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Working Paper

Developments in regulatory regimes: An Anglo-German comparison on telecommunications, energy and rail

Preprints aus der Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter, No. 2002/5

Provided in Cooperation with:

Max Planck Institute for Research on Collective Goods

Suggested Citation: Böllhoff, Dominik (2002) : Developments in regulatory regimes: An Anglo-German comparison on telecommunications, energy and rail, Preprints aus der Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter, No. 2002/5, Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter, Bonn

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Gemeinschaftsgüter: Recht, Politik und Ökonomie

Preprints
aus der Max-Planck-Projektgruppe
Recht der Gemeinschaftsgüter
Bonn
2002/5

**Developments in Regulatory Regimes
– An Anglo-German Comparison on
Telecommunications, Energy and Rail**

von
Dominik Böllhoff

Summary

The liberalisation and privatisation of network utilities lead to the establishment of regulatory regimes. On the national level, regulatory regimes not only include a highly visible single regulatory body, they also combine three institutions: a sector-specific regulatory agency, a ministry and a competition authority. These three organisations are the central institutions within the regime. They share competencies and interact with each other to steer national utility sectors.

From a comparative administrative research perspective, this article explores developments in utility regulatory regimes in Britain and Germany, especially focussing on telecommunications, energy (electricity and gas) and rail. The goal is to show that regulatory regimes are not stable entities, but that there are 'post-reform changes' which result in redesigning regimes over time. To create and correct markets, there are ongoing modifications of regimes aimed at coping with the sector-specific changes.

With respect to economic regulatory competencies of regulatory regimes, cross-country and cross-sectoral institutional dynamics are explored. This article reveals that there are general converging trends in Britain's regulatory regimes and partial convergence in Germany's regimes. An Anglo-German cross-country comparison shows some similarities; for example, on the role of ministries within the regimes. However, the developments in the regimes do not result in overall cross-sectoral convergence. There is continuing divergence in the regulatory regimes.

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Abbreviations

PTT	Post, Telegraph and Telecommunications Utilities
NRA	National Regulatory Authority
EU	European Union

United Kingdom

BG	British Gas
BR	British Rail
BRB	British Rail Board
BT	British Telecom
CC	Competition Commission
CEGB	Central Electricity Generating Board
CWP	Concurrent Working Party
DETR	Department of Environment, Transport and Regions
DGES	Director for Electricity Supply
DGGS	Director General of Gas Supply
DGT	Director General of Telecommunications
DoT	Department of Transport
DTI	Department of Trade and Industry
EnWG	Energy Law (Energiewirtschaftsgesetz)
FOCs	Fright Operating Companies
MMC	Monopolies and Mergers Commission
NGC	National Grid Company
OFFER	Office for Electricity Regulation
OFGAS	Office for Gas Regulation
OFGEM	Office of Gas and Electricity Markets
OFT	Office of Fair Trading
OFTEL	Office of Telecommunications
OFCOM	Office for Communications
OPRAF	Office of Rail Passenger Franchising
ORR	Office of Rail Regulation
PO	Post Office
REC	Regional Electricity Companies
RI	Rail Inspectorate
RT	Railtrack
SRA	Strategic Rail Authority
ROSCOs	Rolling Stock Companies
TOCs	Train Operating Companies

Germany

AA	Associations' Agreement (Verbändevereinbarung)
AEG	Rail Law (Allgemeines Eisenbahngesetz)
BAPT	Agency for Postal and Telecommunications (Bundesamt für Telekommunikation und Post)
BDI	Federal Association of German Industry (Bundesverband der Deutschen Industrie)
BGH	Federal Supreme Court (Bundesgerichtshof)
BGW	German Gas and Water Association (Bundesverband der Deutschen Gas- und Wasserwirtschaft)
BMF	Treasury (Bundesministerium für Finanzen)
BKartA	Federal Cartel Office (Bundeskartellamt)
BMWi	Ministry of Economics (Ministerium für Wirtschaft)
BMPT	Ministry for Postal and Telecommunications (Ministerium für Post und Telekommunikation)
BMVBW	Ministry of Transport, Building and Housing (Ministerium für Verkehr, Bauen und Wohnen)
DBB	Deutsche Bundesbahn
DBAG	Deutsche Bundesbahn AG
DTAG	Deutsche Telekom AG
EBA	Federal Rail Authority (Eisenbahnbundesamt)
FEDV	Association for Energy Services (Freier Energiedienstleister Verband)
GWB	Cartel Law (Gesetz gegen Wettbewerbsbeschränkungen)
RegTP	Regulatory Agency for Telecommunications and Posts (Regulierungsbehörde für Telekommunikation und Post)
TKG	Telecommunications Law
VDEW	German Electricity Association (Verband der Elektrizitätswirtschaft)
VIK	Association of the Industrial Energy Producers (Verband der Industriellen Energie- und Kraftwirtschaft)
VKU	German Association for Local Utilities (Verband kommunaler Unternehmen)

1. Introduction

Utility regulation is one outcome of the process of liberalisation and deregulation in the formerly nationalised industries. During the last twenty years, intensive changes have taken place to open utility sectors in telecommunications, rail and electricity, all of which were formerly run as state monopolies. While in the 1980s Britain initiated the denationalisation of network utilities in Europe, Germany started to deregulate the utilities sectors in the 1990s, mainly in line with legislation of the European Union. However, the marketisation in the utilities sector did not bring about the end of the state. As the sector has shifted from being dominated by monopolies to being more competitive, the state has been intensively involved via supervision, monitoring and/or enforcement procedures – shortly summarised as ‘regulation’. With a shift from a positive to a regulatory state (Majone 1997), new regulatory regimes were put in place. These regimes are the outcome of the regulatory reforms of the state and state administration (OECD 1997).

For political and administrative scientists, these regulatory regimes are not a ‘by product’ of the deregulation process. Instead, they are the core governmental instruments both for the creation and correction of markets and for the sectoral transformation from monopolies to competitive enterprises. That is why this article explores regulatory regimes. However, the **core research goal of this paper is not to examine regulatory systems as such, but to analyse the developments in regulatory regimes** after they are established. The interest is in exploring ‘post-reform’ changes in regulatory regimes (‘reform of the regulatory reform’).

For this analysis, we shall research regulatory regimes, including three institutions: the **ministry** (department), the **competition authority** and the **sector-specific regulatory agency**. They share regulatory competencies and interact with each other; and taken together they build a regime to steer the utility industries (for more details see Section 2).

This article strives for a systematic and detailed **descriptive comparison** of regulatory regimes from a comparative administrative perspective. On basis of analytical descriptions of the regimes, we reveal overall converging trends at both a **cross-country and a cross-sectoral dimension**. The general interest is in exploring the extent to which regulatory regimes show similar or dissimilar institutional designs. Do developments in the regimes show increasing similarities, leading to converging trends between sector regimes and countries? Or are there ongoing dissimilarities and heterogeneity between regulatory regimes?

To explore these questions, the comparative focus is on regulatory regimes in two countries – Great Britain and Germany – and three sectors – telecommunications, rail and electricity.¹ To give a rough overview of the actual regulatory regimes in **Britain**, with the Office of Telecommunications (OFTEL), the Office of Gas and Electricity Markets (OFGEM) and the Office of Rail Regulation (ORR), three ‘Of-type’ regulators (Thatcher 1997) were set up. For the

¹ In general, comparative studies on Britain and Germany on developments in regulatory regimes rare (see Bartle 2000; Coen and Héritier 2000),

three sectors, different ministries or parent departments have supervisory functions: The Department of Trade and Industry (DTI) is responsible for telecommunications and energy, while the Department of Environment, Transport and Regions (DETR) supervises the rail sector. To enforce competition policy, Britain has a highly complex system with two institutions: the Competition Commission (CC) and the Office of Fair Trading (OFT). Both of these have competencies in all three sectors.

In **Germany**, sector-specific regulatory institutions in the three sectors greatly differ: While in telecommunications a Regulatory Agency for Telecommunications and Posts (*Regulierungsbehörde für Telekommunikation und Post*, RegTP) was set up, in the rail sector a supervisory agency was institutionalised, the Federal Rail Authority (*Eisenbahnbundesamt*, EBA). In the case of electricity and gas, with the associations' agreements (AA, *Verbändevereinbarung*), a self-regulatory approach was opted for. To complete the picture of the German regulatory regime: the Ministry of Economics (BMWi) is responsible for telecommunications and energy, while the Ministry of Transport, Building and Housing (BMVBS) is in charge of the rail sector. As an overall competition authority, the Federal Cartel Office (BKartA), has competencies in all three sectors.

This paper is developed in three steps. First, in an introductory section a framework or basic structure for researching the developments in regulatory regimes is outlined. On basis of the basic structure, **three lines of inquiry** are outlined to guide the research (Section 2). Section 3 contains six case studies of Britain and Germany on the regulatory regimes of telecommunications, energy and rail. The starting point is a short overview of the institutional design before liberalisation and the analysis of new regulatory regime after the regulatory reform and liberalisation of the sector. The core focus is on the developments and institutional dynamics of the regulatory regime and future reform trends. On basis of the case studies, in the concluding section the regulatory regimes will be compared from a cross-country and cross-sectoral perspective.

This paper on the developments in regulatory regimes thus serves as an introduction, offering a descriptive overview of regulatory regimes for this analysis on the regulation of utilities in Anglo-German comparison.

2. The 'Basic Structure' and the 'Lines of Inquiry' to Research on Regulatory Regimes

As a starting point for this comparative research on regulatory regimes, the research object shall be clarified here. One **basic structure** of regulatory regimes in the utilities is outlined here.² The purpose of this structure is to highlight general principles of the design of regula-

² There are other approaches to the analysis of regulatory regimes. Grande and Eberlein developed a matrix of four ideal-type solutions to study regulatory regimes in Germany: an agency model (1) and a ministry

tory regimes and to develop three lines of inquiry as descriptive hypotheses to guide this comparative research (Prim and Tilmann 1983: 66). These lines of inquiry will focus on the dominance, overall role and inter-relationship of public institutions in the utility regulatory regimes.

Since earlier research on utility regulation primarily focused on the sector-specific regulatory institution (see e.g. Majone 1997; V. Schneider 2001), this article underlines that there is more than one single institution involved in the regulation of the utility sectors. Apart from a sector-specific regulatory institution, a ministry – as the parent department of the regulator and a competition authority – plays a central role in utility regulation. The three institutions form a **regulatory regime**.³

However, in the political-administrative context, the **regulatory regime may include more than these three institutions**. On the **national level**, besides the parent department, ministries such as the treasury can be involved in the regulatory process. In Germany, administrative courts play a crucial role in the regulatory decision-making process – especially in telecommunications and energy. Additionally, parliaments and committees may have an impact on regulatory regimes. On the European level with the European Commission and its Director Generals (DG) (see Coen and Doyle 1999; Franchino 2000), committees and regulatory fora (Padgett 2001) and the European Court of Justice (ECJ) (Soriano 2001) – there are even more institutions which, together with the national regulatory regime, form a **multi-level system of regulation** (Eberlein and Grande 2000).

In order to understand the basic structure, the three core institutions have to be analysed. However, where necessary we point to the above listed extra-national and European institutions. In the following, all three institutions constituting the basic structure will be studied in more depth, with a focus on their general role in utility regulatory regimes.

Ministries support the government in policy planning and strategic issues, while executive administrative tasks are delegated to subordinated agencies if they remain federal responsibilities at all. Thus, as regulatory institutions are set up, ministries are not directly involved in utility regulation. However, they still have two core functions: First, ministries are responsible for advising the minister on the specific policy field and for defining and formulating sector-specific strategic policies. As a second task, ministries supervise their sector-specific regula-

model (2), combined with the question whether they incorporate sector-specific competencies (3) or not (4) (Eberlein and Grande 2000: 7).

³ The term ‘regulatory regime’ is often used for different purposes. For example, Thatcher utilizes the term to describe the ‘OF-type regulators’ in British sectors such as gas, energy, rail or telecommunications (Thatcher 1998). In their concept of the regulatory regime in British telecommunications, Hall et. al. analyse a ‘ménage à trois’ of the ministry (DTI), the regulator OFTEL and the former incumbent British Telecom (BT) (Hall, Scott, and Hood 2000: 17, 25ff). Levi-Faur points to a variety of ideal-types of ‘governance regime’, including all public and private actors of a sector (Levi-Faur 2000: 430ff.). Doern has characterised regulatory institutions as an ‘interacting set of four regimes’ including public and private institutions on the national as well as the international level (Doern 1998: 30ff., 46).

tory institution as ‘parent departments’. The basic model claims that formally, ministries steer sector-specific regulators at an arm's length.

The overall objective of **competition authorities** is to protect competition by preventing anti-competitive behaviour and controlling mergers (Baake and Perschau 1996: 149ff.). With respect to utility regulation, competition authorities may take over responsibilities for anti-competitive behaviour or the abuse of dominant position. These general competition functions might overlap with the sector-specific functions of regulatory agencies. As a consequence, for consistent decision-making within regulatory regimes, regulatory agencies and competition authorities have to co-operate and co-ordinate their operations (OECD 1999: 10).

It has become trendy to implement policies via **sector-specific regulatory agencies**, often described as ‘NRAs’ (National Regulatory Agency) (Eyre and Sitter 1999): Agencies have multiplied all over the world (Pollitt et al. 2001). As decentralised bodies supervised by a parent ministry, agencies do not act in a purely executive capacity. They **combine legislative, executive and judicial functions** to decide proactively and ex-ante. For example, they interpret and define rules, monitor and supervise them, and introduce sanctions if necessary (Baldwin and Cave 1999: 70). Central arguments for the introduction of regulatory agencies are the – assumed – independence from both political and private interests and the continuity in making decisions beyond the realm of party politics and elections. Additionally, regulatory agencies can build up the expertise to decide on complex and technical matters and take decisions based on a great deal of knowledge (see Majone 1996: 15, 49). In sum, regulatory agencies are the core decision-makers within the regulatory regime.

Table 1 shows the basic structure of the three institutions.

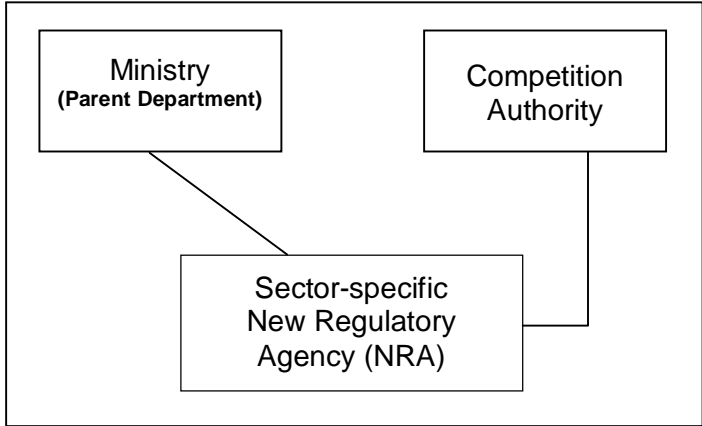


Table 1: The Basic Structure of Regulatory Regimes

This basic model of regulatory regimes is utilized to formulate ‘**lines of inquiry**’. We point to **central aspects of** regulatory regimes and formulate three research questions.

First, the focus is on the institutional role and the development of **regulatory agencies**.

Thus, we explore whether they have been set up, and which role they play in the regime. The question concerns the dominance of the regulatory agency in the basic structure: Given their core regulatory competencies, do NRAs dominate the regime, as its core decision-maker? Or are they only one player among other institutions in the regime? We are trying to confirm the claim that agencies are the central institutions within the basic structure.

Additionally, the focus is on the institutional changes that affect the role of regulatory agencies. Can the popular argument that the growth of the regulatory state leads to a ‘general trend towards the harmonisation of regulatory approaches’ be confirmed (Majone 1997: 143)? And is there proof for the claim that regulatory agencies are similar, and that the divergence of designs is thus of minor importance (V. Schneider 2001)? We explore the role of regulatory agencies in the regime (dominance) as well as the redesign and fine tuning of agencies after they have been (**Line of Inquiry 1: Regulatory Agency Dominance**).

The second and third line of inquiry question the role of the ministry and competition authority in the regulatory regime. Here, the **inter-organisational relationships** (see Hanf and Scharpf 1978) between these two institutions and the regulatory agencies are pointed out, i.e. on the one hand, the relationship between the ministry and the regulator, and, on the other, the relationship between the regulator and competition authority.⁴

The second line of inquiry points to the **relationship between the ministry and the regulatory agency**. As outlined above and, in any case, as portrayed by the basic structure, ministries have a general supervisory function, and they steer the regulatory agency at arm’s length. Ministries do not influence regulatory decisions, and regulators are free from political interference.

However, there are voices which question this view. The close relationship between ministries, regulators and companies is described as a ‘ménage à trois’ (Hall, Scott, and Hood 2000: 17). It is argued that the ministry intervenes in regulatory decisions. ‘Ministerial micro-management’ may exist (Döhler 2001a: 18), which for its part would cause an increase in the politicisation of the regime, especially of the decision-making processes of the regulatory agency. That is why it is instructive to study ‘how much ministerial influence is direct and how much is based on anticipation by the regulators’ (Wilks 1998: 140). It is necessary to question the ‘low interference role’ of ministries, although the ‘precise roles and influences [of ministries] are difficult to determine in operational matters’ (Doern 1998: 31).

Thus, we explore the role of the ministry in the regime and its special relationship with the regulator, i.e. the ministerial interference in the day-to-day decisions of the regulator (**Line of Inquiry 2: Ministerial Interference**).

⁴ With respect to this research on regulatory regimes, the relationship between ministry and competition authority is left out because of its minor importance. For this aspect see e.g. Sturm 1996: 194ff; Veljanowski 1994: 10; Wilks 1999a.

Thirdly, the focus is on the **role of competition authorities within the regulatory regimes**. The basic structure has revealed that competition authorities occupy an important position within the regime: As competition authorities deal with issues on general competition policy, they share competencies with the regulators to regulate anti-competitive behaviour or the abuse of dominant position. This overlap and the vague separation of competencies may imply that the two institutions closely co-operate and co-ordinate the operations. However, as the analysis of the competencies of competition authorities and their inter-organisational relationships with regulators shows, their role may vary. The tendentious increase in the sectoralisation of competition law (see Böge 2001, Wolf 2000) could result in the regulator dominating issues on competition policy. This could result in competition authorities developing a ‘calm role’ within the regime. Additionally, in contrast to the general claim of co-operative inter-organisational relationships (OECD 1994), the relations here are described as ‘competitive’ (Eberlein 2000: 12; J.P. Schneider 2001).⁵ The third line of inquiry will therefore assess the inter-organisational relationship between competition authorities and regulatory agencies and the general role of these authorities in regulatory regimes, especially the predominance of the authorities when behaviour is anti-competitive or when there is abuse of dominant position by one of the parties (**Line of Inquiry 3: Competition Authority Predominance**).

In Section 3, the three lines of inquiry into the role of institutions within British and German regulatory regimes will be assessed. With respect to **developments in regulatory regimes**, the interest is on researching to what extent these lines of inquiry hold for the regimes, or whether there is a change in the institutional design within the regulatory regimes, which then affects the stance in the regimes.

When researching the three lines of inquiry, we will mainly refer to **examples of market creation** (Héritier 1998: 4f.). Market correction is the core competency of regulatory regimes: The task is to supervise and monitor utility sectors, to keep options open for intervening in liberalised sectors and to steer markets from monopoly to competition. One of the regulators’ core challenges is to balance the interests between the incumbents and the new entrants. To do so, regulators have to ensure that markets are open for competition; they also have to prevent market failures (‘market creation’). A second goal is to ensure social and redistributive goals, such as universal services (‘market correction’). In studying regulatory regimes, this paper predominantly refers to examples of market creation, i.e. **to ensure third party access** to the network. This is one core task of regulatory regimes aiming to enhance the competition in sectors.⁶

⁵ There are two dimensions of competition: first, the competition between public and private actors, i.e. regulators and regulatee (Coen and Héritier 2000), and second the competition between public institutions (Hanf and Scharpf 1978). This research points to the second dimension.

⁶ For further details on third party access see e.g. Cave and Doyle 1994; Schwarze 1999.

3. Case Studies on the Regulatory Regimes in Telecommunications, Energy and Rail

3.1 Telecommunications

In telecommunications, before liberalisation, sectors were dominated by the post, telegraph and telecommunications utilities (PTT), in which operative and regulative functions were linked together – i.e. net, service and equipment. The net and service were vertically integrated in the hands of a state monopoly (in Britain the Post Office, in Germany the Deutsche Post). These monopolies worked in close co-operation with producers of the equipment as private monopolies. The strong link between political, administrative and private actors entailed ‘highly closed games’ and strong state-intervention (Thatcher 1998: 123). A key outcome of the transformation of the PTT was the set up of regulatory agencies (NRA) (Eyre and Sitter 1999). Britain, and later Germany, opted for the regulatory agency model. Whereas Britain introduced its telecommunications' regulator OFTEL in 1984, Germany established its RegTP in 1998.

3.1.1 Great Britain – From Telecommunications to Communications Regulation

Before regulatory reforms were initiated in the 80's, the British PTT model included the Post Office (PO), defined as a public corporation with postal as well as telecommunications services. General policy decisions were taken over by the Ministry for Post and Telecommunications, which was not an independent ministry, but part of the Department of Trade and Industry (DTI) (Thatcher 1999: 94ff.).

The transformation of the telecommunications sector started with the Telecommunications Act of 1981: this split the PO into two public corporations, the PO and British Telecom (BT). The separation prepared the ground for the second Telecommunications Act in 1984, where BT was privatised and an independent regulatory body, the **Office of Telecommunications (OFTEL)**, was created as a non-ministerial department within the ambit of the DTI.

Traditionally, the UK has not had regulatory bodies for utility regulation. Different institutional designs were seriously considered: i.e. a ministry, a competition authority or a regulatory agency (Böllhoff 2002). After assessing a variety of options, the regulatory agency model was opted for, and a ‘specialist look-alike’ to the **Office of Fair Trading (OFT)** was invented (quoted in Prosser 1997: 46). As a uniquely British feature and part of the state and administrative tradition, OFTEL is headed by a single **Director General of Telecommunications (DGT)**, who takes individual decisions individually. OFTEL was the first network and utility regulatory body in Britain (DTI 1982).

Since its establishment, the **design of OFTEL has often been criticised**. A central concern is the DGT's discretion in taking regulatory decisions that cause a high degree of uncertainty

(Helm 1994: 27, 29). The regulator's accountability to government and parliament has been questioned, as well as the close relationship with the previously existing incumbent, BT.

However, the overall formal institutional design of the regulator has not yet been amended. The Telecommunications Act of 1984 is still in place. With respect to developments in the regimes, over the years OFTEL has changed its design. When OFTEL was set up in 1984, Europe did not play a role in telecommunications. However, since the late 1980's European directives have increased in importance. In the 1990's and especially since the liberalisation of the whole European telecommunications market, OFTEL has had to take decisions in accordance with European legislation. Until the mid-1990's the focus of OFTEL was on infrastructure investment. With European legislation, the regulator was forced to increase competition, for example, to initiate the unbundling of the local loop. Additionally, policies also changed when the DGT's came into office. For example, Don Cruickshank, DGT from 1993 until 1997, became famous for his proposal to shift OFTEL from a regulatory to a competition authority (Hall, Scott, and Hood 2000: 28).

The Role of the DTI in the Telecommunications Regulatory Regime

An analysis of the role of the relationship between OFTEL and the Department of Industry (DTI) shows that there is not a clear separation of competencies between the two institutions. The involvement of the DTI in licensing issues serves as one prominent example: The Secretary of State not only retains the power to license new operators. In addition, the DTI has a right to veto licence modifications. As a consequence, OFTEL 'works in conjuncture with the [...] DTI [and] has relatively little independent authority' (Beesley and Laidlaw 1995: 319).

In contrast to this, OFTEL has the competency to advise the DTI on matters of telecommunications. The DTI regards OFTEL as an expert on telecom issues, and it relies on the regulator to give specialised and detailed advice (Interview DTI February 2001). However, the DTI does not accept all OFTEL recommendations. The DTI and the Secretary of State take a strong interest in analysing OFTEL decisions and publications, for example the consultation documents. Since the change of government in 1997, ministers have had an even stronger interest not only in issues of price control, but also in consumer protection. If necessary, the DTI might intervene in the decisions of OFTEL. Since British ministries do not have general or special instructions, it is only possible to informally influence regulatory decision-making.⁷ However, the DTI tends to be 'cautious about exercising its substantial back-stop power over OFTEL' (Hall, Scott, and Hood 2000: 91).⁸ Summing up, although in theory one might argue that the DTI and OFTEL maintain distance from one another, in practice they co-operate

⁷ To quote a DTI official: 'If necessary, I will have meetings with my counterpart at OFTEL to ensure that they act in the way the minister expects.' (Interview DTI Feb. 2001).

⁸ This is against the argument of Koenig and Kühling. As public lawyers, they claim that the DTI has only 'low influence' on the OFTEL decision-making, as the ministry has no formal instruments for interference (Koenig, Kühling, and Schedl 2000).

closely and have a dense relationship. The DTI plays a central role within the regulatory regime.

The Role of the Competition Authorities in the Regime

Two institutions are involved with the **competition authorities in the telecommunications regulatory regime**: the Office of Fair Trading (OFT) and the Competition Commission (CC) – this latter was known as the Monopolies and Mergers Commission (MMC) until 2000.

Regarding the modification of licenses, if OFTEL and the involved company do not find an agreement, reference is made to the CC. The CC investigates the license conditions, and then takes a final decision.

Competition law has often been amended for issues of anti-competitive behaviour or the abuse of dominant position. As a consequence, competencies within the regulatory regime have changed, too. To prevent anti-competitive behaviour, under the 1980 Competition Act and the Fair Trading Act of 1973, either the Secretary of State or the OFT referred to the MMC. However, after OFTEL was set up for telecommunications regulation, the DGT was able to ask the MMC to start investigations or prescribe remedies.

In **1998** a new **Competition Act** was set up, which greatly enhanced the powers of the OFT, especially on anti-competitive agreements and the abuse of market power (Goyder 2001: 191). Both the OFT and the utility regulators are allowed to apply this act (OFT 2001)⁹. Consequently, a new mechanism has had to be put into place to co-ordinate the relations between OFT and the regulators (Riley 2000).

A Concurrent Working Party (CWP) was established to prevent ‘regulatory shopping’, to ensure consistent decisions, to consider practical working arrangements and to carry out general co-ordination. Although there are some doubts about whether the new mechanism will function (Riley 2000), the involved actors argue that the system works well and ensures that the act is consistently enforced. In practice, since the 1998 Competition Act, all telecommunications cases have been decided by OFTEL, after being agreed to in the CWP.¹⁰ Therefore, the OFT views its role within the regulatory regime as of ‘minor importance’ (Interview OFT, February 2001). In contrast, OFTEL took over competition competencies and is a ‘competition regulator’.

⁹ However, the CWP is not a completely new instrument. To co-ordinate the work of OFTEL and OFT, even the 1984 Telecommunications Act had asked both institutions in Article 50 (4) to coordinate their decision-making. For the development of the new CWP see J.-P. Schneider 2001: 283.

¹⁰ In general, it depends on criteria such as general knowledge of the sector, recent experience or previous contacts, whether OFT or OFTEL leads the case. However, OFT has pointed out that ‘agreements or conducts which fall within the industry sector of the regulator will be dealt with by that regulator’ (see Riley, 2000: 37, Schneider, 2000: 533).

Future Institutional Changes of the Regulatory Regime

Because of the increased convergence between telecommunications, broadcasting and internet services, in 2000 the Labour government proposed establishing a new regulatory framework. It has often argued in favour of a communication office.¹¹ Labour published a White Paper in which it proposed transforming OFTEL into an **Office for Communications (OFCOM)** (DTI 2000). In accord with this, an ‘umbrella’ agency will be set up combining the expertise of five thus far independent institutions. With OFCOM as an economic as well as a ‘content regulator’, the goal is to attain synergy effects and to reduce communications gaps between formally independent authorities. OFCOM is expected to be implemented in 2003.

3.1.2 Germany: The Set up of a Regulatory Agency

While the German government traditionally viewed the PTT model as the optimal regulatory regime, in the mid-1980s it changed its mind. Parallel to reform proposals of the European Commission, the government started its own initiatives to liberalise and privatise the national telecommunications sector and to establish a new regulatory regime.

The PTT was transformed into a new regulatory regime in three steps (see e.g. Grande 1999; Mette 1999): With the Post Reform 1 (1989/1990), three separate operational units for telecommunications, postal service and post banking were made into public corporations. The Ministry for Postal and Telecommunications (BMPT) still holds the steering competencies for the sector (among other things it owns and regulates it). In 1994, with the Post Reform 2, the intention was to separate the regulatory competencies from ownership. While the competencies have been left with the BMPT, a new administrative agency – namely, the Agency for Postal and Telecommunications (BAPT) – was institutionalised for ownership. The three public corporations were transformed into stock companies, one of which was the Deutsche Telekom AG (DTAG). With the Post Reform 3, in 1996 the decision was made to fully open telecommunications to competition by 1 January 1998. On the basis of a new Telecommunications Law (TKG), **sector-specific regulation was set up with a new telecommunications regulator**, the Regulatory Authority for Telecommunications and Posts (RegTP), an institution under the supervision of the Federal Ministry of Economics (BMW_i). The BMPT became part of the BMW_i, and the responsibility for the ownership was transferred to the treasury (Bundesministerium für Finanzen, BMF). Civil servants of the BMPT moved to the newly created RegTP. Additionally, the BAPT was incorporated into the RegTP.

Up to 1998 Germany did not have regulatory bodies for utility regulation. The case of the RegTP shows that instead of a traditional model, a new and – for the German administrative tradition – **innovative institutional design** was introduced. As the RegTP was being designed, a variety of models were closely scrutinized. However, predominantly because of

¹¹ On this issue see e.g. Hansard Society 1996: 51; Helm 1994: 33; Hogwood 1998: 92.

European legislation and the American and British experience with sector-specific regulation in telecommunications, a regulatory agency design was opted for (Böllhoff 2002).

With respect to the **formal intra-organisation**, the jury-like decision chambers are the central instrument for decision-making. These were established in order to attain independence from the ministry. In these chambers, the decisions of the RegTP are made on the basis of the TKG.¹² The institutional design of this chamber system was adopted from the German Federal Cartel Office (BKartA), which uses a similar system. However, in addition to the decision chambers, the RegTP has a variety of traditional departments responsible for technical regulatory issues that have been taken over from the BAPT. In combining traditional administrative departments and jury-like decision chambers, RegTP is a unique institution.

The telecommunications law, set up in 1996, has not yet been amended, nor has the formal structure of the RegTP, defined in the TKG. However, the design and decision-making of the RegTP has been heavily criticised, e.g. for its insufficient transparency, the inexperience of the heads of the decision-chambers and the failure to develop a strategic approach for the decision-making of the RegTP (Interview with Companies, Feb. 2000).

The increasingly high number of pending court cases, which rose from 236 in 1998 to 1,011 in 2001 (Bauer 2002), might serve as an indicator of how unsatisfied the companies are with the decisions of the RegTP. However, in contrast to the proposals for OFCOM in Britain, there are no signs of further comprehensive regulatory reforms in telecommunications. Instead, the RegTP is highly proactive, and therefore a visible and publicly well-known institution. After three years of existence, the **RegTP** views itself as being **stable** and does not expect major institutional changes in the near future (Interview RegTP, January 2000). The RegTP has only changed its design to optimise its decision-making processes with respect to **internal administrative procedures**. The internal organisation, especially that of the former BAPT, has been streamlined to reach 'organisational concentration'.¹³

New entrants support the RegTP as a necessary 'proxy to the market' (Interview New Entrant, Feb. 2000). Additionally, in a paper on the future of the telecoms sector the Ministry of Economics (BMW) argued that a shift to general competition law would only be possible in accord with a long-term perspective. The short-term abolition of sector-specific regulation and the general regulatory framework is not an issue (see BMW: 2000: 19f.).

In contrast, the former incumbent, Deutsche Telekom AG (DTAG), indicates that regulation does not belong to a sector-specific regulator, but to a competition authority (Interview DTAG, Feb. 2000). This is supported by some academics, who argue for the abolition of sec-

¹² The RegTP has five decision chambers, chaired by a president and two vice presidents, all being responsible for decisions on specific regulatory tasks, such as licensing management or price regulation. For a detailed analysis of the decision-making chambers and their independence see Oertel 2000.

¹³ On basis of proposals of a consultancy report, the number of external branches have been reduced as have the number of sub-departments. As a consequence, today the former parts of BAPT and BMPT are merged and have a close and efficient working relationship (Interview RegTP, March 2001).

tor-specific regulation and for merging the RegTP with the BKartA in the near future (see e.g. Knieps, 1997).¹⁴

Summing up, the RegTP has a new, innovative design. Although it has been heavily criticised, and its decisions are increasingly being contested before the courts, the institutional design has not yet been modified.

The Role of the BMWi in the Telecommunications Regulatory Regime

From a formal perspective the competencies of the RegTP and the Federal Ministry of Economics (BMWi) are clearly separated. While the RegTP is responsible for the day-to-day decision-making, the ministry defines the general telecommunications policy and supervises the RegTP.

There is a debate about the independence of the RegTP and the intensity of the interaction between the two institutions. In comparison to traditional administrative agencies, the ministerial oversight of the RegTP is restricted. Article 66 (5) of the telecommunications law (TKG) indicates that the BMWi is allowed to give general instructions. These instructions have to be published in the federal register, which means that there is a ‘subtle reduction’ of ministerial competencies (Oertel 2000: 238).¹⁵ Additionally, although the TKG does not define whether the BMWi is allowed to give special instructions, the decision chambers are free from this form of supervision (Oertel 2000: 346, 397).

The ministry views the RegTP as ‘fully independent’ and claims that there is no political influence on the decision-making of the RegTP (Interview BMWi, Febr. 2001; see Eschweiler 2001). As of yet, officially there is only one known case in which the ministry interfered with special instructions in a RegTP decision (FAZ 29.03.2000). By contrast, the RegTP complains of constant and subtle ministerial attempts to guide regulatory decision-making (Interview RegTP, Febr. 2000). Companies point to the fact that it is an ‘open secret’ that the BMWi closely over-shadows the RegTP and interferes where necessary (Interview New Entrant, August 2001).¹⁶

To sum up, while BMWi only rarely formally interferes with the decision-making of the RegTP, the ministry steadily informally interferes: this leaves the ministry as one of the central players in the regime.

¹⁴ For more details on the firm-level perspective in German telecommunications regulation see Coen in this report.

¹⁵ To publish instructions is perceived as a barrier to extensive ministerial influence because published instructions are open to external scrutiny. Besides, it requires the minister to provide reasons.

¹⁶ One company argues that there is nothing written down that proves ministerial interference – there are just informal meetings and phone calls between BMWi and RegTP (Interview New Entrant, August 2001).

The Role of the BKartA in the Regulatory Regime

From a formal perspective, the relationship of the RegTP and the Federal Cartel Office (BKartA) is defined in the TKG and the Cartel Law (GWB, *Gesetz gegen Wettbewerbsbeschränkungen*). Article 82 TKG points to different grades of co-operation (Paulweber 1999: 79ff.). There are cases – such as when there is an abuse of dominant position in the telecommunications sector – where both institutions have to agree. The BKartA has the right to comment on some decisions of the RegTP, such as decisions concerning net access or interconnection. So too, in accordance with Article 19 and 30 GWB, the RegTP is allowed to comment on BKartA decisions if the telecommunications sector is affected. Although these rules define the different competencies in the two institutions, they do not ensure a clear cut separation (Paulweber 1999: 81). Because of the complicated distribution of competencies, the relationship between RegTP and the BKartA is described as ‘competitive’, causing a ‘regulatory dilemma’ (Grande 1999). This interpretation might describe how the situation was in the first few months of the relationship in 1998, after the RegTP was established. However, because of regulatory learning, both the BKartA and the RegTP have agreed to develop a stable and cooperative relationship (Interview RegTP, Febr. 2000; Interview BKartA, Dec. 1999). In this, the RegTP is the dominating institution, while the BKartA has more ‘reserve functions’, which it uses quite passively (J.-P. Schneider 2001: 279f.).¹⁷ Researchers describe the silence as a ‘deprivation of power’ (*Selbstentmachtung*) (Schroeder 1999: 27f.). It might be a silent consensus between the two institutions that the RegTP is to be the central institution for regulatory decision-making, while the BKartA is to keep quiet.

3.2 Energy

Like the telecommunications sector, the energy sector has also witnessed a shift from monopolistic to more liberalised regulatory regimes. In energy, we have to distinguish between gas and electricity. In Britain, different regulatory bodies were developed for the two sources, which were later merged. In Germany, two self-regulatory regimes were established.

3.2.1 The Merger of Two Regulatory Agencies in Great Britain

Great Britain was the first European country to shift its focus from ‘energy planning to the realm of competition administration’ (Sturm et al. 1998a). Before liberalisation, the gas and electricity sectors were primarily nationalised industries, under public ownership. The Conservative Government decided to reduce the number of nationalised industries: First, the British Gas Corporation was sold; and later, companies from the more fragmented electricity sector were sold to the public. To ensure the influence of the state, regulatory agencies for gas and electricity were established, i.e. OFGAS (Office for Gas Regulation) and OFFER (Office

¹⁷ Dissatisfied with the decision-making of the RegTP, the VATM, an associations in the telecommunications sector, recently argued in favour of more closely involving the BKartA, in order to use BKartA’s knowledge to optimise decision-making (VATM 2001: 20).

for Electricity Regulation). In the most recent developments, the two regulators have merged in the Office for Gas and Electricity Markets (OFGEM)

The Gas Sector – OFGAS

Before liberalisation, the **British gas sector** was a vertically integrated entity. Regulatory reforms were initiated with the Gas Act of 1986. The incumbent British Gas Corporation was left as a vertically integrated body, and later – like British Gas plc (BG) – privatised as a single unit. It would have been possible to opt for a protected monopoly, but that option was criticised for its ‘limited degree of privatisation’ (Prosser 1997: 89).

To regulate the sector, an Office for Gas regulation (OFGAS) was established. Headed by a Director General of Gas Supply (DGGS), the main function of the regulator was to monitor BG by price caps. BG, as a carrier as well as a provider of gas, was ‘a monopoly carrier and a near monopoly supplier’ (Hogwood 1990: 600). Therefore, OFGAS only had to regulate one company with BG and act as a ‘surrogate to competition’ (Prosser 1997: 95). A core task of OFGAS was to ensure that the other companies were supplied with gas through the BG grid.

The Gas Act 1995 aimed to fully open the gas market to competition. There were new entrants to the gas market, but BG, as a single unified company, still dominated the sector. As a consequence, in 1996 BG was forced to demerge into two companies: TransCo International is now responsible for the transport and production of gas, and British Gas Energy has taken over the responsibility for supply, retail and service. However, since there is still a monopoly in gas supply, to prevent discriminatory practices it is still necessary to regulate the sector.

The Electricity Sector – OFFER

It was much more demanding to liberalise the electricity sector than to liberalise the gas sector. In contrast to the gas sector, with only one incumbent, before the electricity sector was liberalised it already had a market structure with a complex network of actors involved. A Central Electricity Generating Board (CEGB) co-ordinated the generation and supply of the national grid. Electricity was supplied by twelve Area Boards, as regional monopolies. This vertically and horizontally disintegrated sector was reformed with the 1989 Electricity Act. As for power generation, the CEGB was split into three companies: for transmission a National Grid Company (NGC) was created, jointly owned by twelve Regional Electricity Companies (REC); it replaced the Area Boards. The RECs were privatised, and the regional monopolies were abolished to promote competition. In 1995 the NGC was privatised, too. With the Electricity Act, the core goal of the government was to promote competition in power generation and supply and ‘to regulate the behaviour of the monopoly companies in the market’ (Gilland 1996: 244). Therefore, a Director for Electricity Supply (DGES) and a new Office for Electricity Regulation (OFFER) were established. As it was a restructured industry, OFFER had to cope with special regulatory demands. Because supply and distribution were separated in the

electricity sector, the regulator was mainly concerned about ensuring open access to the grid and regulating prices.

OFGEM – The Merger of Offices

Since the two separate regulators for gas and electricity have been set up, there have been proposals to merge the two institutions (see e.g. Helm 1994: 30). To rationalize decision-making and to reduce inconsistencies between the regulators in the two energy sectors, there was a strong impetus to merge OFFER and OFGAS into a single Office for Energy Regulation.

It was not until 1997 that the new Labour government re-examined the existing regulatory framework (DTI 1998). The regulatory approach of previous conservative governments was criticised for being too narrow, primarily on economic regulatory issues. In contrast to the earlier approach, Labour proposed extending obligations on social and environmental regulatory issues. It also suggested aligning the electricity and gas regimes and merging the regulatory offices for electricity (OFFER) and gas (OFGAS) (DTI 1998a). The core argument in favour of merging gas and electricity regulators was that there was increasing convergence between the two energy markets.¹⁸

With the Utilities Act 2000, OFFER and OFGAS were merged with the Office of Gas and Electricity Markets (OFGEM) (see Graham 2000). OFGEM takes decisions under the Gas Act of 1986, the Electricity Act of 1989 and the Utilities Act of 2000. The main objective of the new regulator are to protect the interests of gas and electricity customers by promoting competition and regulating monopolies and to enhance competition in electricity generation or gas transportation. This new energy regulator, OFGEM, will provide the regulatory model for the foreseeable future.

The Role of the DTI in the Energy Regulatory Regime

Before liberalisation, the gas and electricity sectors were supervised by the Department of Energy (DEn). In 1992 the Major Government abolished the DEn, and the competencies were transferred to the DTI, which has been the sponsoring department for energy regulators since then (Eising 2000: 158). To ensure a smooth transition from a monopolistic to a competitive system, the ministry intervened heavily in both sectors (Gilland 1996: 257f.). Additionally, the DTI influenced the sector by subsidising British Coal and by ensuring the diversity of energy sources such as nuclear energy.

¹⁸ Viewing the two markets in isolation was considered even more demanding in order to react more quickly and efficiently to demands to regulate the markets (DTI 1998a: 1, 5). For additional reasons for the merger see J.-P. Schneider 2001: 281f.

Analysis shows that the DTI and **OFGAS** were in close co-operation: For example, it was the DTI, not the regulator, who was responsible for determining price caps. Additionally, to modify price formulas, OFGAS had to negotiate them with the DTI: it was not allowed to change them independently (Hogwood 1990: 600). With the 1995 Gas Act, DTI's influence increased, as it was allowed to veto license modifications.

With respect to the sharing of competencies between the regulator and DTI, during the existence of **OFFER**, the DTI held 'strong reserve powers in addition to those of the regulator' (Prosser 1997: 151). This is clearly indicated by the fact that the formal powers of OFFER were constrained by the DTI: The DTI was allowed to impose supplementary price caps on OFFER (Prosser 1997: 153). Additionally, the DTI had the power to issue licences, and the Secretary of State was allowed to veto any licence modification concerning the regulator and industry (Veljanowski 1994: 9f.).

By establishing **OFGEM**, DTI responsibilities were maintained, such as the veto license modifications. However, because of the Utility Act of 2000 a new kind of relationship emerged. In accord with this the Secretary of State has competencies for guiding OFGEM on social and environmental objectives. This is seen as further politicising the regulatory process (Graham 2000: 93, 102f.).

In sum, in the energy sector the ministry plays a central role, and it co-operates very closely with the regulator.

The Role of Competition Authorities in the Regime

Apart from the regulatory agency, the regulatory regime in the British Energy sector contains the Office of Fair Trading (OFT) and the Competition Commission (CC) (until 2000 the Monopolies and Mergers Commission (MMC)).

Focussing on the relationship between regulators and the CC, both OFFER and OFGAS had to agree with the CC on the licence changes, and OFGEM must now do so, too. If there is no agreement between the regulator and the companies, e.g. on price caps, it is the CC which takes the final decision. However, because this is a time-consuming decision-making process, companies try to avoid this procedure (Gilland 1996).

Especially in the gas sector, the MMC has played a crucial role in supporting the regulator's goal of enhancing competition. In sector inquiries in 1988 and 1992 the MCC argued that BG had used its de-facto monopoly for discriminatory practices and against public interest goals. It therefore paved the way for the 1995 Gas Act, which forced BG to split up into two separate units (Durach 1996: 108ff.).

With respect to issues on anti-competitive behaviour or the abuse of dominant position in the energy sector, with the Competition Act 1998, the relations between OFGEM and OFT

changed. Similarly to OFTEL, these two institutions agreed to set up a Concurrent Working Party (CWP) to ensure consistent decisions and optimal co-ordination.

3.2.2 *The Self-Regulatory Regime in Germany*

In the energy sector the German regulatory regime remains an exception. In contrast to Britain, Germany has not yet created sector-specific regulatory agencies. Instead, a system of 'regulated self-regulation', based on so called associations' agreements (AA), has been set up (Schneider 1999: 41ff.). However, three years after the liberalisation, the BMWi and the BKartA established new divisions and task forces parallel to the AA's as a supplement to reduce anti-discriminatory practices.

Germany started regulatory reforms in the late 1990's. Germany opened its electricity and gas sectors predominantly because of international pressures on the energy sector and European legislation that promoted liberalisation of these sectors (Eberlein 2000: 85f.).¹⁹

Before liberalisation, the German gas and electricity sector was not dominated by one incumbent, as the British gas sector was. Instead, there were around 1,000 firms involved in the provision of energy – privately as well as publicly owned. These were interconnected utilities (*Verbundwirtschaft*), which owned the national grid together with regional companies and municipal utilities. To install and protect the monopoly, companies concluded horizontal demarcation contracts and vertical contracts between energy suppliers and local grid companies (see Ortwein 1996: 108ff.).

The state did not establish a full regulatory system in the sector. In contrast to telecommunications, this sector never had a special ministry for energy regulation. Instead, the economic ministries of the *Länder* defined and supervised the duties of regional energy and gas monopolies. Additionally, a variety of competencies, e.g. the grid code dealing with technical issues of gas and electricity supply, were left to the interconnected utilities.

As a consequence, the central instruments for regulation in the German electricity and gas sector are the **associations' agreements** (AA, *Verbändevereinbarung*). AAs are contracts negotiated between associations, which represent the actors of the energy markets. They aim to define basic rules to prevent competitors from engaging in discriminatory practices and to establish transparent principles to ensure third party access. In general, AAs are thought to be flexible regulatory systems because they leave the state out of the bargaining process and are thought to be instruments who effectively solve implementation problems. The first **AA** was set up for the **electricity sector**, later followed the gas sector.

¹⁹ The EU directive 96/92/EC defined rules for creating a common electricity market. For the gas sector, in 1998 the EU directive 98/30/EC was set up.

Electricity Regulation

One core reason for liberalising the German electricity sector was the 1996 EU directive for electricity. This directive mainly focussed on the creation of competition in electricity generation; however, it pointed to the transmission and supply of electricity, too. The directive outlined regulatory models for third party access. Member states were allowed to choose between a single buyer model, or regulated and negotiated third party access (see Article 15, 16, EC 98/30/EC).²⁰ With the system of negotiated third party access, the German regulatory system distinguishes itself from other European member states. While all other states opted for a regulatory agency model, with the definition of AAs, the German energy sector ‘stands out as a regulatory exception’ (Eberlein and Grande 2000: 7).

The new Energy Law (Energiewirtschaftsgesetz, EnWG), established in 1998, opened the sector to competition. Demarcation treaties were abolished and companies were obliged to provide third party access. However, it was left up to the companies to define procedures for implementation. Therefore, associations agreed to a **first AA (AA 1)** for the electricity sector in order to fill this gap. The AA 1 was set up in 1998, and it mainly defined criteria for calculating access fees on the basis of a concept of capacity-based and distance-related prices (for details see Brunekreeft and Keller 2000a).

Only traditional actors of the sector agreed to the AA1: i.e. the interconnected utilities (the VDEW), the industrial consumers (VIK) and the Federal Association of German Industry (BDI). However, negotiations were opened for upgraded versions of the AA 1, e.g. for the new entrants to the energy market such as the newly founded Free Energy Supply Association (FEDV).

With the **AA 2**, which was agreed on in 2000, a more market- and competition-friendly solution was negotiated. Instead of a distance-related definition of costs, the system was adjusted to regulations for access to the net. The AA 2 defines core components of the costs of transmitting energy through grids. On basis of these components, each grid owner has to publicise the individual net access and transmission prices, and this is not distance related. Additionally, the AA 2 points out that the parties involved should agree to net access contracts (Netznutzungsverträge).²¹

There is **continual dissatisfaction** with this system of negotiated third party access. New independent electricity suppliers especially feel disadvantaged. They argue that there are ongoing discrimination practices: Since the agreement is not legally binding, they blame regional and local suppliers for not sticking to the principles of the AA: Specifically, not all grid owners have openly published their grid prices. Additionally, they point to the fact that there would be great variation in net access prices and overpriced switching costs (see e.g. FAZ

²⁰ For more details on differences between negotiated and regulated third party access see Brunekreeft and Keller 2000: 134ff.

²¹ However, the AA 2 does not define how to formulate contracts in detail. For an overview in relation to net access contracts see Theobald, Wyl, and Dreschler 2001.

05.09.2000; FTD 27.12.2000). The associations agreed to further optimise the rules defined in the agreements, i.e. to adapt the AA 2 to actual market developments and to abolish implementation gaps by the end of the year 2001.

Gas Regulation

For the **gas sector**, liberalised two years after the electricity sector, with a self-regulatory system based on associations' agreements, a more or less similar regulatory regime was institutionalised. The AA 1 for gas was negotiated by traditional actors in the sector, i.e. the interconnected utilities (the BGW), the industrial consumers (VIK), local suppliers (VKU) and the Federal Association of German Industry (BDI).

The agreement on a regulatory framework for the gas sector was **more complicated than in electricity**, because the sector has more obstacles that restrict competition. For example, since gas is not locally produced, it often has to be imported on the basis of long-term contracts, which can not be easily modified. Different gas qualities between regions cause difficulties in the transmission of gas as well as the calculation of prices. There is a much more fragmented grid system; that is why different transmission zones on the local, regional and national level have to be taken into account when negotiating grid prices. Because of these issues on gas in the AA 1, negotiations were complicated, and the first agreement was only signed after long delays (FTD 05.06.2000).

First, the associations decided on a cornerstone paper (*Eckpunkte-Papier*), which contained basic principles for an agreement. In July 2000 the **AA 1** defined principles for opening the sector to new competitors. The agreement outlined principles, such as the procedures for access to networks or rules for the compatibility of gas, which make the transmission through grids possible.

However, the AA 1 did not include a comprehensive regulatory framework. A variety of technical details were left open, and only preliminary agreements were made, e.g. on the use of different gas qualities or on the access to storage facilities (*Erdgasspeicher*). As a consequence, negotiations on the agreement immediately continued. New entrants, who criticised the AA 1 for its intransparent tariff system – the conditions for net access – saw the negotiations as a second chance to reach a more efficient basis for liberalisation (FAZ 21.11.2000).

In March 2001 a **supplement to the AA 1 was implemented**. More transparent principles on the access to the grids were agreed to. Additionally, the supplement clarified that new entrants have equal access to storage facilities, and it ensured principles on how to deal with distribution shortages (*Engpaßmanagement*).

With a **second supplement**, implemented in September 2001, apart from defining further technical details, such as principles to define transmission prices, it agreed to open the gas market for private customers in 2002. Additionally, an arbitration tribunal (*Schiedsgericht*) is

to be established to settle contested issues and avoid going to the courts. The associations agreed to formulate an AA 2 by mid-2002 (FAZ 22.09.2001).

The Role of the BMWi in the Energy Regulatory Regime

With respect to the relationship of the BMWi and the associations' agreement in the electricity and gas sector, the official rule is that the BMWi will not get involved in this system of 'regulated self-regulation'. The BMWi does not intend to be influenced and prejudiced, and it intends to ensure its own independence in case the BMWi has to step in (Interview BMWi, March 2001). However, new entrants criticise this for being 'politically motivated un-activity' (Interview New Entrant Jan. 2001).

The BMWi has encouraged all involved parties and their associations to negotiate the agreements. The ministry has not only closely shadowed the negotiation process (Interview BMWi, March 2001). Additionally, by threatening to set up a regulator, the BMWi has pushed the associations to intensify negotiations and come to an agreement (see e.g. FTD 02.03.2001). Since the BMWi does not influence the content of the AAs, it informally influences the negotiation processes: for example, since private consumer groups were absent from the negotiations for the AA for gas, the BMWi motivated and spurred the representatives of consumer groups (the AGV, *Arbeitsgemeinschaft der Verbraucherverbände*) to interfere (Interview BMWi, March 2001). Additionally, the BMWi has to take over functions that a self-regulatory system is not able to deal with; for example, the ministry represents the energy sectors during negotiations at European level. When other member states send representatives from their regulatory agencies, ministerial civil servants have to do the job for the AAs.

However, the BMWi has changed its role in energy regulation: Three years after liberalisation, the ministry established a **task force**, which should be ready for work at the end of the year 2001 (FAZ 8./9.09.2001). Its goal is to prepare test cases (*Musterverfahren*) for grid owners for the BKartA. The task force has legally sanctioned competencies nor any enforcement powers to optimise the process of regulation (Wirtschaftswoche 15.03.2001). However, the force, staffed by ten civil servants, is headed by a former director of the BKartA, who acts as a 'person of trust' (FTD 01.08.2001).

In sum, the BMWi plays a central role in the energy regime and has an impact on the AAs. The BMWi not only shadows the negotiations of the AAs, it also influences their outcomes.

The Role of the BKartA in the Regime

Since AAs are not enforced by law, actors within the sector utilised other state institutions to reach support. Grid owners have often agreed to provide access to their nets after the decisions of cartel offices and courts.²²

In the regulatory regime for gas and electricity, a fragmented system of competition authorities on the federal (the Federal Cartel Office, BKartA) and *Länder* level²³ has been set up. Both the BKartA and *Länder* cartel offices share competencies for dealing with the abuse of dominant market power in energy production and supply. Because the energy sector has regional markets, the *Länder* cartel offices are responsible for cases in their geographical area.²⁴ On both levels, the offices have to deal with an increasing number of cases.

For electricity, apart from having the associations' agreement, **BKartA decisions** have helped to reduce discriminatory practices by grid owners that have prevented transmission. The BKartA decided that although there are restricted capacities for transmission, a special capacity of the grid has to be kept open for transmission by third parties. In other cases, cartel offices act as mediators between new entrants and established grid owners to define the price to be paid for third party access. Both parties agreed to a preliminary price, which had to be confirmed by the BKartA (BKartA 24.08.2000). Additionally, **Länder cartel offices** decide on cases such as the legality of switching costs or the legality of grid owners' refusal to conclude contracts for net access.

However, this style of decision-making in the regulatory regime has been **strongly criticised**. Compared to regulatory agencies, cartel offices only have a partial regulatory function. They have little capacity – both in terms of staff as well as knowledge – to cope with energy regulatory issues. Furthermore, there is neither an immediate enforcement mechanism nor a sufficient capacity to cope with complaints without delay (FAZ 14.12.2000).

Therefore, in August 2001 the BKartA established a **new division as a decision chamber** (*Beschlußabteilung*), staffed with seven civil servants. This division is entrusted with the issue of competition in the German electricity supply industry. The division deals with test cases and attempts to reduce the number of individual cases. Although the division lacks competencies of direct enforcement, the BKartA hopes that initiating court procedures will serve as a deterrent. The president of the BKartA views this set up as a 'new quality of regulation' (SZ

²² The courts play a central role in the regime. They deal with cases to force grid owners to allow transmission. However, because the BKartA receives the highest publicity, most cases are brought before the BKartA (Interview BKartA, March 2001). There are serious problems with decisions of courts: As complaints often go through various stages of appeal before the case reached the Federal Supreme Court (BGH, *Bundesgerichtshof*), it takes up to five years until a final decision is taken. Additionally, courts only decide on specific single cases; that is why there is only a reduced effect to prejudice on other cases (*geringe Präjudizwirkung*) (FAZ 10.03.2001).

²³ For an overview on the *Länder* cartel offices and their involvement in energy regulation see Bauer 2001.

²⁴ For details on the competencies of cartel offices and the distribution between the *Länder* and Federal levels see Schneider 1999: 468ff..

02.08.2001). The division closely co-operates with the task force of the BMWi (Interview BKartA August 2001).

Apart from the division, in September 2000 a **working group constituted by the BKartA and some *Länder* cartel offices**²⁵ was established to consider the general issues of energy regulation. Their main purpose is to organise coherent decision-making between the offices, to co-ordinate cases and to decide on test cases. In April 2001 the working group published a report defining principles on improper net access costs and general guidelines to measure obstructions to net access for the electricity sector (BKartA 2001). In general, the report highlights that the working group will increase the pressure on grid owners to stop incorrect behaviour. Deciding on test cases should help to increase the legal certainty within the sector.

In sum, competition authorities play an active role in the regulatory regime for energy.

Future Institutional Changes on the Regulatory Regime

Because of the above mentioned criticism on the regulatory regime, which causes a lack of competition in both sectors, there are on-going debates about replacing the AAs with a regulatory institution for the gas and the electricity sectors (see e.g. Wetzel 18.01.2001).

The **new entrants** not only criticise the system of AA's, they also criticise the latest set up of the task force in the BMWi. The task force is interpreted as too late and too weak of a problem-solving approach. The new entrants thus desire legal grid regulation and the establishment of a proper regulator (Initiative Pro Wettbewerb 12.03.2001). The new institutions in the BKartA and the BMWi are interpreted as the 'nucleus' of a new NRA (FTD 01.08.2001).²⁶

Apart from new entrants, the **European Commission** is especially sceptical of the German self-regulatory approach. The Commission has argued in favour of regulated third party access and the establishment of a regulatory agency. With proposals to bring forward the liberalisation process, the Commission intends to push Germany, as the only European country without a regulator, to establish an energy regulator (FTD 14.03.2001).

Only the former incumbents are clearly in favour of the self-regulatory regime. As the initiators of this system, they interpret the AAs as systems of private regulation, which enable companies to negotiate directly within a flexible and non-bureaucratic system (Interview RWE April 2000). They argue that regulatory agencies are always less optimal than self-regulatory solutions (Interview Ruhrgas AG April 2000).²⁷ Instead, they founded a new working group called '**Negotiated Network Access Regime – Agency**' (**NARA**) as a new 'speaking tube' for the system of negotiated third party access in electricity and gas. The group,

²⁵ The *Länder* of *Nordrhein Westfalen*, *Bayern*, *Baden-Württemberg*, *Hamburg* and *Niedersachsen* are member of this group.

²⁶ See Coen in this report.

²⁷ There is scientific support on this view see Engel 2002.

founded by the associations which negotiate the AA's, intends to report on the self-regulatory system at both the national and international level.²⁸

On the governmental side, the **BMWi** agrees that there are problems within the regulatory regime, and it therefore has set up the task force. However, it is still in favour of negotiated third party access. The government sticks to the traditionally 'lean energy law' and light-handed governmental interventionism.²⁹ However, especially in the case of negotiations for the AA 2 in the gas sectors, where it was very demanding to reach an agreement, the BMWi used the announcement that a regulator would be set up as a threat to bring the associations back to the negotiation table (FTD 02.03.2001).

The BMWi argues that the system of AA will only have a future if there are decreasing customer tariffs, transparent principles for net access and clear regulations to switch customers. The Energy law authorises the ministry to set up **legal grid regulation** (*Netzzugangsverordnung*) for third party access: this is outlined in Article 6 (2) for the electricity and Article 6a (4) for the gas sector.³⁰ The BMWi interprets this clause as an 'emergency break' put in place in case the associations are not able to establish a fair system of third party access. As a regulatory model, instead of opting to set up a single regulator, they agree with the BKartA that a regulator ought to be installed under the roof of the BKartA (Interview BMWi, March 2001).³¹

Although there are powerful actors, such as the BMWi or established companies, which also prevented the establishment of a regulator, the pressure on the existing regulatory regime is rising. As a last initiative, the BMWi – in response to the pressures from Brussels – has asked for a two to three year 'grace period' (*Schonfrist*) to test the associations' agreements (FTD 15.05.2001). If associations, the ministry and BKartA are not able to solve the above listed weaknesses of the AAs, developments in the regime might lead to the installation of a regulatory body.

3.3 The Rail Sector

The rail sector was long considered as a natural monopoly with high 'sunk costs'. However, with the goal of reducing state subsidies, enhancing productivity and increasing the sovereignty of consumers, states opened their rail sectors. The state nevertheless retained strong

²⁸ See for more details see <http://www.bdi-online.de>.

²⁹ The BMWi argues that the 1998 Energy Law is 'even leaner than the old one was, however, it might be sometimes even too lean' (Interview BMWi, March 2001).

³⁰ For the electricity sector, proposals for a directive for legal grid regulation were formulated (see e.g. Kafka et al. 1998). For gas, only recently was such a regulation formulated (Interview BMWi, March 2001).

³¹ The BKartA strongly opposes setting up a NRA to prevent the further sectoralisation of competition law. The BKartA fears losing competencies to a new institution. Thus, it lobbies for the extension of its own competencies, i.e. to modify the competition law so that it can receive direct enforcement power (reform of Article 19 (4) GBW) (Böge 2001).

influence on public service obligations. In general, this led to opening the rail net up to other competitors; it also led to the separation of net and services and the reduction of state competencies (see Benz 1997: 163). However, the state retained strong influence on public service obligations. To create and support markets, new regulatory regimes were established. In the following, developments in the regulatory regimes of the British and German rail sectors are explored.

3.3.1 The British Regulatory Regime in the Railways as a System of 'Dual Regulation'

In Great Britain, the rail sector was the last utility sector to be liberalised by the Conservative Government. With high speed and intensity, a radical approach was taken to reform the sector (Dudley and Richardson 2000: 198).

Before the rail reform, the sector was publicly-owned, with British Rail (BR) as the incumbent. BR was vertically integrated, with a hierarchically organised body. The state was heavily involved in the sector: As a nationalised industry, BR was financed by the state and supervised by the Department of Transport (DoT).³²

Government and the British Rail Board (BRB) – the management board of the BR responsible for running the system – had a close relationship. Statutory frameworks had been set up to organise the relationship between BR and DoT; however, they were only vaguely defined (Knill 2000a: 149). Government had wide discretion, which caused a 'constant irritating stream of interventions' on BR, delayed decisions and reduced the effectiveness and efficiency of the railways (Foster 1992: 84ff.).

There was **constant criticism** of the British railways, i.e. of its operational inefficiency and high maintenance costs, its loss-making and its dependence on heavy subsidies. Beginning in 1979, the Conservative government, with a neo-liberal stance, spurred on debates to reform the railways (Knill 2000a: 160f.). For the government 'the question was not so much whether to privatise BR, but how to do so' (Hass-Klau 1998: 34).

After first initiatives towards a rail reform in the 1980s (Gourvish 1999: 127f.), John Major's government undertook radical changes. A White Paper was published in 1992 (DoT 1992), and with the **1993 Railways Act**, a rail reform was initiated with the core goal of **splitting up BR**. The separation of the rail track and services led to vertical and horizontal fragmentations. The following private bodies were created:

³² The DoT was later transformed to a Department of Environment, Transport and the Regions (DETR).

- **Railtrack (RT)**, constituted as a separate track authority in 1994 and privatised in 1996, is responsible for managing the infrastructure (network and stations), i.e. train planning, signalling and the supply of access to tracks and stations.³³
- The **Rolling Stock Companies (ROSCOs)** own the trains and lease them to private businesses.
- For passenger transport, twenty-five private **train operating companies (TOCs)** were set up. The TOCs are franchises. The private sector competes to buy the rights of operation.
- For freight and parcel business, **fright operating companies (FOCs)** with specific tasks – such as regional distributors or companies that transport from harbours or airports – were established and sold to the private sector.

To regulate this complex and fragmented system of privatised bodies, interlinked by contractual relationships, there is not just one regulator, as in the case of telecommunications and energy. Instead, **two regulatory bodies** were created. They have to regulate the private market, but as a second sector-specific function, they also subsidize unprofitable passenger services.³⁴

Especially because of this second regulatory function, the regime is describe as ‘radically different from [...] other utility regulators’. This reflects the ‘considerable regulatory complexity’ of the rail sector (Prosser 1997: 185ff.).

As a primary regulatory body, the **Office of Rail Regulation (ORR)** was institutionalised. This institution functions similarly to regulators such as OFTEL or OFGEM (Thatcher 1998). A director general, the rail regulator, is set up as the head of the regulator. The overall task of the agency is to regulate the newly created market in the rail sector: This includes promoting competition and preventing the abuse of dominant positions. To do so, first, the ORR grants and enforces licences to operate trains. Second, the regulator defines and monitors the access and charging on the network. For example, the ORR approves the track access charges, which have to be paid to Railtrack by the operators. Third, the regulator supervises the contracts negotiated between TOCs and RT. Additionally, the ORR monitors the performance of RT.

The second regulator was the **Office of Rail Passenger Franchising (OPRAF)**, established as a franchise authority to negotiate and monitor the franchise contracts with the TOCs. The central characteristic of the rail sector is that, in the most cases, it is not a profitable entity.

³³ Railtrack had to announce bankruptcy in 2001, was taken into administration and is now to be transformed into a non-profit organization. So far only one bid has been made to the Government by a ‘company limited by guarantee’. The latter will need to raise the financial means to take over RT, including its debt of 4.5 billion pounds. A part of them will be public means.

³⁴ The reasons for having two regulators mainly stem from the decision to set up RT as a private monopoly. For the ORR it would cause problems: one the one hand, in subsidising RT, and, on the other, in defining RT’s access charges (Interview ORR, Nov. 2000).

Therefore, TOCs are dependent on state subsidies. The central goal of OPRAF is to distribute public funding as subsidies and to ensure the quality of the rail service at the lowest possible costs (see Bristow, Preston, and Nash 1998).

OPRAF has to put franchises up for bidding. Franchising contracts are concluded with the highest bidder. These contracts contain the subsidies granted and define performance standards to ensure that the subsidies are invested for effective, efficient and safe rail services.

Additionally, OPRAF regulates the consumer prices: The regulator controls and monitors a variety of standard and discount tickets to prevent TOCs from increasing their rising profit by increasing fares. While OPRAF supervises the economic performance of the TOCs and enhances marketisation between the TOCs via yardstick competition, a Rail Inspectorate (RI) has taken over responsibilities to ensure the safety of the railways.

The Transport Act 2000 and the establishment of the Strategic Rail Authority (SRA)

The Railways Act of 1993 took a radical stance and caused changes which went beyond regulatory reforms in other utility sectors in Britain. With the ORR and OPRAF the reform had a unique regime of dual regulation, which went ‘against the grain’ of the general trends in other utility sectors.

However, the regime had problems successfully regulating the sector: A central concern was the **imbalance between Railtrack and the TOCs**. Contracts were not carefully enough negotiated (Interview SRA, Nov. 1999). Another challenge was the confusion between ORR and OPRAF within the system of ‘dual regulation’ (ORR 1997). For example, both institutions had overlapping competencies in consumer protection. There were still unsatisfactory outcomes, e.g. with train delays, under-investment in the net and a high rate of accidents.³⁵ The performance of the whole liberalised rail system was described as ‘rather poor’ (Héritier 1998: 15f.; Héritier and Schmidt 2000: 562).

The **Labour government**, which took over government in 1997, started an investigation of the sector and developed the regulatory regime further. First plans to renationalise the sector were stopped, because it would have been too expensive to reverse privatisation. Instead, with a reform of the rail law, the fundamental weaknesses of the sector ought to be overcome. A White Paper was published with the goal of creating a safe, modern and high quality transport system by establishing a more effective regulatory framework (DETR 1999). Some of the main flaws were considered the lack of long-term strategic planning, the confusion of competencies between ORR and OPRAF and the lack of a consumer focus.

³⁵ For an overview of further problems see e.g. Schubert 2000.

The most prominent proposal was to reform the regulatory regime by setting up a **Strategic Rail Authority (SRA)**, an institution described as a ‘vehicle for long-term commitment by Government to the railways’ (ORR 1997). However, the SRA views its own creation as offering ‘a second chance to do things better after we have learnt from failures of the past’ (Interview SRA, Nov. 1999).

In 2000, with a new **Transport Act**, the SRA was established. As a ‘multi-party merger’, it took over other institutions from authorities still in operation as well as individual competencies (SRA 2000: 15). Most importantly, **OPRAF was abolished and the SRA took over its competencies**. In contrast to the short-term oriented regulatory style of OPRAF, the SRA decides in reference to long-term perspectives. The SRA will become a **strategic investor**, with competencies to negotiate passenger rail franchises and to enforce consumer protection.³⁶

Additionally, the SRA received competencies from other institutions within the regulatory regime. The SRA took over some competencies from the DETR: the allocation of freight grants and responsibilities on statistics.³⁷ Competencies on safety control were shifted from Railtrack to the SRA. As a further task, the SRA is the new central body for **consumer protection**; that is why competencies on this issue formerly held by the ORR were shifted to the SRA. Additionally, the SRA took over the British Railways Board (BRB).³⁸

As a consequence of the creation of the SRA, **ORR** was reformed, too. From February 2001 the regulator gained new competencies, but lost others. The core goal was to enhance the ORR’s role as an economic regulator and to optimise ORR and SRA co-ordination (Interview SRA, Nov. 1999). With the Transport Act, ORR gained new competencies to closely monitor Railtrack and the ROSCO’s. Besides, the ORR lost competencies, some, such as consumer protection competencies, being transferred to the SRA and the DETR.

In sum, the Transport Act of 2000 led to a major shift within the regulatory regime of the British railways. The dual regulatory regime was re-organised. New competencies were given to the regime, especially to the SRA, and functions were newly distributed between institutions.

However, there are even doubts about the future of the SRA. With the appointment of a new transport minister after the 2001 election, the SRA was blamed for not having reached its goals, as it failed to provide reliable train services. The SRA was criticised for having loosely defined competencies, for improperly managing the rail sector and for its difficulties in its co-

³⁶ To give an example, instead of three to five year contracts, new franchise contracts will have a duration of up to 20 years so that TOCs have greater incentives to invest.

³⁷ There are even plans to transfer all competencies on strategic planning in the rail sector from the DETR to the SRA (Interview SRA, Nov. 2000).

³⁸ The BRB, which before the 1993 Rail Reform was the management board of BR, survived the 1993 rail reform. Until the creation of the SRA it was a residuary body responsible for issues such as non-operational railways land, or the provision of advice on railways policy (<http://www.brb.gov.uk>).

operating with the ORR (The Times 30.06.2001).³⁹ The new minister proposed a new franchise policy. He also recommended narrowing down the SRA's role in improving the day-to-day running of the rail net (DTLR 16.07.01). The ministry even argued for 'keeping open the option of merging the roles of the regulator and the SRA' (The Times 30.06.2001). As a consequence, to clarify and newly define its role, the SRA has to develop a strategic plan to explain how to provide strategic leadership.

The Role of the DETR in the Rail Regulatory Regime

Before liberalisation, the British Rail Board (BRB), which steered the British Rail (BR), was under the close supervision of the DoT, which had powers of intervention. Although there was the separation between general policy and the day-to-day administration by the BRB – which was clear in theory and defined by the ministry, the Secretary of State and politicians – there was intense political involvement. For example, when ministers tried to reduce the investment in the railways, endless discussions delayed the decision-making (see Foster 1992: 83).

With regulatory reform, the government continued to set the general railways policy. Besides, as the rail sector is still very politicised; ministers still have a hand in the regulatory process and the day-to-day decisions.

With the Transport Act of 2000, the relationship of ORR and SRA to the DETR changed. The ORR is formally independent of the government; however, there is governmental intervention. The ministry still plays a central role, as it issues the licences to Railtrack. Additionally, the ORR is allowed to close passenger services so long as the ministry agrees (Prosser 1997: 186f.). The ORR admits that it 'cannot be completely independent of the views of the government of the day' (Interview ORR, Nov. 1999).

In contrast, OPRAF, and now the SRA, are even more closely supervised by the DETR. Article 206 of the Transport Act of 2000 explicitly determines that the DETR is allowed to direct the SRA and guide its strategies. The ministry admits that it 'gives a firm steer', for example, on the renegotiations of franchises, to ensure that performance improves (Interview DETR, Jan 2001). Especially with latest decisions by the government, promising a 1.5 bil pound subsidy to Railtrack, there will be enhanced relationships between the ministry and SRA (FT 24.03.2001), since, with this decision, the government has an even higher interest in directly controlling Railtrack.

³⁹ For criticisms also see the notes of the hearing of the SRA's chairman and its chief executive at the Select Committee on Environment, Transport and Regional Affairs. See <http://www.parliament.the-stationery-office.co.uk/pa/cm200001/cmselect/cmenvtra/434/1050102.htm>.

The Role of Competition Authorities in the Regime

Within the regulatory regime in the railways, the Office of Fair Trading (OFT) and the Competition Commission (CC), which was the Monopolies and Mergers Commission (MMC) until 2000 are involved. In cases where the TOCs or companies such as Railtrack do not agree with the decisions of the ORR, it is possible to appeal to the CC for a final decision. As Prosser outlines, the sector always has the ‘potential involvement’ of the MMC (Prosser 1997: 187).

With respect to relations of OFGEM and the OFT, the Competition Act of 1998 changed the competencies of the two institutions on anti-competitive behaviour or the abuse of dominant position. Like OFTEL and OFGEM, ORR and OFT set up a Concurrent Working Party (CWP) to co-ordinate the decision-making between the two institutions. The institution with the most sectoral knowledge and most recent experience has to decide on the case. As a consequence, the ORR is more involved in cases on competition issues related to the rail sector, and the involvement of the OFT has decreased.

3.3.2 The German Rail Regime – From a Supervisory to a Regulatory Agency?

Before the liberalisation of the German rail sector, the *Deutsche Bundesbahn* (DBB), as a publicly owned monopoly, had the status of a public authority. Article 87 (1) of the Basic Law defined the railways as part of the federal administration. Therefore, the majority of ‘sovereign functions’ (*hoheitliche Funktionen*) were carried out by the DBB itself.

State supervision incorporated two institutions: the Federal Ministry of Transport (*Ministerium für Verkehr* BMV, later BMVBW)⁴⁰ and the Federal Cartel Office (BKartA). The main competency of the **BMV** focused on strategic policies as well as detailed operational issues of the DBB: for example, tariffs, personnel management or budgetary plans. Additionally, the *Länder* had supervisory functions regarding regional planning and technical issues (see Kühlwetter 1996: 15). As a consequence, ‘there were simply too many actors ready and able to interfere in the railway’s commercial decisions’ (Teutsch 2000: 290).

After thirty years of debates on general principles,⁴¹ in 1994 a rail reform was initiated to reduce the ‘structural overload’ of the state (Lehmkuhl 1996). The state monopoly of the *Deutsche Bundesbahn* led to unsatisfactory results, e.g. low productivity, rising annual deficits and increasing debts, with the ongoing threat of bankruptcy (Héritier 1998: 8).⁴² Therefore, the main goal of the reform was to stop further losses in revenues and to strengthen the railways by reorganising the public monopoly.

⁴⁰ In 1998, the former Ministry of Transport (*Bundesministerium für Verkehr*, BMV) was merged with the Ministry for Building and Housing (*Bundesministerium für Bauen und Wohnen*, BMBW) to a new ministry, it formed the BMVBW.

⁴¹ Between 1949 and 1990 the West German rail system saw 16 reform initiatives, which all failed to be implemented (Holst 1997: 84).

⁴² For a detailed analysis see e.g. BMV 1991; Julitz 1998; Windisch 1987.

The European railways Directive 91/440/EC pushed forward the German reform. On the **national level**, the German unification and the desire to merge the *Deutsche Bundesbahn* and the Eastern German *Deutsche Reichsbahn* increased the pressure for reforms. Therefore, these ‘parallel discussions’ on the national and European level ‘facilitated building a consensus over the national reform plan’ (Teutsch 2000: 302ff).

The key **measures** of the new Rail Law (Allgemeines Eisenbahngesetz, AEG) were as follows:

- **Transformation of two state railways into one joint stock company:** The West German *Deutsche Bundesbahn* (DBB) and the East German *Deutsche Reichsbahn* were merged and transformed into the *Deutsche Bundesbahn AG* (DBAG), a unified joint-stock company under private law, while the debt of the two former state companies were taken over by the federal government.
- **Separation of track/net and infrastructure from operational units:** On the European level, the option of completely separating the infrastructure and operation was discussed. However, the DBAG remained vertically integrated and had to separate its functions into sections such as track, freight and passenger transport services. In 1999 these sections were transformed into independent companies under the holding of the DBAG.
- **Non-discriminatory third party access to the rail network:** As the consequence of the liberalisation and the opening of the market, non-state companies now have to be given access to the net from DB Net AG, the infrastructure branch of the DBAG. With this rail law, operators now pay for the cost of using the track. The conditions have to be negotiated in a self-regulatory process.

With the formal privatisation and the establishment of the DBAG, all sovereign functions formerly carried out by the DBB had to be separated and transferred to new institutions. A **new regulatory regime** had to be developed. Apart from the ministry (the BMVBW) and the Federal Cartel Office (BKartA), a new agency was set up, the Federal Railway Agency (*Eisenbahnbundesamt*, EBA).

EBA

All sovereign functions⁴³ were transferred to the EBA, which was established in 1994.⁴⁴ Defined as an **administrative agency**, the EBA is responsible for the ‘supervision’ and ‘approval’ in the rail sector (*Aufsicht und Genehmigung*). Its main task focuses on **technical issues** such as the responsibility for licensing railway companies, control of the safety of tech-

⁴³ Additionally, the Federal Railway Property was institutionalised for the administration of debts, personnel and real estate.

⁴⁴ See Article 5 Allgemeines Eisenbahngesetz (AEG); *Gesetz über die Eisenbahnverkehrsverwaltung des Bundes* (EVerkVerwG), *Organisationserlaß* Z 14/02.04.80-1/19 Vmz 95, 31 December 1993.

nical equipment or issues related to infrastructure planning and financing (Holst 1997: 88). As the state remains involved in financing the infrastructure of the railways, the EBA awards and supervises grants for services on the federal level. For financing services on the regional level, competencies to distribute subsidies have been taken over by regional and local authorities.

However, the EBA is not a ‘mainstream’ regulatory agency. Lawyers and practitioners argue that ‘the term “regulation” is unknown to the German rail law’ (Kühlwetter 1997: 94). Instead of setting up a rail regulator with price regulatory competencies and other extensive competencies – e.g. to enforce third party access – a rail authority was founded, with weak competencies, to develop competition. Competencies have been left in the hands of the DBAG, which is therefore often a ‘player as well as referee in one person’ (Holst 1997: 89). Thus, the EBA describes itself ‘not as a regulatory agency, but as a **non-discrimination supervisory agency**’ (Interview EBA, August 2000). In general, the **EBA** is described as a low profiled ‘tame institution’ (see Kühlwetter 1997: 105).⁴⁵ This is not only because of its work on technical supervisory functions, but also because of its weak competencies in combating the discriminatory behaviour of the DBAG. As the number of complaints before the EBA increased,⁴⁶ small rail operators criticised the supervisory system for being too slow and intransparent. They therefore have argued for further developing the regulatory regime, especially by extending the regulatory competencies for the EBA (VDV 07.07.2000).

The Role of the BMVBW in the Rail Regulatory Regime

Before liberalisation, the German government was heavily involved in the rail sector; there was close **cooperation between the ministry and the Deutsche Bundesbahn**.⁴⁷ With the rail reform, the role of the **BMVBW** changed. The new EBA took on a ‘hinge function’ (*Scharnierfunktion*), mediating between BMVBW and rail companies (Kühlwetter 1997: 105); consequently the impact of the BMVBW on the operational issues of the rail sector diminished. Instead, apart from the BMVBW’s core function – i.e. distributing direct subsidies that reflect the overall responsibility of the government (Art 87e (4) GG) – the ministry received new oversight functions: As an administrative agency, the EBA has to be regulated by the ministry via supervision and directives. There is still no case-to-case intervention in the decision-making of the EBA, a fact that the EBA views as ‘surprising’ (Interview EBA, August 2000).

⁴⁵ Additional reasons are that the EBA is still predominantly staffed by former members of the DBAG, which causes the assumption that they have slow and unprofessional decision making and a bias towards the DBAG. For example, a vice president of the EBA described the position of the EBA as resting somewhere between the ministry and the DBAG and left out to mention smaller rail operators. See the introductory speech of R. Meister in Blümel and Kühlerwetter 1996 / 1997: 7. Furthermore, after the foundation of the EBA there were ongoing debates of lawyers among the authorisation of law (*Ermächtigungsgrundlage*) of the EBA questioning its competencies within our outside the jurisdiction see e.g. Born 1997: 111; Studenroth 1996, Grupp 1996).

⁴⁶ The number of cases brought to the EBA increased from 3 in 1995 to 40 in 1999 (Interview EBA, August 2000).

⁴⁷ There were around 75 norms which allowed the German government to intervene in decisions of the DBAG (Kühlwetter 1996: 15).

The Role of the BKartA in the Rail Regime

Because of the state monopoly, before liberalisation the **Federal Cartel Office (BKartA)** did not play a prominent role in the rail sector. Because of ‘regulations for controlled competition’ (*kontrollierte Wettbewerbsordnung*) (see Aberle and Brenner 1996: 37; Lehmkuhl 1996: 72), attempts were rarely made to prevent anti-competitive behaviour.

Parallel to the rail reform, the competition law (GWB) was amended. With the sixth reform of competition law, the BKartA received competencies for merger control, and for preventing anti-competitive practices in the rail sector. The BKartA is now able to take sector-specific decisions for the rail sector, and it thus shares competencies on net access with the EBA.

If negotiations between competitors in the rail sector fail, the operators have two options: In cases referring to technical issues, they call the EBA (Article 14 (5) AEG). In cases dealing more with commercial issues, the complaint is handed over to the BKartA. These competencies are shared because of an informal arrangement from 1998 between the presidents of EBA and BKartA. It aims to safeguard effective co-operation and to prevent ‘regulatory shopping’. Both institutions inform each other informally about cases given to them and ask each other for advice on cases that include technical as well as commercial issues (Interview BKartA, August 2000). EBA and BKartA have a ‘good relationship’, and they co-operate closely (Interviews BKartA and EBA, August 2000).

Since 1998, the BKartA has become more important. The number of complaints about the DBAG – mainly on the abuse of dominant position, regarding such things as the use of rail track, the access to repairing states or the blocking of locomotives – increased dramatically and led to a work overload for the BKartA (Interview BKartA, August 2000).⁴⁸

The most prominent case brought before the BKartA concerned the **track prices** paid to the DB Net AG to accessing the track (SZ 03.08.2000). Competitors of the DBAG criticised the two-level track price system of the DB Net AG, which was said to favour larger customers such as DB Cargo AG or DB Regio AG and thus to keep competitors out of the market (see Berndt and Kunz 2000: 172ff; Ewers and Ilgmann 2000). After informal negotiations between BKartA, the DBAG and the plaintiffs, an informal agreement led to the development of a non-discriminatory, one-level track-system by the DTAG (Interview BKartA, August 2000). In April 2001 a new system was implemented, which reduced track prices for small users of the DBAG net. For the BKartA, this case highlights how successfully the office uses its regulatory competencies to bring about effective competition in the rail sector (FAZ 14.05.2001).

The latest developments show that Government introduced legislation to reform the ‘supervisory regime’ by enhancing the regulatory competencies of the EBA.

⁴⁸ For more details see Héritier in this report.

First, this plan was caused by the growing intra-modal competition on personnel transport on the regional level and freight transport on the national as well as international level.⁴⁹ Although the number of competitors has only slightly increased,⁵⁰ and the internationalisation of the sector has only slowly emerged,⁵¹ there has been a **shift from co-operation towards more competition**.⁵² As a consequence, as mentioned above, more and more cases are being brought before EBA and the BKartA. Both institutions are overloaded with work, which has led to criticism of their slow decision-making.

Secondly, there is **EU pressure** to set up a rail regulator (FT 23.11.2000). The EU initiated new policies to revitalise the European railways system by opening the railways, separating essential functions and, as a goal to be reached by 2008, establishing free and equal access to the European rail track. To do so, an independent national regulator has to be established for licensing, decisions and track prices.

Therefore, with a **second rail reform**, the government and the **BMVBW** plans further developments in the regulatory regime. One central proposal is to extend the regulatory competencies of the EBA towards a rail regulator.⁵³ The **Pällmann commission**, which published a report on the future of German infrastructure finance in September 2000, argued in favour of setting up a 'special regulatory body in the organisation of the BMVBW' (BMVBW 2000). In March 2000 a new transport minister took over office. He proposed reforming the vertically integrated DBAG and **splitting track from operations** (FTD 12.03.2001). However, since the DBAG opposed this idea, it was agreed to leave the track with the DBAG, but to establish a rail regulator (FAZ, 29.08.200). As a consequence, the EBA will receive new competencies and will become a regulatory agency ('track agency') (see in FTD 08.09.2000; SZ 07.03.2001).

A **draft proposal**⁵⁴ to amend the rail law (*Allgemeines Eisenbahngesetz*, AEG) in order to transfer new regulatory functions to the EBA was accepted by the government in April 2000. The EBA will receive new ex-ante regulatory competencies with the right to initiate its own inquiries to stop discriminatory behaviour.⁵⁵ Additionally, the EBA will have the right to sanction rail companies that refuse to give access to information. With the amendment, the

⁴⁹ See e.g. Die Zeit 13.7.2000; FAZ 19.9.2000; Verkehrsforum 1998.

⁵⁰ Next to the *Deutsche Bahn AG*, around 150 small non-state regional rail companies.

⁵¹ Countries such as France or Italy still have not liberalised the rail sectors. However, at the domestic market, internationalisation is pushed forward by companies such as the *Deutsche Eisenbahngesellschaft mbH* (DEG). In January 2000, the DEG was bought by the French multi-utility company VIVENDI and renamed as Connex. Connex is now the most powerful competitor of the DBAG. See Berliner Zeitung 23./24.05.2001; FTD 02.07.2001.

⁵² For example, to quote the president of DB Cargo AG: 'The rail system only has a chance with growing national and intermodal competition.' (Verkehrsforum 1998).

⁵³ See the following newspaper articles: FTD 08.09.2000; Handelsblatt 24.8.2000; SZ 03.08.2000; Wirtschaftswoche 7.9.2000. As the BMVBW names it, the reform will lead to a 'more concentrated supervision, but not to regulation' (Interview BMVBW, August 2000).

⁵⁴ Draft proposal '*Zweites Gesetz zur Änderung eisenbahnrechtlicher Vorschriften*', 11 October 1999, BMVBW.

⁵⁵ See the new Article 14 (3a) AEG.

regulatory regime will ensure fair and non-discriminatory third party access. The new regulator will be installed in 2002 (FAZ 29.08.2001).

Most actors are in favour of this regulatory reform: The rail reform is supported by the **EBA**, as it will reduce its ‘toothlessness’.⁵⁶ The **BKartA** questions the need for a sector-specific regulatory body for the rail sector and the extension of EBA competencies. Since the reform does not enhance the competencies of the BKartA, the office fears the sectoralisation of competition law and increased administrative costs because of the double authorities (see Böge 2001; FAZ 14.05.2001). The **DBAG** was not in favour of the reform either. The company fears over-regulation and argues that instead of setting up a strong rail regulator the cartel office has sufficient regulatory competencies to prevent discriminatory behaviour (Interview Train Operator, August 2000). However, to keep rail track within the company, the DBAG agreed that there was need to establish sector-specific regulatory procedures (FTD, 10.09.2001).

4. Towards an Anglo-German Comparison of Developments in Regulatory Regimes

From a comparative administrative research perspective, this article has analysed institutional dynamics of regulatory regimes for the sectors of telecommunications, energy and rail in Britain and Germany. In section 2, we outlined a basic structure of regulatory regimes containing a ministry, a competition authority and a sector-specific regulatory agency, and it formulated three lines of inquiry. Section 3 provided six case studies on the analysis of the changes of the institutional design of regulatory regimes. In this concluding section we give an account of the findings of the case studies and draw some general conclusions.

To explore the institutional dynamics of regulatory regimes, we will point to the three lines of inquiry: (1) the ‘Regulatory Agency Dominance’; (2) ‘Ministerial Interference’; and (3) ‘Competition Authority Predominance’. This will allow us to point to two comparative perspectives: **First**, with a **cross-sector perspective** we will explore similarities and converging trends in the sector-dynamics of the institutional designs of the regulatory regimes. We start to explore similarities and converging trends for the British and the German case. **Secondly**, on basis of the outcomes of the cross-sector comparison, we will focus on a **cross-country comparison** between Britain and Germany and draw some general conclusions.

⁵⁶ The EBA even made own proposals with reference to the German telecommunications regulator. For example, it proposed to set up a system of decision chambers for the EBA, however the BMVBW was not in favour of this concept (Interview EBA, August 2000).

Britain

To start with **Great Britain**: The country was always viewed as the forerunner in utility regulation. Comparing the regulatory regimes, we now find strong similarities between them. All three sectors have the same style of **Regulatory Agency Dominance (1)**. The regulatory agency model is found in all the three sectors: telecommunications (OFTEL), energy (OFGEM, as well as its predecessors, OFFER and OFGAS) and rail (ORR). The first British utility regulator had a modelling function: the telecommunications sector, with OFTEL, was taken as an general model and ‘blueprint for all subsequent regulators’ (Helm 1994: 22).

Although they have a similar starting point, British agencies followed **different paths of institutional change**, as analysed in previous sections. Regulators were merged or competencies extended; however, there is no sign to abolish regulatory agencies as such. In telecommunications, a recent white paper proposed a shift from OFTEL to OFCOM. Although OFTEL was in office for more than 17 years, there are now plans to merge OFTEL with agencies involved in broadcasting and Internet regulation to form a new umbrella agency. In energy, originally separated units – OFGAS and OFFER – were merged into the single regulator, OFGEM. After working as two separate units for more than a decade, this was a reaction to the increasing convergence of the two energy markets. In the rail sector, the dual system of regulators is still in place. However, since the design of the ORR was retained, by setting up the Strategic Rail Authority (SRA) powers were shifted from ORR to the SRA. In sum, these developments among the regulators did not lead to the fading out but to the **stabilisation of the existing regulatory regimes, with sector-specific utility regulators as the core instrument**.

Analysing the **Ministerial Interference (2)**, the role of ministries in the regime and ministerial interference in the decision-making of regulatory agencies was investigated. The case studies reveal that ministries play an increasingly dominant role in all three sectors. An analysis of the **formal relationship** between ministries and regulators shows that there is no clear separation of competencies. Ministries keep competencies or ‘reverse powers’ to participate in the day-to-day regulatory decision-making. The DTI for telecommunications and energy and the DETR for rail are involved in decision-making on operative functions, as in the case of licensing. Even after changes in the regulatory regimes, such as the establishment of OFGEM, these competencies have been retained. By extending the regulation to social and environmental objectives, political interference in regulatory decision-making even increased, as was evident, for example, when DTI guided OFGEM on such objectives. Vice versa, regulators and their Director Generals give policy advice to ministries. This competency can be interpreted as a sign of their independence (Hogwood 1990: 602); however, more importantly, it shows that the ministries and regulators have intertwined competencies. With respect to the **informal relationship** of ministries and regulatory agencies, ministries claim to be cautious about openly interfering with regulatory decision-making.⁵⁷ Ministries shadow the decisions

⁵⁷ In contrast to Germany, ministries in Britain do not have the instrument of general or special instructions.

of the regulators, and regulators are aware of the views of the actual government. As a consequence, there is a tendency for ministries to subtly interfere in regulatory agency decision-making.

To sum up, for the case of regulatory regimes in Britain, in all three sectors we could find examples of ministerial interference. Within the regulatory regime, ministries played, and increasingly play, a dominant role. Competencies are overlapping: this leads to close cooperation and dense intra-organisational relationships. Developments in the regimes have not led to a reduction in the number of ministerial day-to-day competencies. The case of utility regulation reveals a general tendency: British ministries are reluctant to give up control (Loughlin and Scott 1997). However, by extending the focus to economic as well as consumer protection, sectors are politicised and the ministerial influence is consequently enhanced. Therefore, ministries are 'crucial actors in regulation' (Hansard Society 1996: 63), and there is a threat of the further politicisation of the British regulatory regime (see Wilks 2001).

Pointing to the **third question**, i.e. the **Competition Authority Predominance (3), in the regulatory regimes**, it was claimed that they play an important role on competition issues in the regime, share competencies with regulators and that they are therefore extremely co-operative.

The case studies on British telecommunications, energy and rail offer a very homogeneous picture of the role of competition authorities within the regimes: For issues on general competition, such as anti-competitive behaviour and the abuse of dominant position, the role of OFT in the utilities changed. With the 1998 Competition Act, the competencies of the OFT on competition issues in the utility sectors increased, but with the concurrency rules and the Concurrent Working Party (CWP), the OFT has limited implementation competencies in the regulatory regimes: The regulatory agencies, OFTEL, OFGEM and ORR, took over decision-making on competition issues. That is why, for regulatory agencies, there has been a shift from sector-specific regulation to 'competition regulation'. However, the OFT is not out of the game: Within the CWP, the OFT co-ordinates and debates with the regulators on general issues of competition policy, and it influences how cases are dealt with.

In sum, within the British regulatory regime, the OFT co-operates with regulators, but has a reduced role in the regime. **The British competition authority has become less important within the regime.**

The following table summarises the overall trends among the British regulatory regimes:

Lines of Inquiry	Telecoms / GB	Energy / GB	Rail / GB	Overall Converging Trend / GB
Reg. Agency Dominance (1)	OFTEL	OFGAS / OFFER	ORR / OPRAF	Stabilisation of regulatory agencies
Development in the Regime	OFCOM in near future	Merger to OFGEM	OPRAF reformed to SRA	
Ministerial Interference (2)	Interference of DTI	Interference of DTI	Interference of DETR	Ministries interfere in regulatory decision-making and play a central role in regulatory regimes; increasing politicisation
Development in the Regime	Increasing; new consumer focus; threat of politicised regimes	Increasing; new consumer focus; threat of politicised regimes	Increasing; new consumer focus; influence on SRA; threat of a politicised regimes	
Comp. Authority Predominance (3)	Increased competencies, but limited implementation power	Increased competencies, but limited implementation power	Increased competencies, but limited implementation power	Increased competencies, but limited activity of OFT in the regime
Development in the Regime	Less input of OFT	Less input of OFT	Less input of OFT	

Table 2: Overview on the Institutional Dynamics of Regulatory Regime in Britain

Germany

At first glance, the **German** utility regulatory regimes – and especially their sector-specific regulatory institutions – show heterogeneous regulatory designs. However, comparing the regimes on the basis of the above-mentioned lines of inquiry reveals a mixed picture.

Starting with **Regulatory Agency Dominance (1)**, the three German utility sectors now show up as heterogeneous institutions. With the RegTP, in telecommunications there is only one regulatory agency being set up. In contrast to the RegTP, the EBA is a traditional administrative agency with supervisory competencies for the rail sector. In the energy sector, for electricity and gas, systems of regulated self-regulation were introduced with associations' agreements (AAs for Electricity and Gas) .

From a comparative perspective, the regulatory regimes have dissimilar institutional designs. Thus far, **there have been differences between the three sectors.**

However, as outlined in the case studies, the institutional developments in the regulatory institutions show **institutional changes which could – in a mid-term perspective – lead to a converging trend**: German regulatory regimes tend to set up regulatory agencies: Since being set up three years ago, the telecommunications regulator, RegTP, has been stable. In contrast, the institutional design of the EBA, the supervisory agency for the rail sector, will soon be modified. A second rail reform will enhance the competencies of the EBA: it will receive more economic regulatory competencies. In the energy sector, the future of the self-regulatory regime is still open. However, there are increasing signs, e.g. with the formulation of a legal grid regulation by the BMWi or European pressures, that a regulatory body is being established. The latest comments of the head of the BKartA are a good indication. He clearly fears the sectoralisation of competition policy for the energy and rail sector and the institutionalisation of sector-specific regulatory agencies (Böge 2001).

In sum, there are **differences between German sector-specific regulatory institutions**; however, excepting the regulators in telecommunications and rail, in the longer run there might be tendencies towards the establishment of a regulatory institution in the energy sector, too.

With **Ministerial Interference (2)**, the clear separation of competencies between ministries and regulators has been pointed out, as has the fact that there is ministerial interference in the regulatory decision-making. In the case of German regulatory regimes, depending on the design of the existing sector-specific regulatory institutions, ministries take over differing competencies and effect regulatory decision-making to differing degrees. Therefore, the regimes appear to be quite mixed: In the telecommunications regime, the RegTP and the BMWi have clear cut competencies. It is rare that the BMWi formally interferes in RegTP decision-making, but they often interfere informally. In the energy sector, with the self-regulatory regime of associations' agreements (AA), the BMWi plays a crucial role. In general, the ministry has claimed not to be involved with the self-regulatory regime. There is evidence, however, that the BMWi informally influences the negotiations of the AAs – for example, in the selection of involved actors or the contents. However, by institutionalising the task force the BMWi has enhanced its impact on the sector. In contrast to the telecoms and energy sectors, the ministry does not strongly influence the rail sector: As an administrative agency, the EBA is supervised by the BMVBW; however, the EBA claims that the ministry is not deeply involved in the EBA's decision-making. With the second rail reform and extended competencies for the EBA, the ministerial interest in regulatory decision-making may increase.

So, to conclude, the **general tendency of ministerial interference holds for** German regulatory regimes. Ministries play an important role in regulatory regimes.

With respect to the **third question** – i.e. regarding the **Competition Authority Predominance (3) – in the German regulatory regime** the role of competition authorities was analysed, specifically the BKartA in the regimes. The role of the BKartA differs for the three sectors according to the design of the sector-specific regulatory institution.

In the energy sector, the BKartA plays the most prominent role: Because it is a self-regulatory regime, with the associations' agreements an increasing number of cases are brought before the office. The BKartA has stepped in and established a new branch with a decision-making chamber for energy cases. Additionally, in cooperation with *Länder* cartel offices, a working group was founded to cope with the weaknesses of the self-regulatory regime and to reduce discriminatory practices. In the rail sector, on basis of an informal agreement BKartA and EBA share competencies on competition issues. With the second rail reform, EBA's regulatory role will be enhanced. This will reduce the impact of the BKartA within the regime; however, it will still play some role in the decision-making.

As a general rule, the stronger the sector-specific institutions, the greater the reduction in the role of the BKartA. Regulation in the telecommunications sector shows that the RegTP is the dominating institution, while the BKartA has 'reserve functions'. The BKartA uses these functions quite passively. As a consequence, the RegTP is the central institution for regulatory decision-making, and although there are internal administrative struggles, the BKartA keeps quiet in most cases.

In sum, a general tendency among the German regulatory regimes is that the **BKartA still plays** – or in the telecoms sector, could play – **a central role within the regimes**. However, there might be changes in a mid-term perspective. If sector-specific regulators were established for energy and rail, as they have been for telecommunications, the predominance of the BKartA could be restricted and be as 'quiet' as in telecommunications.

The following Table 3 summarises the overall trends of the regulatory regimes in Germany:

Lines of Inquiry	Telecoms Germany	Energy Germany	Rail Germany	Overall Converging Trend / Germany
Reg. Agency Dominance (1)	RegTP	No regulatory agency model; instead self-regulation with associations' agreements	EBA as a supervisory agency	Mixed Picture Mid-Term Perspective: Set up of regulators in all three sectors
Development in the Regime	–	Increasing regulation by the BKartA and BMWi	EBA as a regulator in the near future	
Ministerial Interference (2)	Intense informal interference of BMWi	Intense involvement of BMWi	Loose interference of BMVBW	Ministries play an important role in the regulatory regimes; general tendency of ministerial interference
Development in the Regime	–	Open, depends on the future regulatory regime	Ministerial interference may increase with the new role of the EBA as a regulator	
Comp. Authority Predominance (3)	'Quiet role' of the BKartA	BKartA monitors the market	Co-operation between EBA and BKartA	Mixed Picture Central role of the BKartA in the regimes Mid-Term Perspective: depending on the new design of sector-specific institutions, the role of the BKartA might decrease
Development in the Regime	–	New branch in the BKartA and working group between BKartA and Länder offices founded to reduce the weaknesses of the self-regulatory regime	With a EBA as a regulator, reduced influence of the BKartA	

Table 3: Overview on the Institutional Dynamics of Regulatory Regime in Germany

Converging Trends Comparing British and German Regulatory Regimes

For the three lines of inquiry, it was revealed that since the establishment of the regimes, with regard to the three lines of inquiry, there have been overall converging trends among the regulatory regimes in Britain and partly converging trends in the regimes in Germany. In a last step, the extent to which there are converging trends in a cross-country perspective will be analysed. We compare the regulatory regimes in Britain and Germany to show similarities between the regulatory regimes and to draw some general conclusions.

It is a demanding task to compare British and German regulatory regimes with respect to **regulatory agency dominance**. In Britain all three sectors have similar regulatory agency

designs. Germany has opted for three dissimilar regulatory institutions. That is why there is no convergence in the design of the sector-specific regulatory institutions in the British and German regimes. As a conclusion, the overall trend is that the design of the sector-specific regulatory institutions differs.

However, there are signs which may indicate an increasing long-term convergence between the regulatory regimes in Britain and Germany. In Britain, regulatory agencies were being established from the beginning of the liberalisation process. In contrast, the overall trend regarding the implementation of regulatory agencies in Germany was the result of institutional developments in the regimes, leading to a **‘second reform wave’**.

In general, an Anglo-German comparison reveals that the regimes of nearly all the sector-specific regulatory institutions have undergone developments. Regulatory agencies were merged (as in the British energy sector), competencies were shifted between regulatory institutions (as in the British rail regulation and the competencies of SRA and ORR), or the competencies of sector-specific regulatory institutions were enhanced to create regulatory bodies (as in the German EBA). The German regulatory agency in telecommunications, the RegTP, remains an exception: As the regulator has only been in place for three years, there have only been minor changes in the institutional design thus far.

With a comparative focus on **cross-sectoral regulatory learning**, in Britain the regulatory agency model stood as a ‘pioneer of change, especially that of OFTEL, established in 1984 as the first regulator. It [has] served as an example [...] both in Britain and in other European countries’ (Thatcher 1998: 121). In Germany, the debate about institutionalising regulatory agencies started later: Originally, there was **no direct cross-sectoral regulatory learning** in the German utilities. For example, for the regulatory regime in the rail sector – the first sector to be liberalised, and this as late as 1994 – the design of the EBA was copied from one of the subordinated administrative agencies of the BMVBW.⁵⁸ There were no debates about setting up a rail regulator. As a consequence, the EBA did not have an impact on the shape of the later established regulatory regimes in energy or telecoms: The self-regulatory regime in energy was established because of the traditional low degree of state involvement in the sector (see Section 3.2.2). The design of the RegTP was predominantly influenced by the design of the British OFTEL and the American Federal Communications Commission (FCC).⁵⁹ It was not much influenced by national regulatory regimes such as the EBA (Böllhoff 2002).

However, since the establishment of the RegTP, there have been **indications of more national cross-sectoral learning**. The design of the RegTP, as a highly pro-active, powerful and thus visible institution (which is quite innovative for the German administrative tradition), influenced the transitional path of other regulatory regimes as a ‘second reform wave’: For the

⁵⁸ The Federal Authority for Airtraffic and Airtransport (Luftfahrtbundesamt, LBA), an administrative agency to the BMVBW since 1955, served as a reference model (Interview BMVBW, Aug. 2000).

⁵⁹ In Germany, for example the monopoly commission proposed the institutionalisation of a telecommunications regulator using the model of OFTEL (Ortwein 1998: 270).

new design of the EBA, as a **rail regulator**, the RegTP model was not copied; but both the BMVBW and the EBA took the RegTP as a model when developing their own institutional design (see BMVBW, 2000a). As a consequence, there have increasingly been similarities between EBA and RegTP, such as the new ex-ante regulatory competencies or rights to sanction rail companies.⁶⁰ For the **energy sector**, many of the intense debates about transforming the self-regulated regime into a regulated regime have referred to the design of the RegTP (see e.g. Wetzel, 18.01.2001).⁶¹

Thus, in Britain as well as Germany it is clear that **the regulatory agencies for telecommunications served as an example for regulatory learning**. The institutional design of OFTEL was diffused to other utility sectors in Britain. In Germany the model of the RegTP has not been copied. However, other agencies have learned from telecommunications: the telecommunications model thus had influence on the new design of the EBA, and it is now affecting the design the energy sector.

Comparing the **ministries interference in regulatory regimes in Britain and Germany (2)**, there are strong similarities between the countries. In Britain as well as Germany, politics plays a core role within regulatory regimes. Apart from the supervision and steering at an arm's length, there is a tendency for ministries to interfere in the decision-making of regulatory agencies, and not to remain independent.

Britain and Germany took different paths towards change in developing their respective regimes: In Germany ministry has constantly been informally involved: The competencies of the ministries and agencies are clear cut and defined by law, and have not been modified by changes in government. In contrast, in Britain, after the Labour government came in power in 1997, the role of ministries changed: Former conservative governments were predominantly concerned with economic regulation and short-term regulatory issues, and they viewed regulation as a 'by-product' of privatisation. Labour recognized utility regulation as a separate policy field and argued 'to assert [in utility regulation] the primacy of strategic national or social interests over those of shareholders' (Hain 1993: 23). As a consequence, most of the changes in regulatory regimes were initiated and implemented by the Labour government with a focus on social obligations (i.e. consumer protection and environmental protection as a new goal of the Utilities Act 2000 in the Energy Sector) or in accord with a long-term regulatory perspective (i.e. with the establishment of the SRA to enhance the long-term planning capacity of the rail regulatory regime).

⁶⁰ The core economic regulatory competency of the RegTP, to define net access prices, will not be handed over to the EBA. The BMVBW argues that there is sufficient inter-modal competition which could not be increased by price-regulatory competencies of the EBA (BMVBW 2000a: 2).

⁶¹ The BMWi argues that it carefully studied the design of the RegTP, but would hand over the competencies to implement legal grid regulation to the BKartA because of sector-specific differences (Interview BMWi, March 2001). The ministry argues that, compared to the German telecommunications sector, the energy sector has a more heterogeneous supply structure, which causes more complex regulatory decisions. Additionally, the RegTP came out of the former Ministry for Telecommunications and Posts. There was no former Federal Ministry for Energy; that is why there are obstacles to recruiting the adequate staff (Interview BMWi, March 2001).

A comparison of the **competition authority predominance within regulatory regimes in Britain and Germany (3)** reveals cross-country dissimilarities. In Germany, the BKartA plays a generally influential role within regulatory regimes. In contrast, the OFT now has less influence on the British regulatory regimes.

The BKartA is still involved in all three regulatory regimes: However, there is a trend towards the ‘sector-specification of competition law’. Thus far, the BKartA has retained its competencies for issues of general competition law, especially in the rail and energy sector. However, in accord with a mid-term perspective the BKartA may assume a reduced role in utility regulation. Similarly to this development, the role of British OFT within the regimes has become less important: Although the 1998 Competition Act increased the number of competencies given to the OFT that were related to competition regulation, regulatory agencies became ‘competition regulators’. The British case shows the clearly diminished role of competition authorities. Whether Germany will follow a similar path is still an open question. These findings support the conclusion of an OECD report on the future on the interaction between competition authorities and regulators: namely, ‘that there are few, if any, countries where that division [of competencies] can be regarded as finally settled’ (OECD 1999: 8).

The following Table 4 summarises the overall converging trends in Britain and Germany.

Lines of Inquiry	Overall Converging Trend / GB	Overall Converging Trend / Germany	Cross-Country Comparison: GB/DT
Regulatory Agency Dominance (1)	Stabilisation of regulatory agencies	Mixed Picture Mid-Term Perspective: Creation of EBA as a regulator; potential regulation in the Energy sector	Differences GB / DT Regulatory learning from telecommunications; Mixed Picture / Open Future
Ministerial Interference (2)	Ministries interfere in regulatory decision-making and play a central role in regulatory regimes; increasing politicisation	Ministries play an important role in the regulatory regimes; general tendency of ministerial interference	Convergence GB / DT
Competition Authority Predominance (3)	Increased competencies, but limited activity of OFT in the regime	Mixed Picture Central role of the BKartA in the regimes Mid-Term Perspective: depending on the new design of sector-specific institutions, the role of the BKartA might decrease	Differences GB / DT Mixed Picture / Open Future

Table 4: Comparing Regulatory Regimes Britain and Germany

As a **general conclusion**, we point to the following: First, it has been shown that none of the British and German utility regulatory regimes in telecommunications, energy and rail **are static; they are all dynamic institutional settings**. There are ongoing developments in all of the regulatory regimes. To create and correct markets properly, regulatory regimes have to be modified to cope with the changing demands of the state.

Thus, regulatory regimes in all three sectors undergo institutional changes, but with different degrees of intensity. Generally speaking, the changes do not lead to the demise or abolition of the existing regulatory regimes, but to the stabilization of them. The case studies on British and German regulatory regimes show that there are no signs that regulation is being faded out. Regulatory regimes are not ‘interim measures’ (Thatcher 1998: 125); that is why there is **regulatory enhancement and stabilisation**.

Secondly, with respect to the **basic structure for regulatory regimes**, as developed here in Section two, it has been shown that **regulatory regimes in Britain and Germany do not comply with one another along all the three lines of inquiry**: The cross-country comparison highlighted the **importance of ministries** for both regulatory regimes. Ministries only partly steer regulators, and they do so at an arm’s length; that is why they do not have a generally ‘low interference role’. However, in contrast to the Anglo-German convergence on the role of ministries, there are **differences in the roles of competition authorities**. In both countries, competition authorities are part of the regulatory regime; however, their roles differ: In Germany, in general the BKartA plays a central role, while the British authority, the OFT, occupies a less important place in the British regimes.

A comparison of the **sector-specific regulatory institutions** shows that the British regulatory agencies are the core regulators established for all three regimes, whereas in Germany only the telecommunications sector has regimes that comply with the basic structure. While a regulatory institution will soon be set up for the German rail sector, in the energy sector the future of the self-regulatory system is still open, and it is not clear which changes will be made in the regulatory system. However, with the establishment of a task force in the BMWi and the BKartA, the increasing institutionalisation of regulatory instruments is evident. The one exception concerns the self-regulatory systems of associations’ agreements.

Thirdly, as a **general account**, this comparative administrative study has shown that there are converging trends, but still **strong differences between the regimes in Britain and Germany**. The future will show the extent of further converging trends, regarding matters such as the establishment of regulatory agencies. As argued above, regulatory regimes are not static entities, but dynamic ones. These developments in the regimes may lead to unforeseen design changes and the further convergence of Anglo-German regulatory regimes.

Literatur

- Aberle, Gerd, and Andrea Brenner (1996): *Bahnstrukturreform in Deutschland. Ziele und Umsetzungsprobleme*. Köln: Deutscher Institutsverlag.
- Baake, Pio, and Oliver Perschau (1996): The Law and Policy of Competition in Germany, in: *Regulating Europe*, edited by G. Majone. London: Routledge, 131-156.
- Baldwin, Robert, and Martin Cave, eds (1999): *Understanding Regulation. Theory, Strategy, and Practice*. Oxford: Oxford University Press.
- Bartle, Ian (2000): Causes and Consequences of Regulatory Transformation: A British-German Comparison. *Department of Politics, University of Exeter*.
- Bauer, Michael (2001): Regulatory Costs of Utility Reforms. Towards an Anglo-German Comparison. Paper read at Max-Planck-Project Group Common Goods: Law, Politics, Economics, at Bonn.
- Beesley, Michael, and Bruce Laidlaw (1995): The Development of Telecommunications Policy in the UK, 1981-1991, in: *The Regulatory Challenge*, edited by M. Bishop, J. Kay and C. Mayer. Oxford: Oxford University Press, 309-335.
- Benz, Angelika (1997): Privatisierung und Regulierung der Bahn, in: *Privatisierung und staatliche Regulierung – Bahn, Post und Telekommunikation, Rundfunk*, edited by K. König and A. Benz. Baden-Baden: Nomos, 162-199.
- Berliner Zeitung (23./24.05.2001): "Wir rechnen mit bis zu 10.000 neuen Mitarbeitern". Hans Leister, Chef der Connex Regiobahn, über Pläne der größten Konkurrenten der Deutschen Bahn. *Berliner Zeitung*, Berlin, 33.
- Berndt, Arnold, and Martin Kunz (2000): Immer öfter ab und an? Aktuelle Entwicklungen im Bahnsektor, in: *Zwischen Regulierung und Wettbewerb. Netzsektoren in Deutschland*, edited by G. Knieps and G. Brunekreeft. Heidelberg: Physika-Verlag
- BKartA (24.08.2000): Bundeskartellamt erreicht Durchleitung im Gasbereich. *Pressemitteilung BKartA*, Bonn, <http://www.bundeskartellamt.de/24.08.2000.html>.
- BKartA (2001): *Bericht der Arbeitsgruppe Netznutzung Strom der Kartellbehörden des Bundes und der Länder*. Bonn: BKartA und Landeskartellämter.
- Blümel, Willi, and Hans-Jürgen Kühlerwetter, eds (1996 / 1997): *Aktuelle Probleme des Eisenbahnrechts*. Edited by B. u. 2. Speyer: Speyerer Forschungsberichte Nr. 160/175.
- BMV (1991): *Bericht der Regierungskommission Bundesbahn*. Bonn.

- BMVBW (2000): *Kommission Verkehrsinfrastruktur. Schlußbericht (Pällmann-Kommission)*, 5. September 2000. Berlin.
- BMVBW (2000a): *Bericht BMVBW an die Verkehrsministerkonferenz zur Frage: Ist eine staatliche Aufsichtsstelle ("Regulierungsbehörde") zur Sicherstellung des diskriminierungsfreien Netzzugangs erforderlich?* Bonn: BMVBW, Ministerium für Verkehr, Bau- und Wohnungswesen.
- Böge, Ulf (2001): Befürchtungen einer neuen Sektoralisierung der Wettbewerbspolitik, in: *Wirtschaft und Wettbewerb*, Vol. 51 (No. 7/8): 655.
- Böllhoff, Dominik (2002): The New Regulatory Regime – The Institutional Design of Telecommunications Regulation at the National Level, in: *Common Goods: Reinventing European and International Governance*, edited by A. Héritier. Lanham: Rowman & Littlefield Publishers, 227-257.
- Born, Wolfgang (1997): Rechtliche Probleme der Regulierung aus Sicht des betroffenen Unternehmens, in: *Privatisierung und staatliche Regulierung – Bahn, Post und Telekommunikation, Rundfunk*, edited by K. König and A. Benz. Baden-Baden: Nomos, 107-117.
- Bristow, A.L., J.M. Preston, and C.A. Nash (1998): Investment Planning and Appraisal Issues in the Privatized Railway – The British Experience, in: *Transport Review*, Vol. 18 (No. 4): 353-362.
- Brunekreeft, Gert, and Katja Keller (2000): Elektrizität: Verhandler versus regulierter Netzzugang, in: *Zwischen Regulierung und Wettbewerb. Netzsektoren in Deutschland*, edited by G. Knieps and G. Brunekreeft. Heidelberg: Physika-Verlag, 125-150.
- Brunekreeft, Gert, and Katja Keller (2000a): *The Electricity Supply Industry in Germany, Market Power or Power of the Market?* Institut für Verkehrswissenschaft, Universität Freiburg.
- Cave, Martin, and Chris Doyle (1994): Access Pricing in Network Utilities: Theory and Practice, in: *Utilities Policy*, Vol. 4 (No. 3): S. 181-189.
- Coen, David, and Chris Doyle (1999): Designing Economic Regulatory Institutions for European Network Industries, in: *Current Politics and Economics of the European Union*, Vol. 9 (No. 4): 83-112.
- Coen, David, and Adrienne Héritier (2000): Business Perspectives on German and British Regulation: Telecoms, Energy and Rail, in: *Business Strategy Review*, Vol. 11 (No. 4): 29-37.

- DETR (1999): *A New Deal for Transport: Better for Everyone*. London: Department of the Environment, Transport and the Regions.
- Die Zeit (13.7.2000): Am Anfang war die Ferkeltaxe. Der zähe Kampf der privaten Bahnen gegen ihre mächtigen staatlichen Konkurrenten. *Die Zeit*, Hamburg.
- Doern, Bruce G. (1998): The Interplay among Regimes: Mapping Regulatory Institutions in the United Kingdom, the United States, and Canada, in: *Changing Regulatory Institutions in Britain and North America*, edited by G. B. Doern and S. Wilks. Toronto: University of Toronto Press, 29-47.
- Döhler, Marian (2001a): *Institutional Choice, Institutional Genetics and Bureaucratic Autonomy*. Florenz: Workshop on 'The Politics of Delegation to Non-Majoritarian Institutions in Europe'.
- DoT (1992): *New Opportunities for the Railways: The Privatisation of British Rail*. London: Department of Transport.
- DTI (1998): *A Fair Deal for Consumers – Modernizing the Framework for Utilities*. London: Department of Trade and Industry.
- DTI (1998a): *A Fair Deal for Consumers – Modernizing the Framework for Utilities. Public Consultation Paper on The Future of Gas and Electricity Regulation*. London: Department of Trade and Industry.
- DTI (2000): *Communications White Paper*. London: Department of Trade and Industry (DTI).
- DTLR (16.07.01): Concentrate on Early Gains for Passengers – Byers Spells Out New Franchising Policy. *Department for Transport, Local Government and the Regions (DETR)*, Press Release, <http://www.press.dtlr.gov.uk/0107/0325.htm>.
- Dudley, Geoffrey, and Jeremy Richardson (2000): The "Hollow Core" Revisited: Rail Privatisation 1987-92, in: *Why Does Policy Change? Lessons from British Transport Policy 1945-99*, edited by G. Dudley and J. Richardson. London: Routledge, 197-228.
- Durach, Wolfgang (1996): *Die Einführung kompetitiver Strukturen auf den Energiemärkten*. Frankfurt a.M.: Peter Lang.
- Eberlein, Burkard, and Edgar Grande (2000): Regulation and Infrastructure Management: German Regulatory Regimes and the EU Framework, in: *German Policy Studies/Politikfeldanalyse*, Vol. 1 (No. 1): 1-18.
- Eberlein, Burkard (2000): Institutional Change and Continuity in German Infrastructure Management: The Case of Electricity Reform, in: *German Politics*, Vol. 9 (No. 3): 81-104.

- Eising, Rainer (2000): *Liberalisierung und Europäisierung. Die regulative Reform der Elektrizitätsversorgung in Großbritannien, der Europäischen Gemeinschaft und der Bundesrepublik Deutschland*. Opladen: Leske & Budrich.
- Engel, Christoph (2002): *Verhandelter Netzzugang*: Preprint, Max-Planck-Project Group Common Goods: Law, Politics, Economics, and Report for the Monopoly Commission.
- Eschweiler, Wilhelm (2001): Die Regulierungsbehörde im Spannungsfeld zwischen Unabhängigkeit und Weisungsunterworfenheit, in: *Kommunikation und Recht*, Vol. 4 (Heft 5): 238-242.
- Ewers, Hans-Jürgen, and Gottfried Ilgmann (2000): *Trassenpreissystem der Deutschen Bahn AG. Gutachten im Auftrag der DEG-Verkehrs-GmbH und der Hessischen Landesbahn GmbH – HLB Frankfurt a.M.* Berlin und Hamburg.
- Eyre, Sebastian, and Nick Sitter (1999): From PTT to NRA: Towards a New Regulatory Regime?, in: *European Telecommunications Liberalisation*, edited by K. A. Eliassen and M. Sjøvaag. London: Routledge, 55-73.
- FAZ (29.03.2000): Müller durchkreuzt die Pläne der Post-Regulierungsbehörde. *Frankfurter Allgemeine Zeitung*, Frankfurt, 17.
- FAZ (05.09.2000): Auf dem Strommarkt sind Wettbewerbsbehinderungen üblich. *Frankfurter Allgemeine Zeitung*, Frankfurt, 19.
- FAZ (19.9.2000): Spediteure gehen auf die Schiene. Liberalisierung der Bahnmärkte verändert die Spielregeln. *Frankfurter Allgemeine Zeitung, Beilage Logistik und Transport*, Frankfurt, B9.
- FAZ (21.11.2000): Hürdenlauf für Neueinsteiger. Gasliberalisierung in Deutschland – wie die Verbändevereinbarung fairen Wettbewerb verhindert. *Frankfurter Allgemeine Zeitung, Beilage Energie*, Frankfurt, B10.
- FAZ (14.12.2000): Stromanbieter fordern Regulierungsbehörde für Elektrizität. *Frankfurter Allgemeine Zeitung*, Frankfurt, 20.
- FAZ (10.03.2001): Wettbewerb mit Strom und Gas. *Frankfurter Allgemeine Zeitung*, Frankfurt, 15.
- FAZ (14.05.2001): Der Bahn steht Ärger mit dem Kartellamt bevor. Gegen Regulierungsbehörde für die Schiene. *Frankfurter Allgemeine Zeitung*, Frankfurt, 17.
- FAZ (29.08.2001): Keine Trennung von Netz und Betrieb bei der Bahn. *FAZ.Net*, Frankfurt, <http://www.faz.net>.

- FAZ (8./9.09.2001): Müller: Stromanbieterwechsel erleichtern. Eingreiftruppe soll Tricks bekämpfen. *Frankfurter Allgemeine Zeitung*, Frankfurt, 23.
- FAZ (22.09.2001): Müller lobt deutschen Weg zur Liberalisierung des Gasmarktes. *Frankfurter Allgemeine Zeitung*, Frankfurt.
- FAZ (29.08.2001): Keine Trennung von Netz und Betrieb bei der Bahn. *FAZ.Net*, Frankfurt, <http://www.faz.net>.
- Foster, Christopher D. (1992): *Privatization, Public Ownership and the Regulation of Natural Monopoly*. Oxford: Blackwell.
- Franchino, Fabio (2000): Control of the Commission's Executive Functions. Uncertainty, Conflict and Decision Rules, in: *European Union Politics*, Vol. 1 (No. 1): 63-92.
- FT (23.11.2000): EU to Encourage Passenger Rail Competition Across Europe. *Financial Times Online*, London, <http://news.ft.com>.
- FT (24.03.2001): Railtrack May Get Extra Cash. *Financial Times.com*, London, <http://news.ft.com>.
- FTD (05.06.2000): Öffnung des deutschen Gasmarktes verzögert. *Financial Times Deutschland*, Hamburg, 13.
- FTD (08.09.2000): Klimmt sieht eine niedrigere KfZ-Steuer als Möglichkeit zur Entlastung der Autofahrer. Mehr Güter auf die Schiene. *Financial Times Deutschland*, Hamburg.
- FTD (27.12.2000): Der Engpaß ist das Netz. *Financial Times Deutschland*, Hamburg, 27.
- FTD (02.03.2001): Regulierung für Gasnetze wahrscheinlich. Verbände können sich nicht über Durchleitungsgebühren und Engpassmanagement einigen. *Financial Times Deutschland*, Hamburg, 9.
- FTD (12.03.2001): Bahn muß sich vom Netz trennen. *Financial Times Deutschland*, Hamburg, 1.
- FTD (14.03.2001): Brüssel will Regulierer für Deutschland. *Financial Times Deutschland*, Hamburg, 14.
- FTD (02.07.2001): Connex drängt ins Frachtgeschäft der Bahn. *Financial Times Deutschland*, Hamburg, 7.
- FTD (01.08.2001): Kritik an Strom-Aufseher ohne Kompetenz. *Financial Times Deutschland*, Hamburg, 10.

- FTD (15.05.2001): Schonfrist zugunsten der Verbändevereinbarung gefordert. *Financial Times Deutschland*, Hamburg, 14.
- FTD (10.09.2001): Mehdorn stellt seine Netz-Pläne vor. Bahn-Chef akzeptiert bei weiterer Zuständigkeit der DB externe Regulierung. *Financial Times Deutschland*, Hamburg, 3.
- Gilland, Tony (1996): The Regulatory Regime of the Electricity Industry in England and Wales, in: *Wettbewerbspolitik und die Ordnung der Elektrizitätswirtschaft in Deutschland und Großbritannien*, edited by R. Sturm and S. Wilks. Baden-Baden: Nomos, 239-260.
- Gourvish, Terry R. (1999): The Regulation of Britain's Railways: Past, Present and Future, in: *Institutions in the Transport and Communications Industries. State and Private Actors in the Making of Institutional Patterns, 1980-1990*, edited by L. Andersson-Skog and O. Krantz. Canton, MA: Science Historian Publications, 117-132.
- Goyder, Dan (2001): The Competition Commission: Prospects and Problems, in: *Regulating Utilities: New Issues, New Solutions*, edited by C. Robinson. Cheltenham: Edward Elgar, 189-211.
- Graham, Cosmo (2000): The Utilities Bill, in: *Utilities Law Journal*, Vol. 11 (No. 3): 92-103.
- Grande, Edgar (1999): The Regulation of Telecommunications in Germany. Paper read at Regulation Initiative Conference 'Regulation in Europe', at London Business School, London, 4-5 November 1999.
- Grupp, Klaus (1996): Eisenbahnaufsicht nach der Bahnreform, in: *DVBl*, Vol. 111: 591-596.
- Hain, Peter (1993): *Regulating for the Common Good*. London: GMB.
- Hall, Clare, Colin Scott, and Christopher Hood, eds (2000): *Telecommunications Regulation: Culture, Chaos and Interdependence Inside the Regulatory Process*. London: Routledge.
- Handelsblatt (24.8.2000): Kommission widerspricht Mehdorn: Bahn und Schiene trennen. *Handelsblatt*, Düsseldorf.
- Hanf, Kenneth, and Fritz W. Scharpf, eds (1978): *Interorganizational Policy Making. Limits to Cooperation and Central Control*. London: Sage.
- Hansard Society (1996): *The Report of the Commission on the Regulation of Privatized Utilities*. London: Hansard Society / European Policy Forum.
- Hass-Klau, Carmen (1998): *Rail Privatisation: Britain and Germany Compared*. London: Anglo-German Foundation for the Study of Industrial Society.

- Helm, Dieter (1994): British Utility Regulation: Theory, Practice and Reform, in: *Oxford Review of Economic Policy*, Vol. 10 (No. 3): 17-39.
- Héritier, Adrienne (1998): *After Liberalization: Public-Interest Services in the Utilities*. Bonn: Max-Planck-Project Group Law on the Common Goods.
- Héritier, Adrienne, and Susanne K. Schmidt (2000): After Liberalisation: Public Interest Services and Employment, in: *Welfare and Work in the Open Economy. Diverse Responses to Common Challenges*, edited by F. W. Scharpf and V. A. Schmidt. Oxford: Oxford University Press, 554-596.
- Hogwood, Brian W. (1990): Developments in Regulatory Agencies in Britain, in: *International Review of Administrative Sciences*, Vol. 56: 595-612.
- Hogwood, Brian W. (1998): Regulatory Institutions in the United Kingdom: Increasing Regulation in the 'Shrinking State', in: *Changing Regulatory Institutions in Britain and North America*, edited by G. B. Doern and S. Wilks. Toronto: University of Toronto Press, 80-130.
- Holst, Axel (1997): Der Prozeß der Privatisierung und Probleme der Regulierung aus der Sicht des Bundesministeriums für Verkehr als oberster Regulierungsbehörde, in: *Privatisierung und staatliche Regulierung – Bahn, Post und Telekommunikation, Rundfunk*, edited by K. König and A. Benz. Baden-Baden: Nomos, 83-92.
- Initiative Pro Wettbewerb (12.03.2001): Wettbewerb im Strommarkt vor dem Infarkt! Forde- rungskatalog zur Mogel-Liberalisierung im deutschen Strommarkt. www.pro-wettbewerb.de, Berlin.
- Julitz, Lothar (1998): *Bestandsaufnahme Deutsche Bahn. Das Abenteuer einer Privatisierung*. Frankfurt a.M.: Eichborn.
- Kafka, Peter, Hans-Jörg Hinz, Wolfgang Zander, Michael Rinzau, and Christian Held (1998): Netzzugangsverordnung für elektronische Netze, in: *ET*: 33ff.
- Knill, Christoph (2000a): Reforming Transport Policy in Britain: Concurrence with Europe but Separate Development, in: *Differential Europe: New Opportunities and Restrictions for Policy-Making in Member States*, edited by A. Héritier, D. Kerwer, C. Knill, D. Lehmkuhl, M. Teutsch and A.-C. Douillet. Lanham: Rowman & Littlefield Publishers, 113-187.
- Koenig, Christian, Jürgen Kühling, and Hans Schedl (2000): *Liberalisierung der Telekommunikationsordnungen – Ein Rechtsvergleich*. Heidelberg: Verlag Recht und Wirtschaft.

- Kühlwetter, Hans-Jürgen (1996): Vorläufer des Eisenbahnbundesamtes, in: *Aktuelle Probleme des Eisenbahnrechts*, edited by W. Blümel and H.-J. Kühlwetter. Speyer: Speyerer Forschungsberichte 160, 7-26.
- Kühlwetter, Hans-Jürgen (1997): Privatisierung und Regulierung aus Sicht des Eisenbahnbundesamtes als Regulierungsbehörde, in: *Privatisierung und staatliche Regulierung – Bahn, Post und Telekommunikation, Rundfunk*, edited by K. König and A. Benz. Baden-Baden: Nomos, 93-117.
- Lehmkuhl, Dirk (1996): Privatizing to Keep it Public? The Reorganization of the German Railways, in: *A New German Public Sector? Reform, Adaption and Stability*, edited by A. Benz and K. H. Goetz. Aldershot: Dartmouth, 71-92.
- Levi-Faur, David (2000): The Rise of the Competition State: The Dynamics of British and American Telecom and Electricity Regimes, in: *Current Politics and Economics of Europe*, Vol. 9 (No. 4): 427-454.
- Loughlin, Martin, and Colin Scott (1997): The Regulatory State, in: *Developments in British Politics 5*, edited by P. Dunleavy, A. Gamble, I. Holliday and G. Peele. Basingstoke: Macmillan, 205-219.
- Majone, Giandomenico, ed. (1996): *Regulating Europe*. London: Routledge.
- Majone, Giandomenico (1997): From the Positive to the Regulatory State: Causes and Consequences of Changes in the Mode of Governance, in: *Journal of Public Policy*, Vol. 17 (No. 2): 139-167.
- Mette, Stefan (1999): Telekommunikationsregulierung. Ein Überblick über die Entwicklung in der Europäischen Union und der Bundesrepublik Deutschland, in: *Regulative Politik*, edited by R. Czada, S. Lütz and S. Mette. Hagen: FernUniversität – Gesamthochschule Hagen, Fachbereich Erziehungs-, Sozial- und Geisteswissenschaften, 172-238.
- OECD (1994): *Regulatory Co-operation for an Interdependent World*. Paris: Regulatory Co-operation for an Interdependent World.
- OECD (1997): *Regulatory Reform – Synthesis*. Paris.
- OECD (1999): *Relationship Between Regulators and Competition Authorities*. OECD: Paris.
- Oertel, Klaus (2000): *Die Unabhängigkeit der Regulierungsbehörde – Eine organisationsrechtliche Variable in der Privatisierung der Telekommunikation*. Berlin: Dunker & Humblot.
- OFT (2001): *Concurrent Application to Regulated Industries*. London: Office of Fair Trading.

- ORR (1997): *Inquiry into the Proposed Strategic Rail Authority and Railway Regulation*. London: Office of the Rail Regulator.
- Ortwein, Edmund (1996): Die Ordnung der deutschen Elektrizitätswirtschaft, in: *Wettbewerbspolitik und die Ordnung der Elektrizitätswirtschaft in Deutschland und Großbritannien*, edited by R. Sturm and S. Wilks. Baden-Baden: Nomos, 71-131.
- Ortwein, Edmund (1998): *Das Bundeskartellamt*. Baden-Baden: Nomos.
- Padgett, Stephen (2001): Market Effects and Institutions in Transitional Governance Formation; European Regulatory Regimes in Telecommunications and Electricity. Paper read at ECPR Grenoble, 6-11 April.
- Paulweber, Michael (1999): *Regulierungszuständigkeit in der Telekommunikation: sektorspezifische Wettbewerbsaufsicht nach dem TKG durch die Regulierungsbehörde im Verhältnis zu den allgemeinen kartellrechtlichen Kompetenzen des Bundeskartellamts und der Europäischen Kommission*. Baden-Baden: Nomos.
- Pollitt, Christopher, Karen Bathgate, Janice Caulfield, Amanda Smulen, and Colin Talbot (2001): Agency Fever? Analysis of an International Policy Fashion. In *Erasmus University Rotterdam*: to be published in "Journal of Comparative Policy Analysis".
- Prim, Rolf, and Heribert Tilmann (1983): *Grundlagen einer kritisch-rationalen Sozialwissenschaft*. Heidelberg: Quell & Meyer.
- Prosser, Tony (1997): *Law and the Regulators*. Oxford: Clarendon Press.
- Riley, Alan (2000): A Unique Antitrust Regulatory Problem: Co-Ordinating Concurrent Competition Powers, in: *Utilities Law Journal*, Vol. 11 (No. 2): 36-40.
- Schneider, Jens-Peter (1999): *Liberalisierung der Stromwirtschaft durch regulative Marktorganisation: Eine vergleichende Untersuchung zur Reform des US-amerikanischen, europäischen und deutschen Energierechts*. Baden-Baden: Nomos.
- Schneider, Jens-Peter (2000): Flexible Wirtschaftsregulierung durch unabhängige Behörden im deutschen und britischen Telekommunikationsrecht, in: *ZHR*, Vol. 164: 513-544.
- Schneider, Jens-Peter (2001): Verwaltungskontrollen und Kontrollmaßstäbe in komplexen Verwaltungsstrukturen, in: *Verwaltungskontrollen*, edited by E. Schmidt-Aßmann and W. Hoffmann-Riem. Baden-Baden: Nomos, 271-290
- Schneider, Volker (2001): Institutional Reform in Telecommunications: The European Union in Transnational Policy Diffusion, in: *Transforming Europe. Europeanization and Domestic Change*, edited by M. Green-Cowles, J. Carporaso and T. Risse. Ithaca, NY: Cornell University Press, 60-78.

- Schroeder, Dirk (1999): Telekommunikationsgesetz und GWB, in: *WuW*, (No. 1): 14-28.
- Schwarze, Jürgen, ed. (1999): *Der Netzzugang für Dritte im Wirtschaftsrecht*. Baden-Baden: Nomos.
- Soriano, Leonor Moral (2001): The Role of the European Court of Justice in the Competition V. Universal Service Conflict. Paper read at Max-Planck- Project Group Common Goods: Law, Politics, Economics, at Bonn.
- SRA (2000): *Annual Report 1999/2000*. London: Strategic Rail Authority.
- Studenroth, Stefan (1996): Aufgaben und Befugnisse des Eisenbahn-Bundesamtes, in: *Verwaltungsarchiv*, Vol. 87: 97-114.
- Sturm, Roland (1996): The German Cartel Office in a Hostile Environment, in: *Comparative Competition Policy. National Institutions in a Global Market*, edited by B. Doern and S. Wilks. Oxford: Clarendon, 185-224.
- Sturm, Roland, Stephen Wilks, Edmund Ortwein, and Markus Müller (1998a): *Wettbewerbspolitik und die Regulierung der Elektrizitätswirtschaft in Großbritannien und Deutschland*. London: Anglo-German Foundation for the Study of Industrial Society.
- SZ (02.08.2001): Bundeskartellamt warnt Stromanbieter. Neue Abteilung überwacht den Elektrizitätsmarkt. *Süddeutsche Zeitung*, München, 21.
- SZ (03.08.2000): Bundeskartellamt hilft Privatbahnen. Staatsunternehmen DB benachteiligt die Konkurrenz. *Süddeutsche Zeitung*, München, 21.
- SZ (07.03.2001): Koalition will offenbar Regulierungsbehörde für die Schiene. *Süddeutsche Zeitung*, München, <http://www.sueddeutsche.de>.
- Teutsch, Michael (2000): Regulatory Reform in the German Transport Sector: How to Overcome Multiple Veto Points, in: *Differential Europe: New Opportunities and Restrictions for Policy-Making in Member States*, edited by A. Héritier, D. Kerwer, C. Knill, D. Lehmkuhl, M. Teutsch and A.-C. Douillet. Lanham: Rowman & Littlefield Publishers, 255-334.
- Thatcher, Mark (1997): Regulating the Regulators: The Regulatory Regime for the British Privatised Utilities, in: *Parliamentary Affairs*, Vol. 51 (No. 2): 209-216.
- Thatcher, Mark (1998): Institutions, Regulation, and Change: New Regulatory Agencies in the British Privatised Utilities, in: *West European Politics*, Vol. 21 (No.1): 120-147.
- Thatcher, Mark (1999): *The Politics of Telecommunications – National Institutions, Convergence and Change*. Oxford: Oxford University Press.

- The Times (30.06.2001): Beyers Shakes Up Failed Rail Authority. *The Times*, London.
- Theobald, Christian, Christian de Wyl, and Sebastian Dreschler (2001): Der Netznutzungsvertrag, in: *ZNER*, (No. 1): 24-32.
- VATM (2001): *White Paper – Competitive Situation in the German Telecommunications Market*. Köln: Association of the Providers of Telecommunications and Value Added Services (VATM).
- VDV (07.07.2000): Liberalisierung des Bahnsektors in der EU voranbringen. Güterverkehr braucht Öffnung der Netze. *Verband Deutscher Verkehrsunternehmen, VDV-News*, Köln.
- Veljanowski, Cento (1994): The Need for a Regulatory Charter, in: *Regulating the Utilities: Accountability and Processes*, edited by CRI (Centre for the Study of Regulated Industries). London: CRI, No. 7, 1-22.
- Verkehrsforum (1998): *Verkehrsunternehmen und Wirtschaft fordern gleiche Marktzugangsregelungen für den Wettbewerb auf der Schiene*, Bonn. www.verkehrsforum.de/magazin/archiv/6_98.
- Wetzel, Daniel (18.01.2001): Ruf nach einem Regulierer für den Energiemarkt wird lauter. *Die Welt online*, <http://welt.de>.
- Wilks, Stephen (1998): Utility Regulation, Corporate Governance, and the Amoral Corporation, in: *Changing Regulatory Institutions in Britain and North America*, edited by G. B. Doern and S. Wilks. Toronto: University of Toronto Press, 133-161.
- Wilks, Stephen (1999a): The Prolonged Reform of United Kingdom Competition Policy, in: *Comparative Competition Policy: National Institutions in a Global Market*, edited by G. B. Doern and S. Wilks. Oxford: Clarendon Press, 139-184.
- Wilks, Stephen (2001): The Politics of Regulation: A Triumph of Administration?, in: *Regulatory Review 2000/2001 Millennium Edition*, edited by P. Vass. Bath: CRI, University of Bath, 163-179.
- Windisch, Rupert, ed. (1987): *Privatisierung natürlicher Monopole im Bereich von Bahn, Post und Telekommunikation*. Tübingen: J.C.B. Mohr.
- Wirtschaftswoche (7.9.2000): Streit um das Netz. *Wirtschaftswoche*, Düsseldorf, 29-30.
- Wirtschaftswoche (15.03.2001): Strommarkt – Müller benennt Regulierer. *Wirtschaftswoche*, Düsseldorf, 15.

Wolf, Dieter (2000): Institutional Issues of Telecoms Regulation, in: *European Competition Law Annual 1998: Regulating Communications Markets*, edited by C. D. Ehlermann and L. Gosling. Oxford: Hart, 741-744.