

Prof. Dr. Michael W. Bauer
Jean Monnet Professor
Chair of Comparative Public Administration and Policy Analysis
michael.bauer@uni-speyer.de

April 2016

MICHAEL W. BAUER

ADMINISTRATIVE COSTS OF REFORMING UTILITIES

Publication Details:

Michael W. Bauer, 2005: Administrative Costs of Reforming Utilities, in: Coen, David/Héritier, Adrienne (eds.): Refining Regulatory Regimes. Utilities in Europe, New York: Edward Elgar, 53-88.

INTRODUCTION

Recent reform of network utilities was largely promoted as boosting efficiency. There were basically two ways – more or less pronounced in public debate – that the privatisation and deregulation of state monopolies in the utilities was to increase efficiency. First and foremost, the reforms were to lead to better organised markets, which would improve value for money and make goods and services cheaper for consumers (maximising economic efficiency). Secondly, unleashing the market forces and getting the state out of the business of business was also expected to reduce the public bill for sectoral governance, since the superior allocation capacity of the freed market would significantly reduce the need for public intervention (withering away the regulatory task) – or so the argument ran.

This second part of the efficiency promise may have been somewhat more pronounced in the UK, but it was also an essential element of the political discourse of change (*Wende*) when the Christian-Democrats, under Helmut Kohl, came to power in the early 1980s.

Has the reform in network utilities over the last ten years confirmed or disconfirmed the diminishing public burden proposition? And is it possible to come up with a systematic explanation of how and under which conditions sectoral administrative burdens, in the post-reform period, do materialise, migrate or cease to exist?

As I will show for the network utilities in the United Kingdom and Germany public costs do not vanish – contrary to the predictions of normative theoretical accounts of liberalisation. Rather, as state intervention changes in character, administrative costs arise in different corners of the system. Regulatory change may well make the continued provision of common goods increasingly

complex and challenging. The origins of administrative costs change, and their composition may indeed be different in different markets. Regulatory reform does not mean that the bill for the taxpayer is automatically decreasing.

Knowing more about administrative costs (ACs) of managing utility performance will help us to assess the consequences and interrelatedness of political choices and institutional settings. The term administrative costs will be specified in the next section; for the time being it can be conceived of as efforts of public authorities to manage a reformed utility regime. The economic benefits of network utilities (in terms of increasing market efficiency) may be beyond doubt, but the role of the state in providing a fair competition regime and guaranteeing certain levels of public services has not been rendered insignificant by privatisation/liberalisation. Indeed, although public costs have been slashed in certain areas, the reform processes have added new challenges and inflicted new administrative costs in others. It is crucial that we learn more about such ACs in this context, since it will help us more adequately to assess the new complexity of public tasks in the era of the emerging regulatory state – and in particular to assess the kinds of (new?) tasks our public administrations will have to engage in.

DEPENDENT VARIABLE: A DEFINITION OF ADMINISTRATIVE COSTS

The notion of administrative costs carries some heavily negative connotations – particularly within the US-American literature. This chapter uses the term in a strictly neutral sense, referring to administrative efforts or burdens. As a working definition, I suggest conceiving of administrative costs, that is, our dependent variable, as efforts of public authorities to manage a reformed utility regime in terms of enduring ‘hardware’ (for example, personnel, new institutions) and ‘software’ (legislation, directives, judicial review). I will refer to such sectoral administrative burdens as the administrative costs of utility reform or just ACs. Administrative costs are to be carefully distinguished from compliance costs, that is, the costs of the industry to comply with regulation (Hood and Scott 2000: 20) which are not part of the present analysis, and operational costs, which are actually included in my definition of ACs but usually refer only to the costs of running the regulatory offices.

INDEPENDENT VARIABLES, THEORIES AND HYPOTHESES

This analysis highlights in particular three factors thought systematically to

condition ACs in the post-reform period. These factors represent the administrative burdens in the post-reform phase to (1) sustain competitive but fair markets, (2) set incentives for private actors to supply a certain level of public service, judged politically desirable, and (3) co-ordinate public authorities in the daily business of providing (1) and (2). Each of these factors can be based upon a theory, thus allowing the empirical investigation to be ordered and falsifiable hypotheses to be developed.

Market Sustaining and the Normative Theory of Regulatory Change

At its simplest, the normative theory of regulatory change suggests that the level of regulation depends on the quality of the market. A truly competitive market would not need any regulatory coverage from the side of the state at all. As the utilities go from monopolies to competition (see Table 3.1), the regulatory tasks – and thus administrative costs – of public authorities should therefore whither away. While the argumentative thrust of this theory is to be taken seriously, one may, on empirical grounds, doubt whether 100 per cent competition can be reached in the utilities and whether even the emerging competitive segments of the market can do without the state provision of a reliable competition regime.

Table 3.1 Stages model of administrative costs development

Stage 1 – Pre-reform Medium ACs	Stage 2 – Ongoing reform High ACs	Stage 3 – Post-reform Low ACs
Monopoly	Monopoly with competition	Competition

Source: based on Coen and Doyle (2000a).

The first hypothesis that contrasts with the normative regulation theory is thus that administrative costs, in terms of designing economic regulation and controlling compliance, do not fade away as regulatory reform approaches ‘stage 3’, that is, satisfactory competition. The definition of sub-segments of the market, the evaluation of technological change and the task of guaranteeing a level playing field may reduce and transform the state’s regulatory activity. However, it does not eliminate it (market sustaining hypothesis).

Incentivisation and the Principal-Agent Theory

Even after privatisation and deregulation, the continuing provision of public services – at comparable levels to those prior to regulatory reform – is usually

required. Where the desired level of public services (affordability, accessibility, and so on) is not the natural outcome of the unregulated market interaction, state authorities may wish to set the right incentives to make private actors deliver. In this process of setting incentives, monitoring private delivery and, if necessary, improving the prescriptive and/or supervisory mechanisms, state authorities face the problems of incomplete contracting. As in classical principal–agent interactions’ agents have to be made to reveal as much of their privately held information as possible, so that the principal is able to adapt the terms of the contract. For the phenomenon under investigation here, this means that monitoring and information-gathering costs are bound to remain with the state. The second hypothesis thus states that in the post-reform situation, non-economic (that is, public interest) goals are to be pursued by actors who are now largely autonomous. In order to reach certain public service goals, state actors have to set incentives accordingly. At the same time, they need sufficient informational and monitoring capacities. The greater the gap between what a particular market would deliver if left to itself and the politically preferred level of public services, the greater the ACs to rectify outputs (incentivisation hypothesis).

Administrative Co-ordination and the Theory of Bureaucratic Politics

Market sustaining and incentivisation need to be carefully implemented by, and co-ordinated among, the public authorities in charge. At the same time, on the basis of theories of bureaucratic politics, we can assume that these public authorities are supposed to seek to enhance, or at least to stabilise, their own role within the regulatory framework. Therefore, the third hypothesis suggests that the more dispersed regulatory authority becomes (ministries, regulators, competition authorities), the higher the probability of administrative infighting over power and competences (Table 3.2 and Figure 3.1). Such co-ordination problems raise ACs (co-ordination hypothesis).¹

The composition of ACs varies across sectors and probably also across countries. However, it is expected that, with the help of the three independent variables, it will be possible to explain the administrative cost scenarios in telecommunications, electricity and railways.

UK TELECOMMUNICATIONS

The transformation of the UK’s telecommunications sector started back in 1969 when the post office became a public corporation. In 1981 British Telecom (BT) was separated from the post office, and with the 1984 Telecommunication Act, 51 per cent of its shares were sold to private

Table 3.2 Three origins of post-reform administrative costs

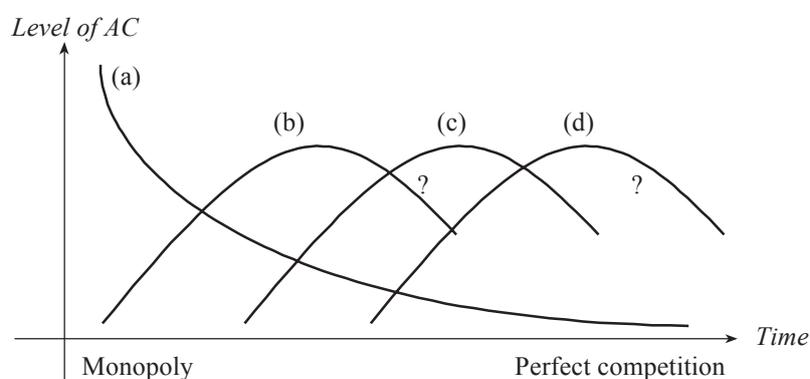
	Market sustaining	Incentivisation	Co-ordination
Problem	According to the normative theory of regulatory change, regulatory activity is to fade away as markets become more competitive. What we see, however, is that demonopolisation by itself is not sufficient to guarantee fair and sustainable competition	Public service goals, in so far as they cannot be delivered by the market, have to be agreed upon; their exact nature has to be specified; mechanisms for providing them through private actors have to be designed, as do monitoring instruments	Market sustaining and incentivisation need to be carefully co-ordinated by various public authorities who seek to enhance or at least stabilise their own role within the regulatory framework
Theory	Normative theory of regulatory change	Principal-agent	Bureaucratic politics
Proposition	(Ex negativo) in terms of designing economic regulation and controlling compliance, administrative costs do not whither away as regulatory reform approaches satisfy competition. The definition of sub-segments of the market, the evaluation of technological	In the post-reform situation, public-interest goals are to be pursued by actors who are now largely autonomous. In order to reach that goal, state actors have to set incentives. At the same time, they need sufficient informational and monitoring capacities. The greater the gap	The more dispersed regulatory authority becomes (ministries, regulators, competition authorities), the higher the probability of administrative infighting over power and competences. Such co-ordination problems raise ACs

Continued overleaf

Table 3.2 Continued

	Market sustaining	Incentivisation	Co-ordination
Proposition	change and the task of guaranteeing a level playing field and fair competition transform the state's regulatory activity. It does not eliminate it	between what a particular market would deliver if left to itself and the politically preferred level of public services, the greater the ACs needed to rectify outputs	
Expectations as regards the utilities	In predicting declining ACs, the normative theory has a strong point if the one-dimensional change from a 'public monopoly' to a 'competitive market' is the focus. The transformation of the utilities, however, is multidimensional: competition starts emerging only in segments of the market. This means that public authorities may still have to engage in defining borderlines. There are also the costs of making industry-related	The liberalised utilities markets cannot be counted on to provide public services if the provision collides with the efficiency-focused logic of market interaction. The gap has to be filled by redistributive policies. Setting the right incentives and monitoring compliance (and eventually punishing defectors) are new areas of state activity in the reformed network utilities. ACs in this area should increase, and it is unlikely to decrease as long as the political	Regulatory change is characterised by the establishment of sectoral regulators. As the regulatory regimes mature, the new players attempt to consolidate their positions – not least in regard to their working relations with ministries, general competition authorities, supranational players and sometimes even with sectoral co-regulators. In line with a bureaucratic politics perspective, power struggles are to be expected. The more

Empirical focus/indicators	information available to all potential players. As a consequence suitable institutions have to be sustained	preferences for certain levels of public services remain the same	complicated the regulatory set-up, the more challenging efficient public regulatory co-ordination becomes
	<ul style="list-style-type: none"> – Development of competition within the market (number of participants) – Level of economic regulation – Competition cases – Increase of regulatory staff – Monitoring and information-gathering efforts related to economic regulation – Running institutions that make industry-related information accessible and transparent 	<ul style="list-style-type: none"> – Obligations for public service provision in legislation and statutory rules – Institutionalisation of social consultation – Increase of public service related staff – Monitoring and information-gathering efforts related to public service tasks 	<ul style="list-style-type: none"> – Number of regulatory authorities involved – Conflicting regulatory strategies – Migration of competences and regulatory staff



Note: (a) regulating the state monopoly; (b) sustaining emerging markets; (c) incentivising and monitoring the delivery of public services by private actors; (d) co-ordinating public regulatory action.

Figure 3.1 Visualisation of post-reform administrative costs development

investors. The Telecommunication Act also established OFTEL, the first sectoral regulatory authority of its kind. BT was privatised intact, that is, as a vertically integrated network operator and service provider. As a result, the government adopted a semi-protective duopoly policy, which, until 1990, allowed only one other network operator, Mercury, to compete with BT. However, after 1991 the network operation market was gradually opened, other service providers were allowed, and the rest of the government's BT shares were sold to private investors.

Market Sustaining

The fact that UK public authorities can look back on 20 years of experience in regulating a liberalised utility, together with the fact that telecommunications came to be a market characterised by astonishing innovations and extraordinarily growth rates, raises expectations that the theoretical predictions of diminishing ACs should – if anywhere – be validated here. And, indeed, the quick rise of the number of competitors and the success of the price-capping formula, retail price index minus X (RPI-X), make market sustaining appear an effortless task (see OFTEL's annual reports). Despite evidence that economic regulation, in terms of market creation, has indeed lost importance, the regulatory business has, however, not become easier for the public authorities involved. The somewhat astonishing résumé is that 'regulation has become more complex' (interview OFTEL, November 2001b; similar interviews BT and DTI, November 2001).

If you have a monopolist with 100% and you have anybody coming in, then there is no dispute really about different market positions. However, as, for example, in the case of Internet call termination, where BT has had less than 20% of the market and the market is changing, here it is much more difficult to decide who is the dominant player or whether things are changing so rapidly anyway so that we do not have to do anything about it. (Interview OFTEL, November 2001)

Hence, even as checking the monopolist becomes less important, 'regulation', as one civil servant expressed it, 'becomes more analytical'. From the perspective of public authorities, telecom regulation is becoming more information intense, and regulatory decision-making is becoming more difficult because the increase in the regulator's discretion is paralleled by an increase in pressure for justification. 'It might not mean more regulation, but more regulatory activity in order to come to a decision' (interview OFTEL, November 2001). Moreover, the smaller (and weaker) market participants turn to the regulator to seek protection against the established incumbents. Coping with such (not always justified) complaints – as rising staff numbers in this area underline (Table 3.3) – has become one of the major occupations of the sectoral regulator (see below).

Table 3.3 OFTEL staff numbers and running costs

Staff numbers

1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	2000
69	102	116	112	117	121	140	148	152	144	156	161	160	170	189	208

Source: Atkins (2001); NAO (1996).

Running costs (£ million at 1999/2000 prices)

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
5.4	6.1	6.9	8.0	8.9	9.3	9.1	10.5	10.4	11.7	13.9

Source: Atkins (2001).

Incentivisation

In addition, after a basic level of competition has been secured, other regulatory objectives like consumer information, societal participation and decisional transparency or social-redistributional (consumerist) schemes move

to the forefront. In the UK case, such a development has been reinforced by policy changes of the Labour government, as expressed in the Utilities and Competition Acts. The regulatory efforts for such incentivisation are intense. The UK government has, for example, asked OFTEL to design regulation that provides cheap Internet access for schools and incentives for small firms to go online (interviews OFTEL, November 2001b; interview DTI, November 2001). It is especially in this context that experts fear a blurring of the distinction between the government's responsibility for redistribution and the sectoral regulator's task of providing for efficient economic regulation.

Administrative Co-ordination

In respect of administrative co-ordination, the UK telecommunication sector has undergone important changes, too. In particular, the Competition Act has reinforced OFTEL's (and other sectoral regulators') concurrent powers for handling competition complaints inside the industry. As regards UK telecommunications, this has been another peak in a long history of wrestling between the DGT and OFTEL which has been solved in favour of the latter. Thus, given the rising complexity of the regulatory tasks and acquisition of competence as regards competition, it is hardly surprising that OFTEL's staff has been continuously expanded.

Accordingly, OFTEL's operating costs from 1990 to 2000 increased by 6.8 per cent, and its staffing levels by an annual average of 4.2 per cent (Atkins 2001: 1–2). Although, compared with the turnover of the regulated industry in 1999 (£20 800000000), OFTEL's costs amounted to a meagre 0.06 per cent – the lowest ratio among the utility regulators.

Another indicator points to an increasing work load, the number of consumer complaints made to OFTEL is on the rise. In 1996, over 39000 complaints were made, in 1997 it was already around 47000, rising one year later to about 54000, and in 1999 OFTEL had to respond to more than 85000 consumer complaints, mostly in the area of mobile communication (OFTEL 1998; 1999).

The fact that the DTI telecom staff has doubled in the last six years, from 75 in 1995 to about 160 in 2001 (interview DTI, November 2001), may serve as evidence of the government's attempt to claw back influence (primarily in the context of the consumerist turn). However, compared with the other UK utilities, it should be noted that administrative co-ordination within the telecom sector is relatively conflict-free, most likely due to the fact that the involved public authorities have been working together for more than two decades.

In sum, even though the UK telecommunications sector was one of the first

to be reformed, it cannot be observed that its maturation leads to lower administrative efforts and thus lower ACs. As one interviewee noted, even though the sector is certainly 'getting closer to effective competition ... regulation is becoming more information intense and decision-making more complex' (interviews OFTEL, November 2001; November 2001b; BT, November 2001); hence, there is (still) no sign of 'deregulation or any retreat of the state' (Thatcher 1999b; 105), and telecom regulation remains in need of continuous re-adaptation and supervision.

GERMAN TELECOMMUNICATIONS

The German telecommunication market was in the hands of a public monopoly until the late 1980s. Before that, it was integrated into one single company, along with postal services and post-banking, known as Deutsche Bundespost. Change started in 1989. Then, Post Reform I split the Bundespost into its three constituent parts – Deutsche Post, Postbank and Deutsche Telekom – and established each as an independent operational unit, administratively separate from the Federal Ministry of Post and Telecommunications. In 1995, Post Reform II privatised Deutsche Telekom, while still, however, leaving the German government with the majority stake in DTAG. In the years to come, the German government continued selling DTAG shares, and today it holds only about 42 per cent of the company (Bundesregierung – Beteiligungsbericht 2001).

Market Sustaining

The development of competition within the German telecommunication market has been assessed to be very positive – especially since one has to take into account that the industry was liberalised only in 1998. However, the dominant position of DTAG was able to be ended only in the wireless market. In long-distance telephony and international calls, DTAG still holds 60–70 per cent of the market, and in the segment of local calls 98 per cent. Thus, as the sectoral regulator, RegTP underlined, DTAG still dominates the German telecommunications market (*FAZ* 7 December 2001: 15). This means that, despite the fact that German telecom legislation stipulates that regulation automatically has to cease if the market domination situation ends (Immenga et al. 2001: 1), there remains plenty of work for RegTP. 'Sooner or later, we must vanish ... But it will take at least 20 years' (interview RegTP, February 2000). In the mean time, price regulation and information gathering has turned out to be much more complicated and work intensive than projected. There are three reasons for what appears to be a slowdown in German regulatory action.

First, there seems to be a tendency towards informal decision-making. Second, ‘75%–80% of RegTP’s decision are disputed in court. Either DTAG or we sue, or even both sue ... That has become more important than the regulatory decisions themselves. The court is brought in as a referee’ (interviews Netcologne, March 2000; RegTP, March 2001). This affinity to court room solutions does not just postpone decision-making; it forces RegTP officials to draft their directives so as to make them legally bullet-proof – in even more rigorous ways than would be normal in Germany’s already extremely juridified administrative interaction. Moreover, in the administrative courts, RegTP is not allowed to motivate its decisions by taking recourse to informal material (usually from inside the industry), and it is thus doubly handicapped. Third, the still dominating incumbent – often politically protected by politicians (interview Mannesmann, February 2000) – retains crucial information, thus transforming price regulation for essential facilities into time-consuming guesswork.

They give us huge amounts of paper with nothing in it ... And if you ask them to explain a figure, you get an explanation and you have even more questions than before. So, it is quite a difficult process until you get the information you need, and sometimes you don’t even get the information, and then you have to make some estimation yourself ... The idea was that I just compare their figures ... and then say, ok, it is fine, and just sign it. But it is the other way around. I have to calculate the theoretical costs, and then I have to prove that I am right and not that they are wrong. And that is something which is, of course, a very hard business. (Interview RegTP, February 2000)

Incentivisation

While the development of competition in the German telecommunication market has not yet led to a significant reduction of regulatory activity (though, as the figures below show, RegTP’s output has definitely diminished), in terms of incentivisation, ACs are hardly significant. Given decreasing prices, universal service goals, particularly those regarding affordability, have been achieved and are sustained through economic regulation. The remaining political pressure for government programmes, such as supporting the information society and the few customer services provided by RegTP (certification of reliable providers, *Positivliste*, mediation between customer and provider) are relatively insignificant and certainly do not need a lot of monitoring or regulatory incentive setting. This reflects, first, the healthy state of the industry, despite current problems, which still enjoys huge growth rates and fierce competition. However, one should also consider the implications of the fact that phoning is probably less essential for weaker parts of the society than are transportation and electricity prices.

Administrative Co-ordination

When, by 1 January 1998, the last barriers to competition were lifted – not just in Germany but in the whole EU – the Federal Ministry of Post and Telecommunications was dissolved. Some of its officials went to the Federal Ministry of Finance, and about 50 of its experts were transferred to the Ministry of Economics, which is now overseeing the telecommunications sector. The rest of the leading personnel of the post and telecommunications ministry (c. 250 officials) became the base of the new sectoral regulator, the Regulierungsbehörde für Telekommunikation und Post (RegTP). Additionally, the Bundesamt für Post und Telekommunikation, holding the technical expertise in telecommunications, also was merged into RegTP. The RegTP now comprises a staff of about 2430 – down from 2710 in 1998. The fact that absolute staff numbers are in decline should not be misunderstood. It is only the technical side that has been slimmed down. The economic regulators actually employed more personnel, and their number is now close to 300 (up from 250).

It should also be noted that RegTP, as a *Bundesoberbehörde*, belongs to the portfolio of the Federal Ministry of the Economy. Formally, it is thus not as independent as its UK counterpart, OFTEL. Moreover, the existence of political pressures has been evidenced in virtually all expert interviews: ‘of course there is always political pressure ... They have very subtle methods [for exerting it]’ (RegTP February 2000); ‘If Müller [former Minister of the Economy] calls, Scheuerle [former head of RegTP] does what he wants’ (interview Netcologne March 2000); ‘We see politicians who would like to influence telecommunications in their direction’ (interview DTAG February 2000). It has also been remarked that, with the change to a social-democratic/green coalition, pressure has been rising further. More important in terms of administrative co-ordination seems to be that the natural regulatory competitor of RegTP, namely the Federal Cartel Office, also belongs to the portfolio of the Ministry of the Economy, though it is equally independent. This certainly reduces ACs for co-ordinating proactive and supervisory economic regulation. At least the relationship between the cartel office and sectoral regulators appears to be less conflictual than, for example, in the transport sector, where competing influences inside the government some-times obstruct the regulatory task.

The overview in Table 3.4 suggests that RegTP’s output in terms of decisions (about licensing, abusive behaviour, setting fees for the use of networks, and so on) seems to have stabilised, after having peaked in 1999. As has already been mentioned, the continuing high number of pending lawsuits on competition and market regulation issues – rising from 58 before

Table 3.4 Overview RegTP: regulation decisions, staff and filed lawsuits

	1998	1999	2000	2001
RegTP regulation (Regulierung)	140	169	88	59
RegTP decisions (Mitteilungen)	113	606	765	737
Personnel*	2710	2569	2555	2428
Lawsuits	263 (pre-1998 58!)	603	471	1011 (still pending 2/01)

Note: * Personnel development concerns the RegTP as a whole, that is, including staff for postal affairs. Moreover, reductions of personnel only concern the technical staff, while personnel for the economic regulation has been steadily increased (interview March 2001, RegTP).

Source: Official Journal RegTP; homepage RegTP www.regtp.de.

1998 to 1011 by February 2001 – is another particular German feature of business–regulator relations in the emerging regime.

Given the low stake of the *Länder* in the field, the regulatory personnel of the sector clusters at the federal level: RegTP (2430), the Telecommunications Department of the Federal Economic Ministry (since 1998 increased to 66) and the telecom staff of the Federal Cartel Office (7).

In spite of the profound differences usually characterising regulatory modes in the German and British utilities, the telecommunications sector is perhaps the one possessing the most similarities. Both sectors belong to the vanguard of the reform movement in their respective countries and were among the first to be liberalised – though this happened in the United Kingdom ten years earlier than in Germany. Furthermore, in both countries, telecommunications is – in economic terms – the most successful utility: nowhere else are growth rates so high and the effects of innovation so apparent. Starting as comprehensively regulated sectors dominated by public monopolies, private competitors were able to be established relatively quickly and market concentration is steadily declining. Moreover, both countries opted for independent sector regulators as the central regulatory authorities. While in the case of the UK this choice became the standard model for the reform of the other utilities, it seems still rather exceptional for the Federal Republic.

UK ELECTRICITY

After having been nationalised in the wake of the Second World War, the 1989

British Electricity Act restructured and subsequently privatised the UK electricity industry. Generation and supply were separated and a non-profit transmission grid (in form of the National Grid Company) established. The power generation segment of the Central Electricity Generating Board (CEGB) was split into three new companies: National Power, PowerGen (conventional power) and National Power (nuclear power). The 12 area boards of the CEGB became private distributors called regional electricity companies (RECs) – each REC holding a public licence for a particular area and being obliged to supply all reasonable demands for electricity within its territory. First, huge industrial customers and, later, also normal ones were, however, able to choose a (second tier) supplier different to the official REC serving in their region.

Market Sustaining

To understand the regulatory development in the UK electricity sector in terms of market sustaining one has to distinguish carefully between generation, transmission and supply. Everybody who wants to generate, transmit or supply electricity needs a licence from the sectoral electricity regulator, OFGEM (former OFFER). The transmission grid, as a non-profit organisation, is regulated by OFGEM and is subject to the price-cap formula RPI-X. Generation, however, is thought to be on track towards competitiveness, and no particular price regulation applies. However, the trading mechanism for electricity between the suppliers and generators has been set up by the state. Originally that mechanism was known as the ‘pool’. The pool operated on the basis of competitive biddings by generators. That system, however, has not been functioning to the full satisfaction of its inventors (Eising 2000a: 167). Some incidents of manipulation, together with the possibility (lawful but against the spirit of the system) of making bilateral contracts to sell power for a fixed price on a particular date in order to safeguard against price volatility, led to the abolishment of the pool in early 2001. It has now been replaced by New Electricity Trading Arrangement (NETA) which basically constitutes a more traditional wholesale market for electricity, operating in much the same way as normal commodity markets do. Hence, generators are now free to contract directly with purchasers. Since small consumers are also allowed to switch suppliers, 37 per cent have decided to do so. But the regional incumbents still dominate the electricity markets and do hold between 72 per cent and 80 per cent of the shares (interview OFGEM, November 2001b). In comparison, the market shares of the two biggest generators, National Power and PowerGen, went down from 45.5 per cent and 28.5 per cent in 1990 to 21 per cent and 19 per cent respectively in 1998.

Incentivisation

In the 1990s UK energy policy was ‘absolutely driven’ by the neo-liberal liberalisation ideology. The conservative governments ‘focused very much the promotion of competition’ (interviews DTI November, 2001b; OFGEM November, 2001b). From 1997 onwards, however, social and environmental objectives came more to the forefront, and there is evidence that ACs related to incentivisation have been rising since. The turning point, as in the other utilities, was the Utilities Act. For example, whereas renewable energy policy was previously a matter of bringing them ‘quickly into the market without having to put into place specific legislation’ (interview DTI-II November 2001), there are now various attempts to strengthen the change to new fuel generation in terms of grants for developing offshore wind, research and development (R&D) funding, and photovoltaic (some £22 million for the next 20 years), and, more importantly, the Renewable Obligation (RO) is about to be introduced. The RO means that ‘suppliers have the obligation to purchase a certain amount of “green” electricity and show that they supply that to their customers’ (interview OFGEM, November 2001a). ‘Moreover, the government has started to issue environmental and social guidance, and OFGEM has translated that in[to] Environmental and Social Action Plans’ (interview DTI, November 2001). This has meant more competences for OFGEM (OFGEM 2001a). Also, before the Utilities Act, the government was active in social and environment issues. But now the ‘sort of varied pieces’ (interview OFGEM, November 2001b) have been put together and consolidated. The Energy Consumer Councils have been merged into EnergyWatch, and, for example, the order of the statutory priorities of OFGEM have been turned around: ‘now the principal objective is to protect interests of customers where appropriate by promoting competition’ (interview OFGEM, November 2001b). All this has brought an additional ‘element of complexity’ to OFGEM’s work. Its regulatory work has become more difficult:

How to regulate the industry in a world of growing demand? ... You want to set the right incentives and to do that efficiently, I mean, this is quite a regulatory challenge ... It is not so obvious as stripping out the initial inefficiencies and bringing down prices ... We are in less obvious territory now. (Interview OFGEM, April 2001)

Administrative Co-ordination

The rising complexity in setting incentives for social or environmental purposes is paralleled by an increase in staff, in particular in these areas. The result of ‘the higher profile of our secondary duties’ is that officials ‘are buried

with work' (interview OFGEM, November 2001b). In particular, as regards support for the development or improvement of technologies for renewable energy, the workload is not likely to decrease soon (interview DTI, November 2001b).

As regards ACs of administrative co-ordination, the UK electricity sector comes off well. The fact that OFFER and OFGAS have been merged is to be viewed as positive. In the long term there is certainly room for exploiting synergies and reducing some staff. The public regulatory authorities involved consist, in principle, of the triade of competition authority, sectoral regulator and government. However, after the dissolution of the energy ministry in 1992, most of it went to the DTI, although parts were also subsumed under the Environment Ministry. As one interviewee noted, the co-ordination of the UK government's renewable approach, especially, has not been in accordance with a 'sensible structure'. As he added: 'it is curiously British, though' (interview DTI, November 2001). On the other hand, the relationship between OFT and OFGEM, which has been given concurrent powers in the competition area, has been portrayed as unproblematic (interview OFGEM, November 2001).

The administrative costs remain as regards the change from the pool to NETA, as does the potential risk of the effects when increased wholesale costs have to be placed on consumers by a fragmented and competitive retail market. To expect problems similar to those in California seems exaggerated. However, regardless of whether it is the pool or NETA, both get combined with fragmentation in retail and consolidation in wholesale markets. Moreover, both have to put up with efforts to push social and environmental objectives. Hence, there is no evidence for an overall reduction of ACs. The reorganisation and privatisation appear to have led to greater *Verregelung*, that is, ever more regulation.

Supporting evidence for such a view may be seen in the data reported in Table 3.5. OFGEM operating costs – discounting the merger costs and as well as the expenses required by creating NETA – saw a 10.5 per cent annual increase in real terms during the 1990s (Atkins 2001: vii). The staff increased annually by an average of 9.3 per cent (see Table 3.5). The somewhat ambiguous picture – increasing competition, decreasing prices but higher ACs – may be explained by the basic conflict running through the UK electricity sector:

I suppose, the situation we are in is that we have conflicting desires. One is markets, which run on their own, where you don't have government interventions ... They set their own prices and are almost self-regulated. And then you have a requirement that you do have to have green power. So the government sort of has to intervene into this market to change the playing field slightly. (Interview DTI November 2001)

Table 3.5 OFGEM and OFFER staff and OFGEM operating costs

OFGEM (OFGAS + OFFER) staff numbers

1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	2000	2001
—	19	21	28	28	188	288	249	269	287	301	343	360	386	439	521	555

Note: OFFER was established only in 1989.

Source: Atkins (2001).

OFFER staff in the 1990s

1991	1992	1993	1994	1995	1996	1997	1998	1999
214	N	222	214	217	231	233	252	Merger

Source: Derek Herbert, DTI.

OFGEM operating costs (£ million)*

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
10.1	9.9	10.5	12.8	13.5	19.2	24.2	29.7	38.0	48.5	62.8

Note: * 1990–98 the numbers express the sum of the operating costs of OFFER and OFGAS.

Source: Derek Herbert, DTI.

GERMAN ELECTRICITY

The speed and pervasiveness of the 1998 liberalisation of the electricity sector came as a surprise to many observers. In crucial respects, the German Electricity Act seems to be even more market-liberal than the crucial EU regulation would require. Be that as it may, the fact is that the German electricity market was, at least formally, opened up without any transitory phase.

Market Sustaining

The crucial difference between the UK and the German electricity sector before the reform was that public ownership of the industry was much more centralised in the United Kingdom than in Germany. Two particular characteristics of the new German regulatory approach can only be explained in the context of that absent centralisation and dispersed ownership structure. First, no central sectoral regulatory body has (yet) been established.² Second, to provide for a minimum of common rules, the market participants in form of their interest associations have been asked to negotiate association agreements (*Verbändevereinbarung*) in order to sort of self-regulate their interaction (in particular to determine the conditions for using essential facilities; *Energiewirtschaft* 1999; Engel 1996: 125; Seeliger 2000). The associations are supposed to agree, first and foremost, to the conditions of Third Party Access (TPA) and respective fees autonomously. However, in case they cannot come to an agreement in due course, the government has the right, and hence is granted the authority, to prescribe specific rules hierarchically. In other words, the Ministry of Economics may assume, in exceptional cases, the role of ‘something like a regulatory official body ... What in other countries is done by the regulator is done by companies in Germany’ (interview RWE, April 2000). As regards market sustaining: leaving it to the interested parties to get a regime regulating the network access is the best possible option, at least in terms of cost saving for the state. However, in practice this solution is criticised because it is said to favour incumbents to be to the detriment of newcomers. Despite rising pressure from the EU and from inside the industry, the German government seems to be inclined to defend its unique model. In the meantime, the saved *ex ante* regulation, on the one hand, contrasts with a rising number of complaints about unfair competition in administrative courts and before the federal and regional cartel authorities, on the other.

Incentivisation

In terms of social and environmental regulation, and thus in terms of setting

the right incentives for industry, there are plenty of instruments in use in Germany – some of them not unlike those in use in the UK. For example, in Germany renewable energy generators enjoy 100 per cent demand security and fixed prices though declining over the years. Germany has also accepted far-reaching commitments in the context of the Kyoto process (Handelsblatt 9 January 2002). However, the present government policy to exit nuclear power and also the *Kohlepfennig* – that is, cross-subsidising electricity produced by German coal via a particular electricity tax – and the ambitious target of quickly reducing CO₂ emissions, and all that in the medium-term, may not be a coherent and feasible strategy (Bundesregierung, Bundesministerium für Wirtschaft und Technologie 2001). All this does point to an increase, rather than a decrease of ACs.

Administrative Co-ordination

Not establishing a sectoral regulator appears to have had at least four consequences. The federal Ministry of Economics (BMW_i) has become the focal point in terms of administrative co-ordination. Moreover, *ex post* competition and cartel regulation have partly had to offset *ex ante* rule-making; consequently, this has increased the importance of the Federal Cartel Office. Conflicting parties, however, have made massive use of the administrative courts in order to sort out their regulatory quarrels. And, finally, the German *Länder* governments continue to exert considerable influence.

The former Minister of the Economy, Werner Müller, came in with the social-democrat/green coalition in 1998. He came from and went back to the private energy sector – it thus may not come as a surprise that he turned energy policy into a main issue (*Chefsache*) (interview BMW_i, March 2001). Most recently, also, an influential secretary of state, Alfred Tacke, involved in many crucial decisions about the electricity market, left the government to work for RAG a big company on the German energy market (*FAZ* 3 September 2004). ‘Revolving-door’ changes at that level are very uncommon in Germany, to say the least, and the job change of Mr Tacke, in particular, has been harshly criticised.

One notes further that the personnel of the energy department within the BMW_i increased from 108 in 1989 to 134 in 2000.³ However, 2001 saw two important reorganisations: first, the former head of the 8th *Beschlusskammer* of the Federal Cartel Office (the unit deciding about electricity markets) was made head of a special task force, inside the Federal Economic Ministry, to contain anti-competitive behaviour of the incumbents. He was also provided with additional staff. Moreover, electricity matters were taken out of the portfolio of the 8th *Beschlusskammer* of the Federal Cartel Office, and a particular unit (with additional staff!) was created instead exclusively for

electricity. Given that regulatory personnel at the *Länder* level has by and large retained its pre-reform dimension – the 16 *Bundesländer* maintain a staff of 130–150 full-time officials for that task, of which about 65 engage in competition or cartel issues for energy production and supply – this tendency underlines that the federal ministry and the cartel office are the two central regulatory players. However, if, as has been suggested, the task force turns out to be the nucleus of a true sectoral regulator, a more conflicting relationship between *ex post* and *ex ante* focused authorities may be a side effect.

In sum, given the particular historical development of the German electricity industry, it seems fair to say that regulatory changes have only brought about a modest transformation. Despite quick and thorough liberalisation, the market has retained its particular features – in particular its characteristic of its 1001 *Stadtwerke*, as local distributors and, sometimes, even producers. No special agency has kept ACs in check so far. Although this is going to change with the arrival of the new electricity regulator, up to now there has been just a modest increase in federal (ministry and cartel office) staff and, closely related, the German model – unique in the EU – of self-regulation and self-enforcement by the regulatees. For market-sustaining and administrative co-ordination, it is thus the most ACs-efficient regulatory solution of all the utilities under study here. However, the efforts to guarantee social and environmental services, in terms of incentivisation, have been more accentuated, and a number of new laws have increased the obligations here. One will, however, have to observe how ACs develop from January 2005 onward.

UK RAILWAYS

In many respects, British railways are probably the most intricate of all the utilities under review here.⁴ Competition is still far off, although the desire to inject some competition quickly was the argument for rushing through a complicated regulatory structure that, in the mean time, has itself become a major obstacle to regulatory progress. Instead of helping the industry to sort out capacity bottlenecks and to improve the quality of services, policy-makers and regulators have been forced to spend a great deal of their time struggling to alter the system itself. A couple of tragic accidents and overly self-important personalities confounded the problems to a veritable stalemate (interview). In autumn 2001, after the arrival of a new transport minister and the exchange of some regulators, consolidation appeared possible at last. The bankruptcy of Railtrack – after all the heart or powerhouse of the railways industry, as Tom Winsor (2000: 2) put it – opened the door to another round

of restructuring. At the time of writing ‘everything is up in the air’, to quote one public servant’s view of the enormous uncertainty for regulators and industry alike.

Market Sustaining

The genesis of the regulatory regime (White Paper 1992, Railways Act 1993, Transport Act 2000) is covered in detail elsewhere. It should be noted, though, that the government’s reluctance to provide Railtrack, whose share prices fell below emission level in May 2001, with additional funding led to its technical bankruptcy and a de facto re-nationalisation, in all but name.

As regards market sustaining, it is obvious that within the UK rail sector there is hardly any (unregulated) competition at all. Hence regulation is not a matter of market sustaining, but still a matter of market creation. The number of actual and potential market participants remains limited – not least of all because of the technical properties of the network. However, competition regarding secondary elements of franchising contracts, such as catering or non-smoking areas, is advancing in the freight business and throughout the bidding process (interview SRA, November 2001). In any case, as the quick succession of the Railways Act, Transport Act and the imminent restructuring after the bankruptcy of Railtrack indicates, there is great and ongoing legislative activity, and thus rising ACs, since ‘after the event it is harder to alter something’ (interview ORR, November 2001). Despite the expectation that ‘civil servants within the department of transport would sort of whither away to nothing more than 4 or 5 people’ (interview DTLR (Department for Transport, Local Government and the Regions), November 2001), the number of regulatory staff has rocketed. The railways directorate of the Department of Transport alone is about to recruit more than 40, thus roughly doubling its size, mainly to cope with the Railtrack disaster.

Incentivisation

Furthermore, inside the regulators there is increasingly a need for industry-related information, since, as one interviewee has said: ‘Your understanding of issues increases, so you are now asking for different kinds of information than before. Before when we got information, we thought that is fine. Now we are saying, yes OK, but what about this and that. We keep learning’ (interview ORR). As the experience of regulator and regulatees increases, more regulatory devices are developed. A telling example is the asset register. After privatisation, Railtrack, actually similar to the DB (Deutsche Bahn), did not exactly know what state its assets were in – that is, railway land and facilities, and so on – and, perhaps more importantly, they often did not know the kind

of care they would need. The lack of such information in the form of an asset register made itself especially felt in the wake of the two latest accidents. Railtrack answered to the increase of safety concerns after the accidents, *inter alia*, by lowering speed limits – though, due to lacking information, in a blanket coverage way. This led to delays, most of which could probably have been avoided if more detailed and distinguishable information over the quality of tracks, signalling, and so on had been available. However, a comprehensive register for better managing the industry assets had to be carefully planned by the ORR, and it will need continuous regulatory coverage. As this example indicates, information costs definitely increased after regulatory reform: ‘There is a great desire for information ... When you start fragmenting the industry, then you need transparency of information. The more fragmentation you have, the more information you need’ (interview ORR).

Administrative Co-ordination

As regards administrative efforts, the lesson of the UK railways seems to be that emulating a market by means of reallocating competences and institutional roles will necessarily remain less efficient than a real market. The state forwent the advantages of hierarchy and, by establishing a sort of a fake market (for which it needs to separate regulatory and financing powers), it got the worst of two worlds: no (or little) economic efficiency gains (state subsidies are needed to keep the railways going) and increasing administrative costs for the new method of governing the sector. The public authorities thus need many more staff to cope with the increased complexity of the regulatory tasks and to fulfil their new supervision and informational obligations.

In terms of incentivisation one has to point to the huge amounts of government subsidies, which find their way into the sector, mainly through the SRA. Allegedly, the Conservatives had been promoting proceeds of privatisation instead of protecting the public interest. By contrast, the Labour government has set out to correct that bias with the Transportation Act, and it has been much more proactive in boosting consumer interests.

The regulatory effort to set the right incentives for Railtrack, TOCs and ROSCOs is extraordinary. Since the franchises are set up for many years, most issues have to be settled in advance, and they literally take the form of detailed contracts between the regulator and regulatee. This goes hand in hand with increased supervision needs on the part of the public authorities, particularly where public service goals (sufficient transport service in remote areas, affordable pricing for London commuters) are directly funded by the state. Moreover, it is not only a matter of receiving the information. It is also one of analysing it appropriately:

There is more information available [after privatisation] but each organisation produces its own information in the way it wants it and it may not be easily reconciled with somebody else's information ... There is more information, which is good, but it has not been getting easier to understand and interpret that information. (Interview DTLR, November 2001)

The biggest drawback of the regulatory solution for ACs in the UK rail sector are the repercussions for administrative co-ordination that derive from the complex separation of regulatory powers. There are three sectoral regulators – the ORR, the SRA and the Health and Safety Executive (HSE) – and a transport minister, who, thanks to the huge amounts of public money spent on subsidising rail services, is in a more influential position than his colleagues responsible for other utilities.

What on paper probably looked easy and clear-cut – the ORR is the economic regulator focusing on Railtrack, while the SRA designs and auctions franchising to train operators, and the HSE (as before privatisation) copes with security issues – turned out to be much less clear and more difficult to manage in practice. The management problems stem, first, from the fact that 'co-ordination is not sensible' and, second, from the 'duplication of functions' inherent in the chosen way of reorganising the sector (interview SRA, November 2001).

The Transport Act already marked the first major reorganisation. The ORR lost its consumer protection competences (and related staff) to the SRA. At the same time, however, the ORR was able to establish itself as the *de facto* sectoral competition authority, thereby partly outplaying the OFT. The relationship between the transport minister, the ORR and the SRA has been problematic. Irritations between the ORR and the SRA seem particularly dramatic.

Under the first Labour government there was a huge split between ORR and SRA. Morton went around telling everybody that this is now 'his' railway and ... Winsor was some sort of economic legal technician with no clout whatsoever. And Winsor went around telling everybody that he was now 'Mr UK Railway' and it was him to make railway policy. They hated the sight of each other, and it was just a straight disaster.

This 'coordination deficit' would have been counter-productive in a healthy industry, but in a sector plagued by security and capacity shortfalls, it made itself felt even more. The quick succession of a number of transport ministers after privatisation has compounded the problems of a lack of strategic vision and continuity. Even more so since some of the ministers displayed a tendency towards 'micromanaging' railways, thus stirring up the survival instincts of the regulators and their organisations – making working relations between the public bodies involved even more 'antagonistic' (interview DTLR).

In sum, ‘turf wars between the ORR, the SRA and the HSE’ and the formalisation of relationships in a more fragmented industry have made regulatory relationships ‘antagonistic and contractual’ and they have, at the same time, to an unprecedented level, brought about administrative efforts to sustain such a complex regulatory structure.

Finally, the available numbers also support an increase in ACs. For example, Nash estimates that the 1993 reform increased government ‘grant[s] paid for passenger services from £458m to £1960m’ (Nash 1996: 61). Moreover, the ORR is more expensive than the utility regulators such as OFGEM or OFTEL. Measured in operational costs, divided by the turnover of the UK railways industry, it retained 0.16 per cent. Between 1996/97 and 2000/01 ORR costs increased by 14.4 per cent on annual average; its staffing levels rose annually by 8.3 per cent (Atkins 2001; see also Table 3.6). While the Railways Inspectorate’s staff numbers remained stable throughout the 1990s, the number of staff member among other regulators and the railways department within the Ministry of Transport increased considerably.

GERMAN RAILWAYS

Inefficiencies and reform needs within the German railways sector became increasingly apparent in the 1980s. The perception that it was necessary to reform the German railways was less a consequence of European initiatives or of an ideological shift among German policy-makers towards market liberalisation than of the understanding that, if nothing happened, the financial deficit of the Deutsche Bundesbahn would soon run out of control. Hence, in early 1989, a state commission was set up to work out suggestions. The fall of the Berlin wall a few months later and German unification in 1990 completely changed the parameters of the commission’s task. In particular, the prospect that Germany would resume its role as a major East–West transit country and the duty to integrate and modernise the railways of the former German Democratic Republic (GDR), the Deutsche Reichsbahn, exerted pressure to reach a more radical solution than was possible in the previous 15 post-war reform attempts (interview BMVBW, August 2000; Herr and Lehmkuhl 1997; Lehmkuhl 1996). In 1992/93, on the basis of the state commission’s proposals, a structural reform of the German railways was adopted.

Market Sustaining

As in the UK, in Germany, railways regulation today is not about market sustaining but about market creation: the goal is still to inject rudimentary competitive features into a hugely inflexible and only slightly innovative

*Table 3.6 ORR staff and operating costs, DTLR staff and OPRAF-SRA staff**ORR staff*

1993	1994	1995	1996	1997	1998	1999	2000	2001
—	32	75	87	130	142	160	165	

Source: ORR Annual Reports (1994).

ORR operating costs (£ million)

1993	1994	1995	1996	1997	1998	1999	2000	2001
			7.3	7.8	8.2	12.6	13.8	

Source: Atkins (2001).

DTLR staff

	1990s–2001	2002
Staff	C. 55	55 + 44

Source: ORR interviews, November 2001.

OPRAF-SRA staff (000s)

	1993	1994	1995	1996	1997	1998	1999	2000 ¹	2001
Staff	13	41	69	102		129	140	250	284 (341) ²

Notes:

1 BRB and OPRAF do already compose the 'shadow' SRA.

2 To the 284 one had to add 108 staff from the BRB Residuary Ltd and another 49 from the Rail Passenger Council (SRA Annual Report 2001: 95).

Source: Atkins (2001).

market, characterised by little technological progress, low growth rates, high sunk costs and continuing dependency on government subsidies for modernising tracks and sustaining regional passenger transport.

The development of competition is sluggish. There are an estimated 150 railway enterprises operating in Germany, mainly in niches DBAG considers unprofitable. These claim only about 3 per cent of the overall market, though they hold one-third of the local passenger transport market, with this tendency increasing.

Railways reform has indeed meant an increase in the need for regulation (see Table 3.6). There have been a large number of new laws and directives: Not least significantly, the German *Länder* had to draw up their own legislation for their newly won competences (Ewers and Ilgmann 2000: 34). From 1994 onwards, the federal competition authority, as well as the newly created quasi-sectoral regulator, the Eisenbahnbundesamt, began increasing the number of formal and informal decisions (interviews EBA, August 2000; BKartA, September 2000). And, last but not least, the German administrative courts have been busy with appeals reviewing public decisions.

Current staff numbers are difficult to compare with those before the reform. First, the merger of the former West German monopolist with its East German counterpart led to considerable overcapacities. Since privatisation, DBAG has been cutting personnel. However, former civil servants remain under a special regime for which the federal government is finally responsible. A particular agency, the Bundeseisenbahnvermögen, has even been created for the task. Second, in particular, the new technical railways office, the Eisenbahnbundesamt, has been recruiting staff since its inception in 1994: they have added around 1000 employees. Ninety per cent of the workforce came from the two railways, Deutsche Bundesbahn and Deutsche Reichsbahn. Of the remaining 10 per cent, most came from the Federal Ministry of Transport (BMVWB). One notes that in the Federal Ministry of Transport, where the railways reform was actually prepared, the responsible unit increased its personnel from 43 in 1990 to 64 in 1992. Then its staff decreased, after 1994, to its current 51 members (still 20 per cent above its 1990 level!). Third, the regionalisation of the responsibility for the railways and the ordering principle (*Bestellerprinzip*) according to which local and regional authorities have to ask (and pay) for local passenger transport, have led to the creation of many public-private partnerships in various forms, and have increased public railways staff within regional and local authorities.

Incentivisation

As regards incentivisation, the situation in Germany appears to be much simpler than in the United Kingdom: the federal government is owner of the

DBAG, the 'de facto monopolist', and it is also the principal rule-maker for the whole industry. The obligation to retain the overall responsibility for the railways – in particular for the tracks – has even been written into the German constitution (Article 87 GG). This does not preclude privatisation of up to 49 per cent. However, plans to bring DBAG (or parts of it) to the stock markets have already been postponed several times; hence the federal government remains 100 per cent owner of the DBAG. The costs for this responsibility of the federal government are very huge. Ewers and Ilgmann (2000: 4) reckon that (although the German railways' shares of an expanding transport market have only very modestly increased and in most segments have even stagnated) the federal government pays €10 billion per year to satisfy debts and obligations of the DB-West. Another €6 billion are paid to the *Länder* so that they can order local and regional passenger transport on the market (thanks to federal funds for regionalisation known as *Regionalisierungsmittel*); and another €4 billion are used to buy socially desired services. Finally, the federal government invests about €3.5 billion per year in the track system (down from €5 billion in 1994 – which, one notes, DBAG was not able to spend completely in 2001 because of lack of planning capacities). This adds up to €23.3 billion each year that goes directly or indirectly into the railways (not counting additional *Länder* subsidies). It comes as little surprise that a financial commitment of such heights also brings along huge political pressures, in particular as regards investment decisions about which lines and which kinds of trains will have priority. Thus, while in the post-reform period public financial support of the railways has become more transparent, the liberalisation and restructuring efforts have not translated into state savings.

Administrative Co-ordination

This is also an area where the increase in ACs is obvious. The EBA, originally conceived as a technical expert, now aspires to become a full-fledged sectoral regulator like the ORR, and it has made progress in acquiring a kind of informal regulatory competence (interview EBA, August 2000). It also has good chances of reaching that aim formally in the next amendment to the railways legislation (*FAZ* 28 November 2001: 15; Schwenn 2001). This sets it against the federal competition authority, which itself has been eager to expand in this area (interviews BKartA, September 2000; BMVBW August 2000). Despite the different regulatory philosophies embodied by the two institutions (*ex ante* sectoral regulation, on the one hand, and *ex post* general competition, on the other), it has been already underlined that 'whoever gets more regulatory tasks will also need more personnel' (Albert Schmidt, quoted in *FAZ* 17 September 2001: 17). One notes in this context that the conflict

between the competition authority and the EBA is also reproduced at the level of the federal government. The transport minister wants to transform the EBA (which belongs to his portfolio) into a strong(er) regulator. In contrast, the minister of the economy would like to see the general competition authority more committed to the areas it is responsible for. And, last but not least, the finance minister (and allegedly also the chancellor) backs the DBAG, since the better the DBAG is doing, the earlier he will be able to sell it on the stock market (*FAZ* 15 March 2001; 27 November 2001; 28 November 2001).

In sum, it appears that ACs in the German railways sector are on the rise. However, the situation is less dramatic than in the UK. First, as regards market sustaining, ACs have increased because competition has not developed as expected, and the federal competition authority and, even more so, the EBA have been increasingly busy keeping the DBAG's anti-competitive tactics at bay. Second, the public service obligations are huge; the federal governments' subsidises to industry and consumers are now more than €20 billion a year. Despite that, financial dimension associated with incentivisation, supervision and monitoring costs are low compared to those in the UK. This is mainly because the state has retained direct control over investment decisions. Finally, the set-up of the regulatory competences is clearer than in the UK. Therefore, there is less inter-administrative co-ordination and hence less ACs in Germany than in Britain.

THE EUROPEAN LEVEL

This analysis is focused on the administrative costs of governance changes in the United Kingdom and Germany. There is, however, no doubt that the European Union has an increasingly important impact in these areas. Figures 3.2 and 3.3 give a short overview of the EU activities in the utilities, displaying regulations and European Court of Justice (ECJ) judgements in the 1990s. European Union regulation and judgements have sped up liberalisation

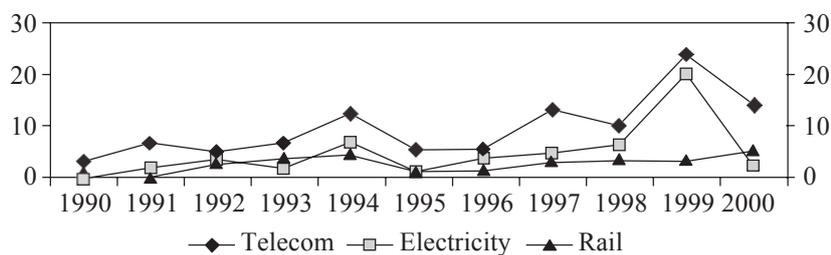


Figure 3.2 EU Acts in telecommunications, electricity and rail

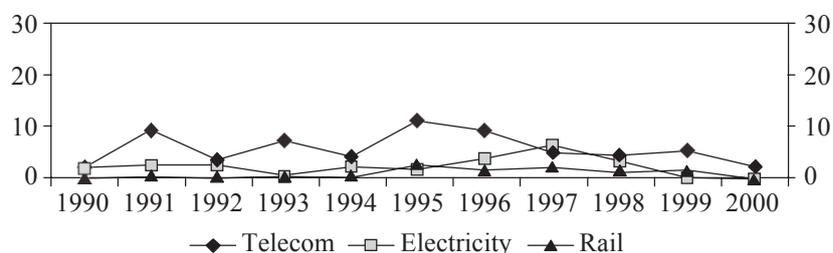


Figure 3.3 ECJ judgements in telecommunications, electricity and rail

in telecommunications and electricity. The EU impact on railways, however, has been rather limited thus far. As regards ACs, two points seem worth noting. First, market sustaining, incentivisation and administrative co-ordination coming from the EU bring ACs *in addition* to the administrative efforts of the member states under scrutiny here. It is evident that the EU functions as a trigger, or rather framework setter, while the material costs of implementing market creation and incentivisation strategies are carried by the member states' administrations. The exception to this rule of thumb are costs deriving from administrative co-ordination. A growing number of important competition cases are decided by the EU Commission's Directorate General for Competition Policy (DG IV) and a considerable number of appeals to the ECJ (see Figures 3.2 and 3.3). In addition, the Commission staff in telecommunications, energy and railways has been increasing continuously, although, owing to a number of mergers of DGs and horizontal distribution of competences inside the Commission, exact numbers are difficult to obtain. Moreover, the Commission has begun to claim veto rights over the decisions of national regulators (as in telecommunications – *FAZ* 2002: 15). It also has put pressure on individual member states – in this case Germany – to establish a national sectoral regulator in electricity. All this translates into policy co-ordination costs, which seem, however, not unusually high given the complexity of relationships in a multi-level system.

The national support for more EU engagement in the day-to-day regulation of the utilities is limited. As our interviews show, national civil servants clearly oppose it. However, new entrants usually view the European card as a trump to speed up the liberalisation of national regimes, while, like regulator–regulatee relationships at national levels, the market-dominating incumbents (who have the most to lose) disapprove of EU regulatory interventions. As stated in one interview: 'We see some risk that the EU Commission [might] take over more responsibilities and overrule national regulators' (interview DTAG, February 2000).

In certain areas there are also suggestions to centralise crucial regulatory

powers at the EU level or even to establish EU sectoral regulatory agencies. At the Laeken summit, for example, the heads of state and government recommended (upon a proposal of the Commission) setting up a European agency for the safety of the railways (see European Council 2001). More outspokenly, an expert report (commissioned by the Commission) in the context of the process of the governance White Paper demanded the establishment of European sectoral regulators for electricity and telecommunications. While the dynamics inside the utilities make forecasts difficult, it is fair to say that private associations or loosely institutionalised groups or round tables of national sectoral regulatory bodies have thus far dominated the public–private interaction at the European level and, at least for the time being, full-fledged EU regulators still seem some way off.

CONCLUSION: TOWARDS A MORE COSTLY AND MORE ANALYTICAL ADMINISTRATION

The 1980s saw a discussion about the (necessity of the) shrinking of the state and its administration. Privatisation and deregulation were put forward as means to reaching economic efficiency and to getting the state out of the business of business. But when the first reforms were implemented, warnings and misgivings grew that reconciling both objectives by privatising public monopolies and deregulating markets might, in the end, be accompanied by new regulatory tasks for the public authorities, not necessarily fewer such tasks. Near the end of the 1990s – in no small part because of the catalytic influence of the European Union (Héritier et al. 2001) – reform processes were accelerated and spread throughout the entire EU. As a result, we are now – perhaps for the first time – in a position to compare systematically the effects of the reforms across countries and sectors. Conceptualising such an empirical comparison, this chapter has attempted to study the effects of the recent restructurings of the telecommunications, electricity and rail sectors in the United Kingdom and Germany by focusing on the changing role of the public administration. The focal point of the analysis has been on the development of administrative costs, understood as administrative efforts or burdens to manage a reformed utility regime in the three areas of market sustaining, incentivisation and administrative co-ordination. The results, as reported in the six case studies above, may be summarised as in Table 3.7.

Table 3.7 highlights some important points. Regulating telecommunications carries the lowest ACs. At the same time, the distribution of ACs in the telecommunication sector (among the three dimensions: market, incentives and co-ordination) in the two countries is very similar. Hence, in terms of ACs, there are no big differences between German and UK telecommunications.

*Table 3.7 Assessment of sectoral administrative costs**

	Market sustaining	Incentivisation	Co-ordination	Sum
UK telecom	1.5	0.5	1.0	3.0
<i>German telecom</i>	<i>1.5</i>	<i>0.5</i>	<i>1.5</i>	<i>3.5</i>
UK electricity	1.5	2.0	1.0	4.5
<i>German electricity</i>	<i>0.5</i>	<i>1.5</i>	<i>0.5</i>	<i>2.5</i>
UK railways	3.0	3.0	3.0	9.0
<i>German railways</i>	<i>2.0</i>	<i>2.5</i>	<i>2.0</i>	<i>6.5</i>

Notes:

0.5 = AC very little; 3 = AC very high.

* The analysis of the pertinent documents and literature as well as the semi-structured expert interviews built the basis for the assignment of the values. The values represent relative assessments. For example, on the basis of our empirical data, administrative co-ordination have been least costly in German electricity and most costly in UK railways. The position of each sector in a particular column thus indicates its relative position as compared with the best and worst of the respective six examples investigated. However, the translation of qualitative results into a particular value can only indicate a tendency.

Administrative costs in electricity take the middle ground. It is more costly than telecommunications but still much less costly than the railways. Besides, the regulatory solutions the countries adopted for their electricity sectors go more visibly in different directions, leading to a greater variation in the distribution of ACs along the three specified ACs dimensions. German electricity administration (supporting self-regulation and the renunciation of a sectoral regulator) appears less costly than the UK administration (where the transition from the pool to NETA has offset efficiency gains by the merger of the two regulators, OFFER and OFGAS).

Finally, in the United Kingdom, as well as Germany, the railways entail the highest ACs. (However, one has to keep in mind that, in the UK, there has been a real privatisation of the railways, while in Germany, DBAG is still under government control.) The country differences in ACs for the railways are still a bit higher than in electricity, but this fact is overshadowed by the huge absolute burdens the railways inflict upon each administration.

From a general perspective on cross-country ACs, however, the data suggests – somehow surprisingly – that the United Kingdom only has lower sectoral ACs than Germany in telecommunications. Germany is doing better in electricity and the railways, and thus has a lower average ACs than the United Kingdom.

But the data also points to some other issues. For example, we observe relatively low ACs in UK and German telecommunications as well as in

German electricity. Classifying ACs in three different categories (market, incentives and co-ordination) allows us to make an additional conjecture: in telecommunications, ACs have obviously been kept in check by a growing market that has made incentivisation ever less problematic, while the low level of ACs in German electricity is the result of a corporatist regulatory solution, which bypasses the administration efforts to develop economic regulation and co-ordinate its own actions.

The fact that the UK electricity sector has been assigned relatively high ACs is the result of the recent restructurings and may thus be a temporary phenomenon. However, in the perspective of the present analysis, these reorganisations have added a lot of co-ordination ACs. Even so, there may be potential for ACs savings in the medium term when the investments start to pay off.

The railways are problematic in both countries. However, in terms of ACs, the United Kingdom undoubtedly maintains the most expensive sectoral transformation. But the German railway sector also requires far more intensive intervention in terms of ACs than other national utilities.

While one may contest the assignment of particular values, the tendency captured in Table 3.7 appears to be justified by the qualitative analysis. The gradual decrease of state involvement in telecommunications below the levels of electricity and the railways fits well with the findings of the authors of the other chapters in this volume.

Having shortly summarised the main results of the empirical investigation, the question towards which this chapter now turns is how this evidence relates to the three main hypotheses developed above. As regards the first hypothesis, that is, that regulatory activity in the economic sphere does not fade away with the arrival of satisfactory competition, one has to admit that a reasonable degree of competition (somewhere between stage 2 and 3 – see Table 3.1) is only to be expected to come about in telecommunications. However, there we observe that the administrative efforts to regulate the emerging competitive market are still considerable. Therefore, ACs for market sustaining has certainly not been extinguished; at best it has been contained. The normative theory of regulatory change, in other words, is much too optimistic and does not sufficiently mirror the complexity of the empirical evidence.

According to the second hypothesis, once pure market competition is no longer able to guarantee the provision of certain public service goals that are thought to be politically desirable, state authorities have to set incentives and supervise compliance of private actors to deliver such common goods. This, in turn, increases ACs. Indeed, the empirical cases have shown a connection between badly performing markets (railways, electricity) and rising ACs for incentivisation. The two contrasting examples – UK railways and German electricity – however, offer some further interesting interpretations. In terms

of keeping ACs in check, German electricity offers a realistic way out by taking recourse to self-regulatory strategies. This lowers incentivisation ACs tremendously. The UK railways are a case in point for the opposite strategy, that is, the attempt to mimic a market situation by artificially setting up a competitive structure in which actors are supposed to follow individually their economic efficiency-maximising strategies. If now the same actors are relied on to deliver social goals visibly in defiance of economic efficiency maximisation, this requires that public authorities design incentives and verify compliance in a way that does *not* interfere with the ACs-intensive crypto-market they themselves have established in the first place. Such a solution may yet work; however, even in a best-case scenario, only at high administrative costs, and UK railways are certainly closer to a worst-case scenario than anything else. Such a comparison between well-performing German electricity regulation and badly performing UK railways may seem unfair. However, in terms of ACs, it only suggests that, where there is no realistic chance of a largely competitive market, the costs of basing the delivery of social goals on artificially sustained market structures are prohibitive.

The connection suggested by the third hypothesis – that is, that the more dispersed regulatory authority is, the higher co-ordination ACs become – is supported by the evidence of these case studies. The restructuring in UK electricity, the particularity of the German system, with a strong cartel office (wrestling about competences with the emerging sectoral regulatory authorities), and the influence of administrative courts in Germany have been driving ACs up, as has the disorganisation among the UK railways regulators, the SRA and the ORR. The fuel of such bureaucratic struggles are organisational strategies for expansion or fears about institutional survival. This was underlined by the expert interviews. Comparing Germany and the United Kingdom as regards administrative co-ordination ACs, and discounting for the recent changes in UK electricity, which undoubtedly will result in medium-term cost-saving pay-offs, one can expect a bifurcation. The prevailing administrative pragmatism of the UK makes it very likely that, once actors have found their role within the new institutional structures and have learned to optimise the (re)distribution of competences coming along with the sectoral transformation, these types of ACs may stabilise or even decrease over time. Such an option is not excluded for Germany either. However, the more antagonistic attitudes and the central role of the administrative courts, as strategic resources in the hands of the regulates for influencing regulatory decisions *ex post* (Héritier 2001c) point to a danger: that administrative co-ordination costs will remain higher and certainly less predictable than in the UK.

Moreover, these results of the analysis of ACs in the network utilities do have some other, broader implications. First, the diminishing public burden

proposition was clearly disproved by the empirical findings. There is no sign that the sectoral reorganisations significantly lowered ACs. In fact, the tendency for higher ACs in the development of personnel in the national ministries and within the sectoral regulators is especially evident. Both classes of organisations recruited new staff and thus considerably expanded their capacities during the 1990s.

Moreover, an ACs perspective on reforming the network utilities all but ends the myth that the UK would run a most efficient and lean public administration. True, in many cases the UK has been the first mover, and has thus been able to influence the reform agendas of many of its EU partners (see Héritier et al. 1996). However, as regards the network utilities, with the single exception of telecommunications, Germany has been able to establish leaner regulatory options. The United Kingdom has paid a very high price for its inclination to rely on market mechanisms, even if such mechanisms were only able to be put into practice and sustained artificially. In electricity and the railways this has resulted in the need to re-adapt at a later stage (pool/NETA and Railtrack), and it has therefore tremendously increased the public bill for incentivisation and administrative co-ordination.

Thirdly, even though some convergence in the ACs of the sectors across countries can be observed, the national institutional idiosyncrasies remain effective and condition such a convergence in important ways. If we, for a moment, take the results of ACs as a measurement of the intensity of state involvement in general, which would mean that in telecommunication state involvement is lowest and in the railways highest, this correlates neatly with the order in which particular national paths remain effective. In other words – and perhaps unsurprisingly – convergence seems to come with the arrival of a truly transnational market.

To sum up the major finding of this chapter: quickly introducing market-like mechanisms in complex environments – where market forces do not have the transformatory capacity deriving from technological innovation as in telecommunications – is bound to increase ACs, while incrementally changing regulatory structures appears the safer way to keep ACs in check. In any case, the reform of the utilities in the United Kingdom and in Germany does not lower the bill for the taxpayer.

NOTES

1. One notes that administrative co-ordination is not to look at vertical implementation costs, as the classical implementation literature does, but to focus on horizontal costs of co-ordinating the involved state actors.
2. However, after the empirical research for this chapter had been completed, the German government decided to establish such a sectoral regulator to be operative from the 1 January 2005 onwards (*FAZ* 28 July 2004: 8).

3. This number stands for the whole of department III of the BMWi, including not only gas and electricity units, but also resorts in charge of oil and coal matters. Moreover, due to a reorganisation after the 1998 change of federal government, 1–2 units from the former Ministry for Science and Research were transferred to the BMWi. These and other changes may account for 10–15 more posts and hence the net increase in the BMWi electricity staff up till 2000 can only be called marginal.
4. Peter Hain, UK minister for European affairs, has called it ‘the worst railways of Europe’ (NZZ 14 January 2002: 14).