

RAILWAY REGULATION IN PORTUGAL: LESSONS FROM EXPERIENCE

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1. Introduction

The “examination” to which the railway sector is presently subject emerges from the confluence of several vectors. On one hand, and in spite of the continually disappointing results regarding operation efficiency and market share, the assertion of railway survival and even of its growing usefulness in the near future, no longer allows for it to be treated as a terminally ill patient, unpleasant but ignorable in the imminence of a “biological” solution. On the other hand, the evolution of the dominant economic paradigms no longer warrants situations that, under the pretence shelter of great principles, allow the perpetuation of activity areas free from the scrutiny of economic rationality analysis. The modern evolution of the political-economical paradigms (especially the theories of economic liberalism) and the vitality of intellectual production around the Theory of Regulation constitute the third vector of the confluence, added to and completed by the emergence of new challenges and constraints in the midst of the transport sector to which it became evident that “status quo” did not hold an answer.

For the EU, the foremost objective of the European transport policy is to accomplish the adaptation of the transport system to the growing demand postulated by economic provisions in the most efficient way so to better achieve economic, social and environmental goals and fulfil quality criteria regarding accessibility, travel safety and comfort. To that effect, the EU found it necessary to create a regulatory framework covering the requisites of transport planning and identifying incentives to be integrated in the system so that it oriented itself towards the efficient supply of its services and allowed a more intensive use of public transport. The emphasis on the importance of the regulatory function is reaffirmed in the White Book “*European transport policy for 2010: time to decide*”, the most recent programmatic EU document in the transport sector. This emphasis goes hand in hand with the construction of the trans-European transport network – which has become the preferential subject of these regulatory principles – and the formation of the internal rail market, taking into account the general interest and economic and social cohesion. These objectives are once again addressed in the 2002 Communication from the Commission to the Council “Towards an integrated European railway area” which elaborates five proposals for a rapid progress towards that area (a common approach to railway safety, development of interoperability, setting up the European Railway Agency as an effective management body in the system, and completing the internal market through the establishment of an equitable framework for fixing tariffs, the development of the trans-European networks – TENs - and the constitution of a legally and technically interconnected European area). The same document reaffirms the importance of Regulation in bolstering competition in rail transport markets, announcing that it is the Commission’s intention to present an amendment proposal of the Directive 2001/14, aiming to reinforce the competences of regulatory bodies.

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The development of the reforming framework for European railway (and in particular, the need to balance regulation and deregulation/liberalization) took into account the English experience (whose immense outpour of new information on the operation of railway systems comprises one of the richest knowledge pools on railways presently available) and the experiences which meanwhile started in the United States and countries of the EU through the setting up of legal frameworks, whether global (international treaties of 1987 and the creation of the Single Market in 1993) or specific in the domain of air transportation (following a path that started with the common licensing of airway companies in the EU territory, the regulation of airway tariffs, and followed through to the removal of cabotage restrictions, the setting up of the framework for the imposition of public service obligations with protection against anti-competitive behaviour, imposition of rules on “slot” allocation, opening the “handling” market, setting up conduct codes).

In this context, the Directive 440/91 appears as milestone of undeniable importance, setting out the conditions for the evolution of the process. The rationale it builds on can be translated into some essential points, namely: (i) the railway does not produce in acceptable conditions in terms of efficiency and quality; (ii) the promotion of competition (intra-modal) is the adequate vehicle for forcing railways to improve their performance; (iii) in sectors such as railways, in which the service is rendered on a infrastructure that is not economically duplicable, the promotion of competition has to be built through the creation of conditions for a “multi-usage” of that infrastructure (iv) the establishment of such conditions makes for the indispensability of the separation (at least accounts-wise) of infrastructure management and the provision of the services rendered on it. This Directive set the reference framework for the evolution of the European railway system – very different from the evolution that took place in the United States or Japan.

The creation, in railways, of a system separating infrastructure management and the provision of service on that infrastructure, led to a procedural model of railways with strong similarities to what was already going on in other economic sectors (indeed, this was used as an argument in favour of that separation), allowing the full-strength entrance in the railway sector of economic theorization models built on Regulation Economy, theories that had known a remarkable development applied to sectors such as production/distribution of electricity and water and, later, telecommunications, where they had proved their theoretical vitality and practical applicability. The evolution in the way the State’s functions are carried out (as we shall see in the next point), on one hand, and, on the other hand, the fact that the separation Model nearly established a “reference case” for the application of Regulatory theories, with the existence of a “natural monopoly”, coinciding with the infrastructure provider, and the existence of several users of that infrastructure, fully enabled the application of Regulation theories to the railways sector, minding, however, the necessity to manipulate some concepts carefully as they need to be tested in situations that are particular to railways (for instance in which regards the fact that railways usually functions in an atypical regimen of average and marginal costs curves). The application of Theory of Regulation concepts has undoubtedly enabled a never ending flow of theoretical supports in the research for answers to the highly complex problems raised by the separation of functions previously described.

2. The evolution of Regulation

The evolution of Regulation and the paradigm of the so called “Regulatory Economy” are closely related to the evolution of the part played by the State in the economy and, draws, some say, on the first actions of the United States Interstate Commerce Commission in the railways domain.

Regulatory economy can therefore be regarded as a product of the evolution of the role the State plays in Society. Indeed, the 19th century “liberal State”, in which the State non-administrative functions were reduced to a minimum (model built on the belief that natural balance in society would spontaneously happen as a result of the exercise of the fundamental rights and liberties of citizens – especially property rights – and that this process shouldn’t be interfered with), was followed, in the second half of that century, by a widening of the assumption of economic responsibilities by the State – mainly because of the need to support the needs of economic expansion that the private sector wouldn’t or couldn’t provide for (major infra-structural investments) and which involved national scale planning. The supervention of the question of the ownership of the activities supported on those infrastructures came to have different answers in Europe and in the United States, having the latter opted for the establishment of “private regulated monopolies” and the former for the direct assumption of such function by the State. The two World Wars and the economic crisis came to widen the sphere of direct or concessioned State activity, “forcing” it to intervene not only in the areas which were already object of its intervention but also in the production, transport and distribution functions. From the end of the first half of the 20th century, there’s a profound transformation in the State’s activity, which was expanded to comprise a component for the delivery of its social objectives (“welfare state”). The State becomes the direct provider of basic social services (now called “public interest services”), while the sustainable development of big energy sources, transport and communications media comes to be regarded as its normal and necessary task, a trend that underlies several basic economic sector nationalization programs that to some extent occurred all over Europe around that time. This evolution would come to suffer deep changes in the 20th century’s 80’s and 90’s decades due to the privatization process of major public services, of which the roots go back to the first crisis in the Welfare State (exponential public expenditure, limitation of the tax burden) and to the vigorous spreading, happening around that time, of the monetary theories (Chicago School) and the post-Keynesian theories. The demands deriving from the integration process in the European Community, associated with the construction of a single market and the election of the principle of free competition as a structuring pillar in its construction, ended up imposing the necessity to open to the market activities and services that were in the hands of the State up to then. The privatization of tasks now returned to the market did not take away, however, their essential importance to the citizen and, consequently, the need of not letting him stand unprotected before the free operation of market mechanisms that, from a certain point in time and faced with the reflux of the Chicago School theories (which had supported the sheer liberalization of the economy), no longer enjoyed the generalized presumption of getting the best possible adjustments of the resource mix, especially in “market failure” cases, on which abundant economic literature was starting to theorize. It is in this new context that the State assumes a Regulatory responsibility. With it, the State no longer has the burden to provide essential services, assuming, however, the obligation to intervene through regulation on the way in which the market agents provide for those services. We therefore move from

the existence of “regulatory practices” to the development of the “Regulation paradigm”. In this context, it can be stated that we have thus arrived to a point that presently allows, generally speaking, depicting regulation as having the protection of public interest as its objective.

The occurrence of “market failures” in the railway sector (for instance, incomplete information), a natural monopoly (the infrastructure) and the supply of essential goods not directly assumed by the State (at least in the Model presently valid, where it is State companies and not the State that provide those goods), obviously means that we are in the presence of a reference case for the application of a Regulatory system. The aim to pursue would be to achieve such behaviour from the regulated system as to maximize “net social value” of goods and services produced by the companies subject to regulation (the least social cost for a particular level and quality of service).

The existence of a natural monopoly takes on a central part in dealing with the application of the regulatory paradigm to the railway sector. The existence of this natural monopoly comes out of the fact of fact that it is nor economically sane to multiply the existence of infrastructures aiming towards the fulfilment of the same end (each railway company with its own infrastructure, side by side with that of its competitors). Disregarding very particular cases in which a desirable network redundancy allows for that situation to happen, this is not, however, possible (geographical constraints) nor desirable, as the natural monopoly that comprises the railway infrastructure is characterized precisely by the fact that we are before a market in which the costs of providing the desired output level (transport channels) are less if provided by a single provider than they would be if there were more entities providing that service, even if they were competing among each other (there are, therefore, growing and significant economies of scale). The presence of high sunk costs (costs whose recovery, given their singular nature, becomes virtually impossible if alternative uses of the goods to which they relate were sought– for instance, railways’ infrastructure) also acts as an impediment to the entrance of new competitors in the market, as they constitute an immediate competitive disadvantage for them.

No wonder, then, that the first regulatory bodies that were slowly being created, in the beginning oriented themselves towards the determination and establishment of limits on prices obtained from knowledge or calculation of the costs of the “monopolists” they regulated and which, in addition to the compensation for those costs (if “reasonable”), were only allowed to obtain an “adequate” remuneration level on capital applied in investments (system known as “cost plus”). Those regulatory attitudes were complemented by the establishment of an “obligation to serve” that would force them to adapt their production capacity so as to address the needs of all potential consumers. Some shortcomings in the application of this type of regulatory procedures (and issues regarding the ability of the regulated bodies to “capture” the Regulator) drove the theories’ evolution and led to the application of other regulatory paradigms. In particular, more attention was paid to questions of global efficiency in resource allocation and use. From that point of view, the level and structure of prices should give consumers incentives to make consumption decisions leading to an efficient use of resources in respect to goods provided by the regulated sectors. Those prices should also allow adequate remuneration levels on the activity of regulated companies, so that it is possible for them to cover their efficient costs (would-be costs if the company worked and was managed in an efficient way). If the first condition is determinant to be

able to achieve a sectorial macro-economic balance, this last condition is of the utmost importance to secure the survival of the sector itself: if it is not ensured, the companies in the sector will have to abandon it, ceasing to produce essential goods – and ensuring companies' ability to survive in the long-term becomes especially important when, as is the case in railways, considerable sunk costs exist. Regulators therefore also ended up having to address issues such as their capacity to determine efficient costs and what they cover (necessary condition for long-term balance in operation) and the distribution of benefits that the correct application of regulatory prices yields to the several stakeholders of that regulation. To these new areas of action it is still necessary to add the whole domain of issues addressing the establishment of conditions for the degree of openness of the regulated sector (market contestability) through the removal of barriers – especially administrative barriers - preventing the entrance of newcomers that are willing to defy the incumbent, the definition of clear access rules that will not unduly protect the incumbent (without, however, allowing inappropriate “cherry-picking”) and the protection of competition.

The development of the State's regulatory function was not, over time, without breakthroughs and setbacks, ambiguities and contradictions. Apart from the fluctuations that the very existence of a supporting theory still under construction, however strong, justify, the State's singular position in which it simultaneously acts directly on the market (service provider), is a major (or single) shareholder in the companies providing basic services and is responsible for Regulation provoked and still provokes conflicts of interest that sometimes are not properly settled. Furthermore, the “political” rationale for conflict resolution that characterizes the State can, sometimes, adjust awkwardly to the principles of economic rigour that should characterize, as seen earlier, the action of the Regulator, all this complex web potentially inducing traces of “schizophrenic behaviour” by the State, which in many cases resolves unsatisfactorily the bestowal of independence and autonomy characteristics to the Regulatory bodies, characteristics that are, however, indispensable for these Regulation bodies to exercise their functions adequately. To this setting still has to be added, in many cases (but with worthy exceptions), the general lack of awareness of government senior staff and politicians regarding Regulatory economical issues and problems, facilitating the settlement of erratic behaviour born out of that lack of understanding of those involved or, mainly, happening as a result of the search for compromise, even if inefficient, in the face of the game of forces exerted by those who intervene in the market (who, most of the time, have an interest on the limitation of regulation which is regarded by them as a hindrance). The fact that many times these intervening entities are the State itself (through its share in those companies) further complicates the problem, as they suffer more than the others with the fact that they have to comply with rules which, through the interposed Regulator, they impose on the markets...

3. Regulation applied to railways

Be it because railways were seen as important profit makers (in the beginning) or the very opposite of that (after the collapse of the private sector and the deficit accumulation that characterized the post-1929 crisis period and that consolidates in the post-World War II period), railways, as a sector where there were clear manifestations of monopoly elements, was one of the sectors that most underwent State intervention and that, in certain circumstances (namely at the realization of the inefficiency linked to self-regulatory practices, that they practiced for a long time), was regarded as an important application field for autonomous regulatory practices in relation to the companies in the sector.

But it is not only the limitation of predatory practices (in the era of railway expansion) or the need to intervene in the growing build up of complicated financial situations that led to regulatory intervention in the railways. The realization that railways, due to their importance to the economy, cannot be considered a “purely commercial operation” and that there is a strong public interest in its operation, the same public interest which forces it to be consistent with national and regional objectives, as well as the importance given to its safety, leads to the assumption that the right to explore railway services is always paired with a significant set of responsibilities in the domain of public interest, which, in turn implies constant vigilance by the protector of that public interest – the State.

From a conceptual point of view, the Regulation of the railway sector can easily be integrated in the domain of network industry regulation that also encompasses other domains such as that of energy and water (discounting the differences in economic-financial environment). In fact, the reform of the sector which is being conducted under the sponsorship of the European Union (and theoretical contributions from the ECMT) can be read as essentially translating the adequateness of the railway sector to the “model” of the remaining network industries, separating its monopolist component (the infrastructure) from its competitive component (service provision).

Integrated in the domain of transport regulation, the railway sector displays, however, some particular attributes (perhaps transient in time) that authorize the defence of regulation specific to the sector (particularly in view of the road transport sector). Among them are: the existence, in the rail market, of a natural, sector-structuring monopoly, which doesn't happen in the road transport sector; the different business structure of the several transport types, with the predominance of an atomized structure in that of the road transport contrary to what happens and will happen in that of the railways; the different market maturity level (railway regulation assumes a market builder function that has no correspondence in the road transport market); the importance of regulation on infrastructure access and tax on use; the regulatory differences at technical level.

According to the mainstream theory, the regulation of network industries should essentially be applied to the domain of the “natural monopoly” comprised by its own infrastructures, as the competitive replication of those infrastructures (as long as they are not saturated) constitutes inefficient resource allocation and would, therefore, not be regarded as adequate protection of public interest. In the railway domain those components comprise the train paths and the signalling equipment, the stations and the

maintenance and refuelling sites, thus becoming necessary to protect the railway operators from possible monopolist behaviour on the part of the manager of the infrastructures (as well as protecting market newcomers from exploitive behaviour on part of the incumbent).

Regulatory protection should fundamentally be applied to the establishment of the “game rules” regarding access and use of the infrastructure (access conditions, use conditions, tax on use, timetables, maintenance rules, non discrimination between operators, and so on) and the creation of incentives leading to a rational operation of the network (including capacity investment determination mechanisms).

An important feature of regulatory action consists of the fact that it has to be prompt, adequate and effective. Besides the pervasive equity issues, these characteristics are also regarded as essential in establishing an environment of trust that is considered to be indispensable in the engaging of private sector interest in the railways. The inflow of private funds in railway operation is, in the present prevailing railway paradigm in the EU, regarded as essential to the construction of intra-modal competition that is considered to be the touchstone in the introduction of practices leading to greater operation efficiency and quality of service which are fundamental issues in the quest for improvement of the situation of railways.

Railway regulation can be broken into two strands: legal and economic regulation, aimed at establishing operation conditions similar to those of a competitive market (overcoming market failures; allocation and production efficiency; sustainability and equity) and the technical regulation dealing with the creation of conditions for an efficient and safe functioning of the sector.

The rail market presents the conspicuous attributes of a network industry market (subadditivity/existence of a natural monopoly; sunk costs) but also some specific attributes (hefty legacy; high funding needs; small number of companies on the provision side; “absent” market or under construction; “normal” operation in the area where marginal costs are lower than average costs; absence of external costs internalization; information asymmetries/moral hazard). These specifics, together with those adduced in one of the previous paragraphs, urge caution when analysing proposals for the fusion of transport regulators. In fact, some of the positions that are being defended these days seem to confuse governance issues with Regulatory issues. The first type covers issues such as ensuring a correct horizontal articulation of policies, namely in the area of investment planning, tax intervention planning and the shaping of policies for economic and social intervention, together with laying out the correct action of the State in its multiple roles as shareholder, regulator, service provider and, additionally, as overall planner of a particular vision of Society. The second type covers vertical issues that belong to the domain of sector Regulation, where legal, economic and social regulation (both technical and of quality) are carried out. Hence, without denying – if only, due to the orientations deriving from governance and to the statutory mandates of the Regulatory bodies – the interest in the existence of a necessary level of strategic coordination of the transport regulators’ action (which we see as mainly being set in the Government itself), it cannot be left unsaid that the market specifics mentioned earlier prove the scarceness or inexistence of eventual synergies which may be obtained through an institutional fusion of those regulators and that such a solution may generate bigger problems than the ones it affirms to be able to resolve.

4. The European reform of railways and the emergence of Regulatory Bodies in that context

After World War II, the rail sector in the different European countries was fundamentally structured according to a national basis, with its operation centred on a public entity and without significant intra-modal competition. Its evolution up to the Eighties came to stress some other characteristics: management constrained by political objectives, loss of competitiveness and poor adherence to the principles underlying the internal market under construction.

Present since the Foundation Act of the European Union (Treaty of Rome), the transport policy was slow, in the road and rail areas, to materialize in the European texts. Only after taking the Council to justice, did the Commission press forward a Reform, under construction even today and of which the theoretical foundations are to be found not only in the inclusion of the transport sector in the set of network industries and its subsequent handling according to the general models for dealing with such industries, but also in a statement of belief regarding the effectiveness of introducing intra-modal competition as a dynamization element for the changes that were needed to create greater efficiency and quality in the rail operation service.

The essential objectives – in fact, those of the EU itself – are the creation of the internal market (space without physical, technical or legal frontiers), the development of the free competition principle and non-discrimination on the basis of nationality. Hence, it was deemed necessary to liberalize the access to the activity, harmonize conditions for the execution of activities (promoting, among other, legal standardization) and remove technical frontiers (through the promotion of interoperability). Regarded as essential was the structural regulation of the natural monopoly element (and occasionally that of the operators) and the pledge of non-discriminatory treatment of the new operators.

The European Union's intervention Model in the rail area adopted, in practical terms, the liberalization that at the time was taking place in the air transport sector and was then regarded as very successful, and determined the separation of the infrastructure management from the provision of railway services. This separation, which had previously taken place in the United Kingdom as a necessary step in the ladder leading to the privatization of railways in that country, evolved according to different models (that can be broadly regarded as of the “English type solutions” or “Swedish type solutions” – just to mention pioneer countries in the institutional separation – or the minimalist “French type solutions”).

The proclaimed changes are aimed at altering the panorama described in this chapter's first paragraph through the organization of the sector according to a Communitarian basis, supported on a multiplicity of intervenient entities, and bringing into it market mechanisms.

The transition to open competition and its rules forces the redefinition of the role of the State and the disciplining of State/company relationship, namely by making a distinction between the State positions as shareholder, regulator and provider. Particularly, the State shall abide by the new Directives (under preparation) on State support grants, turning to a general principle which determines both the subjection of

contract awarding and public services rendering to public tendering and the guarantee of transparency in the awarding of funds, as well as transforming the management of those former State companies according to open competition management practices.

Open competition models can be classified into two groups according to whether, after previous licensing, free access to the infrastructure is permitted for all licensed undertakings (competition in the market), – a model which is presently preferred for passenger occasional or long haul, and freight services – or tendering for public service takes place (competition for the market) – a model which is presently preferred for suburban and regional service – in which case, after a competitive tendering, the winner is the sole user of the infrastructure within the contractual period.

As a result of one or two actions previous to the approval of the first structuring Directive for the rail sector (Regulation 1191/69 – amended by Regulation 1893/91 – on the Member States' acts in the matter of public service obligation and public service contract awarding, with an amendment proposal – COM (2000)0007 – put together in 2002 and intending, as a rule, to make public tendering mandatory in contract awarding), the activity of the European Commission entailed, after the Eighties decade, the creation of a set of Directives aimed at achieving the separation (at least accounts-wise) between the management of the infrastructure and the operation of rail services (regarded to be a necessary condition to the introduction of railway path multi-usage), the establishment of rules for licensing and capacity allocation (the famous Directive 91/440 and subsequent 95/18 and 95/19) and bolstering the interoperability of the European railway system. At the same time, the EU was taking action in the development of TENs (trans-European networks), interoperability and inter-modal transport.

The experience obtained from the implementation of this Directive (of which the results were considered insufficient), drove the EU to promote, about 10 years later, the approval of a new set of Directives, known as “First Railway Package”, (Directives 2001/12, 2001/13 and 2001/14). The reflection on the application of the first Directives (440/91, 95/18 and 95/19) led to the consideration, among others issues, that the deepening of the Model called for the creation of a true competitive market not only in the binomial “Infrastructure manager – Operators” but also in the industry (and a better management of the intermediate market of rail paths sales that was timidly making its appearance) and demanded the existence of a function/body of Regulation that could act towards the creation of a market and of its proxies, until the market would be considered mature. That's why one of the Directives (2001/14) had as its main objective to regulate the constitution and operation of Regulation Bodies, ensuring them, albeit under a cape of flexibility of possible institutional designs, the characteristics of authority, independence and autonomy that the theories and practices existing up to then had shown to be indispensable to a positive exercise of the Regulatory function.

Among the most significant measures of the “First Railway Package” (already transposed to Portuguese Law in the DL 270/2003) are the reinforcement of safety, the definition of liberalized services, the expansion of the rights of access to the infrastructure and of the autonomy of the infrastructure manager, the establishment of conditions ensuring open market competition, the standardization of the licensing scheme and the tackling of the taxation scheme on infrastructure use, as a means to the creation, at Communitarian level, of a stable, predictable and non-discriminatory

regulatory framework and the opening of the international freight market. One of its lines of action – besides the creation of the new business organization model through the establishment of market mechanisms – is the explicit introduction of independent economic regulation.

A second railway package has already been approved and awaits transposition into Portuguese Law. That package comprises a Directive addressing the deepening of railway safety issues, amendments to the interoperability Directives, the regulation that institutes the European Railway Agency, which is already operating and which will handle the European networks' safety and interoperability issues, and the amendment to the Directive addressing the rights of access. The principal objectives of this "Second Railway Package" are: to complete the liberalization of rail freight, to reinforce the Communitarian approach to safety and accident investigation, to bring about a fully operational "Railway Agency", and to shape the Community's regulatory framework according to the European model for impartial regulation, extending it to safety.

A third "railway package" is presently on its way to approval (with a greater or lesser resistance from some countries and a greater or lesser "survival rate" of some of its principles). It contains a proposal for a Directive addressing the certification of train drivers, a proposal for a Directive addressing international rail passengers' rights and obligations, a proposal for a Directive addressing the opening of the international passenger service rail market and a proposal for regulation addressing freight quality. Its objectives are to extend the ongoing liberalization to passenger transport, to promote the demand for railway transport through the creation of a "charter for passenger rights" and for freight and to make the access to the European network more operative through the institution of a train driver's licence.

It is also worth mentioning the enormous importance for the sector's future design that the Community's initiatives will have regarding the framework for contract awarding, public service financing and State aid grants, as well as the initiatives to create platforms for meeting and understanding among the national Regulators and their articulation with the Competition Authorities.

Whatever the "fate" this new packaged and other EU initiatives are destined to, some of the future challenges are clear and easy to predict: the creation of conditions for attracting private sector initiative, the clarification of the State's different functions as regulator, shareholder and service provider, the transparency of action and of contract awarding in public service provision. A critical success factor for all these objectives is the development of the regulatory function and regulatory bodies, giving them conditions for authority, impartiality and autonomy and, at the same time, requiring them to meet accountability, efficiency and predictability conditions without which the market will not react in the desired way and the conditions for the development of the rail sector will not have been established.

5. The national context

In the national context, the Terrestrial Transport Base Law (Law 10/91), the DL 252/95 (amended by the DL 60/2000 – transposition of the Directive 440/91 and subsequent 18 and 19/95), the Law 88-A/97 (Law of Sector Delimitation); the DL 104/97 (the creation of REFER – The infrastructure manager), the DL 299-B/98 (creation of INTF – the Rail Regulator); the Regulations 18 and 19/2000 (on rolling stock licensing and tax on use – this last one having recently been substituted by Regulation 21/2005) and the DL 270/2003 (transposition of the “First Railway Package”) are currently deemed relevant.

That set of diplomas materializes a path initiated in 1997 (with the exception of the Base Law for Terrestrial Transport, which dates back to of 1991), when the principle of institutional separation of the infrastructure manager(s) and the operator(s) was accepted, going through the creation of the regulatory body in 1998, the first private concession (North-South Rail Axis) and the application of the tax on infrastructure usage (1999), following through the transposition of the interoperability Directives in 2000, the creation of RAVE (High speed planning body) in that same year and the transposition of the First Railway Package in 2003, which was also the year when the installation Committees for the Metropolitan Transport Authorities of Lisbon and Oporto were created.

The INTF (National Institute of Railway Transport) was created according to one of the models existing in Portugal for the creation of Regulators – and possibly not according to the best of these. In fact, Regulators in Portugal can be classified according to their Statutes in the following manner:

- Regulatory bodies of special type and statute: CMVM (which regulates the stock exchange) and the Bank of Portugal which, in turn, regulates the national financial system.
- Regulatory bodies with Statute suitable to the function and observing the most advanced proposals in this domain: ANACOM (Telecom Regulator) and ERSE (Energy Regulator), which saw their initial Statutes revised according to principles defended in particular by Prof. Vital Moreira (a well-known Portuguese professor of law) and which, through that revision acquired the characteristics of authority, impartiality and autonomy (namely because of the irremovability of their Board members) which are now regarded as essential constitutional elements in the formation of regulatory bodies.
- Regulatory bodies with a mere Institute Statute: INTF and others, created according to the juridical model for Institutes (which means that there is no irremovability of senior management), with administrative, financial and patrimonial autonomy, even though such characteristics have come to prove to be far more theoretical than practical and which, under heavy attack from (past) Governments, did not prevent the asphyxiation of those bodies through limitations on the use of resources, even if previously approved in their Budgets and Activity Plans.

According to its Statutes, INTF is a public Institute with administrative, financial and patrimonial autonomy that exercises regulation, inspection and supervision functions and also has support functions in what regards the development of the railway system. It also represents the State in international organizations and in public service procurement/contract awarding, be it on the conventional rail transport domain (for

instance the Fertagus concession) or the light rail transport domain (Oporto and Mondego metros, etc.).

The INTF's objectives are: to promote and materialize the sector's reform, to promote the development and modernization of national railways, to promote the economic efficiency of the regulated companies, to promote inter-modality and consumers rights. In the domain of economic regulation, the INTF promotes system efficiency, regulates the natural monopoly and defends the best interest of railway clients, acts toward the establishment and development of the economic regulation information system ("regulatory accounts"). In the domain of technical Regulation, it promotes the reorganization of the sector's technical standards, verifies the compliance with the appropriate norms of infrastructures, rolling stock and staff working in safety-related areas,. Furthermore, it supervises and inspects railway safety and it investigates accidents and incidents. It also carries out consumer defence functions.

Currently INTF also has a Planning function which obviously held a close relationship to the regulatory function (Regulation should be coordinated with the ruling conception of the sector's development). Of course that close relationship can be obtained at the expense of other organizational models in which the planning function is carried out by other entities (even though it is considered that the State should not let go of its autonomous capacity for contradicting the proposals presented by the sector's undertakings, and in particular, by the infrastructure manager). INTF's vision on planning was moulded on a ruling issued by the Minister of Social Equipment (which included transport) in charge at the time, Ferro Rodrigues, regarding activities associated with the High Speed project. It was deemed necessary to precede the making of proposals for investment programs and their materialization in the networks design – to be done particularly by REFER – by a set of exercises that were not to be confounded with those activities, and which should be carried out not by those undertakings but by the State or whomever the State delegates that responsibility to (safeguarding its own power to decide). Among these exercises were those proposing a new planning methodology that would take in due consideration the new model for the rail sector, now with more than one player with intervention rights on the shaping of the future of rail and, hopefully in the future, with an increased role in the market. And (mostly), the production of studies that would allow to set the mission, objectives and economical-financial sustainability conditions of the railway system, making it possible for the political power to set clear goals and to set the reference framework for the planning to be carried out by the rail undertakings, and also, with such studies completed, allowing the State, when confronted with the planning propositions of the rail undertakings, to exercise proposal contradiction with well-founded arguments as opposed to casuistic or random argumentation. In the afore mentioned dispatch, the Institute's range of action was complete with responsibilities in the macro planning of the railway network, meaning that the Institute was to (solely) determine, regarding the future, the matrix of economic and social relations in the territory (Portuguese, Iberian and European) that would be interesting to transform into itineraries serviced by the transport network and, in particular, by the railways, thus establishing a reference framework for the determination of investment priorities in the rail network.

To end the list of the Institute's statutory, or otherwise, responsibilities of INTF it has to be mentioned that the Institute also has the duty, as State representative, to follow up on

concessions and specific projects and on the State's request, it provides legal or economic advice and undertakes studies.

In 2001 the Government approved the staff provision (80 people) even though, up to 2003, there was never authorization to hire personnel so as to have more than just half of this number. The Operational Budget was approximately 4 million Euros (2003), which makes the INTF one of the Government bodies with smallest Budget. The INTF has, according to its Statutes, the obligation to derive 75% of its income from sources other than the State Budget, which it has complied to, through charging REFER a fee and also charging some scattered taxes in relation to the work it produces regarding conformity analyses etc....

From the set of actions carried out by the INTF since its creation the following can be highlighted: the creation of regulations for the operation of the rail sector (tax on infrastructure usage, licensing), transposition of Directives (91/440, high speed interoperability, conventional systems interoperability, cable transport, First Railway Package), ratification of the infrastructure usage tax, legal and economic actions in the domain of concessions and of rail network and sector undertakings analysis, interventions regarding public domain railway assets, enquiries into and follow up on accidents, and so on. The appearance of the "Fair Competition Authority" and the need for coordinating actions with it should also be noted.

Analysing the life of the INTF for the duration of the years the authors were associated with the institution (from 3 to 5 years), different phases of growth can be considered to have existed:

- Up to 1998 – "pre-historic" phase, beginning with the creation, by the then recently installed Socialist Government, of the three Commissions that approached the reform of the sector, one of them dedicated to the analysis of the regulatory component of the system. From these Commissions came the proposal to create the Regulatory Body – but unfortunately that creation was not, as was later proven that should have happened, prior to the creation of REFER and to the separation between infrastructure manager and service operation company, situation which came to have consequences in the development of the railway Regulator, namely preventing it from acting more actively and institutionally in the initial shaping of the Reform, and, due to the urgency in it starting to be operational once its creation was decided, also preventing it from having a first stage of life with an "Installation Commission" that would adequately handle the development of its internal and external Regulations and that would allow the building of the possible compromises (without affecting the rigour applicable to its construction) in the making of Regulations which are as important as from pertaining to the ratification of the tax on infrastructure usage.
- From 1998 to 2001 – birth phase, corresponding to a period of construction of the global instruments for regulation (without prejudice of producing the necessary application Regulations) and of which the main characteristics are the high transaction costs deriving from high litigation with the regulated undertakings (facilitated by the Government's erratic conduct), a phase which ends with the approval of the Regulator's staff provision.
- From 2001 to 2003 – youth phase, when a noticeable decrease in the pre-existent litigation takes place (without coming to an end the perturbing interventions on the

“normal” functioning of the Regulator, maybe due to the fact that litigation has eventually moved to an “underground” level, and being less active but not inexistent) and there are efforts to settle the framework for internal operations, while at the same time actions are carried out that lead to the Government’s approval of important sector structuring diplomas (among them the transposition of the European Directives). During that phase the Government successively extends the scope of action of the Regulator (especially in the domain of “metros” – light or conventional and of technical follow up on concessions). It is also in this phase that the Institute starts to work on technical regulation and that the Institute’s active intervention is called for in the shaping of options for the High Speed project and of decisions of macro planning (and even on micro planning, in the form of economical or legal advice) of the conventional network. This phase could be considered as having been completed with the substitution of the Institute’s Board which can be deemed to have followed a certain line of thought which was present ever since the Institute was born.

Looking at the future and at the need to deepen the re-structuring of the sector, it is deemed necessary to ensure a strong participation of the all the players involved, whose action must take into consideration twelve “principles”: i) the understanding that the ongoing reform will not preclude the need to continuously and significantly invest on the network and its maintenance, which poses the question of adequate funding; ii) the need to carry out, in depth, the financial clearance activities which, since the beginning, were known to be a necessary condition for the success of the sector’s reform and which have not yet seen the light of day; iii) the need for significant improvement in the operational results of the sector’s undertakings; iv) the need to carry out the revision of the incumbent’s Statutes to bring it to compliance with the Model designed for the sector – which should have happened at the beginning of the ongoing reform; v) the need to construct a true rail market, where it is possible for that same market to sanction almost automatically behaviours that would be adverse to the subsistence of the undertakings that adopted them if they were in a competitive environment – it is, in fact, the Regulator’s job to actively work towards achieving this; vi) the need for the sectorial Regulation function to settle and be able to develop in a “non litigational” environment; vii) the need for stability to create the conditions for attracting private initiative – which is one of the objectives of the ongoing Reform – stability which may come to prove itself as a decisive factor in what concerns the participation of private entities in a sector to which attracting such capital is difficult because of its complexity and specific characteristics; viii) the creation of a critical mass of “know-how” built as a support base to the diffusion of knowledge (and even of innovation) essential to the development of the new way in which the sector actors are expected to play; ix) the need to think that the ongoing Reform calls for particular attention to the evolution of railway undertakings but that the opening of markets calls for an equal amount of attention to be devoted to the extreme relevance of the existence and of the characteristics of statutory and shareholder impartiality regarding all the service providers; x) the absolute need to create a framework for tendering and contract awarding, difficult to create, but absolutely necessary to establish the obligations and rights of the parties involved (especially the infrastructure manager and the undertakings providing railway services) and to create the adequate incentives to the correct operation of the rail system, with particular incidence on the public service provision domain; xi) the need to cut the high transaction costs that have come to characterize the regulatory function and the creation of conditions for normal operation of the Regulator – which does not refute the necessary existence of control on its

activity. Only in this way will it be possible to achieve a course of action that is coordinated towards supporting the creation of conditions for a healthy evolution of the rail system – where we may find efficient, financially uncluttered, effectively regulated undertakings in healthy competition providing high quality services encompassing railway transport made possible through the investments that prove to be necessary, market shares that will allow it to play an important part in the sustainable development of both National and European society. In a nutshell: to make railways competitive and a relevant instrument in the production of wealth.

On the other hand, the desired evolution of the rail Regulator's institutional model calls for an analysis on some of the solutions adopted at the time of its creation and on which it is worth reflecting upon. Its "Institute Statute", in particular, appears not to be very adequate in making him resist, in good conditions and without high internal and external costs, to assaults against its impartiality and autonomy and to material strangling attempts on its action; at the same time, its present Statute, which grants it Regulation responsibilities – this is in areas where impartiality and autonomy should be manifest – and also Government aid functions (especially in the domains of following up on concessions, planning, conducting studies and giving legal and economic advice) – this is in areas where it works for the Government – has been the origin of some of the Government's inability to situate its level of dialogue with the Institute (in itself usually complicated, as experience teaches us), attempting to act as the "owner of the shop" in domains where it should not try to impose and eventually letting go of responsibilities in domains where it shouldn't. The fact that it can be proudly stated that such perspective errors never had major consequences, doesn't mean that the situation didn't contribute towards an unclear understanding of the Regulator's standing and produced some "noise" that should be avoided in the future. This leads to the desired introduction of statutory mechanisms that will endow it with increased defence abilities against assaults on its autonomy and impartiality, simultaneously ensuring the introduction of an obligation of daily reporting to citizens and to the political powers that prevents the autonomy from potentially turning into autism and warrants the Regulator's accountability. Unfortunately, and in spite of some interesting pieces that were produced and which give form to reflections on these domains (in the generic Regulatory Bodies case and in the specific case of the Rail Regulator), the (previous) Government chose to go around this evolution, avoiding it, and this will surely lead – in the middle if not the short run - to unhappy results if another course of action is not set.

6. Conclusions

After World War II, the rail sector in the different European countries was fundamentally structured according to a national basis, with its operation centred on a public entity and without significant intra-modal competition. Its evolution up to the Eighties came to stress some other characteristics: management constrained by political objectives, loss of competitiveness and poor adherence to the principles underlying the internal market under construction.

It was deemed necessary to liberalize the access to the activity, harmonize conditions for the execution of activities (promoting, among other, legal standardization) and remove technical frontiers (through the promotion of interoperability). The structural regulation of the natural monopoly element (and occasionally that of the operators) and the pledge of non-discriminatory treatment of the new operators was also regarded as essential.

The development of a new paradigm for the rail sector, essential for it to effectively fulfil its role in the transports area (now that there are no longer bets on its disappearance as a significant global player) makes it indispensable to adopt reforming practices on the procedural model that was valid during countless decades and, in spite of its past virtues, led it to the present and no longer sustainable situation. In Europe (and in countries from other continents) it was chosen to separate the infrastructure management and the provision of rail service as a means to promote intra-modal competition, main leverage instrument, according to the EU, to improve rail operation efficiency and improve quality of service, indispensable to obtain market shares allowing an effective operation of the transport sector, foundation to economic development. The creation, in railways, of a system separating infrastructure management and the provision of service on that infrastructure, led to a procedural model of railways with strong similarities to what was already going on in other economic sectors

The model adopted for the separation – which was approved in Directive 91/440 – stands on the development of the theories that support the liberalization of the economy and on the studies on the Theory of Regulation, applicable to the railways, which, in that particular and in spite of some specifics, can be regarded as just another one of its “network industry” application fields, considering (only) the natural monopoly part for the infrastructures.

The development of the State’s regulatory function was not, over time, without breakthroughs and setbacks, ambiguities and contradictions. Apart from the fluctuations that the very existence of a supporting theory still under construction, however strong, justify, the State’s singular position in which it simultaneously acts directly on the market (service provider), is a major (or single) shareholder in the companies providing basic services and is responsible for Regulation provoked and still provokes conflicts of interest that sometimes are not properly settled. Furthermore, the “political” rationale for conflict resolution that characterizes the State can, sometimes, adjust awkwardly to the principles of economic rigour that should characterize, as seen earlier, the action of the Regulator, all this complex web potentially inducing traces of “schizophrenic behaviour” by the State, which in many cases resolves unsatisfactorily the bestowal of

independence and autonomy characteristics to the Regulation bodies, characteristics that are, however, indispensable for these Regulatory bodies to exercise their functions adequately. To this setting still has to be added, in many cases (but with worthy exceptions), the general lack of awareness of government senior staff and politicians regarding Regulatory economical issues and problems.

The set of reform instruments applied to the railways makes indispensable the introduction and development of the sector's Regulation and the guarantee of fairness independence and autonomy in the actions of the Regulatory Bodies that are to be created, without prejudice of it being able to assume several institutional forms, from their constitution as individual Entities - the best way to warrant those characteristics – up to their integration in the State apparatus (which may raise questions regarding the guarantee of independence and autonomy). Whatever their institutional form, Regulators will have to obey to transparency rules (accountability) and other rules which theory and practice have proven to be a fundamental part of the set of attributes necessary to its effective action. An important feature of regulatory action consists of the fact that it has to be prompt, adequate and effective. Besides the pervasive equity issues, these characteristics are also regarded as essential in establishing an environment of trust that is considered to be indispensable in the engaging of private sector interest in the railways.

The setting up of the Regulation function has been upheld in successive European Directives that are progressively materializing that function's operational framework, and it is noticeable that there has been an evolution in the Community's positions towards the expansion of the independent Regulation Model to encompass other non-economic matters (for instance, safety and interoperability, as is the case in the newly formed European Railway Agency) and the creation of consultation structures of the several national Regulators, as a realization that Regulatory problems (in the rail system) are increasingly being set at the European level – especially considering that it is intended for Regulation to be a construction vector in the European Railway Area.

The rail market presents the conspicuous attributes of a network industry market (subadditivity/existence of a natural monopoly; sunk costs) but also some specific attributes (hefty legacy; high funding needs; small number of companies on the provision side; “absent” market or under construction; “normal” operation in the area where marginal costs are lower than average costs; absence of external costs internalization; information asymmetries/moral hazard). These specifics, together with those adduced in one of the previous paragraphs, urge caution when analysing proposals for the fusion of transport regulators. In fact, some of the positions that are being defended these days seem to confuse governance issues with Regulatory issues. The first type covers issues such as ensuring a correct horizontal articulation of policies, namely in the area of investment planning, tax intervention planning and the shaping of policies for economic and social intervention, together with laying out the correct action of the State in its multiple roles as shareholder, regulator, service provider and, additionally, as overall planner of a particular vision of Society. The second type covers vertical issues that belong to the domain of sector Regulation, where legal, economic and social regulation (both technical and of quality) are carried out. Hence, without denying – if only, due to the orientations deriving from governance and to the statutory mandates of the Regulatory bodies – the interest in the existence of a necessary level of strategic coordination of the transport regulators' action (which we see as mainly being

set in the Government itself), it cannot be left unsaid that the market specifics mentioned earlier prove the scarceness or inexistence of eventual synergies which may be obtained through an institutional fusion of those regulators and that such a solution may generate bigger problems than the ones it affirms to be able to resolve.

Some of the future challenges are clear and easy to predict: the creation of conditions for attracting private sector initiative, the clarification of the State's different functions as regulator, shareholder and service provider, the transparency of action and of contract awarding in public service provision. A critical success factor for all these objectives is the development of the regulatory function and regulatory bodies, giving them conditions for authority, impartiality and autonomy and, at the same time, requiring them to meet accountability, efficiency and predictability conditions without which the market will not react in the desired way and the conditions for the development of the rail sector will not have been established.

In Portugal, the reform of the rail system effectively started in 1996/1997⁽²⁾ and closely followed the construction of the European model (in which construction, in fact, the Portuguese played an important part). Yet the timings in the setting up of the Regulator Institute (not prior to the institutionalization of the REFER/CP separation and very near to the awarding to the private sector of the contract for the North-South Railway Axis) and the option of its constitution as Institute did not guarantee optimal conditions for the establishment of the Regulatory function, situation which was worsened by erratic behaviour of the political powers. This originated the establishment of a litigation environment in the relations with the regulated bodies that led to high transaction costs, which, in its turn, had an obvious negative impact on the sector's operation and the progress of the system's reform. In spite of that, and even though there was no installation period (which did not permit the establishment of an adequately stable environment), several relevant actions were carried out in the domains of legal, economic and technical Regulation, as well as interventions in the areas of supervision and inspection, follow up on concessions, studies and legal and economic advice. This significant production would not have been possible without the existence in the Regulator's (much reduced) staff, of elements with high personal and technical capacities and who are a fundamental part of the critical mass needed to support the sector's reform.

It is easy to predict that the future calls for a revision of some of the choices made at the time the Regulator was founded, if only to respond to the emergence of new problems (like the creation of the Fair Competition Authority) and the beginning of a new cycle in the railway reform conducted by Brussels (and which is marked by the need to transpose the "Second Railway Package", active participation in the discussions on the "Third Railway Package" and in the rail institutions that are or will be created and which constitute future "rail power strongholds". It is unfortunate that some opportunities were lost as a result of some governmental "visions" that enthroned, at least temporarily, a general reflux of the regulatory function (diminishing some of the elements that are an indispensable part of its autonomy and of the Board's powers needed for the adequate management of its specific nature).

⁽²⁾ This is because the 1991 Basic Law for Terrestrial Transport was never regulated, thus not having effect.

Together with the continuity of action in the rail sector itself (to invest well and continuously in the development of the network and its maintenance and to ensure a significant improvement in the operational results of the sector's undertakings), the positive evolution of the rail sector has to go through the construction of a true rail market, which implies the settling of the sectorial Regulatory function and the existence of a stable environment which creates the conditions to attract resources (financial, human, know-how). Equally fundamental is the need to create a clear procurement framework for the relations between the players (in particular in which regards the provision of public services) where the correct incentives for rail operation have to be established, and the clarification of rights and obligations of the players, which absence is an understandable reason for complaints. It will also be important to achieve the reduction of the high transaction costs that have characterized the operation of the regulatory function and to establish conditions for a normal operation of the Regulator, be it in resources issues or, most importantly, in the defence of its independence and autonomy – which does not refute the necessary existence of control on its action. Only in this way will it be possible to achieve a course of action that supports the creation of conditions for a healthy evolution of the rail system – where we may find efficient, financially uncluttered, effectively regulated undertakings in healthy competition providing high quality services and playing an important part in the sustainable development of both National and European society.

On the other hand, the desired evolution of the rail Regulator's institutional model calls for an analysis on some of the solutions adopted at the time of its creation and on which it is worth reflecting upon. Its "Institute Statute", in particular, appears not to be very adequate in making him resist, in good conditions and without high internal and external costs, to assaults against its impartiality and autonomy and to material strangling attempts on its action. This leads to the desired introduction of statutory mechanisms that will endow it with increased defence abilities against assaults on its autonomy and impartiality, simultaneously ensuring the introduction of an obligation of daily reporting to citizens and to the political powers that prevents the autonomy from potentially turning into autism and warrants the Regulator's accountability. Unfortunately, and in spite of some interesting pieces that were produced and which give form to reflections on these domains (in the generic Regulatory Bodies case and in the specific case of the Rail Regulator), the (previous) Government chose to go around this evolution, avoiding it, and this will surely lead – in the middle if not the short run - to unhappy results if another course of action is not set. It is deemed desirable that its Statutory situation evolves towards a greater sedimentation of its sanctioning ability, a bigger or maybe total distinction between its role as State advisor and Regulatory Authority and the deepening of the dispositions that more transparently guarantee its necessary autonomy, independence and accountability characteristics before the People and the political power (especially through the obligation to report to the Parliament).

Lisbon, the 15th of May 2005