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## Some Lessons from Incentive Theory: Promoting Quality in Bus Transport Service Concessions

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## SOME LESSONS FROM INCENTIVE THEORY: PROMOTING QUALITY IN BUS TRANSPORT SERVICE CONCESSIONS\*

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### **ABSTRACT**

In this paper we highlight that service quality is an important problem in many intercity bus transport service but hardly any transport authority has tried to improve the concession contract to solve this problem. Grounded on the complementarities between different mechanisms of control and on the similarities between franchise and concession contract, we propose to imitate market-oriented solution from private franchise chain to increase operators' concerns about service quality. They use the threat of losing rents or quasi rents to stop franchisee opportunism. Similarly, we propose to link the renewal of concession contracts to an operator' administrative reputation which is based on consumers' perception of service quality. We offer several details about the implementation of this incentive system.

# **SOME LESSONS FROM INCENTIVE THEORY: PROMOTING QUALITY IN BUS TRANSPORT SERVICE CONCESSIONS**

## **1. INTRODUCTION**

It seems clear that the introduction of competitive tendering in bus transport has yielded a cost reduction (Hensher and Wallis, 2005; Preston, 2005). However, this regime also brings with it consequences which are not so positive. Apart from the possible market structure problems (Mathisen and Solvoll, 2008) and less innovation than in a totally deregulated sector (Ongkittikul and Geerlings, 2006), service quality could be reduced for cutting costs. In fact, how to protect the quality is one of the most studied problems in franchising (Rubin, 1978; Brickley and Dark, 1987, Blair and Lafontaine, 2005). Intercity bus transport concessions are very similar to franchise contracts in terms of economic incentives and problems and then they should also suffer the quality problem. They are based on a detailed contract between the transport operator and the Administration and the risk of opportunism does not end with the selection of concessionaire in a competitive tendering.<sup>i</sup> Once transport operators have the concession, they may be tempted to take advantage of their market power, maximizing profit at the expense of quality of service.<sup>ii</sup> Aggravating factors in this problem are the public nature of the Administration (Ministry or Board in charge of transport matters) and the difficult lines of communication between the receiver of the service (the passenger) and the Administration.

The literature on contract suggests two potentially complementary solutions, in particular for the problem of quality and in general for the problem of information asymmetry (Milgrom and Roberts, 1992; and González-Díaz and Raynaud, 2005). One suggestion is that the less informed party should invest resources (in monitoring and control) to reduce the information asymmetry and thus prevent the other party from acting opportunistically. The second solution is based on introducing safeguards that reduce the conflict of interests between parties, for example by designing a system of incentives that makes agents partially responsible for their decisions. Agency Theory stresses this last point because (i) it is an automatic mechanism that usually lowers the costs of supervision and because (ii) when the costs of monitoring the agent's behavior are high it becomes the only economically viable solution (Holmström 1979).

It is surprising to see, however, that the Administration hardly ever uses systems of incentives in service concession contracts for intercity regular scheduled public transport on road in

Spain. The Administration controls concessionaires solely by means of a superficial system of inspection<sup>iii</sup> and a self-enforcing incentive system has not yet been considered.

The aim of this paper is to show how a system of incentives could be introduced into the concessions of regular scheduled public transport services to improve the quality of service for customers. This improvement would bring with it better control of opportunism. Specifically, we suggest imitating (benchmarking) the way private franchise contracts work (Lafontaine and Slade, 2001), linking the keeping of concessions to the accomplishment of a good concessionaires' administrative reputation, just as franchisors make franchise contracts conditional on strict compliance with their instructions and levels of customer satisfaction. Administrative reputation would be based on the results of monitoring a series of variables related to customer satisfaction and compliance with the minimum requirements. The economic success of the franchise model would appear to support this recommendation.

Although our proposal contains significant conceptual differences, the idea of rewarding the best concessionaires is not new. The British Quality Bus Partnership and Contracts scheme is probably the best known effort to improve the service quality throughout an explicit agreement between the transport operator and the authorities. However, this is a totally deregulated sector and the incentives to reduce quality are different to companies in a competitive tendering environment. In this type of regulated market, the local government of Catalonia introduced in 2003 a scheme to offer concession extensions to operators that were willing to undertake suggested improvements.<sup>iv</sup>

The aim of our proposal, however, is to go beyond the simple Catalonian model of reducing or extending contract duration and to present objective grounds for renewing concessions. We focus on customer preferences to determine the key factors to improve quality of service. To achieve this, we feel that it is fundamental to base the 'reward' (contract renewal or extension) on the results of periodic customer satisfaction surveys, instead of handing it over in advance after passing a technical and financial analysis of theoretical viability. Internationally there are other examples (Norway and Australia) where incentive systems have also been introduced. Their way of operating, though, is different as the government subsidizes operators in an attempt either to maximize customer satisfaction on a fixed budget or to cut the budget as far as possible for a particular level of service.<sup>v</sup>

In the following section we describe Spanish concession contracts and we present some evidence about how the quality is not protected enough in the contract. We then introduce and analyze franchise contracts by way of benchmarking, presenting the problem of franchisees' and concessionaires' disregard of externalities. In the fourth section we put forward an incentive system to be included in concession contracts to tackle this problem. The final section presents a summary of our conclusions and recommendations.

## **2. CONCESSION CONTRACTS IN INTERCITY ROAD PASSENGER TRANSPORT IN SPAIN**

The 1987 Organization of Land Transport Law (LOTT, in its Spanish acronym) gives regular scheduled public transport for general use the status of a state public service to be managed indirectly by administrative concession. The competent authority cedes the exclusive right to transport passengers from a city/village to another for a stipulated period of time and route to a transport operator. These concessions are awarded by competitive tender to the operator that makes the best offer in terms of quality, price, etc. This operator is obliged to charge a fare regulated by the Administration, and to deliver the service in compliance with the stipulated tender conditions and quality, using its own assets and being responsible for expenses and revenue. Consequently, once the concession has been awarded, a legal monopoly to exploit the bus line is created that completely closes the market for the duration of the concession (Izquierdo-Llanes and Fernández-Sánchez 2004).

Tender specifications set out all the conditions the operator must comply with (there are essential, minimum and guidance conditions). Among them, fares are clearly crucial because intercity bus transport is subject to obligatory maximums that are set in the concession agreement as part of a controlled pricing system. The fares are reviewed using a system that takes account of real inflation over the previous 12 months, adjusted by a reduction indicator based on each operator's performance. These fares should cover the total real costs under normal conditions of productivity and allow —along with remunerating complementary services— acceptable amortization, a reasonable business profit, and satisfactory service or performance of the activity (Fernández-Farreres 2004).

The LOTT states that the duration of concessions cannot be shorter than eight years or longer than 20, and that the duration must always be specified in the tender conditions. In general, the standard concession period for national bus lines has been 12 years, with the possibility of

extending it a further five years for those concession holders that promised to freeze fares for two years (law of 13/1996). For this reason, in most cases the concessions will end between 2007 and 2013, from which time new concessions will conform to the minimum of six and maximum of 15 years set out in the royal decree-law of 4/2000 (23 June). Meanwhile, the proposal for European Parliament and Council regulation on member states' involvement in road passenger transport questions outlined a limited duration of no more than five years.

We have surveyed a sample of 40 intercity concession titles that were operative in Spain in 2005 to obtain an accurate picture of them and to compare their variability, especially between the different Autonomous administrations. The most outstanding feature is their great similarity. All the contracts define in detail:

- a) subject (route, listing stops and distances);
- b) service conditions, including information on services and seasonal schedules, registered vehicles and facilities;
- c) economic conditions (maximum fares and structure of costs); and
- d) legal and administrative conditions, including information on the duration of the concession, rights and obligations of concessionaires (guarantee bonds, direct control, transfers, abandonment, additional services, etc.), and the obligations of the Administration (modifications, terminations, inspections, redemptions, penalties, etc.).

The biggest differences, though not particularly important, are between Autonomous administrations. They are mainly to do with the complexity and detail of fare structures and timetables (e.g., in Madrid, where the outlying area is divided into several zones) and some attempts to improve the quality of service (e.g., in Catalonia). This survey's most important finding for our work was, however, the complete absence of explicit systems of incentives it revealed. In other words, our study of contracts shows that among current concessions there is not a single system of incentives to promote quality of service (with the exception of the modest efforts made by the law of 13/1996 and the local government of Catalonia).

In order to test the relevance of the problem of quality in practice, we carried out an exploratory study on this with a sample of 29 news stories —from the Internet— about road passengers' complaints. Half of them were about *a*) infrequent services, and *b*) non-compliance with timetables. Other complaints that we observed were, in order of importance, *c*) poorly equipped stations (both in terms of ease of use for the disabled and the passenger information available) and *d*) badly signposted and equipped shelters. To a lesser extent, there

were complaints about buses not being properly equipped for disabled people, the speed and jerkiness of driving, the never-ending lines in stations (both to buy tickets and board buses), the high price of tickets, and having to pay for transfers. In summary, this illustrates that quality matters in transport service.

### **3. FRANCHISE CONTRACTS: A REFERENCE MODEL**

#### **3.1 Franchising and concession: How similar are they?**

Private franchise contracts have similar economic characteristics to administrative concessions. Vaughn (1979: 12) states that a franchise exists when “[...] a parent company gives an individual or company the right, or privilege, to run a business in a pre-established way during a determined length of time in a specific place. The parent company is called the franchisor; the individual or firm that receives the privilege is the franchisee; and the right or privilege itself is the franchise.” This definition stresses the parallelism with concession contracts: the Administration plays the role of franchisor and the concessionaire that of franchisee. Therefore, both contracts can be considered from an economic standpoint as the legal instrument of an agency relation between the principal (franchisor or Administration) and the agent (franchisee or concessionaire); the former owns a business concept (authority over passenger transport matters) and temporarily cedes it to the latter.<sup>vi</sup>

Consequently, both contracts (franchise and concession) create similar systems of incentives. In both cases the exploitation of the business is in the hands of an independent company that is remunerated with its profits (or residual income). This form of remuneration provides sufficient incentive to agents (franchisees or concessionaires) to work as hard as they can, as the benefits of their efforts come directly to them. Employees —public or private— would not have the same incentive to push themselves as they are not totally responsible for the economic consequences of their decisions.

The main incentive difference between the two contracts (concession and franchise), lies however in the distinct nature of the principal when they are considered as agency relationship. In franchise contracts the principal is a private firm acting in its own name, while in concession contracts the principal is the Administration or State, acting on behalf of the

citizens. In other words, in concession contracts there is a double agency relation: of the citizens over the politicians, and of the politicians over the concessionaire. Therefore, the ultimate principals are the passengers themselves. The economic significance of this difference is that, following the arguments of Alchian and Demsetz (1972), the most motivated controllers are those that receive the residual income (i.e., the entrepreneur or private company), as any control effort they perform has a direct impact on them. The Administration, however, does not benefit directly from putting more effort into control, which makes it likely that its incentive to make this effort is less than for a private firm.

### **3.2 Franchising problems and solutions**

The system of incentives in franchise contracts that we have just described also suffers from its own problems. One of the most well known is the franchisees' tendency to ignore certain externalities of each outlet on the whole chain, such as reducing the quality of the product (Rubin 1978, Brickley and Dark 1987). Franchisees with a high percentage of irregular customers may think that unilaterally lowering product quality will benefit them via reduced costs without resulting in a significant loss of customers, whose loyalty would be assured by the overall quality offered by the rest of the chain. The problem here is that if many franchisees begin to think—and act—like this, they will drag down the average of the whole chain and may then cause the business to run into difficulties.

As the incentives are similar in both contracts, by extension we can argue that this problem of quality is also present in concession contracts. Once concessions have been obtained from the Administration, concessionaires may decide their best course of action is to reduce the quality of service. It is even possible to argue from a theoretical point of view that this problem of quality is likely to be more serious in administrative concessions than in private franchise contracts. The reason is that in the former the principal is the Administration. The Administration is not as motivated as a private company to monitor quality because it derives no direct benefit (in terms of profit or residual income) from it. Its interest would come as a result of its role as user or because of wanting to preserve its political reputation. In addition, information about service shortcomings does not easily get back to the Administration, unless the proper channels are created. Compensation claims resulting from complaints are usually made against the operator itself, but few reach the consumer protection or road passenger travel inspection services. The importance of this problem, however, depends on the demand

characteristics. If passengers have little chance of changing their method of transport (inelastic demand), operators probably have a greater incentive to reduce quality (costs) than in situations where alternative methods of transport are easily available.

This problem of conflicting interests between franchisor and franchisee on quality can be resolved in two complementary ways (Milgrom and Roberts, 1992; and González-Díaz and Raynaud, 2005). First, the party that lacks information (franchisor) can invest resources in obtaining the information. And second, a system of incentives that tries to reduce the conflict of interests between the parties can be built into contracts.

#### *A) Monitoring and control*

The most obvious solution, therefore, involves getting the franchisor to invest resources to prevent opportunistic behavior occurring. This first requires including in the contract a detailed specification of the production system, materials and service to be delivered. These points can then be checked at a later date to see that franchisees are complying with the norms and instructions (Love, 1986; Dnes, 1992; Bradach, 1998). This monitoring and control process is usually fairly expensive, especially if the aim is to do it thoroughly. Although the franchisor should pay for this, the costs actually fall on the relation, which means that it can be passed on to the franchisee through a negotiated settlement, higher royalty rates and/or up-front fee.

The most common mechanisms used by franchisors are field audits, mystery shoppers, surveys and information systems (Bradach 1997, 1998). In a field audit an employee of the franchisor goes to the franchisee's outlet to directly observe the production system and/or service. Inspections typically focus on the skills of employees, levels of service and the quality of the inputs, among many others. Mystery shoppers – who pretend to be customers - are also employees of the franchisor. They visit - anonymously and without warning - the different outlets (normally both the parent company's and franchisees') to grade the level of service that customers receive. These undercover inspectors score factors like speed of service, cleanliness, friendliness, information given, condition of the outlet, etc. Real customers are also asked for their opinions on a variety of key indicators of satisfaction. Lastly, the information systems are usually provided by the franchisors, thus giving them almost direct access to much of the franchisees' information (e.g., state of sales, most sold products, types

of sale, etc.). In some cases information on inventory levels and franchisee expenses is also supplied.

### *B) Incentive contracts*

This solution requires all parties to work on designing a contract that aligns their interests on quality. This is usually achieved by designing a system of incentives that makes franchisees partly responsible for their actions, by negatively linking payment (profit) to some measure of the externalities they want to prevent (e.g., lower quality of service) (Blair and Lafontaine 2005: 117-138). This type of performance-related pay is more economical than monitoring the behavior of agents, which usually turns out to be expensive, especially when dealing with services or when outlets are geographically spread out. In fact, franchising uses inspections and direct supervision as a complement and support to incentive systems, as they link the continuity of contracts and/or access to new outlets to favorable inspection reports (Bradach 1997, Blair and Lafontaine 2005: 117-138).

This incentive mechanism is self-enforcing in the way it aligns interests by simply getting franchisees to act in their own interest. Franchisees have nothing to gain by running the risk of being discovered cheating on franchisors' quality inspections as this would seriously endanger their investment (quasi-rents) given franchisors' power to terminate contracts (Klein and Leffler 1981, Klein 1995). They could even miss out on future business opportunities (rents) in franchisors' new outlets ((Lafontaine and Raynaud, 2002). Therefore, it is the fear of losing rents or quasi-rents that really stops opportunistic behavior, which in turn becomes the perfect complement to counterbalance the excessive intensity of franchisees' profit-related incentives.

## **4. DESIGNING A CONCESSION CONTRACT**

How can the lessons learnt from franchise contracts be applied to administrative concessions? As we have argued that the economic nature of both types of contract is similar, we can also suppose that the safeguards that resolve the main problem in one should also work for the other. We propose, therefore, applying the existing knowledge on franchise contracts to the design of administrative concession contracts.

#### 4.1 Administrative reputation

Applying the logic of franchise contracts to those for administrative concessions makes it necessary to introduce a system of incentives that lessens the risk of *ex post* opportunism on the part of the concessionaire. This system could be based on some type of track record or administrative reputation for each concessionaire. Continuity of concession contracts, then, would be at least partially determined by this reputation. In other words, concessionaires with the best track record would be rewarded with contract renewals. Administrative reputation would be calculated using the average scores obtained from evaluations (inspections and customer satisfaction surveys) carried out by the Administration during the concession period. This approach would imitate at an administrative level the private system of incentives that links franchisors and franchisees (e.g., as in the McDonalds chain) and that has up to now produced good results judging by the success of franchised chains.<sup>vii</sup> In the same way that franchisees are motivated to act impeccably so that the franchisor will reward them with better terms, contract renewals or further outlets, administrative reputation would give an incentive to concessionaires to act impeccably during the concession period.

This administrative reputation would be built using a points system. Points would be awarded to operators based on the scores from each evaluation —the better the scores, the more points awarded. The points obtained would accumulate during the concession period until the time for renewal, when an average score for the whole period would be calculated. This score would represent the administrative reputation (good or bad) of the operator. It would then be possible, for example, to set up three groups based on the score or reputation obtained. The first group, for the lowest possible scores, would be defined as ‘bad reputation’ and would bring with it automatic termination of contracts. It would even be possible to make this ‘bad reputation’ count against the operator in future competitive tendering processes. A second group would include satisfactory or average scores, which would not lead to automatic contract renewal but would be a positive factor in the new tendering process. Finally, a third group could be set up that would reward above average scores with automatic contract renewal, limited to three concession periods. After this time concessionaires would be required to re-enter the tendering process. This would keep the door on competition open and would prevent too many concessions ending up in the hands of too few operators than could be justified on anything other than strict grounds of economic efficiency. The Administration

should always have the right to terminate contracts if the inspections reveal that certain minimum requirements are not being met.

#### **4.2 Monitoring and evaluation**

There should be a single monitoring service—in cases where there is more than one, they must be perfectly coordinated—so that the scoring criteria are as standardized as possible for all routes. The quality assessed should be demand-oriented instead of supply-oriented because the latter underestimates many traveler problems (Rietveld 2005). This means that the consumer perception of the disturbances (delays, reduced availability of seats, etc.) is the relevant information that should always be based on fieldwork, surveys of users of transport services, surprise inspections and mystery users.<sup>viii</sup>

Regarding customers' perception of service quality, at the very least first-hand information on the following variables should be collected and scored:

- Quality of service outside the vehicle
  - Safety of baggage
  
  - Friendliness and diligence dealing with incidents and problems (availability of forms and trained staff)
  
  - Ease of ticket purchase (availability of ticket counters, ticket machines and on-line purchase) and friendliness at the point of sales
  
  - Satisfactory facilities in stations, stops and shelters
  
  - Information on schedules, itineraries, route changes, etc.
  
- Quality of vehicle
  - Driver friendliness, appearance and level of training
  
  - Exterior cleanliness and condition of vehicle
  
  - Safety and smoothness of driving
  
  - Information updates during trip
  
  - Interior cleanliness and condition of vehicle

- Quality of on-board services (audio, video, food and drinks, newspapers, toilet facilities)
- Passive safety and vehicle comfort (leg-room, curtains, tinted windows, tables, reclining seats, temperature control)
- Fares and schedules
  - Timetables, number of services and seats
  - Ease of connection with other lines
  - Punctuality of departures and arrivals
  - Duration of service (appropriate number and duration of stops)
  - Reasonable prices, range of fares and customer loyalty

It should be noted that the operator does not totally control the above aspects (e.g. the punctuality also depends on the congestion). However, making him responsible for these aspects, the operator will have the appropriate *incentives* to undertake those policies which may attenuate the problem. We also need to clarify that the monitoring and inspections which are being proposed cannot correct the problems of opportunism alone. Without doubt, some aspects related to the lack or absence of information can indeed be corrected directly by the inspectors and evaluators. Problems, however, usually come from other not so easily observed aspects, where direct supervision is not particularly effective, an example being the efforts of concessionaires to get staff to be friendly, punctual, neat and clean, etc. Our only goal here, therefore, is to look for estimators of these variables, something on which the system of incentives can be built. This will align the concessionaires' interest with those of the users.

It is important to stress that the Administration should invest the necessary resources to perform this evaluation task; it is the foundation stone of the incentive system and must be seen to be reliable to be successful. Currently in Spain these responsibilities are delegated to the Autonomous Communities (something that is similar in many European countries), which would make it necessary to negotiate some type of agreement with them. This kind of communications and negotiations channels between many actors has been called “policy networks” and it has been argued that their use does not mean necessarily a loss of efficiency in the decision-making process because they help to achieve efficient horizontal relationship among different political partners (Kennedy *et al.* 2005: 399-400).

### 4.3 Contract duration

One requirement that seems to be necessary for the system to work correctly is shortening the duration of contracts to a period that will keep the operators interested in enhancing their reputations. This safeguarding mechanism (reputation) works when ‘repeated game’ conditions are present (Kreps and Wilson 1982, Kreps *et al.* 1982). Under these conditions the players are continuously interacting, thereby making it possible to verify the strategy adopted by the other party. In the situations that have been common until now, where the length of contracts has almost always been more than 15 years, the number of interactions is greatly reduced, which in turn reduces the interest of the parties in enhancing their reputations.

Taking the duration of franchise contract as an example, we know that *i*) the average length of contracts with a predetermined duration in Spain is slightly more than six years and *ii*) the most frequent (mode) length is five years. Furthermore, there is a trend towards reducing the duration of the longer contracts (20 years) in favor of shorter periods (5 – 10 years). Consequently, we consider that the standard length of concession contracts should be five years —something the European Union (EU) is planning to introduce.<sup>ix</sup> Our proposal also includes the options of contract termination —due to non-compliance— or contract extension —due to excellent service levels.

When contract renewal is linked to results, as is the case in franchising, the duration of the contract becomes less important. Firms interested in enhancing their reputation and continuing in the business in long term are not so concerned about having the safety net of lengthy contracts but on how to obtain the required results. Moreover, there do not appear to be reasons for such long-term contracts based on the specificity of the investments (Joskow, 1987). Bus transport operators employ mobile and general use assets, which significantly lowers their specificity as they can be re-used at low cost for other activities (e.g., by another regular or chartered transport company, even urban). Even when franchisees make large specific investments, contract duration does not tend to be a problem as contract renewal is practically guaranteed if the franchisor’s guidelines are adhered to. The idea in our case is similar: to reduce the chance of opportunism, concessionaires should perceive the risk of contract termination (i.e. loss of quasi-rents) if they do not obtain a proper performance.

#### 4.4 Discussion of contract efficiency

This system of incentives would keep the future behavior of concessionaires in line —as occurs in franchise contracts— for two main reasons:

- a) Risk of losing investment (quasi-rents): Concessionaires make investments that they would never recoup if contracts were cancelled early. Logically, companies should also be interested in renewing contracts, as this is the best way to turn a profit on past investments. Although these investments (vehicles and human capital) are not likely to be highly specific, loss of the contract will always prove expensive for operators in terms of tying up assets, searching for alternatives, re-painting vehicles and signs, etc.
- b) Chance of access to new business (rents): Operators are interested in keeping and enhancing their reputation if this helps them win more competitive tendering processes. This is a door to new business opportunities that it would be unwise to close, except in situations where companies are considering getting out of the business.

Introducing more explicit and stronger incentives —as, for example, automobile manufacturers do with their distributors<sup>x</sup>— do not, however, seem advisable. It is not easy for the Administration to put these measures into practice because once operators have the concession the Administration is not the supplier and receives no payment from operators for the concession. In addition, there is no agreed upon explicit and objective indicator of concessionaire performance, which always leaves evaluations open to debate. As a result of the difficulty of measuring performance, the literature on incentives usually recommends subjective and less rigorous evaluations (Milgrom and Roberts 1992: 206-47). The example that we have put forward, based on making contract renewal dependent on repeated quality evaluations, is in line with this recommendation. It is possible to set up, however, a penalty system for the most obvious and common infractions.

Two critical conditions must be met for the system to work correctly.

- a) **Monitoring and evaluation system.** The whole incentive system is based on monitoring and administratively grading concessionaires. This being the case, the relevant Administration needs to develop and protect the evaluation procedure to ensure it is as reliable as possible. If this does not take place, the whole incentive system will collapse. This does not mean that civil servants themselves should be

charged with this task alone. Monitoring companies could also be brought in and given sufficient independence and control to do the job.

- b) **Business opportunities or rents.** The second prerequisite is that operators should have some interest in continuing with the concession. For this to happen, the return on the business should make both continuing with and taking on new concessions attractive propositions. Concessionaires, therefore, must not see their profits strangled. The literature on this point strictly stresses that profits must be greater than the minimum necessary to attract investment (i.e., rents). Despite this, however, it seems likely that operators obtaining a ‘reasonable’ return (above the cost of capital, taking the risk premium into account) would still be interested in staying in the business and in expanding their operations.

Lastly, it is important to emphasize that direct supervision and systems of incentives are, at least in this case, complementary —one does not substitute for the other. Consequently, the relationship between the two needs to be looked after. The better and more reliable the supervision is, the better the incentive systems will work, as their impact will be strengthened. In other words, to penalize a firm with contract termination we must first minimize the risk of making a mistake in the evaluation procedure.

## 5. CONCLUSIONS

Our goal here has been to show how to improve the current system of administrative concessions for regular road passengers transport services — a system that seems to be promoted by the regulator, both in Spain and the rest of Europe. Given that we have observed *i)* the lack of incentives to keep the quality service in concession contracts and *ii)* the great importance attached to it by travelers, we have suggested building an incentive system for increasing operators’ concerns about the quality of service into concession contracts. We feel this would add value by reducing the chances of concessionaires acting opportunistically *ex post*, especially regarding quality of service delivered. The formulas recommended are based on those that private franchising has developed over recent decades and which appear to offer good results, judging by its popularity. These formulas try to reward the concessionaires that deliver the best service —estimated by the consumers’ perceptions and inspections— with contract renewals and offers of new concessions. We also recommend making the threat of terminating contracts for the worst operators a credible one, so that the threat of losing investment (quasi-rents) works as an incentive.

Under this system the duration of the concession period would become less relevant, while implementing the mechanisms needed to reach the results required for contract renewal — obtaining a good administrative reputation— would gain in importance. In this context it seems logical, therefore, to increase the frequency of renewal —and evaluation— by shortening the formal length of contracts to five years. This would promote the need to enhance administrative reputation and help the proposed incentive system to work properly. In addition, the Administration needs to develop a monitoring system that provides information on passengers’ opinions about quality of price, schedules, and service inside and outside the vehicle. This information is the foundation stone on which the administrative reputation or track record of an operator is built. The information would be used to decide contract renewals —automatic for operators with the best scores— and non-renewals —in cases of clear sub-standard performance. Moreover, where service inspections find serious infractions, contracts could be terminated with immediate effect —i.e., before the official end-of-contract date. Lastly, it seems advisable to limit the maximum number of automatic renewals to three as a way of not completely restricting competition for the market. Operators’ administrative reputations, however, could be taken into account in other competitive tenders for regular road passenger transport concessions.

Two critical conditions need to be met for this system to work correctly. First, an effective monitoring and control system must be developed —the entire incentive system is based on this. The Administration should, then, invest the necessary resources to ensure that it works correctly. Second, operators must want to keep concessions so that making the effort to enhance their reputations is worthwhile. This means that a reasonable level of profits, one which makes both staying in the business and looking for new concessions attractive, needs to be guaranteed.

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<sup>i</sup> We take the concession system as given and it is not our goal here to decide which competitive structure is best. This is an open discussion. See Cambini and Filippini (2003), Demsetz (1968), Prileszky (2005) and Van de Velde (2003), among many others.

<sup>ii</sup> This is also a ubiquitous problem in the whole transport sector at international level because of the widespread use of both monopolies and political intervention (Schiefelbusch, 2005).

<sup>iii</sup> Law 16/1987 on the Organization of Land Transport entrusts the "inspection to guarantee fulfillment of the regulatory norms of land transport [...] to the land transport inspection services" (Art. 32 and ff.).

<sup>iv</sup> Decree 128/2003 (13 May) on measures to innovate and improve quality in the regular passenger transport services in Catalonia (DOGC no. 3893, 28 May 2003).

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<sup>v</sup> See Carlquist (2001) and Dalen and Gómez-Lobo (2003) for the Norwegian case and Hensher and Houghton (2004) for the Australian example.

<sup>vi</sup> Interpreting franchise contracts as agency relations, and therefore as systems of incentives to reduce moral hazard, is the most common practice in the literature. See Caves and Murphy (1976), Rubin (1978), Mathewson and Winter (1985), Lafontaine (1992), and as a summary of the state of the art, Blair and Lafontaine (2005: 107-115).

<sup>vii</sup> Up-to-date data on the growing importance of franchising in different countries can be found at <http://www.franchise.org/intlresources.aspx>.

<sup>viii</sup> UNE regulation 13816, on quality of service from the users' viewpoint, is a useful tool in this respect.

<sup>ix</sup> This is only a proposal at present as the regulation is still awaiting approval (De Rus 2000: 256).

<sup>x</sup> Automobile manufacturers offer their distributors incentives by granting them discounts on large orders if they reach their goals. These discounts are usually agreed beforehand and are based on how far goals are reached. They are an important incentive for distributors to significantly reduce (up to 3.5%) the cost of their raw materials (vehicles). See Arruñada *et al.* (2001).