

Predatory bidding in competitive tenders: A Swedish case study

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Abstract Public procurement by competitive tendering is an important part of European policies to encourage competition in network industries previously dominated by public companies. In recent years, the appearance of very low bids has become an issue in several countries. We discuss predatory bidding from a theoretical, practical and legislative point of view. A case of tendering for train services in Sweden is used to illustrate the possibilities to detect an abnormally low bid. An analysis of projected costs and revenues is complemented with a method using historical data on previous tenders. One conclusion is that there is scope for reform in national competition policies in European Union member states concerning multinational enterprises participating in local tenders.

Keywords Deregulation · Railways · Competitive tendering · Predatory bidding

JEL Classification K21 · K23 · L12 · L43 · L92

Introduction

The deregulation of the railway industry is one example of the striving for a common European market for goods and services, a process intensified since the late 1980's. This paper deals with a policy problem raised by the introduction of competitive tendering in the formerly protected national passenger railway markets: the use of

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predatory bids by powerful players seeking either to protect a market or to enter a new market.

The process of “Europeanisation” of the former national economies in Europe has increasingly affected the competition policy in the union’s member states (see e.g. Vickers, 2001; Morgan, 2001; Dabbah, 2003). One part of this development is regulatory changes and creation of institutions aiming at facilitating entry of foreign firms to former protected national markets, often in the public sector of the economy. For example, increased use of public procurement by competitive tendering is supposed to increase competition, save taxpayers’ money and safeguard equal treatment for competing firms, regardless of nationality (European Commission, 1996). Generally, the use of this form of franchise bidding seems to have been much more widely applied in Europe than in e.g. USA.¹

The European transportation industry, not least the railway sector, has been particularly affected by this development, implying important structural changes in several countries. For instance, EU member states like Sweden, Great Britain, Denmark, Germany and the Netherlands have introduced tendering of railway services. The European Directive 91/440 on the separation of accounts for infrastructure from operations has commonly functioned as a starting point for railway reforms, although specific problems and events at the national level have also played an important role. An overview and interpretation of how far rail liberalization has progressed in the countries of the European Union is provided in reports of the so-called rail liberalization index (Kirchner, 2003, 2004).

The “Europeanisation” of the railway market highlights one general issue: the functioning of competition policy at national markets when there is increased competition from large foreign firms. Among the specific problems is the appearance of very low bids in tenders, sometimes linked to later failures of winning firms to deliver the contracted train services.² Examples may be found in Sweden, Great Britain and Germany, contributing to a growing concern for negative effects of competitive tendering at the national and regional level.

In the next section of the paper, we explore the possible reasons why companies place low bids, and the short-run and long-run socio-economic consequences of a low bid winning a tender. We then present the legislator’s view on low bids, in order to clarify the circumstances when a bid may be considered abnormally low. This is followed by a section devoted to a much-publicized case on the tender for the

¹ In Europe, Great Britain’s Act of 1980 on Compulsory Competitive Tendering was an important early step in extending the operation of market forces to services provided by local government, as described by Adnett (1998). The theoretical history of franchise bidding is described by Harstad and Crew (1999), dealing also with the principal critique against the method and other possible reasons behind its limited practical use (at least in an American context). Harstad and Crew argue that it is time to reconsider the potential of franchise bidding as a viable alternative to e.g. price-cap regulation. A recent article by Doni (2004) adds to their analysis by showing that some parts of the theoretical critique against franchise bidding does not hold when relaxing the (unrealistic) assumption that the information (on e.g. production technology and cost structure) held by the procuring entity or regulator is symmetric with that of the competing firms.

² In this article, we use the word “tender” when we talk about the process of procuring certain services or goods. The word “bid” is then used to describe an offer placed by a firm in such a tender or another auctioning process. Some authors and some legislative text use the word “tender” as a synonym to “bid” which we believe may cause some confusion. We only use this wording when it appears directly in the cited references.

trains to northern Sweden. The outcome of the aftermath of this tender is likely to be of principle importance for the industry and for the current system of competitive tendering in Sweden. The case study includes two methods, complementing each other, to determine the existence of too low bids. The first method is a reconstruction of the projected costs and revenues underlying the bids in the specific tender. The second method is a more general bottom-line approach, using historical data for comparative cases. The concluding section addresses three issues. Firstly, was the winning bid in the investigated tender abnormally low and predatory? Secondly, is there a risk that the bid will result in negative socio-economic consequences? Thirdly, how can national competition policy and legislation be amended and re-interpreted in a European context in order to avoid the problems related to abnormally low bids?

1. Predatory bidding and related issues

Why do firms place very low bids in tenders? In the desirable case, the explanation is that some firms do have a unique competence on production methods that result in a completely different cost structure or possibilities for additional income compared to their competitors. One important factor may be that some firms are able to gain from economies of scale or scope.

In addition to this, there are several possible explanations for low bids that are less attractive from a socio-economic point of view. These become relevant when the bids get so low that they may be declared “abnormally” low. Based upon the literature, we have identified three main categories of explanations for abnormally low bids in tenders. Firstly, such bids may aim at ousting or at least weakening competitors. Secondly, a subsidiary to the procuring organization may place a bid that, if it turns out to be impossible to fulfil, presupposes more money from the owner. Thirdly, abnormally low bids may simply be explained by carelessness or ignorance.³ As we will develop further below, these alternative reasons behind abnormally low bids are related to different bidding strategies and decision-making and may also lead to different outcomes.

In the first case, the firm may practice dumped prices with a consciously calculated loss, or is able to use profits gained in other branches of its business through cross-subsidization. This bidding behavior is analogous to a strategy of *predatory pricing*. Such a strategy is generally assumed to hit competitors first, making them exit the particular market. In the second phase, consumers are affected. After having enjoyed a period of temporarily low prices, they come to face higher prices and a deteriorated supply. With few exceptions, the literature on predatory pricing presumes that a large incumbent firm practices the strategy in order to force minor new entrants to exit.⁴ Sometimes the firm is dominant on other parts of the market than the one where the practice is applied.

³ A similar but more detailed listing of reasons can be found in the DGIII report on Abnormally Low Tenders (1999).

⁴ One exception is an article by Lindsey and West (2003), discussing predatory pricing in markets characterized by imperfect competition and differentiated products. Another example is a study on predatory pricing in network markets (Farrell and Katz, 2001).

In journals of economics as well as in journals of law, predatory pricing has been a lively debated subject for a long time. One major problem is the difficulty to separate predatory pricing from the sometimes fierce but legitimate price competition between firms (see e.g. Niels and Ten Kate, 2000). While some industrial economists have based their analyses on historical evidence, advocates of the Chicago School have claimed that predatory pricing should be rare — if existing at all. Their main argument is that such a strategy is seldom or never rational from an economic point of view, since it is costly (compared to e.g. acquiring competitors) and often difficult to recoup by future monopoly profits due to entry of new competitors (Ten Kate and Niels, 2002). However, during the past 20 years, the views on predatory pricing have changed. The development within the fields of decision theory and game theory has shown that the strategy may be rational in the presence of asymmetric information between different actors, for instance between incumbents and entrants or between management and investors. Small firms with very competitive and innovative products appear to be particularly prone to successful attacks of predatory pricing, since their lenders typically have stronger incentives to pull the plug than to run with the risk (Grout, 2000). Moreover, aggressive pricing and other practices may function as strong signals to new firms, deterring entry to certain markets (Roberts, 1986). If predatory pricing is a rational strategy or not will ultimately depend on the objectives of the practicing firm. Something that appears to be irrational from a profit-maximizing perspective may be rational when other objectives are taken into account (Ten Kate and Niels, 2002).

At this point, it might be useful to make a distinction between reactions to an abnormally low bid and one that is only marginally lower than the bids from other firms. If the winning bid is marginally lower, it is likely that the other players in the market will consider the bid to be “fair”. Therefore, they will find it interesting to stay in the market and try to rationalize their businesses until the next tender comes along. If, however, an abnormally low bid wins, the competitors may interpret this as a signal that the bidder is prepared to do whatever it takes to conquer or keep a certain position of the market. It then becomes pointless to compete on the basis of normal rates of return, and chances are that competition erodes. In markets where there are substantial barriers to entry, it is also less likely that new competitors will try to enter even if a higher bid level is re-established in the future. Therefore, such markets may be more attractive for a company practicing a predatory bidding strategy.

The second type of explanation for abnormally low bids may be viewed as a special case of the first. A common complaint to the Swedish Competition Authority is that companies owned by municipalities or county councils apply pricing below costs in public tenders, signifying a “hidden tax subsidy” (Konkurrensverket, 2004). A related accusation is that low bids from public companies are based upon lower expected rates of return compared to competing private firms.⁵ Some defenders of the Chicago School (see for example Lott, 1999) have argued that publicly owned companies are the only ones that actually may commit to a predatory-pricing strategy.

It also happens that firms make more or less serious mistakes when calculating their bids. Some mistakes may be due to shortcomings of the internal information systems, producing false impressions of costs and revenues. The basic data provided by the

⁵ A similar point is made in the DGIII report (1999) on abnormally low tenders in the construction industry.

procuring authority may sometimes contain incomplete or incorrect information on the tendered business, leading to faulty calculations. In this third category of explanations, we also include firms that have unrealistic expectations on the possibility to perform changes in a certain business, or underestimate the development of costs in the industry. This is probably more common among new entrants than incumbent firms. In auction theory, the concept of *winner's curse* is used to explain why winning bids may be based upon judgmental failures. In particular, *common value auctions*—in which the participating bidders value items differently based upon their judgment of uncertain prospects—tend to be won by the bidder with the most optimistic estimate of the item's value, unless pre-emptive actions are applied (see e.g. Kagel and Levin, 1986). Competitive tenders of public services typically show similarities to common value auctions with a sealed-bid procedure. Adnett (1998) discusses winner's curse in relation to such tendering procedures. He argues that a low number of bidders, and in particular if they are inexperienced as in the first round of tendering in a certain business, will increase the importance of winner's curse in competitive tenders. One way to limit the problem of winner's curse is to alter the auctioning procedure. An open English auction, in which the bidders continuously follow the bids of their rivals, may stimulate aggressive bidding but yet decrease the risk of too optimistic bids and the related winner's curse (Milgrom and Weber, 1982). However, there is an increased risk of collusion in open auctions (see e.g. Robinson, 1985).

The special circumstances related to public procurement entail some specific problems that are rarely observed on ordinary markets. The procuring entity has a strong position as a buyer, sometimes close to a monopsonist. Its purchases and buying behavior determine the range and limits of the actual market. A supplier that wins a tender enjoys a monopoly-like position during the contract period, but its actual powers are often very restricted, e.g. in terms of its possibilities to influence prices and supply. The end consumers are bound to use the supplier chosen by the procuring entity.⁶

Bids that lead to low profitability or even losses create a risk that the supplier will not be able to fulfil the conditions of the contract. Sometimes this will become obvious already when the shift from the former to the new contractor is about to take place. In the short run, this may cause sudden interruptions in delivery, resulting in considerable consequences, e.g. for services like public transportation. The procuring authority may be forced to purchase the goods or services from another firm, sometimes at considerable additional costs. When this is not an option, end consumers, such as bus and train passengers, will face big transportation problems, which may have negative socio-economic and environmental effects. In a longer perspective, the confidence for the supply of goods and services is deteriorated, and firms that contribute to a healthy competition may leave the industry. Thereby, the future price competition as well as the innovativity of the industry may be harmed.

It has been suggested by some authors (see for example Calveras et al., 2004) that *surety bonds* may be a way to deter submission of abnormally low bids and handle the risks associated with non-performing bidders. Although surety bonds may help to reduce the problem of bids based upon flawed calculations or unrealistic expectations, they will probably not deter a bidder from consciously placing a very

⁶ Similar observations on public procurement characteristics have been made by Sorana (2000).

low bid for strategic reasons. As a guarantee against interrupted delivery or complete withdrawal due to financial distress, e.g. by assuring commitment from company owners, a surety bond may be an appropriate instrument. However, its applicability is probably very dependent on industry characteristics. Surety bonds seem to work well in the construction industry, where the aim is to make sure that a building or any type of construction is completed.⁷ In industries like public transportation, where continuous daily service performance is critical, their relevance is more uncertain. For example, even strong commitment and ample financial resources will not immediately remedy problems such as a lack of trained personnel, related to mistakes in the planning process of a company set to take over a service.

Public procurement also means that actual competition between firms for a specific part of the market only takes place at discrete points in time, often with several years in between. This affects the continuity of the seller structure, and thereby competition, over time. Even if other public tenders, concerning other parts of the market, may happen during these years, a loss in a tender that represents a major part in a firm's business may lead to the dismantling of the firm altogether. It may be argued that firms that are efficient in the long run would always have the alternative to borrow money (see for example Strand, 2004). However, this option does not seem to be realistic in situations when firms need to survive long periods of no or much reduced business activity, with only a chance (not certainty) to win a future tender.⁸

2. The legislator's view on low bids in tenders

The increasing literature of recent years on predatory pricing as a real problem has yet to affect the law in the U.S. and Canada. The focus is upon dominant firms acting against new entrants. Since predatory pricing presupposes the possibility of recoupment by monopoly pricing in the future, an analysis of market structure is critical when judging whether or not predatory pricing has occurred. For example, if entry barriers are low, predatory pricing is assumed not to be economically rational. Therefore, neither the objectives of the accused firm, nor its pricing related to costs may even be considered worthy of investigation (Niels and Ten Kate, 2000). Consequently, it is currently very difficult to prove before a Canadian or U.S. court that predatory pricing has actually occurred (Niels and Ten Kate, 2000, p. 795; Edlin 2001, p. 941).

EU legislation does not consider predatory pricing as such. Instead, it focuses on price reductions as one of several practices related to abuse of dominant position. EU case law, and especially the work of the European Commission in recent years, has resulted in a different view compared to the U.S. and Canada. This is also reflected in Britain's new Competition Act. The European Commission considers price reductions to be a serious matter (even if they don't result in prices below costs) whenever they are practiced by dominant firms and aimed at specific competitors. It is treated as price discrimination or cross-subsidization, regardless if the strategy may succeed or

⁷ See for example the report prepared by the DGIII Working Group on Abnormally Low Tenders (1999).

⁸ Eckert (2002) discusses the importance of speed of antitrust actions in order to avoid these types of problems.

not (Niels and Ten Kate, 2000; Grout, 2000).⁹ When it comes to firms that are not dominant it is more difficult to find relevant regulations. Closest is the view on price promotions. In 2001, the European Commission rejected some national experts' call for a harmonized EU prohibition on prices below costs. The Commission argued, among other things, that such a strategy is an efficient marketing tool not least for minor firms and that possible negative consequences could be avoided through tougher demands for transparency in pricing towards competitors and end consumers (Commission of the European Communities 2001, pp. 12–13).

In Sweden, two laws, based upon EU legislation and directives, are relevant for handling the occurrence of very low bids in tenders: the Competition Act (SFS 1993:20) and the law (SFS 1992:1528) on public procurement (hereafter abbreviated LPP). The 19th paragraph of the Competition Act prohibits abuse of dominant position. In one case attracting much attention, pricing below costs in a tender was considered to be abusive. The case concerned a tender in 1993 for regional railway services in the counties of Jönköping and Halland (in the southern part of Sweden)—a tender won by Swedish State Railways (SJ) in competition with the incumbent operator BK Tåg.¹⁰ The final verdict in this case did not come until early 2000, when a special court found SJ guilty of abusing its dominant position by means of under-pricing its services (Marknadsdomstolen, 2000). The court focussed on the intent behind the pricing practice and the relation between price and costs. SJ's behavior was considered to entail such a risk of deterioration of future competition that SJ later would have been able to recoup the financial losses caused by the bid. A key issue was if SJ could be considered to have a dominant position on the relevant market, and what that market was. In this case, the relevant market was defined as the market for contracted railway services in Sweden, on which SJ was a dominant player.

The Swedish Competition Authority does not find the Competition Law to be relevant when firms slash prices in order to enter a new market. As long as the firm is not dominant in the particular business sector in the relevant market (as defined by the Competition Authority), even a conscious dumping of prices may be accepted.¹¹

Turning to the LPP, it includes a paragraph that states [in our translation]:

“A procuring entity shall accept either: 1. the bid that is the economically most advantageous, or 2. the lowest bid. When evaluating which bid to be the economically most advantageous, the entity shall consider all circumstances such as price, time of delivery, operating costs, quality, esthetical, functional and technical characteristics, service, technical support, environmental effects etc.”¹²

These circumstances shall be specified by the procuring entity. Another paragraph says [in our translation]:

⁹ For an extensive review of the boundaries of dominant firms' pricing policies in the context of European competition law, see Henriksson (2003).

¹⁰ BK Tåg, a private company with its roots in the bus industry, became a pioneering new entrant in 1990 after winning the first tender for these services.

¹¹ This view was expressed in an interview made by the public service radio broadcaster in Sweden, cited in Sveriges Radio (2003).

¹² SFS (1992:1528), paragraph 22.

“A procuring entity may reject bids that it considers to be unreasonably low, but only after having requested a written explanation for the low bid without receiving a satisfactory answer.”¹³

Of central interest here is what is meant by an “unreasonably low” bid. The law itself does not define the concept “unreasonably low” and there appears to be no Swedish preparatory work for guidance. This lack is due to the fact that the Swedish legislation is based upon EU regulation and directives.

It is also interesting to note that the choice of words describing these bids in Swedish legislation and court decisions does not conform to the EU standard. Sweden has chosen the word “unreasonably” while EU legislation uses the word “abnormally”. It is beyond the scope of this article to discuss any possible implications of this difference for the actions of procuring authorities or the interpretation of the law in the juridical system.

There are only a few Swedish cases where procuring entities have rejected bids with reference to them being “unreasonably low”. The view of NOU (a committee supervising public procurement) is that a reasonable explanation from the bidder is sufficient to avoid a bid being categorized as “unreasonably low”. According to NOU, even dumping prices to enter a market is an acceptable justification. Hans Sylvén, chief lawyer at NOU, claimed that LPP provides no support for the rejection of a bid with reference to pricing below costs:

“As a buyer you may not kick out a supplier due to the price being too low. If you believe that the technical ability and quality is fulfilled, the bid must be taken into consideration. . . There are also firms that calculate with losses and dump prices in order to enter the market. This is not prohibited either.”¹⁴

The law only stipulates that a bid must not be “unreasonably low” in relation to the evaluation of the circumstances considered important by the procuring entity. In one case, the Swedish Supreme Court found that according to LPP a buyer must accept the lowest bid if it hasn’t specified how other factors (apart from the price) will be evaluated. Failure to do so may result in damages amounting to the whole contract sum of the rejected bidder.¹⁵ This implies that checking bids against the invitation to tender is of great importance to determine if a bid can be called “unreasonably low”.

3. Deregulation and tendering in the Swedish railway sector

Following a step-by-step process that may be traced back to the 1960’s, the Swedish railway sector has gradually been transformed from a vertically and horizontally integrated monopoly to an industry characterized by decentralization and multiple

¹³ SFS (1992:1528), paragraph 23.

¹⁴ The citation [in our translation] is from the Swedish daily *Nerikes Allehanda* (1999). NOU’s views were expressed in relation to a case described also in *Nerikes Allehanda* (2000, 2002) and in the magazine *SAF-tidningen* (1999). NOU has later confirmed the view in Sveriges Radio (2003).

¹⁵ This case is described in the Swedish daily *Svenska Dagbladet* (1996) and in the magazine *Lex Press* (1999).

suppliers of railway operations and supporting services.¹⁶ The state still controls and maintains the railway infrastructure, by means of the authority Banverket, and is the owner of the most important railway operator SJ. Many railway lines are subjected to competitive tendering by public procurement, carried out by local authorities (local and regional lines) and the national authority *Rikstrafiken* (inter-regional lines). Since 1990, a total of six new railway operators have entered the Swedish market for passenger railway services. Of these, four remained as independent actors alongside SJ in 2004. It should be noted that a typical tender in the Swedish railway market attracts two or three bidders, which is substantially fewer than in for example the British railway market.

The current model of public procurement in the Swedish railway industry is a kind of hybrid between a beauty contest and a reverse closed auction in which the lowest bid wins. The bid price is always very important, but generally the bidder also has to meet other criteria, showing that it conforms to standards on competence and is prepared to work with quality-related issues. Within this framework, two main alternative types of contracts are in use. For local and regional services, *gross cost* contracts are generally applied, implying that the winning bidder gets compensation for its costs of operation, while revenues from ticket fares accrue to the procuring authority. For long-distance services, a *net cost* approach is used, meaning that the operator, apart from the subsidy in accordance with its bid, also gets the income from ticket sales. In these contracts, the operator may influence the price of tickets at least to some extent. The net cost procurement of passenger rail services therefore resembles a common value auction, in which the participating bidders value the prospects differently, for instance based upon different expectations of patronage development. Since a procurement of a net cost contract means that the bidder must calculate both future revenues and costs, it implies a higher degree of risk taking for the bidder than the gross cost contracts normally in use for local and regional services.

In the net cost tenders of the inter-regional services, *Rikstrafiken* evaluates the bidders by means of a number of parameters in addition to the bid price. The criteria relate to competence, the supply and quality of the proposed services, and also the proposed ticket prices. In 2002, Riksrevisionsverket (the Swedish National Audit Office) pointed at several problems concerning these procurement procedures, for example the lack of specified weights for each of the multiple criteria. In a later investigation, Statskontoret, the Swedish Agency for Public Management, found that *Rikstrafiken* had improved on this point, but criticized the authority for the absence of strategic and operational goals and the lack of resources for monitoring and controlling tendered services. Statskontoret (2003) also pointed at remaining problems with having a sufficiently competent staff for evaluating bids and performing other tasks.

4. The case of the tender for train services to northern Sweden

4.1. The tendering process and its legal consequences

On the 25th of June 2002, the procuring authority *Rikstrafiken* decided that the company Connex had won the tender for a net cost contract of operating the night trains to

¹⁶ A description of this development is presented in Nilsson (1995), and Alexandersson and Hultén (1999).

northern Sweden, regarding a period of five years beginning in June 2003. The outcome of the tender was determined by the large difference (on average 42% for the whole period) between Connex' bid and the bid of the incumbent operator Tågkompaniet (Rikstrafiken, 2002b).

Connex, originating from France, is Europe's biggest private passenger transportation company, having 55.000 employees and an annual turnover of 3.4 billion Euro.¹⁷ The company has successfully entered several European countries following the opening of national railway markets to competition, but has also experienced several problems fulfilling its commitments.¹⁸ In France, the company has not yet had to encounter any foreign competitors.

Three former executives from the national operator SJ formed Tågkompaniet in early 1999. The company very soon became successful in several tenders, beginning with the important contract for the trains to Northern Sweden, taking over operations from SJ in January 2000. Building up the company from scratch, the management followed a strategy of minimizing overhead costs and using external suppliers for all things that were not considered strategically important.

Following the decision of Rikstrafiken in June 2002, Tågkompaniet faced a clear risk of being dismantled altogether, since these tendered services made up 80% of its business. The company's management reacted by reporting the tender to the county court of Västernorrland. Among other things, it was claimed that the bid from Connex was "totally unrealistic" and had to be based upon price dumping (Gärde Wesslau Advokatbyrå, 2002a, p. 2). The court decided to temporarily stop Rikstrafiken from completing the tender, thereby preventing the signing of a contract with Connex (Länsrätten i Västernorrlands län, 2002). Rikstrafiken (2002d) replied in a writ to the court that Connex, upon request had presented satisfactory explanations for the low bid. Tågkompaniet responded by accusing Rikstrafiken to have given up the basic preconditions in its invitation when accepting several reservations in Connex' bid (Gärde Wesslau Advokatbyrå, 2002b). Rikstrafiken (2002e) replied that Connex had accepted the basic conditions and had made elucidations, interpreted by the authority as if Connex would bear any risk if "the calculation prerequisites" would deviate from the basic demands. In a final plea, Tågkompaniet demanded that Connex' bid was rejected as unreasonably low or that a new tender was performed. The company continued to claim that Rikstrafiken had failed to act in accordance with LPP when it accepted Connex' calculation prerequisites and that Connex had not presented a satisfactory explanation for the low bid (Gärde Wesslau Advokatbyrå, 2002c). However, in late August 2002 the county court decided (without trial) to give Rikstrafiken clearance for

¹⁷ The figures refer to the whole Connex group, operating in Europe, North and South America, the Middle East and Australia (Connex, 2003b). Connex Sweden (previously Linjebuss) is a part of Connex Transport, a subsidiary responsible for the contracted services in Northern and Eastern Europe. Connex Transport has about 18.000 employees and an annual turnover of about 760 million Euro (Connex, 2003c).

¹⁸ In November 2003, the Strategic Rail Authority (SRA) forced Connex to leave its U.K. franchise on South Eastern Trains prematurely. This action followed Connex' failure to live up to conditions linked to an agreement on SRA payments of additional subsidies in 2002, corresponding to a doubling compared to the contracted level (Strategic Rail Authority, 2003). In Germany, Connex discontinued one of its non-subsidized long-distance lines (Rostock-Berlin-Cologne) in October 2003 after five months due to lower demand than expected. Likewise, according to Die Bahn (2004, pp. 11–12), its winning bid for the Hamburg-Westerland route appears to be based on unrealistically high expectations of fare revenues.

signing a contract with Connex, which then took place in mid September (TT, 2002; Dagens Nyheter, 2002). In parallel to this process, Tågkompaniet also tried to get the Swedish Competition Authority to take action. The company argued that Connex' bid was based upon information produced by means of a prohibited co-operation between SJ and Connex in a tender for the same services in 2001. SJ and Connex had then placed a joint bid, but Rikstrafiken chose not to complete that tender, with reference to unclear legal circumstances (Rikstrafiken, 2001). In October 2002, the Competition Authority decided not to take action, after failing to find sufficient support to investigate any possible violation of the Competition Act (Konkurrensverket, 2002).

When Rikstrafiken and Connex had signed the contract, the tender could no longer be tried in the county court. Instead, Tågkompaniet started to prepare for suing the state in a local court, based upon its view that Rikstrafiken had made several formal faults during the tendering process and that Connex' bid should have been rejected since price dumping had occurred. In June 2003, Tågkompaniet revealed that its demands amounted to SEK 53 million, equaling the lost expected profits during the contract period 2003–2008 (Dagens Nyheter, 2003).¹⁹ By this time, it had also become clear that Tågkompaniet would survive the loss of its main business, sticking to its few other contracts and seeking co-operation with Danish State Railways (DSB).

4.2. Assessing the bid—introductory remarks

The legal consequences after the tender have not resulted in an actual trial of whether or not Connex' bid is “unreasonably low”.²⁰ In our opinion, the question is of such importance for future tenders of train services and other goods and services, that a thorough analysis is called for. Therefore, based upon accessible information, we have made our own assessment of the reasonableness of Connex' bid. As previously cited cases have shown (and not least the view of NOU), such an assessment must begin with the conditions specified in the procuring entity's invitation to tender. The first question to ask, therefore, is whether this invitation allows very low bids, for example due to price dumping, to be accepted.

In its invitation, Rikstrafiken has specified the circumstances of guidance for the tender. Under the headline “The procurer's objectives” it is declared that [our translation]:

“The overall objective for the transportation policy is to secure a socio-economically efficient and long-term sustainable provision of transportation for the citizens and industry all over the country.”²¹

How does this conform to bids that are explained by price dumping or cross-subsidization? Accepting such bids may lead to an unsatisfactory allocation of resources both statically and dynamically, because the winning firm is not selected on the basis of its efficiency. This may result in the exit of another, possibly more efficient

¹⁹ These demands appear to be rather modest, taking previous court rulings into account. Damages may amount to as much as the total contract sum for the whole contract period (see e.g. Lex Press, 1999).

²⁰ Following Tågkompaniet's sue for damages, a trial was likely to begin in early 2005. As described in the Post Scriptum, the case was eventually settled outside court. It is unclear what aspects of the tender that would have been considered by the court.

²¹ Rikstrafiken (2002a, appendix 1, p. 1).

firm, which would have been able to offer the service at a sustainable price level. Moreover, there is a risk that the chosen bidder will not be able to fulfil its obligations, which will also have negative socio-economic effects. Consequently, we argue that a public agency that seeks socio-economic efficiency, such as Rikstrafiken, should reject bids as “unreasonably low” if they are based upon price dumping or cross-subsidization. To decide if this is the case, the agency should conduct an evaluation of the cost structure of the bid.

Rikstrafiken’s tender for the train services to northern Sweden is a tender for a net cost contract, i.e. the bidder must calculate both future revenues and costs. The difference between these values (with addition of the calculated profit) results in the bid of asked subsidies from the bidder.

Tågkompaniet started to run the services in January 2000, receiving an annual subsidy of (on average) SEK 114 million. When SJ operated the traffic in 1999 it cost the state close to SEK 144 million per year.²² SJ did not place any bid in the latest tender, making it the first tender of some importance without SJ’s participation.

Connex demands an annual subsidy of 62 million SEK on average during the five-year-contract period, while Tågkompaniet believes that 107 million is necessary (Rikstrafiken, 2002c). Compared to the 105-million-subsidy to Tågkompaniet in 2002/03, preceding the new contract period, Connex’ bid implies a decrease of the annual subsidy by 43 million SEK on average. This is the starting point of the upcoming analysis.

4.3. Costs, revenues and subsidies in detail

In order to do a detailed comparison of the calculations of Tågkompaniet and Connex, it is necessary to make their differences clear regarding the views on the development of revenues and costs. Tågkompaniet has published the firm’s prognosis for revenues and costs over the contract period, forming the basis for its bid. For Connex’ part, we have made estimations based upon assumptions and Rikstrafiken’s presented information on the company’s explanations.

The starting point for our calculations is the available information on the train services right before the new contract period. It is assumed that Tågkompaniet’s prognosis for the traffic year 2002/03 is a good approximation of this situation. The forecasted costs and revenues this year are presented in Table 1, as well as the state subsidy. The forecasted profit was 11.7 million SEK.

In order to estimate Connex’ forecast on revenues we have used the information from Rikstrafiken (2002e, p. 3) that Connex expects an annual 2% increase in revenues. For the estimation of the forecasted cost development we make two assumptions. Firstly, every year’s decrease in the amount of subsidy needed must be fully covered by larger revenues and/or cost cuts during the same year. Secondly, we assume that Connex calculates with the same average profit margin (2.7%) as Tågkompaniet.²³

²² The data originates from *Delegationen för statens köp av viss kollektivtrafik* (Committee for the state’s procurement of certain public transport) and the bid from Tågkompaniet.

²³ The profit margin of Tågkompaniet was calculated as follows: the total revenue for the five-year contract period is the sum of all revenues and all demanded subsidies. When the sum of all costs for the period is subtracted from this total revenue we get the total five-year profit. This total profit is then divided by the

Table 1 Comparison of the bids of Tågkompaniet and Connex (million SEK)

<i>Traffic year</i>		02/03	03/04	04/05	05/06	06/07	07/08
<i>Tågkompaniet</i>	Cost forecast	346	356	365	384	396	407
	Revenue forecast	253	264	272	281	296	312
	State subsidy	105	105	105	114	109	104
<i>Connex</i>	Cost forecast		324	319	320	320	325
	Revenue forecast		258	263	268	274	279
	State subsidy		75	65	60	55	55

Sources: Rikstrafiken (2002c, 2002e), Tågkompaniet (2002) and own calculations.

The data from Tågkompaniet and the results of the calculations regarding Connex are presented in Table 1. A first observation to be made is that Connex’ forecast on the development of revenues is rather modest compared to the one of Tågkompaniet. The biggest difference between the bids relates to the forecasted costs. While Tågkompaniet appears to assume that the development of costs is closely linked to the revenues, Connex believes that it is possible to immediately cut costs to a lower level, and keep them relatively stable for the rest of the contract period. Thereby, Connex may demand substantially lower subsidies already in the first year of the contract period.

In short, the calculations show that of the decrease in annual subsidy of SEK 43 million (on average) that Connex’ bid comprises, higher revenues may explain 15.6 million, while 24.7 million must be achieved through lower costs.²⁴ Even if the already low profit margin is reduced to zero, it would be necessary for Connex to save almost 16 million SEK.

How will Connex achieve these cost savings? Experiences have shown that many costs are impossible for the railway operator to influence, since there is only one supplier of certain services.²⁵ The charges for renting vehicles are fixed by a contract between SJ and Rikstrafiken; maintenance may only be performed by a special workshop; Banverket sets the track fees, and the energy costs depend upon current prices on the electricity market. Connex has also publicly declared that it will not cut down on staff or change the working conditions (Connex 2002b, 2003a). With this in mind, practically the only remaining things to consider are the costs for selling tickets, serving meals onboard, cleaning and some minor “other” costs. For these things, Tågkompaniet calculates that costs will increase from SEK 108 million in 2002/03 to (on average) 114 million during the contract period. Connex therefore has a need to save on average 25 million on things that cost 108 million (a 21% decrease), provided that the parts of the costs that are difficult or impossible to influence are kept unchanged (but for which Tågkompaniet also calculates on increased costs).

total revenue to get the profit margin (2.7 percent) for the period, which may also be seen as a (weighted) annual average. The data necessary for this type of calculation is available in Table 1, but since they are represented by approximate values (no decimals) the result will be slightly higher (2.8 percent).

²⁴ The rest, 2.7 million SEK, relates to a decrease in projected profits (coming out as a residual value in our calculations).

²⁵ Mikael Prenler, former director at *Delegationen för köp av viss kollektivtrafik* claims this in Gärde & Wesslau Advokatbyrå (2002c, Appendix 4).

The cost calculation of Connex becomes especially remarkable when taking into account that the company simultaneously expects increased revenues, regardless of their modest magnitude. This is because the increase in revenues will not be possible to obtain primarily through higher ticket prices, since Rikstrafiken gave Connex and Tågkompaniet the same evaluation marks for the ticket price level (Rikstrafiken, 2002c). Instead, increased travelling is needed. This increase must be obtained without additional expenditure on marketing or sale of tickets—on the contrary large savings must be achieved on precisely these parts of the business. In comparison, Tågkompaniet assumes that increased travelling will translate into a demand for additional trains and lead to increased costs in all areas.

One circumstance that makes Connex' bid difficult to evaluate, is the fact that it is based upon what Connex calls [in our translation] “assumptions making up prerequisites for the calculated compensation and prices” (Connex, 2002a, p. 3). Although the complete bid has not been made public, these passages appeared during the county court's handling of the case. Among Connex' “assumptions” it should be noted that the company has chosen not to account for that some vehicles need to go through expanded maintenance during the contract period, assumes that track maintenance of some scale must not affect revenues substantially, and expects that no local deals above central agreements will lead to increased staffing costs (Connex, 2002a, p. 3). Rikstrafiken has chosen to call these assumptions “calculation prerequisites”, arguing that in case they actually would lead to a deviation from the basic conditions of the tender, Connex alone bears the risk (Rikstrafiken, 2002e, p. 2). However, Connex has not officially declared that the company shares this view. Tågkompaniet was not given the opportunity to make the same reservations, and has calculated that Connex' assumptions correspond to about SEK 29 million annually in lower costs (Gärde Wesslau Advokatbyrå, 2002c, p. 15).

The analysis of the differences between the forecasts behind the bids can only lead to the conclusion that Connex' bid will result in losses and violate the clause on socio-economic concern in the invitation to tender. In addition to this first type of evaluation, we will also present an alternative method. It is based upon information on previous tenders in the Swedish railway sector.

4.4. What do previous tenders of train services show?

The studying of historical data on previous tenders should provide some guidance and rules of thumb that may help a procuring entity reveal the existence of abnormally low bids. Already today, rules of thumb play an important role in both European and American competition law, and may often be traced back directly to related theoretical and applied research (see for example Niels and Ten Kate, 2000; Grout, 2000). In order to judge Connex' bid, we will consider the economic results of the train operators winning gross or net cost contracts in Swedish tenders during the past 15 years.²⁶

Tenders of gross cost contracts for train services may be divided into two groups: contracts implying a profit for the winning bidder, and contracts resulting in losses. The

²⁶ The data has been collected through direct contacts with traffic authorities and the predecessors to Rikstrafiken, i.e. *Förhandlaren för statens köp av persontrafik på järnväg* and *Delegationen för köp av viss kollektivtrafik*.

first time specific traffic is put out to tender, a large reduction in subsidies is generally achieved. Later tenders will typically lead to minor savings. Historically, a critical limit seems to occur when cost savings have amounted to 20%. BK Tåg successfully managed to cut subsidies by more than 20% for the regional services of *Länstågen* in the Swedish counties of Jönköping and Halland, following the first tender in 1989. One important explanation was that the company succeeded in expanding the tasks performed by the drivers and altered their schedules. This resulted in considerably lower costs compared to the previous situation. Thereafter, two other operators, first SJ and later BSM Järnväg, have failed to bring down subsidies even further, to a level 40% below the starting point. During the legal process following BK Tåg's loss of the contract in the second tender, SJ had to admit that costs were higher than included in its winning bid. BSM Järnväg won the contract in the third tender with a bid somewhat higher than SJ's, but it nevertheless turned out to be unprofitable. The latest (fourth) tender resulted in substantially higher costs for the procuring authority, although a direct comparison with previous years is impossible to perform due to changed conditions in terms of supply and rolling stock.

Another case of a tender resulting in large reductions of the public subsidies, but leading to losses for the train operator, is the first tender for the *commuter trains* of Stockholm. The county council enjoyed lower costs in the magnitude of SEK 300 million annually, corresponding to about 32%. But the winning bid from Citypendeln turned out to be based upon unrealistic assumptions regarding the possibility of changing the working conditions of the train drivers. Considerable disruptions in the services occurred when the shift of contractor took place, and several problems remained for almost a year. The fact that the contract included far-reaching terms on quality of deliverance linked to penalty payments did nothing to improve the situation. It was impossible for the procuring authority to monitor all the problems, and the penalty system was not designed to handle a total breakdown of the services. Citypendeln's losses amounted to 29 million SEK in 2000 and 67 million SEK in 2001, (Citypendeln, 2002).

The tenders for the train services on *Västerdalarna Line*, *Österlenaren*, *Kinnekulle Line* and *Upptåget* have resulted in contracts on reasonable levels, i.e. the subsidies paid by the procuring entities have been pushed down, but not to the point that train operators are losing money. In the cases of *Västerdalarna Line* and *Österlenaren*, the operators winning the first round of tendering (BK Tåg and Sydtåg, respectively) were able to take advantage of limiting the size of the work force, specializing in driving only the services in question. Sydtåg did go bankrupt before the contract period ended, but this was due to problems related to the firm's freight services rather than the passenger services. *Kinnekulle Line* has been put out to tender three times. After several years of short-term extensions of the contract (with negative economic effects for the operator BK Tåg), the latest tender resulted in a slight increase in subsidies (with adjustment for the fact that the contract was turned into a net cost contract) when Connex took over in June 2003 (Västtrafik, 2002).

The tenders concerning net cost contracts are harder to divide into groups, partly because there are fewer examples available for comparison over time. The possibilities for the train operator also to influence ticket revenues appear to make larger reductions of subsidies feasible, or at least make some bidders believe so. The *West Coast Line* is an extreme case. The companies behind Sydvästen, the firm that won the tender for

the services of the year 2000 with a radical zero-subsidy bid, assumed that it would be easy to increase travelling and find many additional premium customers by means of a higher service level. Sydvästen both succeeded and failed with its intentions. The number of passengers increased, but most of them did not generate any additional revenues—people only started to use their already purchased travel cards (issued by the traffic authorities) more frequently. Therefore, the calculation did not hold, and the company went bankrupt after only four months.²⁷

In the third tender for *Vättertåg*, BSM Järnväg came out as the winner, with a bid that was more than 35% lower than the subsidy before the first tender, and substantially lower than SJ's winning bids in previous tenders. BSM's bid turned out not to be profitable, and when the contract period ended, the firm chose not to use the option for a prolongation. At short notice, Rikstrafiken was therefore forced to organize a new tender.

A package of lines in *Bergslagen* has been won by SJ in all tenders. Actual competition in the first two tenders initially resulted in a reduction of subsidies by more than 20%, followed by a period of stability as competition became weaker. A fourth tender preceded a substantial expansion of the services from 2001, coupled with the introduction of new trains. SJ won this tender with a low bid, turning out to be a source of annual losses of SEK 100 million for the firm (Trafik Forum, 2003, p. 32). SJ has then pushed for modified contract conditions, including threats to terminate the contract prematurely.

The train services to the northern part of Sweden have not experienced any substantial benefits from important innovations related to the rolling stock. Likewise, the limited track investments have not resulted in major gains of travel time. The first competitive tender (regarding the traffic year 1993/94) reduced the state's subsidy by almost 20%, although SJ continued as the operator. Corresponding reductions were achieved on the other tendered lines this year (all of them won by SJ). One explanation is that SJ adapted its demanded level of compensation, following a sensed real threat of entry from new competitors. In the next tenders, actual competition for these services weakened, and the state's subsidies tended to increase. However, the tender resulting in the entry of Tågkompaniet led to a substantial reduction of the subsidies, initially about 20% (or 25% below SJ's original level in 1992). This was possible by means of a number of actions. One important change was that the company reduced the number of passengers travelling for free (e.g. former SJ employees), a group that used to be so large that it may have crowded out the paying passengers. Moreover, service levels were improved, and Tågkompaniet also strengthened the co-operation with tourism organizations. During 2001–2002, the subsidies to the company increased (following renegotiations rather than proper tenders), partly to compensate for higher track fees. On average, the subsidies to Tågkompaniet were about 21% lower than during SJ's final year.

²⁷ There were also other factors that contributed to this rapid development. For instance, only a couple of days after Sydvästen had started its services, the Government decided that SJ would get back the traffic directly after the end of the one-year contract, without having to win a new tender. When the bid was placed, Sydvästen assumed that the services would continue to be tendered. The changed conditions made it pointless for the company to endure the whole contract period once the economic problems had become apparent.

In view of these experiences from previous tenders of Swedish rail services, let us have another look at Connex' bid. It implies that subsidies are reduced by 42% (or more than 45% below Tågkompaniet's average level for the past years), while Tågkompaniet's calculations assume a more or less unchanged need for subsidies. When compared to the historical data, it becomes clear that no bids promising subsidy reductions similar to those of Connex, have been possible to carry out without losses for the train operator. This has not even been possible when train services are tendered for the very first time, and this case refers to services that have already been tendered six times—at least twice with evident competition between several bidders.

The study of historical data leads to the same conclusion as the detailed analysis of forecasts for the development of costs and revenues: Connex' bid is extremely low. It would be possible to explain by means of a radical cost reducing reorganization of the business, but any signs that this is the case have yet to appear.

5. Conclusions

Public procurement by competitive tendering is growing in importance, not least in Europe. When used successfully, it tends to increase competition, inducing efficiency gains and structural changes that revitalize sectors long curbed by national monopolies. However, the occurrence of predatory bidding and other questionable bidding practices may undermine the positive effects of competitive tendering.

Like predatory pricing, predatory bidding may be hard to detect and separate from fierce but legitimate price competition. In order to illustrate the possible options in situations with limited access to data, and the applicability of the current legal framework, we have taken a closer look into one specific case, the tender for the passenger trains to northern Sweden.

As follows from our two types of analyses, it is likely that Connex' bid in this tender is based upon unrealistic assumptions, price dumping and/or cross-subsidization. There is also a risk that the company will ask for more compensation if the "calculation prerequisites" are not met.

How can we characterize Connex' bid? A benevolent interpretation is that it is based upon faulty calculations, due to carelessness or ignorance. Drawing on examples from its operations in other European countries, Connex has had some problems fulfilling its obligations that may be explained by faulty calculations or unrealistic expectations. This would lead us to consider if it is reasonable to demand that a company like Connex places a realistic bid. In the court's decision concerning the case of SJ's pricing below cost in a tender for regional services, it was claimed that SJ in its calculation of costs should be expected to have "performed a reasonably thorough and realistic calculation" Marknadsdomstolen (2000, p. 23). In our view, there is no reason for having lower demands on Connex' forecast on costs and revenues.

Modern economic theory stresses the importance of what signals a firm transmits and how they influence inter-firm relationships. One way to look upon Connex' bid is to consider it to be a clear signal to present and future competitors that the firm from now on views the train services to northern Sweden as its own business. SJ seems to have accepted this, demonstrated by the fact that the firm did not even place a bid in

the latest tender.²⁸ Although Connex' bid appears to have been predatory by intention, it did not actually destroy Tågkompaniet, since the firm managed to survive by means of other contracts.

How was the bidding process carried out as regards the law? It is clear that the tender of the trains to northern Sweden has put the procuring authority Rikstrafiken—facing criticism and legal actions—in a very delicate situation. Even in the case of a successful implementation of Connex' bid, some parts of the critique will remain valid. Firstly, Rikstrafiken should clearly have motivated *why* it considered Connex' bid not to be “unreasonably low”. The authority confined itself to declare this view (after having received explanations from Connex). Rikstrafiken did not discuss the risk of Connex dumping prices or cross-subsidizing the train services—practices that should not be allowed following the demands for socio-economic efficiency stipulated by the authority itself. Secondly, the authority accepted bids bearing such differences that they appear difficult to compare. We here refer to what Rikstrafiken calls “calculation prerequisites” in Connex' bid. Resembling restrictions, they should at least have resulted in a new resetting of the bids. The contract bears the risk of turning into a very costly deal for Rikstrafiken and for the state. In the worst case, Rikstrafiken may have to cover the additional costs due to changed prerequisites, and also pay damages to Tågkompaniet. Although this company only asks for a small amount, previous court rulings suggest that considerably higher amounts are possible. All in all, Rikstrafiken should reconsider its routines for procurement, further emphasized by the fact that two authorities (Riksrevisionsverket and Statskontoret) have criticized Rikstrafiken after previous tenders.

Procuring entities already need to acquire considerable knowledge on the goods and services that they are expected to purchase. Our analysis of historical data is a first step towards rules of thumb, showing when it is justified to thoroughly consider whether a bid is reasonable or not. Perhaps, there is also a need for complementary changes in the model of procurement. We have identified the case in question as a hybrid between a beauty contest and a reversed closed auction. Experiences from auction theory on alternative practices may therefore be of use, although it is probably difficult to eliminate the presence of abnormally low bids entirely. In addition, theoretical auction models need some revision in order to become usable in practical decision making (Rothkopf and Harstad, 1994).

The case of the northern train services shows a number of problems with today's legislation and regulations concerning competitive tendering. Overall, there is very little attention paid to the risks of disturbance and disruption of delivery connected to low bids in tenders, despite the negative effects on the end consumers of certain goods and services. More specifically, the Swedish Competition Act (based upon EU legislation) is unsatisfactory for dealing with large international firms winning competitive tenders with aggressive bids in the Swedish market, due to the limitations of the concept “relevant market”. By use of complementary market definitions—the

²⁸ It may be argued that an alternative explanation to SJ's decision not to place any bid of its own would be that the company considered that it could not compete with the existing operator. Although this is possible, one should consider the fact that this was the first occasion SJ acted like this. It also happened right after a joint bid of SJ and Connex had caused Rikstrafiken to abort the previous tendering procedure for the same services.

national market and the international—it may be possible to reduce the risk of predatory bidding in competitive tenders. Judgments on the relevant market and the related market power of firms should be made on a case by case basis. The existing interpretations of the Competition Act, as expressed by the Swedish Competition Authority, Swedish Courts of Law and EU institutions, only look at the market power in a regional Swedish market or in the national Swedish market for a defined product or service. This interpretation limits the actions of the incumbent Swedish former monopolist and oligopolists, but puts no restrictions on the competitive behavior of multinational firms that are often substantially bigger than the Swedish players. We suggest that both these categories of firms can be regarded as dominant firms in competitive tenders for railway passenger services—for two reasons: (1) they have a substantial market power in the relevant multi-layered (regional, national and European) market context, and (2) they can benefit from a predatory bid by reducing competition in the future, since a competitive tender for a railway contract results in a winner-takes-all situation which can drive out a competitor from the market.

The analysis and discussion above leads us to the conclusion that there is a need for a Swedish re-interpretation of the law on public procurement and of the Competition Act. Similar measures may be applicable in other (especially small) EU countries that introduce competitive tendering in public transportation. Within the framework of EU regulations, the legislation and related instructions should provide better guidance to the procuring entities as well as to the Competition Authority. Current work on new EU-wide guidelines for the interpretation of Article 82 (abuse of dominant position) seems to be in line with at least some of the points raised here. For example, a recent report to the European Commission argues for an effects-based approach to competition policy, focusing on the examination of each specific case and “the presence of anti-competitive effects that harm consumers” (EAGCP 2005, p. 2). This would also put less emphasis on defining market boundaries and dominance.

Postscript

Since this article was originally submitted, a couple of things related to the case have happened. We will describe and comment upon these briefly.

In July 2004 it became apparent that Rikstrafiken needed to save money on all its tendered services, following some tendered contracts for airline services that had become way too costly. After negotiations, Rikstrafiken and Connex closed a deal meaning that one of the three daily departures was to be withdrawn in January 2005. The change also implied that the connections from Gothenburg in the south were rerouted via Stockholm (increasing travel time) and that some cities in the north were no longer to be served at all by the trains (Norrbottnenskuriren, 2004a).

During the autumn 2004, the services of Connex were criticized for bad punctuality and cleaning, but foremost for being run by old and very run-down trains lacking the comfort passengers expected. Connex appeared not to be willing or able to keep the interior of the trains in good shape. Patronage plummeted and in late 2004 the management of Connex was facing massive criticism from staff and union. The head of the services was replaced (Norrbottnenskuriren, 2004b, 2004c).

The step-wise process of worsened conditions for traveling by train between Stockholm and Northern Sweden (and elsewhere) now caused a political debate that soon reached the national level. The end result was a decision in Parliament in 2005 to direct an extra 100 million SEK per year to Rikstrafiken, making it possible to keep or improve the level of supply and standard on all tendered train services. A special programme of vehicle renewal was also initiated.

Earlier the same year (in January) the dispute between Rikstrafiken and Tågkompaniet was finally settled outside the court (until then, the trial had been delayed several times). Rikstrafiken publicly admitted that the tender was badly performed and agreed to pay Tågkompaniet the symbolic amount of 500.000 SEK in damages (Rikstrafiken, 2005, Norrbottenskuriren, 2005).

All in all, this chain of events makes it pretty clear that the bid of Connex was not possible to fulfill. Interestingly enough, Connex has been able to make the state increase the amount of taxpayers' money spent on the services in order to maintain an acceptable vehicle standard. It is also likely that Connex has been able to achieve some net gains from the reduced number of train services.

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