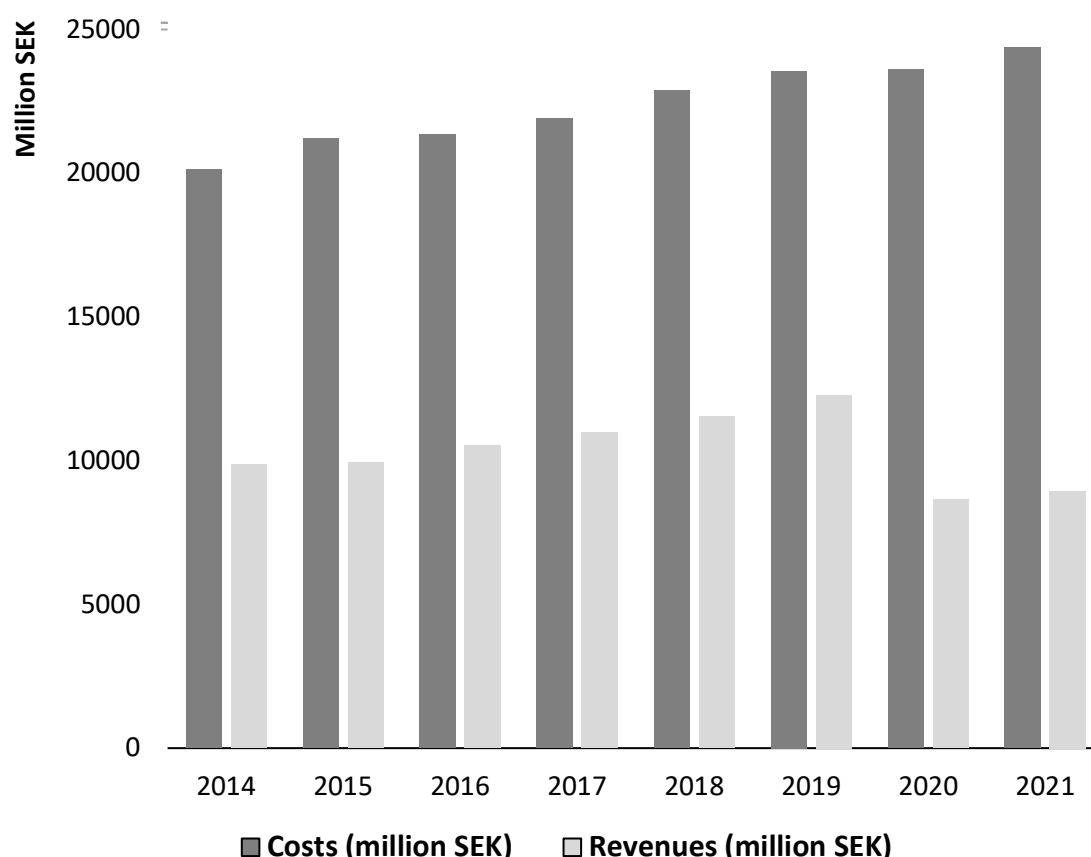


Source: Trafikanalys

**Figure 1. Supply and demand of procured public bus services**

In order to protect bus drivers from COVID-19, acrylic glass shields were installed, and front doors were locked, meaning that passengers had to enter and exit buses only by means of doors in the middle or in the back. In many cases this had a negative effect on the possibility to check the validity of tickets, meaning that revenues were affected both by reduced demand and more free riders. Nevertheless, revenues dropped a bit less than demand in 2020 – by 29 percent – and were stabilised in 2021 (Figure 2). This indicates that people who bought travel cards did not use them as frequently, and some PTAs also report a higher share of single tickets being sold. Such tickets typically generate more revenues per journey. Also evident from Figure 2 is that the costs of bus operations were not reduced, but instead continued to rise.





Source: Trafikanalys

**Figure 2. Costs and revenues of procured public bus services**

All in all, the economic consequences for the PTAs were severe, with a reduction in revenues from bus services amounting to SEK 3.6 billion between 2020 and 2019, and, following some improvements in 2021, a drop of 3.3 billion when comparing 2021 with 2019. At the same time, the costs of the bus operations increased by SEK 45 million in 2020 and more than SEK 820 million in 2021.

The Government (and Parliament) decided to support the regional public transport authorities by means of additional state grants, amounting to SEK 3 billion in 2020 and a similar amount in 2021. A condition for the second instalment of this support was to uphold the level of public transport services. Although this is a lot of money, it should be remembered that the PTAs also lost revenues from train operations, amounting to about SEK 2 billion in both 2020 and 2021. Therefore, a large amount of the deficit still had to be covered by the regions themselves.

Although mostly a problem for the operators running commercial long-distance or chartered services, some contracted bus operators (especially if renegotiations were not successful) had to reduce their staff as a way to tackle the impact of the pandemic. Nobina is a rare example of a bus operator that to some extent benefitted from the impact of the COVID-19 crisis. Its subsidiary Samtrans quickly became contracted to transport COVID-19 patients, and it also set up 300 mobile COVID-19 testing stations all over the country (Nobina, 2021).

## 5.2 Renegotiations and amended contracts

In most regions, the pandemic and its effects on public transport immediately triggered a discussion about the contracts and their fulfilment.

Table 1 summarises the types of contracts that were mainly used by the PTAs when COVID-19 hit the public transport sector, if renegotiations or amendments to contracts were carried out and which party that triggered the process.

**Table 1. Renegotiations of bus contracts during COVID-19**

PTA No.	Type of contract	Renegotiations or amendments	Triggering party
1	Passenger incentive	Yes	Both
1	Gross cost	Yes	Both
2	Passenger incentive	Yes	Operator
2	Gross cost	No	-
3	Minor passenger incentive	No	-
3	Gross cost	No	-
4	Passenger incentive	Yes	Authority
4	Gross cost	No	-
5	Passenger incentive	Yes	Operator
5	Gross cost	No	-
6	Gross cost	No	-
7	Gross cost	No	-
8	Minor passenger incentive	No	-
9	Passenger incentive	No	Operator (unsuccessful)
10	Passenger incentive	Yes	Operator
10	Gross cost	No	-
11	Minor passenger incentive	Yes/No	Operator
12	Gross cost	Yes	Operator
12	Subsidiary (no contract)	-	-
13	Subsidiary (no contract)	-	-
14	Passenger incentive	Yes	Authority
14	Gross cost	No	-
15	Passenger incentive	Yes	Operator
16	Passenger incentive	Yes	Both
16	Gross cost	No	-
17	Passenger incentive	Yes	Operator
17	Gross cost	No	-
18	Passenger incentive	Yes	Operator
18	Gross cost	No	-
19	Passenger incentive	Yes/No	Operator (unsuccessful)
19	Gross cost	No	-

It is evident from this table that several PTAs used both gross cost contracts and contracts with passenger incentives, although the dominant type varied. A substantial part of the PTAs had focussed on passenger incentive contracts for most or all of their procured bus services. Also very clear is the abundance of renegotiations triggered by the pandemic. Perhaps unsurprisingly, contracts with passenger incentives have been renegotiated/amended by almost all PTAs and their contractors, while gross cost contracts have rarely been affected. In almost all cases, the operator triggered the discussions.

In only a few cases, the PTA refused to renegotiate or amend contracts with passenger incentives, sticking to the brocard *pacta sunt servanda* ("agreements must be kept"), or only agreed to make minor adjustments to some contracts but not to others (indicated as Yes/No in the table). One major PTA even kept the passenger incentive contract design intact for the new tenders that were initiated during the pandemic. Despite being very critical about this, the largest bus operators did take part also in these tenders, perhaps fearful of missing out, but the result was an unusually wide range of bid levels.

To be noted, some PTAs did not have any contracts to be reviewed, due to an alternative organisational model of providing public transport services by their own means, for example via a fully owned subsidiary.

In the renegotiations and the resulting amendments, the passenger incentive element was handled, with different outcomes depending on the original contract design. In some cases, the operator was given a simple monetary compensation for lost revenues, sometimes making use of the additional state grants to the PTA. More common was an adjustment of the period of comparison (such as 85 percent of passenger levels of 2019 rather than 100 percent) or setting a floor for the revenues coming from passenger incentives. One PTA found itself in the unusual situation of having a contract where patronage from July 2020 to June 2021 would establish the base level for the calculation of passenger incentives, which explains why the authority triggered the renegotiations. In a few cases, the contracts were completely transformed into gross cost contracts, abandoning the passenger incentives completely. In the limited number of cases where also gross cost contracts were amended, the operator was compensated for the effects of extraordinary numbers of sick leave among drivers, and some tasks, such as ticket validation, were no longer required.

Several renegotiations were completed in the fall of 2020, but some cases were not settled until well into 2021. At least one PTA was still involved in renegotiations in May 2022. Several of the completed contracts were temporary by nature, being valid only for 2020, 2021 and 2022. With the exception of one major PTA, retendering of contracts that were about to expire were typically not postponed. It could also be noted that the empirical data does not include any case where the renegotiations initiated by the COVID-19 crisis resulted in an early contract termination and exit.

Some of the measures introduced to stop the spread of the virus, such as the installation of acrylic glass shields, also became an issue in discussions between the PTAs and the contracted operators. Sometimes the additional costs were paid by the PTA, while in some regions they were shared between the PTA and the operators.

Going forward, both PTAs and operators foresee that there will be long-term changes in the tenders and contracts for bus operations after COVID-19. Since the long-term impact on public transport patronage is still very uncertain, it might be too early to make predictions. It seems self-evident that future contracts will explicitly include clauses on how to handle another pandemic event. The future of contracts with passenger incentives appears unclear. For now, they appear to be abandoned by several PTAs. Some argue that other incentives will become more important instead. Contracts that rely heavily on passenger incentives could also become less common. A recurrent idea is that a retendered contract may begin as a simple gross cost contract, but at a certain point in time, following an evaluation, passenger incentives could be implemented for the remaining part of the contract period.

## **6. Discussion and conclusions**

The regulatory framework governing public procurement assumes that contracts completed after a tender should not be renegotiated without a new tendering process. Nevertheless, it includes specifications on when contracts can be changed – to a certain limit – to handle unforeseen events and other circumstances. Moreover, the typical contracts used for public bus services do include reasons for contracts to be changed, renegotiated, or terminated.

If we analyse the design of the contracts in the Swedish public bus transport market, we note that the decision makers have developed solutions that are similar to the ideas highlighted in the theoretical literature on the complete contract, the payoff contract, and the renegotiated contract. Indexation is not dissimilar to using a reference market to decide future remunerations as in the most complete market model. Penalties and bonuses specified from the start of the contract are used to steer the contract towards goal fulfilment. This constitutes a method to share positive and negative payoffs from the contract, similar to the payoff model. Lastly, the renegotiation clauses in the contract give both parties opportunities to use information about the actual functioning of the contract to improve their situation *ex post* – an opposite principle to the *ex-ante* stipulated renegotiation in the renegotiation model. Instead of only focusing on economic effects in terms of money streams, the contracts include more reasons for renegotiation. But, in the Swedish public bus transport market, the procuring authority can make use of a larger set of justifications than the contracted operator.

The COVID-19 crisis was an external shock that resulted in unexpected exogenous changes. Public transport in Sweden was hit hard, particularly affecting patronage and related revenues, while costs remained constant or even increased. Therefore, it is not surprising that most of the renegotiations that were triggered came to focus on the contracts with passenger incentives. Also as expected, the operator generally took the initiative. Eventually, the outcome was amendments that limited or completely removed the element of passenger incentives from the compensation to operators during the pandemic.

Long-term, passenger incentives may become less important in tenders for future contracts, which could have an impact on competition in the industry. It appears to be the case that predominantly the large bus operators have been willing and able to take part in tenders where passenger incentives have played an important role. As discussed by Vigren &

Pyddoke (2019), tenders on contracts with passenger incentives are more expensive and riskier to participate in. Small and medium-sized firms may therefore prefer to bid in tenders for gross cost contracts or contracts with more limited elements of passenger incentives. Consequently, bidder participation could be affected by a change in contract types being used. Interestingly, the PTAs that had chosen to run some or all public transport services *without* external contractors, for example by means of a fully owned subsidiary, were of course able to avoid much of the turmoil linked to the renegotiations of contracts. In a sense, a market closed from competition simplified crisis management. We have yet to see if this will have any impact on future models of organisation and competition in other regions. Paraphrasing Segal (1999), can we evaluate the decision makers as being either “completely dumb” or “perfectly rational” when choosing to renegotiate a completed contract due to the COVID-19 crisis? It is interesting to note that only a very limited number of PTAs chose to uphold the passenger incentive contracts, while a large majority chose to renegotiate or amend them. In retrospect, it is probable that a lack of renegotiations *en masse* would have resulted in financially distressed operators and forced exits. This would have implied a need for PTAs to either perform temporary direct awards or complete retendering of contracts, risking disruptions in services during the process. Most likely, these contracts would not have been able to retain the passenger incentives either. In this real-world context, it therefore seems as if the bounded rational decision makers were pragmatically rational in their approach to solve the havoc that COVID-19 created for the public transport services (Simon, 2000).

While the renegotiations may have been a rational way to tackle the crisis, it is not certain that all of them were *legal*. As was pointed out in chapter 3, the law on public procurement stipulates that the changes made must not be so profound that they “alter the overall character of the contract”. It could be argued that if a contract where passenger incentives play an important role is changed into a contract without such incentives, there may have been a change in its overall character. If so, renegotiation is not legally possible, but the contract must be retendered. To our knowledge, no one has disputed any renegotiations *ex post*, perhaps because most operators have had similar interests to protect. Therefore, this question has not been tried in court. However, the very few PTAs that refused to renegotiate, likely considered retendering as the only alternative option.

Similarly, it could also be argued that the changes made may not always be considered “non-substantial” in the legal sense of the word. For example, without passenger incentives the original tenders could have attracted other or additional bidders. This even seems likely if we consider that primarily the large bus operators have favoured contracts with strong passenger incentives.

To conclude, the COVID-19 crisis did not only disrupt public transport operations, it also had profound effects on many of the contracts governing these services – to the extent that the pragmatically rational behaviour of the actors may not have been within the limits of the legal framework. There is reason to make further research on what all this could mean for public procurement and the development of both contracts and the legal framework in the future.

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## Declaration of interest

Gunnar Alexandersson has a part-time employment at the Swedish national railway operator SJ AB. This has not affected the work on this article.

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