

# *Management regulatory liberalization of the public service contracts in the rail industry*

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**Abstract:** *Today, in Romania, we can state that may require regulatory intervention where public interest is expected to differ materially from the commercial interests of public service providers usually private companies. Yet, the literature states this situation as „market failure” considering that the public interest may be compromised if the market fails to deliver government objectives such as national security, national cohesion and social policy objectives. In Europe governments determine what they think is needed to make the railways pay for the cost of doing so. These are obligations of the state that focus on regulating monopoly power rail and the development of competition, safety and environmental protection, and the establishment of technical standards. In this paper we propose to analyze the management of the public service contract through the current regulations in the field and to correlate trends in railway industry the specific situation in our country. So the question arises whether in the public service contract management railway industry can speak liberalization in terms of infrastructure or over regulatory monopoly is the only option.*

*To obtain an objective response we conducted a series of comparative analyzes and SWOT considering the context of Romanian railway industry. Were defined and decontextualized concepts such as Public Service Obligation (PSO) and Public Service Contracts (PSC). Solutions have been proposed that promise social and economic benefits but were given the risks of these solutions. We remain dependent on the idea that past problems once again become current and not admit the old solutions especially after the global economic crisis*

**Keywords:** *Railway, interoperability, multimodal transport, intermodal transport.*

**JEL:** *L92; L98; O24.*

## **Introduction**

Since its entry, the railway industry has had involvement of the public sector. In many countries, railways are owned and managed by the public sector. However, both publicly owned railways and the private property were usually subject to government controls pricing, market entry and exit (the obligation to keep the lines open and operating services), financial structure, accounting

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methods, vertical relations such as those between infrastructure and train operations, and operating rules.

Increasingly over the past 30 years, experts have questioned the heavy burden of economic regulation, which in some countries where national monopolies were replaced by regulations that allow free access to the infrastructure for third parties. These opposite trends are most evident in the European Union (EU), where rail liberalization was accompanied by extensive regulations to establish a non-discriminatory market.

Devotees of market economy considered the best regulatory system is the market, which means that economic regulation may be used only to correct market failures, for example, where competition is absent.

However, the economic crisis in the entire world in recent years has a strong influence on management at the location (Androniceanu, 2013), (Manole, C.; Alpopi, C; Colesca, S.E., 2011) and thus the commercial units in that area. In crisis situations the first recommendation of the specialists in the management of public services is increasing budgetary allocations to boost the competitiveness of enterprises in the national interest and their continued support of the Romanian Government. (Androniceanu & Dragulanescu, 2012).

Another type of recommendation may be that the regulation should be used with caution as it can cause unintended consequences of which were designed to protect. For example, in many countries, regulated prices are set below cost. In short, they seem to benefit customers, but the influence of assets and rail services will deteriorate as long as prices are set below cost will deter railway companies from doing long-term investment or may cause bankruptcies. Regulations therefore working against the rail system are the term „financial”, the possible lack of sustainability finally having an effect on customers.

A railway reform may involve changes in ownership or management track, institutional and organizational structures and systems of government. These changes may require changes in the form of economic regulation. For example, the introduction of third party access creates the need to regulate the behavior of organizations that supply infrastructure. Economic regulation may include also the difficult task of maintaining and developing competition in the sector.

Regardless of the „solution” chosen perhaps the most important railway reform is transparent decision when it comes to public funding or government involvement (Androniceanu, 2011).

In many countries, the transport ministry was replaced as governor by a body that is independent of government. The body is then separated from the government, he kept for administrative and political role of owner and financier. In countries that have yet to establish independent regulatory experience, may need other solutions, at least in the short term until the obstacles can be overcome. The combination of trends is still debated in the literature to identify the strengths and limitations of the solution.

Some experts tributary of specific mindset research area of origin and argue that today transport pricing policies are measures of demand management transport system to reduce traffic and propose solutions for electronic Road Pricing (ERP) (Talukdar, 2013).

We can say that increasingly frequently over time as public services face constant changes influenced by a steady increase in the level of services and their management and subscribe to the idea that the need to integrate the various other services becomes a solution that can considered worthy (Carlan, Rosca E. & Rosca M.A., 2014).

### **1. Research methodology**

In this paper we analyzed the light rail regulations to specific situations in which one finds in the market of transport services and the interdependencies with various socio-economic and social factors. Analysis of the target compensation levels between the EU 15 and EU 12, then the compensation between the EU and Romanian Railway.

In analyzes were considered the basic principles established by EU regulations, the rail market in Romania in the context of the conceptual, political and technical. Were defined and recontextualized concepts such as Public Service Obligation (PSO) and Public Service Contracts (PSC) I conducted a SWOT analysis of the PSC and proposed an evolutionary program for PSC correctly. In section conclusions and recommendations have proposed solutions that promise social and economic benefits without neglecting the risk presentation. A PSC evolved oriented development of passenger transport services in terms of quality and frequency must apply the statements above. If the officer has not complied with these statements, long-term effects could lead to a collapse of the entire railway system (large loans railway undertakings providing discounts, lowering of quality standards, etc.). Table 1 contains the main strengths, weaknesses, opportunities and threats related with the trade balance CFR Passengers and rail service development.

**Table 1. The SWOT Analysis**

STRENGTHS	WEAKNESSES
<ol style="list-style-type: none"> <li>1. Requests mandatory minimum quality and performance</li> <li>2. Steps leading up to assess quality targets</li> </ol>	<ol style="list-style-type: none"> <li>1. Uncertainty on the regularity and amount of compensation during the period of validity of the PSC</li> <li>2. Compensation is directly related to the actual train miles without considering the responsibility of third parties, ex. infrastructure works</li> <li>3. Public Authority is not responsible for their payment delays</li> </ol>

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OPPORTUNITIES	THREATS
<ol style="list-style-type: none"><li>1. Integrates Romanian legislation in EU regulations</li><li>2. Rail market is growing and high potential in both Romania and the EU</li></ol>	<ol style="list-style-type: none"><li>1. Irregular Flow of compensations transfer.</li><li>2. Choppy political and economic environment makes it impossible to activate an investment plan linked to market services</li><li>3. Fluctuating market shares</li></ol>

As a result, the main clause of the current PSC will be discussed by type of content considering these weaknesses, the analysis of cost and rules set by EU regulations

Compensation : The main issues are the type of offset compensation methodology to calculate the regularity of payment and the annual adjustment during PSC. While PSC defines the method of calculating the compensation taking into account net margin of the company's revenue and expenditure. To this sum must be added to 3 or 5 % share in profit, based on the actual cost of services. This methodology, even if it is objective because it is based on profit and loss account is not transparent, it does not allow differentiation between different types of services to avoid cross subsidies between services with high profitability and low profitability. Calculation of reasonable profit is related to the actual cost of transportation, so it seems that if you increase the cost, then the profit recognized for the company grows, without any difference in cost (by this regulation will reward inefficiency company). You must correctly calculate the profit taking account of Capital Employed Net which is the sum of net working capital and net capital assets linked to operational activities).

Legal arguments are that EU regulations deemed compensation from the state aid compatible with the treaty if it is clear that they do not compromise market competition. Therefore, the analytical method must allow for the profitability level for each category. To achieve this objective, the methodology suggested by the consultant based on technical parameters that assigns a cost calculated for each train each train in a transparent and objective.

In addition, to calculate a reasonable profit, Annex 1 of Regulation 1370/200 defines the rate of return on capital that is normal for the sector in a particular Member State and take into account the risk or no risk to the operator through the intervention of the public authority.

### **Economic and legal bases of public service contracts**

Most economic regulations in the railway sector are designed to address two issues:

1. Monopolies, especially natural ;
2. Industrial interface management, usually at the point of separation between natural monopoly and the rest of the industry;

**MONOPOLY** - The most common form of market failure in the railways resulting from monopoly power. Rail companies dominate some markets and usually have a natural monopoly, at least for infrastructure. In the railway sector, it is rarely possible to create competition in the provision of infrastructure as a result of economies of density needed to support lowering the cost - business as volume growth corridor. Also, when inter-modal competition between railway undertakings is weak, regulations may be necessary to protect final and perhaps to ensure that all actual or potential competitors have equal access to facilities owned by existing incumbents. Economic regulation would need to be developed to reproduce a competitive as far as possible.

In practice, these options are more complex. Discretionary regulation can be combined with concession contracts and public enterprises. For example, in Europe, many state infrastructure providers are subject to discretionary regulation, whether they are part of holding companies or completely independent of any operator. Markets may have a greater or lesser influence. State infrastructure providers rarely depend entirely on private markets to raise capital.

#### **The management interface in a reformed industry**

If there is third party access to infrastructure is likely to need regulation to ensure fair access for railway undertakings wishing to use the infrastructure, particularly to ensure that the rules are not discriminatory access fees. If there is no third party access without vertical separation of infrastructure and operations, they can appear particularly strong regulations to ensure that vertical not discriminate new entrants.

A vertical separation does not allow infrastructure providers to have direct contact with customers, a situation that require regulation to ensure that the investments made by the supplier of infrastructure reflects customer needs and government. Also, separate infrastructure and train operations require good vertical coordination and regulation to play a role in this.

Most governments want to retain influence over rail services of passengers and freight. Perhaps the best way to do this would be to use a model in which governments use a contract to purchase services and tariff concessions they want. First, it can introduce the concept of public service obligation (PSO), which form the basis of two main contracts - contracts and public service contracts PSO (PSC).

#### **Public service obligations (PSO)**

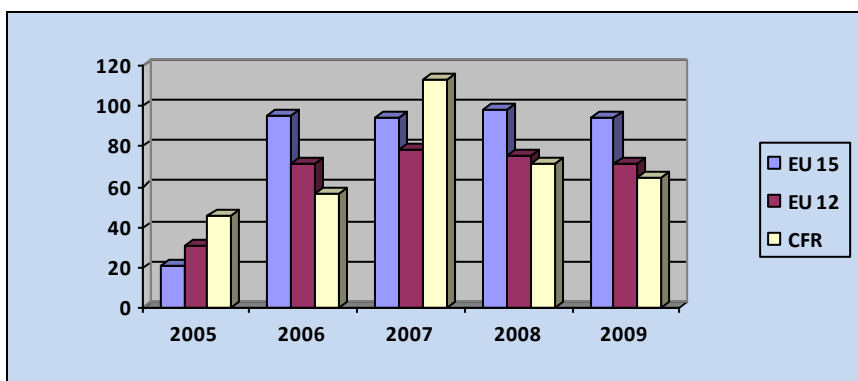
A working definition of public service obligations (PSO) has been developed by the European Commission for use in the European Union and is adapted here for more general application „requirement” defined or determined by the government, by which the transport concerned if it were considering its own commercial interests, would not assume to the same extent or under the same conditions without reward. Public service obligations could include:

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- a particular service or group of services, such as those on the low-density branch lines, shuttle services or off-peak services at night or on Sundays, regardless of the application;
- structure regulated tariffs or restrictions noncommercial, is recommended to increase the lowest prices or a lower rate than the increase in costs;
- offer public service obligations is a requirement defined by the government, which track would not take it if you would take into consideration their own interests.

Setting rates for specific groups such as students, retirees, military personnel, civil servants, disabled and so may be desirable. Worldwide, railroads carrying passengers face service obligations explicitly set by the government or imposed by regulatory intervention, but rarely are reimbursed directly. In other cases, railway managers face similar unreported obligations which, if ignored, could prove successful, leading to their limit. The explicit or implicit unfunded services undermine the exercise performance of commercial management and its commercial responsibility of the railway. (figure 1)

**Figure 1. Comparison of the compensation between the EU and CFR passenger**



(Source: CER - Community of European Railways and Infrastructure: 2013)

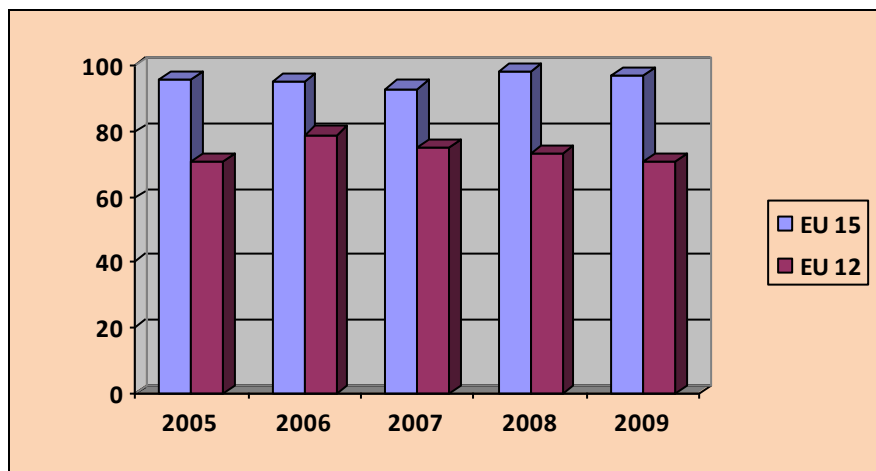
Typically, managers continue to meet its obligations and then try to recover costs from the end of government by grouping service obligation costs total annual losses, which are then covered by the government. Unfunded obligations undermines the efficiency and effectiveness of government spending because there are no connections between government objectives, actions, results and impacts of the budget. However, the costs of unfunded obligations are buried somewhere in the bottom line deficit financing for the entire package.

By contrast, PSO contracting in financing costs reveals the obligations imposed by the government and allows the railroad to handle both commercial activities and PSO on a commercial basis.

Preparing a PSO contract requires the identification of public service obligations and then establish the principles for compensation. PSO arising from the government should be more easily defined. However, if the obligations are not explicit, the railroad must analyze its activities in detail to select the services and tariffs that would provide in terms of commercial freedom. Then the government can present a list of services and price differences between concrete and commercial cases. This gives the government the opportunity to balance social objectives and availability by selecting the railway obligations necessary to continue. These obligations are PSO.

Ideally, compensation for PSO should be full commercial net cost provisions. For a PSO service, cost estimates should be equal to the cost effective supply, including return on equity, less service revenue. Compensation should be based PSO contract with governments. However, if governments are reluctant to finance the costs of non - cash depreciation and return on capital, the minimum level of compensation should go to a cash basis until it reaches the PSO. But in this case, capital renewal PSO activities should be compensated by a grant from the government next track.

**Figure 2. Comparison of the compensation between the EU 15 and EU 12**



(Source: CER - Community of European Railways and Infrastructure: 2013)

In a PSO system of contracts, reporting lines of the buyer from the government and rail provider reporting lines must be clearly separated to ensure that the buyer can be objective in assessing the performance track in meeting its obligations. In principle, PSO contracts may provide greater transparency and

accountability in public governance organizational performance, which may lead to improvements. However, in practice, rail passenger PSO contracts are not simple, for reasons that are conceptual, budgetary, technical and political.

A system of contract PSO is suitable for an industry with a set of activities based at the ends, another set of obligations that can be disaggregated cost separately charged by the government. However, financial modeling is suitable for passenger trains, the services can not be operated without long-term budgetary support, even at efficient entry-cost, except in very limited circumstances, such as rail corridors dense inter-city. Most passenger rail services are far from cost effective recovery supplement. Challenges to achieve full commercial viability are even higher for very many lines that peaked lines, suburban or regional services less used. In many countries, hardly a single passenger rail route could be profitable in a commercial sense completely. Under these conditions, a list of individual prices PSO would fill the entire schedule, representing a decision impractical and cumbersome instrument.

Railway requirement is not only to meet the PSO, but also to provide effective and obligation is to fund government at a level that PSO would charge an efficient provider. In principle, PSO contracts apply equally profitable and unprofitable railways. But when the national railways are profitable, state budget planners tend to resist the model contract PS. Instead, they prefer to rail internal cross-subsidy obligations. This argument is not convincing in terms of economic efficiency, as implicitly supports the idea of an internal tax on some customers over others support them. But it is still convincing governments make budgetary choices liquidity, they can observe other industrial networks more practical and profitable, such as postal services, phone networks, broadband networks, broadcasting, electricity supply, water and others often contain important elements of passage-domestic subsidy between customer groups.

#### **Public service contracts (PSCs)**

CSP is based on the concept of public service obligations (PSO), but PSCs exceeded conceptual and practical difficulties arising and agree on a program of individual price obligations. Rather than try to divide a network of specific business and non-commercial, contract officer may specify a minimum price of services and obligations for the entire job or most of it, and can compensate with a provider agreement or an agreed formula for the period of contract.

This toolkit presents PSO contract as a generic tool for management of public financing of railway passenger obligations. But it is important to consider the specific application of PSCs in the EU, the concept has undergone significant regulatory and legal development in the context of urban transport-bus, tram and rail transport; also replaced the PSO contracts accepted method of meeting public interest objectives in these areas.



EU regulations promulgated by the European Commission recognize that many passenger transport systems serving the general interest can not operate economically on a commercial basis, therefore, Member States must act to ensure the provision of safe passenger transport, efficient, attractive and high quality. In accordance with EU legislation by Member States concerning the award of exclusive rights to public service operators are granted financial compensation and general tax rules for public transport operators.

Regulations agree that financial compensation may be necessary to apply to basic public passenger transport both national and international, such as trains and trams, road ways, both public and private. While contracts for roads and light rail transport services must follow procurement procedures for heavy rail may be granted exemptions for which Member States may decide on the assignment of contracts.

In accordance with EU regulations, government or local authority should enter into a PSC with any carrier of passengers and to grant an exclusive right of operation, pay compensation for public service obligations, or both. Obligations aim to establish maximum tariffs for net clearing need positive and negative financial impact of compliance incurred pricing.

European Union through PSCs and their general rules, defined among others: the operator's obligations; parameters for calculating the compensation; nature and scope of the exclusive rights granted to all; distribution of food service costs (personnel, energy, infrastructure, maintenance, etc.) and the distribution of revenues from airline transportation between public service operator and public authority.

This contract agreement is essentially transparent to avoid an open commitment to deficit. If the officer is not offered as many rail services in the EU are not compensation should not exceed the net financial effect of the contractual obligations of the costs and revenues of the public service operator. These effects are evaluated by comparing the costs of the public service obligation to the situation that would have existed if the obligation had not been met.

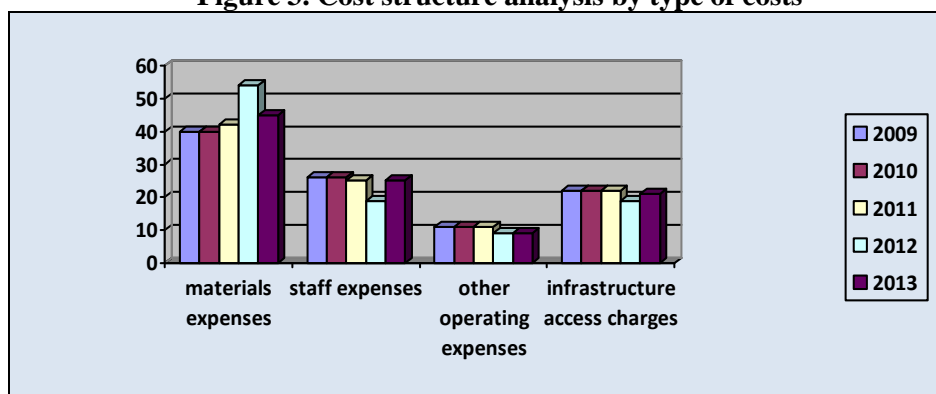
Public service accounts must be closed (round) - defended by increasing transparency and avoid subsidies paid to any public service operator who is engaged in other activities while providing service obligations offset by public transport.

## **2. Main findings**

Cost analysis performed on the national rail operator shows that revenue from ticket sales do not cover the actual costs of services by rail. In fact, no line or any service provided you train has a 100% profitability. In addition, cost analysis shows that there are few trains reliability percentage (low income / total expenditure) close to 100 % and sometimes more than 100 %, and overall high quality services are able to improve their profitability through appropriate actions to reduce costs and improve their incomes.

These elements provide an opportunity national railway operator and the state authority to develop, through a public service contract appropriate rail services in the country respecting the state and the rules set by the EU.(figure 3)

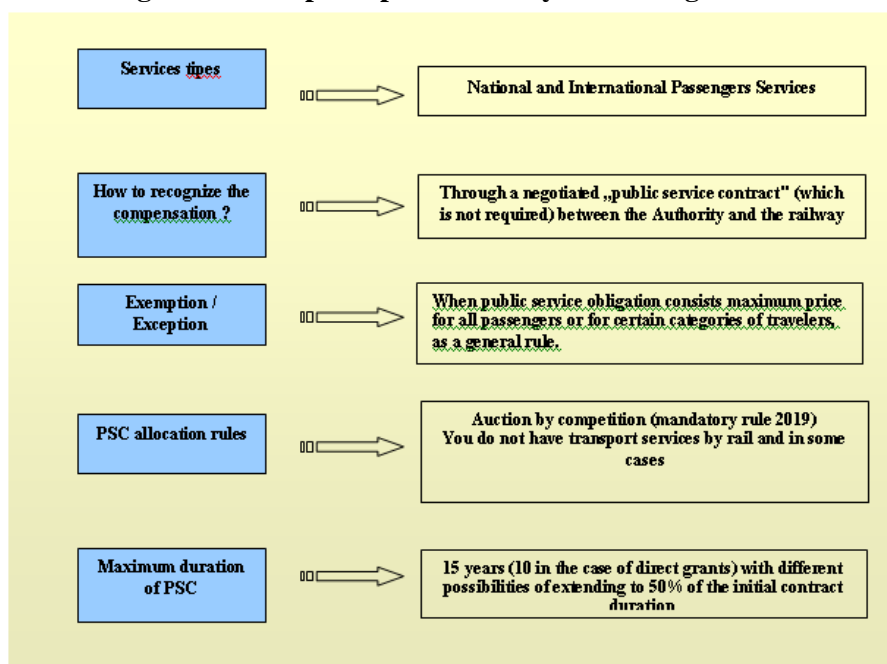
**Figure 3. Cost structure analysis by type of costs**



(Source: own calculations: 2014)

The new European regulatory framework establishes flexible rules of obligation to define public / social and duration of the public service, but also clarifies that public obligations should be compensated in a transparent and objective.

**Figure 4. Basic principles set out by the EU regulations**



(Source: CER - Community of European Railways and Infrastructure: 2013)

The fact that public service contract is a contract means that the performance of both parties must be in balance throughout the period as it takes public service contract. In addition, the contract must stipulate the conditions for adapting content obligations consequences of events that may occur during the contract period and may affect production costs and expected revenues. As an example, we can imagine the effects of a delay in implementation of investment plans (such as delay implementation of the plan or uninspired acquisition of rolling stock), this means that it is impossible for the national operator of passenger rail implement measures to optimize service costs and increase revenues because, as shown by studies carried out in this project, pricing policy can be truly effective if it is linked to increasing the quality of service provided. Otherwise, we can imagine the negative effect of performance degradation railway infrastructure; Every slow and destruction of the line can cause emerging costs such as higher cost for train drivers and train crew and possible cancellation of those events which seriously affects not only involves costs and expected revenues and reduce the risk of customers pay severance costs that were not complied with the minimum rights of travelers. (Regulation 1371/2007)

Finally, we can imagine the effects of inflation or increased costs on infrastructure access fee or fuel on the actual level of annual compensation granted until the contract expires. The amount of compensation in the public service contract may become totally inadequate, remaining nominally equal, if the contract does not provide a mechanism for adjusting the time. Consequently, it is now possible to sketch the basic elements of the public service contract.

### **3. Conclusions**

Perhaps a major social benefit claimed and would limit possible risks to public service contracts should not exceed 10 years for bus services and coach, and 15 years for rail. This period may be extended by up to 50 % under certain conditions, in particular to allow amortization of investments. We believe that the long periods may apply in the case of rail transport because we know the long-term nature of capital investment in the rail system.

Emphasize, however, that if PSC contractual agreements with public railway system in office if they are awarded without competition, the operator will have no incentive to optimize performance. First, if the price is based on cost or PSC input objectives such as improved usage of rolling stock or labor productivity objectives, it is lacking incentives to improve efficiency.

Secondly, if the CPS covers the difference between revenues and costs, even for objective cost-effective, the contract has incentives to optimize tariff structures to collect all charges.

This perhaps would oblige the contracting authority to set parameters marketing and revenue collection, which would add complexity and administering

contracts. Conversely, if PSCs are questionable, these difficulties are avoided for bidders to have clear incentives to plan their offer efficient and cost based tariff collection systems, and that their bid be successful for implemented.

Yet when there is a monopoly, price and quality can be determined in several ways from total dependence on markets to public service provision. The next option is the proposed concession contracts, which, as in the case of private contracts, use instances of litigation, but perhaps are more suitable for rail transport, with many customers. More government would be able to create a specialized body to make discretionary regulation including the power to set prices and standard services.

The regulator could operate such a clear and transparent framework established by legislation, but large enough to allow the regulator to exercise substantial discretion.

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