

GOVERNANCE IN RAILWAY NETWORKS

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- A THOUGHT PIECE ON RAILWAY REFORM -

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ABSTRACT

“Governance in Railway Networks” combines two brand-new analytical frameworks to compare European rail networks. Taking into account the entire scope of individual institutions involved in running a rail network, the paper goes beyond existing research, which is primarily limited to cost structures and economic models. Furthermore, the paper examines various structures of “bound governance”, in which public bodies, regulators, operators and manufacturers work and interact according to largely undisputed rules. Preliminary findings suggest that railway networks are run more successfully if a system of bound governance prevails, because little energy is lost in disputes over rules and in hierarchical, behind-the-scenes, power-based governance. Drawing its conclusions on that basis, this paper introduces a new model of governance structures, in a departure from the entrenched positions in the debate on the separation between infrastructure operations and train operations. It argues that the main concerns of railway reform involve not the separation of infrastructure operators and train operators but the separation of strategic authorities and the operating companies. Five case examples from the United Kingdom, Germany, France, Sweden and Switzerland have been selected to reflect a large but still comparable variety of optional systems of governance. In its preliminary conclusion, this paper finds that the UK’s massive legislative and administrative efforts are an example of successful bound governance, as is Switzerland’s well-established separation of government strategy and rail operations. The paper is highly critical toward the current German rail privatisation plan (now on hold), which includes no clear separation of responsibilities between the government and the Deutsche Bahn.

MANUSCRIPT

1) Introduction

Railway networks all across Europe have seen profound changes over the course of the last two decades. The old railway administrations have been dismantled, replaced and revitalised by means of efforts aiming toward modernisation, revitalisation and the introduction of some form of competition and privatized management. Today, each country has developed its own separate institutional framework in order to run its own railway network. A broad new range of private, state-owned, regional, nationwide and international actors are behind today’s running rail networks. In spite of the wide range of both positive and negative

examples throughout Europe, surprisingly little comparative research exists. Some attempts, like the IFMO European Benchmarking Study (2007), have been undertaken in order to compare cost structures. Crozet (2004) thoroughly investigates comparative differences in productivity, but the conditions underlying differences in productivity lack some explanation. Very few researchers have been examining the institutional frameworks from a viewpoint beyond economic theory. In their contribution to the "Handbuch Verkehrspolitik", Rub and Seifer (2007) discuss the necessity of some form of research on governance without exploring possible content. Similar to the 2005 paper by Bouf, Crozet and Leveque, day-to day interactions between the constituents of the railway network rarely face examination beyond economic reasoning based on incentive structures and accident investigations. However, Merkert, Stills and Nash (2008) have undertaken the farthest attempt to investigate and compare governance structures including day-to-day interactions. Their main interest, once again, remain (transaction) cost structures, and their depiction of governance structure is not underpinned by a systematic approach other than economics. This paper seeks to propose a new qualitative perspective including the entire rail-related political framework, a systematic approach of governance structures, and an examination of all kinds of interactions, including those hidden from view or normally summed up as "personal relationships" (Merkert 2008).

The objective: Finding the best structure of governance

Not surprisingly, Railways seem to work well inside a framework of clear rules, clear missions, and a clear financial outset. According to a certain perspective, this can only be achieved through economic (de-) regulation, private enterprise, separation of infrastructure and train operating companies as well as competition, at least through competitive tendering. This however contradicts not only possible benefits attached to integrated Railway companies (Merkert 2008), but also the reality of successfully run, integrated and state-owned networks. Similarly economic doctrine alone will neither cope with the technical challenge of running, nor with planning and upgrading railway networks, and even less provide the blueprint for a successful bid for subsidies in front of the general public. In my view, economic reasoning does not provide us with sufficient clues for a broader understanding of successful policies in running our railways.

One of the very basic notable characteristics of today's railways in Europe is the asymmetry of power between actors of very different sizes. This particular characteristic makes governance theory an approach likely to shed further light on key structures underlying a successfully run railway network. Asymmetries of power loom all over existing research (Merkert 2008) but lack a systematic analysis. My aim is to investigate the structures of governance, the arrangement of institutions and the methods of cooperative interaction that have been proven to create a well-run rail network both appreciated by the population as a whole and in the position to take on its competition from the roads. Generally speaking, my line of reasoning follows the idea of good governance as it has been developed in respect to international comparative politics: an open approach focusing on the question of which

institutional structures of coordination work well in one specific country as compared to others. More specifically, the fundamental asymmetries of power between the actors within railway networks favour the use of a model that defines matters in terms of the following three basic types of governance, as laid out by Prof. Dr. Volker von Prittwitz (2009):

- Power-based governance, where rules either don't exist or give one actor hidden or open hierarchical powers over the other(s)
- Disputed governance, where there is a struggle over the definition and application of rules
- Bound governance, where actors with transparent and separate roles operate according to various existent rules

Both regulative and non-regulative patterns of coordination are included within my definition of rules. Legal frameworks, contractual arrangements, and administrative action are found on the regulative side, while non-regulative patterns include loose or informal understandings, typical methods actors use when dealing with one another, and both existent and respected norms and attitudes. It can be expected, of course, that both regulative and non-regulative patterns of coordination are connected with the general characteristics of the country's political system.

Five examples – the railway networks of the United Kingdom, France, Germany, Switzerland and Sweden, viewed roughly over the past two decades – illustrate a number of possible systems of governance that have proven either successful to some extent or, alternately, rather problematic. These five countries were selected to reflect a variety of possibilities within railway reform. All of them share some kind of institutional separation between the different spheres at work within their railway networks. However, the respective national institutional frameworks in place within each of these five countries differ greatly.

Although the paper is limited to railway networks, its results are also meant to give at least partial insight into the general operation of networks involving government control, into the operation of non-railway public transport networks, and into the intersection of public bodies, public enterprises and private enterprises.

1.2) Measuring success in railway networks

Railway Networks are in the focus of such different and diverging interests that a consensus on a successfully run Network rarely ever exists. Different scientific disciplines, politics, transport operators, the general public, passengers or railfreight customers of different nature all hold different views on the mission of railway networks. This means that one of the fundamental achievements of any overarching governance structure is to bring together, satisfy and balance a maximum of different interests around the railways.

When it comes to taking into account all the different needs and interests of the different actors and society as a whole, apart from the meticulous Swiss approach,

only Britain and Sweden realistically attempt to evaluate all sorts of different needs, interests and their respective feasibility. Meanwhile Germany and France keep autonomous railway companies dictating large parts of the national rail strategy. For the purpose of this paper, which is to open up a new and fruitful debate over the way railway networks can be understood, each national case is presented with a short list of the main achievements and shortcomings.

1.3) A new model of governance in railway networks based on a division between institutions

One of the most important applications of the concept of bound governance rests in fundamentally differentiating between *the regulative sphere of binding demands* and the *operative sphere*. (Prittwitz 2009) Railway networks have long been torn between a multitude of conflicting demands from the political sphere on the one hand and their long-presumed commercial, strategic and technical self-reliance. When railway reforms were put in place in the 1980s and 1990s, the need for some sort of separation was widely acknowledged. However, because of the liberalisation euphoria of the 1990s, governments, scientists and commentators only took into consideration the separation of infrastructure operations from train operators, as economic doctrine suggested. This focus on market regulation may have been misleading. As its central hypothesis, this paper suggests that a much-needed, successful separation of spheres in railway governance depends on the separation between the political sphere of binding demands and the operative sphere of railway activities. My suggestion is that economics-inspired separation of infrastructure and train operations is merely a specific way towards a broader separation of spheres. Its main achievement (if carried out properly) are transparency and accountability as opposed to the often obscure dealings inside traditional integrated railway companies. What the incomplete economic perspective tends to hide from view, is the massive conceptual input that political bodies have undertaken since railway reform has spread across the continent. This input has only been investigated in where it concerns market regulation or contracts. (Merkert 2008) In reality, political bodies have not only created regulations or drafted contracts, but have undertaken unprecedented conceptual efforts in planning public transport networks. Never before have transport needs, viable technical and financial options been as thoroughly and openly discussed as in recent years. All these efforts have in some places been pushed forward by (de-) regulation and the introduction of competitive tendering, but don't necessarily need "market reform" as a pre-condition. The much envied Swiss railway network can be seen as an example of creative, transparent and extremely successful governance in an all-public setting.

Main hypothesis: The separation of spheres

From this viewpoint, railway networks as different as the Swiss Railways and the British Rail Network share a common and presumably "successful" feature: a regulative sphere in which politics set the binding demands in addition to an operative sphere in which train operators and infrastructure operators comply with those binding demands. Problems arise where binding demands and operations are

mixed, subject to unfair competition or subject to hidden influence. This is certainly the case in Germany, where Deutsche Bahn is not only the dominant train operator, both of passenger and freight trains, but also jointly manages the infrastructure as well as drawing up most of the national railway strategy.

1.4) Diagram

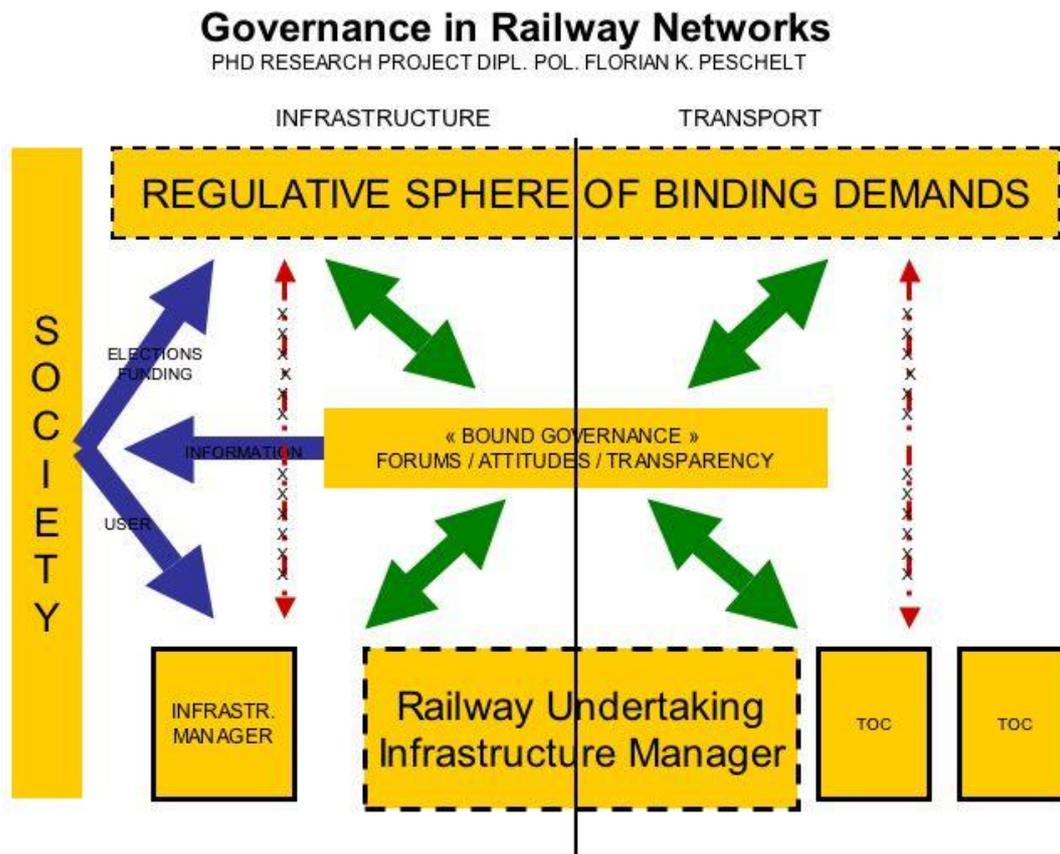


Diagram : Separation of spheres

1.5) Key elements of a successful Governance structure:

All five of the countries chosen to illustrate the hypothesis of this paper exhibit:

- separation of spheres: some kind of institutional separation along the lines of the regulative sphere of binding demands and the operative level within their railway networks. None of them have retained the pure traditional model of a largely autonomous, integrated, national railway company responsible for both transport and infrastructure.
- a specific set of different types of governance: bound governance, disputed governance, and power-based governance
- some extent of political activism in railway policy

2) The national cases

2.1) France

2.1.1) Institutional separation

- Managing infrastructure:

RFF, a virtual infrastructure management entity, was created in 1997. At its beginning, RFF was merely a concession in the face of European requirements and a place outside the current budget to park the historic French railway debt. It became the owner of the infrastructure in name, collecting access charges from state railway company SNCF and then channelling them back via a general maintenance contract. Since then, RFF has taken on a more active role, has undertaken a complete review of the infrastructure, and has put in place an access charge and maintenance control system that provides the government and the general public with a better overview of the financial needs of the network. Starting with a maturing RFF, the French state is presently creating a whole new regulation pattern with different agencies taking over functions previously united within SNCF. The new ORTF rail transport organising law seeks to separate the public domain of infrastructure provision from competitive or contractual operations. The state operator nevertheless retains a large degree of autonomy. At its heart lie the strong and largely untouched privileges of SNCF's infrastructure division, clearly more involved in strategic decisions than just executing a contract. SNCF Infra retains full control of day-to-day decisions, is not bound by a working penalty regime and shows behaviour often characterised as erratic and surprising. In order to enforce a better coordination, SNCF Infra will soon share some managerial functions with RFF staff. In some places regions facing a very bad state of their network have put in place formal agreements with RFF and SNCF to renew local infrastructure. Interestingly, in its renewed organisational structure to fit in with the ORTF legal provisions, SNCF has nevertheless put its new stations managing branch entirely into the commercial ambit.

- Managing passenger transport:

On the national level, passenger transport is organised as a delegate public service by SNCF, enjoying large managerial autonomy. No separate entity officially interferes with their decisions. Behind the scenes, however, the government does have its say via all imaginable informal channels. In my view, this kind of practice can be seen as a form of implicit contract rather than an open access regime (for the moment SNCF retains its monopoly anyway). Faced with a shrinking “commercial” SNCF offer, regions have started to subsidise national services open-handed and largely without common methodology. In the near future, all services outside TGV and international passenger trains will be governed by a new contractual agreement. On the regional level, responsibility for passenger services was devolved to regional authorities. Within the official regional domain of public transport, bound governance and successful operations are meant to be achieved with transparent,

accountable proceedings, often specified within long-term transport schemes. Despite the fact that rolling stock provision is not governed by regionalisation legal texts, the general practice of recent years has been for the regions to fully finance rolling stock refurbishments as well as new trainsets, even with SNCF continuing its formal ownership of all rolling stock.

- Managing freight transport:

Decades of neglect had left the French rail-freight sector in the sole hands of SNCF and in a poor state; in regular intervals, the national operator concentrated on its high-speed development has successfully lobbied the government to finance one unsuccessful but expensive relaunch scheme after another. Since European law has forced the network open for new competitors, they have taken over substantial services, but suffer as much as SNCF from a run-down network that has conserved the different standards left by pre-1938 private operators. Inspired by the German success of a large quantity of competitive but tiny freight operators, national and regional authorities have made some moves towards the politically fostered creation of local proximity freight operators, responsible for both operations and infrastructure, a promising but so far unsuccessful initiative. National coordination and regulation mechanisms have yet to become reality.

2.1.2) Types of Governance

- Managing infrastructure:

Formal rules and mechanisms emerge but the dealings of SNCF, RFF, the government and regional authorities remain largely dominated by power-based governance, informal networks and all forms of dispute. The unfinished status of RFF has left it in long disputed governance conflicts with SNCF and their strong ties to the central administration. The underfunded network and even scarce funding for high-speed lines have opened the door for regional efforts, but even the positive examples here suffer from a lack of legal framework and methodology; the fragmentation of regional prerogatives in the hands of regional and departmental authorities under close and sometimes jealous scrutiny from the central government's prefectural administration often works like a built-in disputed governance institution.

- Managing passenger transport:

The kind of implicit contract governing SNCF's "commercial" national network keeps the door wide open for power-based governance relationships; it also fosters typical disputed governance settings, where extra funding is negotiated via the press: SNCF sources announce the stop of non-viable TGV lines, the government reassures officials and the public that no TGV will stop running, and behind the door financial arrangements are made...

Explicit contracts as one archetype of bound governance exist on the regional level but sometimes doubts remain over the way they have been drafted, potentially

involving power-mingling and lacking methodology as well as transparency. All over France, regional administrations have found it difficult to employ competent staff. As a consequence SNCF has dragged many regions into overpriced contracts of poor quality. On the positive side a line-by-line passenger-consultation scheme is completing some region's best efforts into providing good rail services through transparent decisions.

- Managing freight transport:

Very few rules have accompanied the introduction of new competitors in the freight sector; besides a minimum regulation effort no national strategy (outside SNCF's helpless repetitive new schemes) coordinate the development of rail-freight. Inside of SNCF Fret just as well as in the relationship with other operators power-based or disputed governance prevails. When regions try to step in, their action is likely to be met by some resistance.

2.1.3) Political activism

- Managing infrastructure:

A lot of political activity surrounds the creation of new lines and the scarce means at the disposal of existing lines; however, most of the activism is traditionally flawed by in-transparency, lack of focus or national coordination.

- Managing passenger transport:

Political activism is only recently emerging on the national level (apart from prestige projects) but intensely present on the regional level.

- Managing freight transport:

Political activism crucially lack in this sector, outside of the occasional rain of subsidies for yet another great plan, the very few very local examples of positive political involvement remain isolated.

2.1.4) Conclusion

In France's long-standing tradition, an independent, national railway sets its own priorities; government involvement is restricted to presidential approval. Within SNCF's autonomy, the world-famous TGV has set the pace for high-speed travel worldwide, both technically and commercially. However, with all its efforts focused on the TGV, the conventional network has seen years of decline. Maybe this illustrates the potential of power-based governance. Successful in a simple setting of limited point to point intercity services, but unable to cope with the complex issues of a large territory and its multiple interests to be balanced. A run-down network, dwindling freight operations at a time when neighbouring DB Freight hit record levels, and once-prestigious interregional lines abandoned one by one have characterised the

SNCF beyond TGV for years. RFF's creation may help in the long run, but the new organisation remains small and is not underpinned by a real national railway policy. The general decline outside TGV has been met with clear reversal only in regions that have seized the opportunity to organise regionalised local and, to some extent, interregional services within a structure along the lines of a separate and active sphere of binding demands. On some previously doomed lines, regional funding has occasionally even reminded SNCF that those lines can still be a viable commercial success and sparked the arrival of new and not directly subsidised offers. On the national level, the government has become more involved with the recent and less profitable newer TGV lines and a new agreement will institutionalise these proceedings. The failures of SNCF's freight division clearly show that new governance structures are needed to bring together freight clients, infrastructure managers and public bodies willing to fund rail-freight infrastructure in order to lift the strain on congested roads.

2.2) Germany

2.2.1) Institutional separation

- Managing infrastructure:

Too many powers remain in the hands of Deutsche Bahn, the unsplit integrated national operator: the government's small transportation ministry is clearly not in control. A formal service agreement (LuFV) exists but only in very vague terms. The national coordination is limited to a wish-list of prestige projects, whose integration into the national timetables is only evaluated once they have been built as an isolated structure. A national regulator is more and more present in attempts to cut back DB's power. More and more regional efforts are directed towards infrastructure, such as audit schemes, contracts to keep temporarily unused infrastructure in place, and different types of funding. None of this, however, is regulated by meaningful institutional arrangements.

- Managing passenger transport:

The German central government, despite legal provisions to do so, continues to abstain from structured involvement in national passenger rail. Regions step in and organise and fund some very long distance services, but on a sound basis only where this can take place within the framework of regionalisation. Devolution of regional services has turned Germany into a laboratory for very diverse ways of organising passenger transport: With or without competitive tendering, with or without intense and meaningful preparation, within or without new and creative institutional arrangements that sometimes take devolution down to the local level, where local authorities and regions created common bodies organising an integrated network of public transport.

- Managing freight transport:

Rail-freight has greatly profited from the emergence of a great number of new operators (in a technically unified network) ready to take over markets that the shrinking national operator left unserved. But the overall picture is less enticing: the absence of real national coordination leaves the network congested and slow in many places and has produced many regions where lines have been scaled down to the only need of passenger transport.

2.2.2) Types of governance

- Managing infrastructure:

A number of market-regulation and technical rules are elements of bound governance, but the lack of a constructive national policy leaves a lot of space for discretionary power-based governance and disputed governance, whose only openness are rivalling announcements through the press: “No money left...”, “Government going ahead with project...”

- Managing passenger transport:

National passenger transport put in the sole hands of DB's managerial autonomy continues to be organised on the basis of an implicit contract with the government, with all the potential for power-based governance that this involves. Regions, on the contrary, and however power-flawed their organisation may still be in some places, move more and more towards meaningful new institutions bringing about bound governance and successful services.

- Managing freight transport:

Crucial decisions on national and regional levels remain discretionary and continue to lack any institutionalisation, methodology and coordination.

2.2.3) Political activism

- Managing Infrastructure:

Political activism on the national level is erratic and restricted to isolated projects; regions willing to take action struggle with the lack of provisions and funding.

- Managing Passenger transport:

Absent on the national level, political activism is largely developed on the regional level.

- Managing freight transport:

Isolated projects do not make up for a national strategy that merits its name, nor can local efforts.

2.2.4) Conclusion

Of the five examples, Germany is the only country where railway reform on the national level neither introduced a new infrastructure management structure nor instituted effective governmental control. (Merkert 2008) Whereas regionalisation since 1996 has produced a number of institutional models providing for an effective and successful separation between a sphere of binding demands and regional train service operators, the Deutsche Bahn, the national railway company, enjoys far-reaching autonomy in concerns to strategy, infrastructure and long-distance passenger services. Governmental control is minimal, the main federal funding scheme has no clear priorities, and in general, infrastructure projects are carried out and monitored project-by-project and line-by-line without any prior timetable planning. Even the technical supervision agency, EBA, does not centralise most of its data. Long-distance passenger travel is stagnating, and the technical state of parts of the network has been the cause of some concern over the last years. More politically active regions are tempted by independent reviews of the quality of the infrastructure. The agreement governing the funding and monitoring of new contractual infrastructure (LuFV) remains too vague to be of much use. All dealings and data surrounding the Deutsche Bahn are vague and represent only a carefully tailored glimpse of what the DB wants to be seen. Even though technical and market-regulative authorities have recently put up some pressure on DB to let go some of the more aberrant privileges, the basic outline of a national railway network left to the goodwill of one operator continues. In many aspects, the situation in Germany mirrors that in France: slightly better in the areas where federal states choose bound governance, transparency, accountability and sufficient funding; worse where the Deutsche Bahn is still given nearly total discretionary autonomy. Some regions successfully dedicate considerable legislative efforts for the sake of their railways. In contrast, the federal state, except for a shallow, under-financed, under-prioritized wish list of prestige projects (“Bundesverkehrswegeplan”), continues to renounce its prerogatives. Much as in the old days of the Federal Railways (“Deutsche Bundesbahn”), the national rail strategy, infrastructural development, and long-distance passenger trains remain within the vice grip of the decisions made by Deutsche Bahn executives, meaning that power-based governance – or at best, disputed governance – prevails. Of course, the power-hungry federal states are very uncomfortable with this situation and tend to create their own long-distance trains planning facilities or initiate independent investigations into the technical state of their infrastructure. These efforts parallel and compete with the strategy of the Deutsche Bahn, and due to their “extra-legal” status, they cannot yet be seen as bound governance but primarily as disputed or power-based governance.

Take as well the very positive development of rail freight transportation in Germany. To some extent, it can be attributed to the positive effects of legal activism within the framework of bound governance. When the Deutsche Bahn began concentrating on a very few select freight customers, small freight operators found not only interesting opportunities but also a legal framework to grant them access to the national rail

network. However, the development of the freight sector as a whole might be even more successful today if legislators had made better provision for fair network access conditions, had created a long-term reserve capacity for more freight trains within the network (as in Switzerland), had halted the Deutsche Bahn's division of infrastructure directed toward reducing large parts of the network to tailor-made rails only sufficient to accommodate passenger trains and their own freight trains, and had provided statutes allowing lines temporarily not in use to be kept in place, ready to be refurbished and reopened given the emergence of a new business opportunity. Here, once again, some federal states did step in to create a specific statute ("Trassensicherungsverträge") to prevent the Deutsche Bahn from dismantling unused lines.

2.3) The United Kingdom

2.3.1) Institutional separation

- Managing infrastructure:

The division of tasks between the Department for Transport infrastructure manager Network Rail can be seen as a working model of the separation of the spheres of binding demands and the operative level. Strategic decisions and reviews are carried out or at least validated by the DfT; Network Rail then executes its mission under an agreement.

- Managing Passenger transport:

The competitive tendering of nearly all UK passenger Rails services is the example of the most large-scale existing separation of spheres in Europe.

- Managing freight transport:

Through its provision of infrastructure and train-paths within the national timetable the department for Transport acts as a body in the sphere of binding demands, private or public (as for DB or SNCF-owned companies) operators provide the services.

2.3.2) Governance types

In all the three sectors of infrastructure, passenger and freight transport the UK's railway Network, the move from British Rail to today's governance architecture can be seen as a move from an implicit service contract with its flays of hidden power structures via an ideology-inspired period of disputed governance towards a consolidated bound governance structure. As a lot of knowledge was lost and the building of new procedures and institutions from scratch turned out to be very lengthy and costly, quality and safety problems came up and remain an issue.

2.3.3) Political activism

Following the doctrinal misconception of railway politics, with the perceived threat of political intrusion, the UK government had reduce its involvement in governing its railway network. Soon this proved unworkable and a period of unprecedented political activism followed, with the positive result of stabilisation and even a period of unprecedented growth of transport volumes. Whether the new UK government will ultimately continue the precedent degree of involvement remains unclear.

2.3.4) Conclusion

The railway network in the United Kingdom has had a hard time overcoming the catastrophic consequences of the 1990's railway privatisation, which was guided by an ideology stemming from economic doctrine rather than a deliberate railway policy. When British Rail was cut into separate and primarily privately-owned entities, the railway network's lack of effective control and strategic vision soon became apparent. Worse still, much of British Rail's knowledge was irretrievably lost when well established recruitment and training practice just vanished and highly qualified personnel left the railway sector for good. Two independent strategic and regulative bodies, the department of transport, and the network operator, Railtrack, all struggled to cooperatively run a network characterised by the numerous franchises awarded to private train operators. Problems arose in nearly every possible domain. Coordination between the various actors remained difficult; punctuality, rates of satisfaction and passenger numbers dwindled to record lows. When the crisis escalated, a series of spectacular accidents triggered a rewriting of the entire institutional structure. The bankrupt infrastructure manager was renationalised as Network Rail, and the independent strategic rail authority's tasks were mostly turned back over to the direct control of the transportation department. Out of the market-liberal-dream-turned-passenger's-nightmare emerged a governance structure in which legislative activity, direct governmental control and deliberate political action is turning out to be much more intensive than in the old days of British Rail, which enjoyed substantially larger entrepreneurial independence. The vital work carried out within the sphere of binding demands (tied to the train operation companies via the contractual agreements of the franchises and a similar contractual agreement for Network Rail) provides a relatively stable foundation for a network potentially set on expansion. However, in many ways, today's political and institutional efforts only nearly come close to old British Rail standards in terms of quality and efficiency or even lag behind them. The privatised UK rail system could only achieve success and acclaim on a British Rail pre-privatisation level after an unprecedented amount of legislation had been passed. Once again, a comparison with Switzerland reveals a parallel between the two countries: Several referendums have given the Swiss Rail Network a solid base of support by means of accurate objectives, target timetables and the appropriate funding. As for Sweden, regionalisation, the split between SJ and infrastructure company Banverket, and the definition of Banverket's and SJ's respective missions and plans for the future have been the focus of intense political activity.

2.4) Switzerland

2.4.1-3) Institutional separation, governance types and political activism

With its meticulous approach of prior planning and political debate before drafting and executing a public service contract, Switzerland continues to hold its status as a model for separation of the spheres, bound governance and, via the political instrument of the referendum, of political activism in all three sectors of infrastructure, passenger and freight transport. On the negative side, the freight sector seems to have suffered from an overly focus on international transit and a lack of strategic vision for the domestic freight.

2.4.4) Conclusion

Although its primary operator, SBB, is an integrated national railway company in charge of transport and infrastructure, Switzerland exhibits a very strong separation between the spheres of binding demands and operations. Binding demands are put forward by the transport ministry or through occasional referendums, and the operator is bound to its mission via a contractual agreement with the government. Objectives tend to be precise, the necessary finances are usually secured and the Swiss culture of cooperation and accountability eases compliance. To some extent, this system is mirrored on the regional level, where cantons plan and contract out transport services to SBB or other operators. Upcoming timetables for passenger trains and open train paths for freight trains are planned decades in advance, adjusted to demographic needs and public demand, and weighed against financial capacities; only then is SBB charged with adapting the costly infrastructure to the desired capacity. Such operational methods may seem self-evident, but within the history of railway networks, infrastructure has been and still continues to be built and modified on a project-per-project, stretch of line-per-stretch of line basis, with timetables and train paths adjusted to the infrastructure once it has been built.

2.5) Sweden

2.5.1-3) Institutional separation, governance types and political activism

Sweden, more out of practical questions concerning precisely a governance-related issue, has pioneered separation of spheres, bound governance structures and political activism. Its freight sector, serving mainly the specific bulk-heavy sectors of the Swedish economy, seems to have only limited potential for comparison with the other European countries.

2.5.4) Conclusion

Sweden clearly delved into railway reform not for the sake of doctrinal orthodoxy but as a means to improve their railway network. For years, the old single national railway company had used delays in network maintenance to cover losses incurred over the course of train operations. (Alexandersson 2008) As a consequence, the old SJ was split into different companies for the operation of passenger trains, freight

trains, infrastructure, stations and maintenance respectively. Public infrastructure operator Banverket, (recently renamed Trafikverket and now also in charge of national motorways) is also charged with developing strategic direction for the network but has to bring its policies before the general public, putting them up for discussion by the government and the parliament. In other words, whatever Trafikverket proposes has to be validated within the sphere of binding demands. Better control of infrastructural funding seems to have encouraged the government to dedicate greater attention and more funding to the railway network. There is a deliberate government policy in place to keep access charges low. Passenger train operations have been organised into the following three types: Regional services contracted out by regional authorities, with a strong separation between the political sphere of binding demands and the contractual operator; long-distance services thought to be unprofitable, which are proposed and contracted out by government agency Rikstrafiken – again, with a strong separation between the spheres; and long-distance services thought to be profitable (given modest access charges). The state operator only recently lost the exclusive right to plan and run the latter without much involvement from the sphere of binding demands. New Open-Access competitors emerge on a small scale. This arrangement, involving the sphere of binding demands in passenger trains only where the “commercial” provision fails (with commercial opportunity, however, created by other political provisions separated by spheres), seems to have worked so far. The in the long run consequences of the end to SJ’s monopoly on “profitable” services remain unclear.

2.6) Conclusion: Institutional separation, Bound governance, political activism

As a general rule, the dismantling of the old national railway companies and the introduction of a number of various train operators have created the necessity for legislative action. Whereas technical and commercial conflicts could once be solved within one railway company, today’s multiple actors have created a need for formal rules, from security norms to litigation surrounding commercial issues. (Merkert 2008) The same holds true for franchising and regionalisation; new actors need an entirely new set of guidelines in order to work cooperatively.

The more the political activity surrounding railway networks takes place openly or with the use of transparent political procedures, the more it can be defined as bound governance; the more its scope and proceedings are subject to struggles, the more it can be defined as disputed governance. Whenever infrastructure operators and train operators are controlled by politics carried out in hidden negotiations within closed power networks and whenever the fate of the network is left to the discretionary will of an administration with a dearth of concrete accountability mechanisms, power-based governance is likely to steer the railways off to nowhere.

The same basic questions surrounding public transport contracts are on the agenda everywhere: How are contracts negotiated and written? Does their content represent an offer that meets the customer’s needs both today and tomorrow? Are the risks and benefits of train operations distributed in an equitable way that provides for the financial stability of train operating companies and offers the taxpayer something

worth the financial effort? When regionalisation began in France and Germany, the French regions and German federal states did not necessarily have the capacities needed to draw up good agreements. In what can only be described as power-based governance, the major train operators, SNCF and the Deutsche Bahn, were able to use the full range of their knowledge and capacities to draw up contracts highly advantageous to them. As regions began building up their own specialised services (or hiring external consultants), the subsequent waves of contracts have been drifting closer and closer toward disputed methods of governance, although hidden, powerful networks remained an influential tool at the disposal of the dominant train operator. Regional efforts to put in place what can be described as bound governance continue to be structured with fierce efforts aimed at preventing dominant operators from abusively using their influence. This lack of confidence has led to very detailed, specific contracts along with increased financial pressure placed on operators. In a way, this can be interpreted as power-based governance, with an abuse of power on the part of the public bodies drawing up contracts replacing the abusive influence of dominant operators. Over-specific, unfair contracts that attempt to define every detail up to the number of seats on specific rolling stock risk being too rigid to allow for the necessary adjustments (a problem frequently seen in Germany when the success of new services outdoes the capacities of the newly bought rolling stock) and putting too much strain on the financial stability of some operators.

At a glance, institutional separation of the spheres of binding demands and of operations in a bound governance setting, fuelled by political activism, favour the development of railway networks. In the railway context political activism needs rules, and rules need political activism.

In the freight sector specifically, the introduction of new and smaller operators seems to fit the needs of smaller businesses sometimes better than very large operators. However, if rail-freight is to ever come out of its niche again, new types of and institutions for national and European coordination will have to be found and put in place.

3) Observations

3.1) Observations on funding

As a general rule, the more complex the funding for infrastructure and public transport is, the more intense struggle is to be expected. In terms of governance, multiple sources of funding and conflicting procedures favour disputed or power-based governance. Since railway infrastructure – in contrast to most roads – has always been considered to be financed at least in part by revenues generated from traffic, many parts of railway networks, especially secondary lines, have suffered greatly from the efforts of dominant operators to divert all public funding to their top lines. This mechanism has the perverse effect of over-subsidised main lines and under-funded secondary routes that are often subsequently closed down. Dominant infrastructure operators tend to try out every means of procuring public funding

before making investments from their own revenues. This is especially true of joint train and infrastructure operators like SNCF or the Deutsche Bahn. On some lines in France and in Germany, SNCF and the Deutsche Bahn are thought to delay maintenance until regional or local authorities, desperate to see their trains running in order to provide service at a sufficient quality level, pay for repairs. Regional responsibility, however, remains constricted by limited regional financial capacities and the stark disparities between regions willing to dedicate large efforts to their rail network and regions that continue to concentrate on road development.

In Germany, the distribution of revenue generated by access charges and the specificities of those charges/that revenue remains a contentious issue. The Deutsche Bahn now claims to have put in place a fair system that doesn't automatically favour their trains, but with the poor government control that the understaffed German transport ministry provides, railway and public transport executives independent of the Deutsche Bahn continue to cast doubts on this claim.

The distribution of the revenue generated by ticket sales creates a number of governance-related issues. From an examination of the ticket-selling system to the monitoring of usage to the modalities of financial redistribution, whenever there are several operators present, each of these issues is likely to engender opportunities for and cases of power abuse – or at least engender intense struggles. When British Rail was split up, the UK came up with a number of bound-governance solutions. Traffic flows and ticket sales are continuously monitored in a database called ORKATS, which serves as the basis for revenue distribution and gives competitors and the government good oversight of the usage and revenues on their network. So far, every new competitor has joined a ticket sales agreement under private law. The government tightly controls pricing and draws up a general pricing policy (“fares up”). In contrast, because Germany has left the national ticket-sales system in the hands of the Deutsche Bahn, the measurement of passenger flows remains an obscure science, and competitors have experienced constant struggles and stalemates with the Deutsche Bahn over these issues. This has led to conflicts time and again, with some operators resorting to charging furious customers on-train supplements or even refusing national DB tickets.

As to the general pricing policy, recent years have seen Europe-wide attempts to muscle users into paying a larger share of the real costs, governments hoping to reduce subsidies in this way. High and diversified pricing has also been justified by quality of service and the varying degrees to which different groups of customers are willing to pay. Some data, however, suggests that there is much more demand for low prices than for high quality of service. More reality-based insight into this question remains a matter of debate. The Swiss railways have met up with great success due to their generalised half-priced reduction card (as compared to walk-on fares). As one Swiss transport official put it, “If all people subscribing to what we offer vote for us in the referendums that determine our funding, we will never lack support”.

Wherever operations are separated into seemingly profitable and seemingly unprofitable services, as exemplified in the UK franchises in which TOC's receive subsidies or pay royalties or in Sweden, where "unprofitable" services are franchised and "profitable" services remain within the scope of SJ's autonomy and open-access competitors, authorities must come up with mechanisms for adjustment in cases of a shift in financial balances.

3.2) Observations on infrastructure control

The monitoring and control of infrastructure is undoubtedly one of the core issues of railway governance. Any operator who controls the infrastructure and has in-depth knowledge of its state has enormous potential power over all the other actors – and along with that, an enormous potential for power abuse. The institutional separation of different tasks via clearly defined roles and rules – such as the separated infrastructure operators exemplified in Sweden and the UK, the separated infrastructure manager exemplified by RFF in France, and the precise mission defined in a separate political sphere as exemplified in Switzerland – provides for bound governance structures fit to hold back power abuse as well as disputes that eat up time and energy. Even in Germany, where the Deutsche Bahn and its allies in the federal government continue to tightly grasp their privilege of fully controlling the infrastructure and all its relevant data, some federal states have begun efforts to monitor the state of their railway infrastructure. There have also been some cases where private or local public infrastructure operators have emerged on secondary lines. Sooner or later, the federal states can be expected to succeed in obtaining separate institutions, perhaps in the form of the long-standing proposal of regional infrastructure agencies ("Regionale Trassenagenturen"). This, in turn, will introduce bound governance where disputed and power-based governance retains its stronghold for the moment. The Deutsche Bahn's efforts to use the UK's vocabulary of "open access" are no more than an ill-concealed attempt to justify their privilege. When the UK set up statutes for open-access operators alongside franchised passenger services, this meant and still means a well-reserved place within a whole system of public transport strategy, of tight regulations, and, not least of all, established timetables. Deutsche Bahn's idea of "open access" merely means leaving the dominant operator in place and in control of every aspect of railway governance while hampering all serious attempts on the part of other operators to introduce anything other than marginal services.

3.3) Observations on rolling stock and staff transfer

When Sweden and Britain introduced new passenger train-operating companies and a franchise system, they provided statutes by which rolling stock, staff and maintenance yards could be transferred from one operator to another. At the moment, French proposals to introduce franchises open to operators other than SNCF include similar provisions. Germany, on the contrary, introduced franchising and left the train operation companies in full control of rolling stock, maintenance yards and staff, a move that cemented in place long-lasting elements of disputed and power-based governance. This has resulted in a very high access barrier for new

operators, allowed the Deutsche Bahn to seduce public bodies into DB-favourable contracts by playing the card of guaranteed employment, and left railway staff in particularly uncertain employment conditions. To some extent, UK-based rolling stock lease companies and public bodies have stepped in to offer trains for leasing, but as a whole, the issue remains unresolved.

3.4) Observations on human resources practice

Non-specific, traditional HR methods may present some serious disadvantages in terms of HR and recruitment practice. Infrastructural road planning is less demanding, as it leaves plenty of room for the individual patterns of use developed by car and truck drivers. Railway planning and management has to go to a great deal more effort to find suitable answers for the convenience of users. Current HR and recruitment methods that can be viewed to some extent as power-based governance all too often leave railway planning and management to individuals who fail to address the specific needs of customers or users. This phenomenon can also be observed in respects to infrastructure, freight and passenger operations. Small freight operators prosper whenever large corporations fail to address the specific needs of regional and small businesses. Regional infrastructure managers can bring together local users, communities and politicians. Regional actors at work in the sphere of planning are more likely to promote a fruitful dialogue between politics, users and communities. In a similar way, railway planning and management often fails to address basic needs, with years of conventional HR practice have left a largely male base of employees which, at the executive level, is full of individuals with values and lifestyles that are largely automobile-oriented or at least focused on high-speed and luxury travel. As one regional public transport official likes to explain: "We always thought of our users as being primarily men past their thirties – until we took a closer look and found out that our typical customer is a 19-year old female". Good governance in railway networks cannot ignore gender bias nor the personal distance executives draw from their field of work. The Deutsche Bahn has repeatedly suffered by adopting the strategies created by executives brought in from car and plane manufacturers and from airlines, at times with catastrophic results, such as in the case of the ill-fated, airline-inspired new pricing scheme introduced and then dumped by chairman Hartmut Mehdorn. A window of opportunity for change, briefly open, quickly shut again as he once again chose a successor bred outside the railway sector, ensconced within the automobile industry. To cite a positive example from the field of light rail, the tram operator of the German city of Rostock has included criteria such as frequent public transport usage in their HR scheme and encourages a personal interest in their network on the part of executives. Company cars are the exception, public transport the obvious choice. As regional and national public bodies busy themselves creating new capacities, the need for qualified staff calls for a coherent response. Further development of rail-related academic training and public transport-specific codes of recruitment might be introduced as elements of bound governance.

4) Typology sketch and the influence of the political system

Each of the five countries included in the comparison have developed some kind of separation of tasks and spheres within their railway networks – not least of all because European legislation requires them to do so. The individual institutional arrangements of each country differ to a large extent. In a primary sketch of what will be an extensive typology once the substantial body of research is completed, I suggest the following classifications.

4.1) Group 1: Activism within the spheres of binding demands

Switzerland, the UK and Sweden each pursue active political support for their railway networks. Although Sweden and the UK chose to create a national company for infrastructure operations and Switzerland chose to keep a joint national operator for infrastructure and trains, strategic, future-focused choices and binding policies of various kinds are widely discussed in each of the three countries. Funding and timetables are meticulously planned for years in advance. These three countries exhibit many characteristics of activism within the separate spheres of binding demands. Growing passenger and freight volumes as well as substantial political and popular financial support seem to reward this successful strategy. Open, transparent proceedings embody bound governance.

4.2) Group 2: Activism within the spheres of binding demands on the regional level

In France and Germany, a clear distinction between the sphere of binding demands and the operative sphere only exists on a regional level. French regions and German federal states organise, finance and plan medium- and, increasingly, long-distance trains for years in advance. In recent years, they have increased their control over the infrastructure, sometimes paving the way for regional freight operators as well. The more the regional political bodies rely on elements of bound governance, keeping their activities transparent and accountable, the more the resulting train services can be expected to be successful. Sometimes, however, personal influence or powerful networks that result in power-based governance stand in the way of successfully run rail networks. In France, the creation of a separate infrastructure manager, however virtual its role was in the beginning, worked in favour of transparency and the regulation of bound governance structures. On the national level, SNCF still plays a dominant role in the absence of a coherent national railway policy. Power-based governance has fostered a successful TGV high-speed service but failed to provide the conditions for a successful, nationwide conventional railway network.

Germany's regionalised train services have been successful in many ways, but the absence of a separation of tasks and spheres on the national level continues to block their development and limit their financial stability. The continuing absence of a national railway strategy separated from the corporate objectives of the Deutsche Bahn and the absence of an effective mechanism to control the activities of the Deutsche Bahn as infrastructure operator represents the continuation of power-based or, at best, disputed governance. The results, beyond regionalised passenger

trains, are a shrinking intercity network and limitations to the growth of a freight sector that might otherwise be much better prepared to confront its road competitors.

4.3) Political systems and governance

Further research will have to provide concrete confirmation of the link between the general characteristics of the governing political system and prevalent types of governance in specific countries. The fact that Switzerland, Sweden and the UK have seen development in the governance of their railway networks that is closer to the idea of bound governance than the developments seen in France or Germany, however, is very likely linked to their respective traditions. The UK, with its democratic tradition of governmental accountability; Switzerland, with its effective democratic control and political culture of cooperation; and Sweden, equally marked by transparency and cooperation, prove to be fertile ground for bound governance. The elite administration active within France has produced an elite high-speed network but failed elsewhere. Federalist Germany is characterised by positive activism on the regional level, but on the national level, powerful and abusive corporate objectives are given preference over the absence of a transparent, accountable joint national policy.

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