This was reinforced when the chairman of Ruhrgas was asked by the East German government to renegotiate the terms of the Yamburg contract.[34]

However, in October of 1990, Wintershall – which had been left complaining about its relatively small 15% stake in VNG – announced a coup: a cooperation agreement with Gazprom at the heart of which was a joint venture company to market Russian gas in the eastern part of Germany.[35] (Gazprom apparently first proposed a similar arrangement to Ruhrgas and was rebuffed.) This allowed Wintershall to bring these transmission aspirations to fruition by building the Stegal pipeline carrying Russian gas from St Katharinen on the German/Czech border, to join the Midal line south of Kassel (Map 5.1).[36] There ensued a large and well-publicized price dispute between VNG and WIEH (but in reality between Ruhrgas and Wintershall) which centred on charges for transit fees and provision of related services.[37]

These events need to be placed in the context of the debate over the introduction of competition and foreign investment into the industries of the former GDR, and German industrial politics.[38] However, in the context of this study they mark the beginning of gas-to-gas competition in a united Germany. Since 1990 a frenzy of pipeline construction has been evident in Germany, a development which has seen the building of competing pipeline systems by Ruhrgas/VNG – concentrating on expanding the role

(VNG) AG. For an assessment of Ruhrgas' position, see Arild Moe, 'Natural Gas in the Federal Republic of Germany, the position of Ruhrgas', *International Challenges*, Vol. 8, No. 4, pp. 47–55.

[34] These activities caused a furore and an investigation by the European Commission's competition directorate. Sara Knight, 'Ruhrgas sparks cross-border row', *Financial Times*, 6 July 1990.

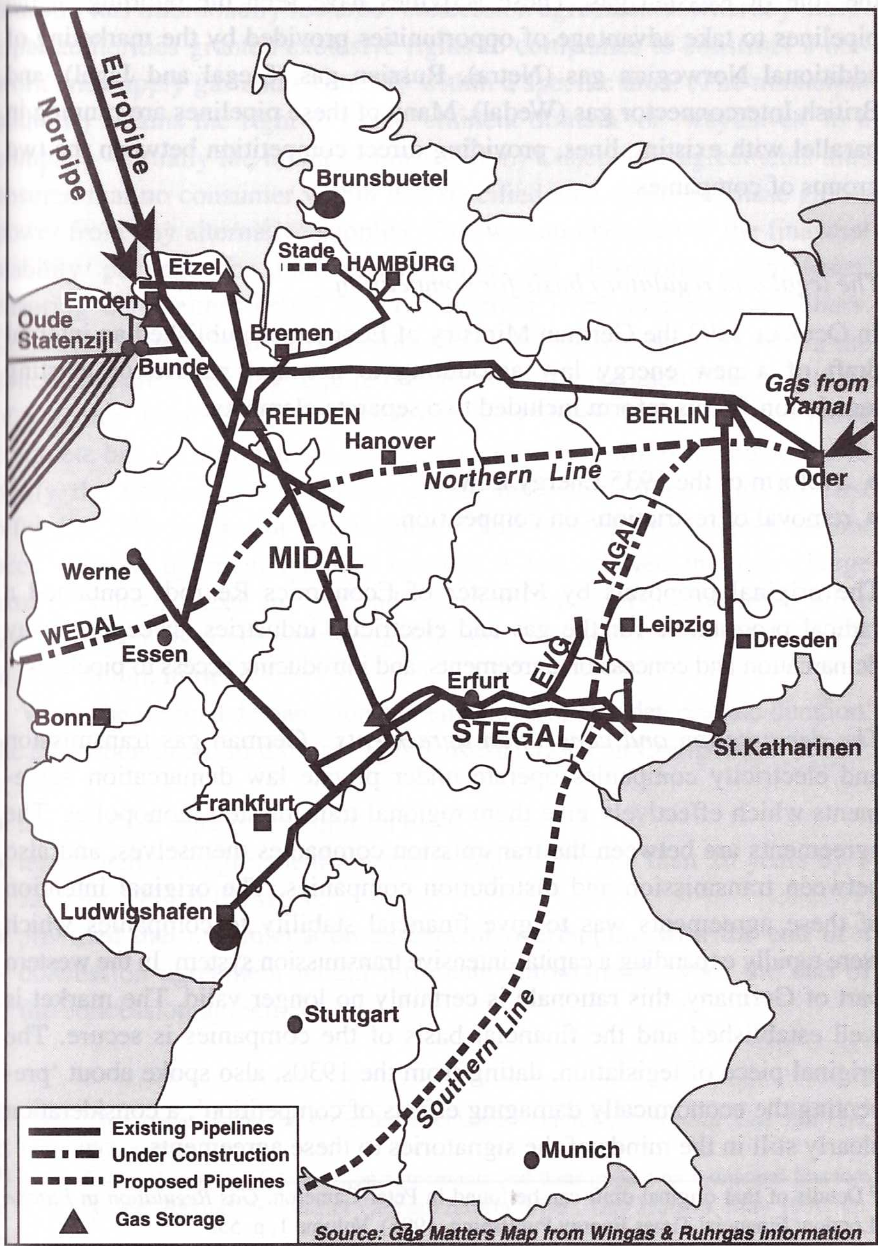
[35] The name of the original joint venture was Wintershall Erdgas Handelshaus (WIEH). Subsequently an additional joint venture, Wingas, was formed for transmission and marketing of gas within Germany. With the exception of sales to VNG, WIEH became the joint venture's marketing arm in central/eastern European countries.

[36] For a Wintershall account of events, see Peter L. Menzel, 'Europe's Changing Energy Markets', a paper to the *Gas Daily* Conference, London, 21 and 22 May 1992.

[37] For details, see 'The battle for East Germany goes behind closed doors', *Gas Matters*, 16 December 1991, pp. 1–4.

[38] For an account which places these events in the wider context of reunification, see Barbara Lippert and Rosalind Stevens-Ströhmann et al., *German Reunification and EC Integration: German and British Perspectives* (London: RIIA/Pinter, 1993), Chapter 7.

Map 5.1: New German gas pipelines



Source: Gas Matters Map from Wingas & Ruhrgas information

of Norwegian gas in Germany; and Wingas – concentrating on expanding the role of Russian gas. These activities have seen the building of the pipelines to take advantage of opportunities provided by the marketing of additional Norwegian gas (Netra), Russian gas (Stegal and Jagal), and British Interconnector gas (Wedal). Many of these pipelines are running in parallel with existing lines, providing direct competition between the two groups of companies.

The legal and regulatory basis for competition

In October 1993 the German Ministry of Economics published an internal draft of a new energy law amounting to a major reform of existing legislation.[39] This reform included two separate elements:

- a reform of the 1935 Energy Law;
- removal of restrictions on competition.

The original proposals by Minister of Economics Rexrodt contained a radical programme for the gas and electricity industries, sweeping away demarcation and concession agreements, and introducing access to pipelines.

The demarcation and concession agreements German gas transmission and electricity companies operate under private law demarcation agreements which effectively give them regional transmission monopolies. The agreements are between the transmission companies themselves, and also between transmission and distribution companies. The original intention of these agreements was to give financial stability to companies which were rapidly expanding a capital-intensive transmission system. In the western part of Germany, this rationale is certainly no longer valid. The market is well established and the financial basis of the companies is secure. The original piece of legislation, dating from the 1930s, also spoke about 'preventing the economically damaging effects of competition', a consideration clearly still in the minds of the signatories to these agreements.

[39] Details of that original draft can be found in Peter Cameron, *Gas Regulation in Europe* (London: Financial Times Energy Publishing, 1995), Volume 1, p. 55.

Along with the demarcation agreements, the regulatory structure of the industry has traditionally featured 'concession agreements' whereby municipal authorities granted exclusive rights to companies to construct a network and supply gas and electricity within a specific area. (The municipal authority retains the right to grant 'eminent domain' or 'wayleaves' to a company – usually the municipal distributor.) Concession agreements thus ensured that no consumer within this specified area could purchase gas or power from any alternative supplier. This was another part of the financial stability package for both transmission and distribution companies, ensuring that neither could face competition from alternative suppliers. Contracts between transmission companies and those customers within the concession area typically require the customer to take additional quantities of gas only from the transmission company. Even where there is not a complete ban on third party supplies, the contract requires the customer to notify the transmission company giving the latter either rights of first refusal or other means of intervention.[40] This type of arrangement has not been resisted by municipalities because it has allowed them to charge extremely high prices for gas and electricity in order to subsidize other services (such as transportation and leisure facilities) which they provide to local communities.[41]

While the original demarcation agreements were of indeterminate duration, the 5th Amendment to the Law against Restrictions on Competition 1989:

- limited their maximum duration to 20 years;
- terminated any agreement already in force for more than 20 years by 1 January 1995 at the latest;
- provided that a demarcation agreement overlapping with the end of a concession agreement would terminate automatically with the end of the concession agreement.

[40] 'RWE, Thyssengas agree to surrender exclusivity clauses', *European Gas Markets*, 23 May 1997, p. 4.

[41] For the financial aspects of concession agreements and their impact on municipal finances in Germany, see 'Rexrodt relaunches German reform drive', *Gas Matters*, May 1996, pp. 5–8.

It was hoped that this amendment to the law would give rise to strong competition in gas and electricity industries starting in 1995. In the event, as we shall see, it has given rise to major litigation and attempts by transmission companies to integrate vertically with distribution companies.

Competition and access: landmark cases

In its efforts to introduce greater competition, the German government has been supported by the Federal Cartel Office (FCO), the principal competition regulatory body. In 1994 an exceptionally frank speech by the President of Germany's FCO noted the shortcomings of the country's electricity and gas industries:

> in practice, the German market consists of regional monopolies with little or no supply competition ... the lack of competition has negative effects on the national economy as a whole – the extraordinarily high level of energy prices in Germany is a burden for industry and its international competitiveness.
>
> In their defence, the energy companies often argue that they might not be able to guarantee security of supply if more competition were introduced. But this argument is not very convincing. The system of energy supply in Germany was created at a time when security of supply might have been a real problem ... today, electricity and gas networks cover virtually the whole country and sufficient production facilities are in place. With the achievement of this objective, the question is now whether the regional monopoly model put in place in order to create and develop the system is still appropriate.[42]

Since 1991 landmark legal cases began to test the parameters of existing German competition law with respect to the gas and electricity industries.

The Ruhrgas–Thyssengas demarcation agreement[43] As just noted, demarcation agreements were due to expire in 1995 and the first of these agreements was between Ruhrgas and Thyssengas. An attempt by these two

[42] Dieter Wolf, 'Competition, Liberalization and Privatization – a German Perspective', a paper to the Royal Institute of International Affairs Conference, Emerging Policies for European Energy, December 1994.

[43] Cameron, op. cit., Vol. 1, pp. 59–60.

companies to renew their agreement at the end of 1994 was blocked by the FCO. The agreement allowed the two companies to supply customers in each other's areas, thereby excluding other suppliers; prevented Thyssengas from supplying in any other company's supply area, thereby further protecting Ruhrgas' interests in those areas; and allowed the two companies to deliver gas jointly to four local utilities.[44]

The Federal Cartel Office had declared this agreement (and by implication all other demarcation agreements) incompatible with Article 85(1) of the EU Treaty. The basis for that judgment was that because Thyssengas imports more than half its gas from the Netherlands, and Ruhrgas purchases part of its gas from other member states, the demarcation agreement can be considered to 'limit trade between member states and impede competition within the boundaries of the common market'. In contrast to German competition law, EU law does not provide for exemptions from the ban on cartels for demarcation and concession contracts in the energy sector. The parties (Ruhrgas and Thyssengas) appealed to the Berlin Court of Appeals which referred the matter to the European Court for a decision as to whether the FCO is competent to apply Article 85 to the German gas and electricity industry. A ruling has yet to be made, but the case looks likely to be overtaken by the passage of the new German energy law.

The Selfkant case The small municipality of Selfkant, located within the demarcation area of Thyssengas, had been attempting to expand its gas distribution system. In 1993 Gasunie (the Dutch merchant transmission company) and Thyssengas (an important customer of Gasunie) refused to allow Selfkant to purchase gas from Mega (a Dutch gas supplier and affiliate of Gasunie). After taking its case to the Commission, Selfkant eventually obtained offers of supply both from the Dutch exporter and from the authorized Thyssengas subsidiary (Aachen Westgas).[45]

Third party access: the Weissenborn case The major German gas companies – led by Ruhrgas – always maintained that access was not only

[44] 'Ruling soon on German demarcation case', *Gas Matters*, October 1996, pp. 7–9.

[45] Cameron, op. cit., Vol. 1, p. 61.

undesirable, but also contrary to constitutional protection of property rights. There had also been a serious legal debate as to whether TPA would be contrary to German competition law. Although the Law on Restrictions against Competition states that the denial of transportation rights constitutes a *prima facie* abuse of a dominant position, this principle had never been tested because of the demarcation agreements between the transmission companies. It was not foreseen that Wintershall would succeed in entering the gas market by forming a joint venture with Russia's Gazprom, which would both build pipelines and market gas in Germany. As a new entrant, Wingas was not party to any agreements and therefore not required to respect the demarcation areas.

In 1992 a paper manufacturer (Weissenborn), supplied by Erdgas Südsachsen, which in turn purchased gas from VNG, signed a contract with WIEH at a lower price. The latter then requested VNG to transport its gas to Weissenborn's premises. (As mentioned, VNG's ownership is dominated by Ruhrgas 35% and BEB 10%, but Wintershall also owns a 15% share and Gazprom 5%.) When VNG refused, on the grounds that access would not have been necessary if VNG had bought the gas from WIEH and resold it to Weissenborn, the case was referred to the FCO.

The FCO supported the case for TPA, ruling that it was 'not incompatible with Germany competition law'. VNG immediately appealed in the regional court in Berlin which overturned the FCO. Undeterred, the FCO appealed this judgment to the Federal Bundesgerichthof (highest administrative) Court which ruled, against the findings of the Federal Cartel Office, that, in this particular case, VNG did not have to carry gas for WIEH to the paper company in Lower Saxony. This ruling was made on the basis that VNG had made an offer to the customer which matched WIEH's offer. Therefore, since the offers were similar, the Court saw no basis for allowing WIEH to use VNG's pipeline network.[46]

Thus the ruling neither established a precedent, nor conclusively settled the debate between:

[46] Ibid., pp. 60–61; 'German Cartel Office: If at first you don't succeed...', *Gas Matters*, March 1995, pp. 4–6.

- the FCO which believed that the ruling established the compatibility of TPA with German competition law on the basis that:
  - TPA should be negotiated (not enforced);
  - TPA does not constitute a hindrance to the pipeline owner's basic constitutional right of freedom of economic activity;
  - the obligation to permit TPA, in order to create competition, does not constitute an unreasonable promotion of competition to the pipeline owner's disadvantage;
- VNG which believed that:
  - gas supply companies are not in principle obliged to grant TPA;
  - refusal to permit TPA can be contested only if it constitutes abuse of a dominant position.

The legal problem for those seeking access was that the Court did not give any indication as to the circumstances in which it would be prepared to grant access. The practical problem was that since the case demonstrated that access can be legally defeated if an existing supplier is prepared to match the offer made by a new supplier, others were dissuaded from making further attempts. If consumers believe that they can force their current supplier to reduce prices by threatening to take gas from an alternative supplier using TPA (even if they have no real intention of doing so) this could have a significant impact on the future behaviour of both consumers and suppliers. However, the impact may be limited if the case has to be litigated before the existing supplier can be coerced into offering better terms. It is significant that, following this case, Wintershall agreed a demarcation agreement with VNG in eastern Germany which seemed to imply a recognition that competition by means of access through pipelines would not be possible.

Competition developments in transmission and marketing

Aside from these major cases, the perception of impending institutional and regulatory change has focused the minds of all market players. According to the CEO of the production and transmission company BEB:

> Clearly, with the changes in the German legal framework, and in particular the proposed ending of the system of demarcations, the market will become more fluid. We are looking outside our traditional areas in Germany, and of course we are looking beyond the borders of Germany.

However, BEB has clear views on the limits of competition, even without demarcation areas:

> In the future there may be a re-allocation of supply areas between Ruhrgas and BEB ... But for us, there is a basic principle of competition here: we do not sell the same gas twice. We do not sell to Ruhrgas and then try to sell it to Ruhrgas' customers.[47]

It is also clear that in some instances there has been no need for legal or regulatory intervention in order to guarantee access to pipelines. In 1996, BEB sold some spot gas to the Polish Oil and Gas Company (PGNiG) and requested transportation through VNG's system. VNG initially refused on the basis that it should be allowed to perform the merchant function of buying from BEB and selling to PGNiG. However, it eventually agreed to transport the gas. The CEO of BEB drew the conclusion that:

> In long term relationships you have these occasional disputes, but there was no real problem between us and VNG. They are a first class company and we have a general understanding with them that we will cooperate in a number of areas.[48]

However, in resolving this transportation problem, it was undoubtedly helpful that BEB owns 15% of VNG and is also a shareholder in Ruhrgas which owns another 25% of the company. It also provided a stark contrast to an episode nearly 10 years earlier in which Ruhrgas refused to transport

[47] The statement that 'we do not sell the same gas twice' is a direct quote from the judge's reasoning in the Weissenborn case. Apart from the issue of a matching offer, Wintershall's request for access was refused because the judge found that Wintershall and VNG had bought gas from the same source (Gazprom) and that Wintershall would sell to both VNG and a VNG customer. The judge (somewhat confusingly) construed this potential situation as 'selling the same gas twice'. 'BEB prepares for change', *European Gas Markets*, 24 April 1997, pp. 6–7.

[48] Ibid.

Norwegian gas to Austria as part of the Troll contracts. After protracted negotiations, Ruhrgas purchased the gas and 'resold' it to Statoil on the German/Austrian border.[49]

Another notable example is the experience of Bayerngas, the regional Bavarian transmission company. Following the loss of its largest single industrial customer (the chemical company Wacker-Chemie) to Wingas in 1996, the company's Chief Executive noted the impact on the company:

> We lost it for a variety of reasons, including the price. But for us the most important thing was that Wacker was a wake-up call; it really did make the whole company sit up and take notice.[50]

It may therefore not have been a coincidence that Bayerngas then signed a contract with Wingas in 1997 which will allow for the purchase of up to 15% of its supplies, despite the fact that Ruhrgas, hitherto the company's sole supplier, was in the process of significantly raising its shareholding in Bayerngas. Other regional transmission companies, which had been exclusively supplied by Ruhrgas, have also begun to include Wingas in their portfolios, in particular Westfälische Ferngas and VEW, two of Germany's largest regional suppliers.[51] These developments could probably have only taken place with the agreement of Ruhrgas, thereby releasing the regional companies from their exclusive purchase obligation. The purchases from Wingas do not involve displacing Ruhrgas sales, rather they allow that incremental purchases of gas – up to a certain percentage of total requirements – can be made by the regional companies and municipalities.

One way in which the German regulatory authorities are attempting to break down the barriers of the concession agreements is to use their approval of shareholding exchanges as a bargaining counter. The purchase of 50% of transmission company Thyssengas' shares by the electricity company RWE was conditional upon the transmission company removing

[49] 'Ruhrgas holds out against transporter status', *World Gas Report*, 19 June 1987, p. 1.

[50] 'Exciting times for Germany's Bayerngas', *Financial Times International Gas Report*, 21 March 1997, pp. 6–8; 'Bayerngas revamp finalised', ibid., 27 June 1997, p. 14.

[51] 'Wingas makes inroads on rival Ruhrgas', ibid., 16 May 1997, p. 3. 'VEW, Westfaelische Ferngas create new German gas major', *European Gas Markets*, 10 April 1997, p. 4.

exclusivity clauses from its contracts.[52] The RWE investment in Thyssengas is again part of a trend of German electricity companies becoming involved in the gas industry, both within Germany and elsewhere in Europe.

Vertical integration by means of purchasing equity in other energy companies, particularly between those companies involved in demarcation and concession agreements, is another area where competition authorities have begun to impose limits. In 1997 the FCO blocked a merger between Westfälische Ferngas and VEW Energie, which would have created the third largest transportation company after Ruhrgas and Wingas, on the grounds that it would have given the resulting company an excessively dominant position in North Rhine–Westphalia. Interestingly the parties did not appeal the decision following the Bundesgerichtshof Court's rejection of two attempted electricity investments by RWE and PreussenElektra. The Court made clear that acquisitions of this kind will in future be based on three criteria:

(1) dominant energy companies will need to keep their equity shares in distribution companies below 20%;
(2) this equity participation must be limited in time;
(3) the equity agreement must not include a clause which would allow the new shareholder to veto the distribution company's choice of suppliers; choice of generation decision; decision to extend its distribution activities into neighbouring regions.[53]

Mindful of the increasing competition and impending legal/regulatory changes within Germany, German companies have begun to extend their activities elsewhere in Europe. This applies not simply to the purchase of equity in other European gas companies – for example the Ruhrgas' and Bayernwerk's purchase of equity in Hungarian gas distribution companies and RWE taking a share in the Prague gas works, and Bayernwerk.

[52] 'RWE, Thyssengas agree to surrender exclusivity clauses', *European Gas Markets*, 23 May 1997, p. 4.

[53] 'German cartel office bans merger of WFG and VEW', and 'Berlin court ruling upsets energy majors' strategy', *Gas Matters*, September 1997, pp. iii–iv and August 1997, pp. x–xi.

German gas companies are beginning to supply gas to other countries: Ruhrgas to MOL (Hungary) and BEB to Distrigaz (Belgium), Dangas (Denmark) and in negotiation with both Transgas (in the Czech Republic) and PGNiG.[54]

An example of a more aggressive foreign approach by German companies is the Ruhrgas contract (starting in 1999) to supply Austrian distribution companies at Linz and Salzburg, breaking the monopoly of the Austrian transmission company OMV.[55] This does not involve issues of access since Ruhrgas will build a new pipeline to deliver the gas. It is uncertain whether Ruhrgas took this action as a result of the Wingas/OMV pipeline supplying the Wacker-Chemie plant which had been taken from Ruhrgas' customer Bayerngas. However, as a further retaliation, it has been suggested that the OMV/Wingas pipeline may be expanded within Bavaria to try and expand market share, almost certainly at the expense of Ruhrgas.[56] This kind of overt competition between two major European transmission companies, Ruhrgas and OMV, breaks all the established rules of European gas commerce and is a clear indication of the dawning of a new, more competitive era.

Lessons from Germany

Events in the German gas market since 1991 clearly demonstrate that gas-to-gas competition has arrived in the country, although by the rather unusual method of building parallel pipeline networks to compete for customers. With ferocious resistance from established gas companies to government and regulatory attempts to introduce liberalized access to pipelines, the first development has been competition between transmission companies largely selling Russian gas. The emergence of Wintershall as a

[54] BEB has already signed a contract for winter peak supplies to Czech Transgas. This may be the forerunner of a more permanent contractual relationship. 'BEB, VNG and Transgas sign contract for winter gas deliveries into Czech Republic', *European Gas Markets*, 28 November 1997, p. 4.

[55] 'Ruhrgas price cut breaks Austrian monopoly', *Gas Matters*, January 1997, p. 1; 'Ruhrgas plans Austria Anschluss', ibid., February 1997, p. 4.

[56] 'OMV to help Wintershall', *International Gas Report*, 18 April 1997, p. 7.

major player in German gas transportation and marketing, disturbing the long-established status quo, was due to a number of factors:

- the reunification of Germany followed by the collapse of Soviet communism which created an entirely different German market and removed many of the ideological objections to the import of Russian gas;
- the inability of BASF to obtain what it considered to be satisfactory terms for supply to its chemical plants due to the *Anlegbarkeitsprinzip* pricing which in turn created sufficient incentive for BASF to make such huge investments and allowed WIEH/Wingas to undercut the prices of the incumbent merchant companies and persuade customers to switch supplier;
- the special relationship with Gazprom which, with the creation of the WIEH and Wingas joint ventures, brought to Wintershall's pipeline projects the credibility which they had hitherto lacked. Norwegian producers have repeatedly declined to sell gas to the Wintershall joint ventures, giving rise to allegations of unfair practices and a case brought under EU competition authorities (see Norway later in this chapter);
- the financial power of Wintershall's parent company, BASF, which allowed the financing of the Stegal and Midal pipelines prior to signing contracts for a majority of the throughput of the pipeline, and prior to settling equity ownership of the assets.

But while Wintershall began as a 'revolutionary' actor in the German market, by the mid-1990s it had begun to find its place in a changed status quo, establishing a vertical demarcation agreement with VNG in East Germany, having won a superior court case against the FCO.[57] While this did not signal the end of Wintershall's support for liberalization, it was a pragmatic commercial move necessary to increase the load factor of its pipelines. The company certainly retains an interest in offering *lower* prices than those charged by the long-time incumbents. But the need to amortise its investments in new pipeline infrastructure means that, as

[57] A vertical demarcation agreement is where Wintershall, having agreed to sell to VNG, cannot then sell to VNG's customers. 'Setback for liberalization plans as court approves demarcation', *Financial Times, EC Energy Monthly*, 26 February 1996.

presently constituted, German competition will not deliver the lowest possible prices. Yet Wingas has continued to be a catalyst for change in Germany, providing regional transmission companies and municipalities with their first experience of supply diversification. This is having a significant effect on wholesale prices with municipalities which – despite not being free to purchase their supplies – are increasingly using the threat of competition to reduce purchase prices from their traditional supplier.[58]

The type of pipeline-to-pipeline competition could not have taken hold in Germany without very significant existing margins in the gas transmission sector. Had BASF/Wintershall not been able to foresee their ability to build the infrastructure and still sell significantly below the prices being offered by the dominant companies, they could not have afforded to take such a major commercial step. The objection of liberal economists to the German pipeline-to-pipeline model is that, in requiring two sets of pipelines to be built, it imposes significantly higher costs and lower efficiencies than competition through access. While this may be an unassailable theoretical position, it is unlikely to be relevant to German legal and political circumstances in 1997, until the owners of pipelines choose, or are forced, to provide access to their systems.

Pipeline-to-pipeline competition has brought lower prices to German industrial customers, and as such it has been a welcome development for both politicians and competition authorities. The resistance of the established gas transmission companies to legal and regulatory changes which would introduce liberalization has continued in parallel with the development of competition. Yet despite their resistance, it is clear that companies are positioning themselves both at home and abroad for anticipated changes. This includes attempted joint ventures and alliances between gas and electricity companies in both German and foreign markets.

Alongside the evolution of national legislation, the FCO has been fighting a range of competition cases, with mixed success, testing out the boundaries of German law and the applicability of European law. The government and regulatory institutions appear neither radical in their

[58] The CEO of Wingas noted that the Bremen municipality achieved a significant reduction in its gas costs, just by using the threat of a Wingas purchase, which did not take place. 'Wintershall in '96 profits surge', *International Gas Report*, 18 April 1997, pp. 14–15.

goals, nor in any great hurry to achieve them. Their actions suggest a patient strategy of incremental change in legal and regulatory frameworks, using national and EU legal instruments to achieve their goals. Since 1993 the government has been trying to pass new energy legislation, to sweep away the monopoly elements of demarcation and concession agreements and provide some degree of access to pipelines supervised by the Federal Ministry of Economics.[59] This legislation seems likely to be passed during 1998, but it will not include any provision for access, other than that provided by the EU Gas Directive. The likely adoption of negotiated access will mean that the FCO will remain in charge of gas regulation.

In terms of market structure, the authorities have had some success in limiting the degree of attempted horizontal and vertical integration in the gas and electricity industries by which companies have tried to pre-empt the removal of demarcation and concession agreements. As long as the gas industry continues to move in the direction of greater competition and liberalization the competition authorities appear to be content. This patience seems to be a combination of *Realpolitik* – that this is the most that can be achieved in the current political situation – and a belief that future market developments in Germany will set the stage for the desired degree of liberalization, making legislation and regulation much easier to enact.

The most important goal of both government and regulatory authorities is achieving price reductions for an industrial sector which has for some time been paying some of the highest gas prices in Europe. The first step towards competition – eliminating demarcation and concession agreements – can go a considerable way towards achieving across-the-board price reductions for industry. Assuming that this can be achieved, the German authorities may then turn their attention to questions of liberalization with negotiated access as the first step in this process.

From the point of view of competition and market structure, it is as yet uncertain whether the traditional market dominance of Ruhrgas is simply being replaced by the duopoly of Ruhrgas and Wingas, each company allied to a major producer (or set of producers): Wingas with Gazprom;

[59] In fact the draft energy legislation is more directly concerned with the electricity industry than with gas. It will transpose into German law many of the provisions of the EU Electricity Directive (see Chapter 5).

Ruhrgas with Statoil and other Norwegian producers. With each company also becoming closely associated with certain distribution companies – partly through equity investments by these companies – the German gas market could become divided into two increasingly vertically integrated blocs: 'forces of Ruhrgas' versus 'forces of Wingas'.[60] It is likely that this kind of vertically integrated duopoly will turn out to be too simple a structural projection of what is likely to become an extremely complex market.

The geographic and economic centrality and influence of Germany within Europe are such that developments in the German gas market cannot but have a significant affect on surrounding countries, and possibly in the wider Europe. Significant development of *competition* in German gas markets will reduce prices to industry and could give rise to similar competitive pressures in neighbouring countries. Development of *liberalization* would not only remove powerful gas industry opponents to this kind of change within the European Union as a whole, but could transform them into proponents for faster change elsewhere in Europe.

Spain: anti-competitive structure with rapidly emerging liberalization

The Spanish gas industry, a relatively small but rapidly growing gas market, presents an interesting contradiction in terms of competition and liberalization in European gas markets. Gas Natural is the overwhelmingly dominant gas transmission and distribution company, selling gas to around 90% of the Spanish market. The company was formed in 1991 by a merger of the country's two largest distribution companies with Repsol's gas distribution business. In 1994 Gas Natural purchased 91% of the equity of Enagas – the monopoly transmission company. The creation of Gas Natural appeared to be a defensive privatization measure by political and commercial interests, partly intent on preventing foreign incursion into the industry, partly consolidating against EU-inspired liberalization measures. Gas Natural's major shareholders are the oil and energy group Repsol with 45.3% and the Catalan savings bank La Caixa with 25.5%.

So it came as some surprise when, following the election of a new

[60] Estrada et al., op. cit., p. 345.