

VIAG

A COMPANY PROFILE

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CONTENTS:

1. History and background	1
2. Strategy	2
3. Management change and core-activities	5
4. The Viag-Bayernwerk merger	6
5. Ownership, privatization and competition	8
6. Financial results	10
5. Viag by division	12
Chemicals division	12
Energy division	17
Refractories division	21
Glass division	25
Trading and services	28
Aluminum division	31
Metal packaging	34
Transport and logistics	37
Corporate network	39
6. Labour issues	41

1. History and background

In 1923 Viag, the Vereinigte Industrieunternehmen was formed, as the holding company for several industries (energy, raw materials, arms) which were grounded by the state during the first worldwar. In 1939 Viag acquired a 40% share of Bayernwerk AG. In 1951 the Federal Republic took over Viag. Until the mid 1980s nothing much changed, apart from a few major acquisitions (Ilseder Hütte, Thyssengas, SKW Trostberg).

Just like Veba, Viag was one of the first state-owned companies to be privatised in Germany. In 1984 Viag was constituted into an AktienGesellschaft (Ltd). Privatization followed in two steps, in 1986 and 1988.

Viag has come a long way since 1990 when its ambitious expansion plans were unveiled. Since then, Viag has cobbled together a diversified and international holding group. Over the past five years, Viag has cleared stressed growth over profitability as it muscled its way into nine disparate industrial divisions. Between 1989 and 1993 turnover grew 140%, employment more than doubled. In 1993-94 Viag and Bayernwerk ended their 54 year old period of engagement and married each other (see par 4).

The next table shows how Viag since its privatisation has put more stress on growth by acquisition instead of growing by 'real' investment. Still, investments in plant, machinery etc (tangible assets) are quite considerable:

Investments:	1987	1988	1989	1990
Financial	116	338	436	1121
Tangible assets	807	757	711	1098

Investments:	1991	1992	1993	1994
Financial	2302	649	551	5900
Tangible assets	1701	1838	1632	1700

Still, Viag is sometimes mocked as being a 'poor-man's Veba'. Veba, main competitor and example for Viag is twice as big, the other important competitor RWE 1.5 times.

Viag in a birdseye view:

INDUSTRIES Energy, Aluminium, Chemicals, Metallurgy, Packaging, Trading, Services, Transport, Glass

PRODUCTS AND ACTIVITIES Electricity generating and distribution, gas-purchase and transport, aluminium and aluminium products, organic chemicals, fertilizers, metallurgy, fire-resistant materials, technical ceramics, refractories and advanced ceramics, trading of raw materials, energy, environmental technology, transport systems, chemical and engineering plants, glass, plastics and packaging

PRODUCTIONS LOCATIONS 21 locations in Germany and also in the USA, Canada, France, Australia, the UK, Italy, the Netherlands, Spain and Asia

EMPLOYEES 84,613

2. Strategy

Although its roots are in the capital goods industry, Viag now seeks to move into branches with more advanced technology. To some, Viag's strength comes from the diversity of its subsidiaries. The group is active in a variety of markets, with many of Viag's subsidiaries occupying the leading position in their special niche. This is particularly true of packaging subsidiary Schmalbach-Lubeca AG, which is the European market leader for recyclable plastic containers and bottles. Other subsidiaries include SKW Trostberg AG, Germany's industry leader in high-quality specialized metal products and VAW Aluminium AG, the largest producer of aluminium in Germany.

Still, others dispute whether this diversity should be seen as a point of strength. To understand this discussion, we will have to outline some general remarks on conglomerates first.

Viag is a typical conglomerate. Reading recent management magazines, one might wonder how comes conglomerates do still exist? Conglomerates are considered to be one of the worst inventions of the 1960s. Today, management theory and fashions prescribe concentrating on core-competencies, selling out non-core businesses. This is based on the idea that it takes too much resources to keep up with developments in more than one or two technologies. So one must concentrate resources. In addition, today's volatile markets demand much more management attention than the sellers-markets of the 1960s. This also calls for a concentration on a few productlines.

So, in theory conglomerates should be a thing of the past. Reality however is different. Conglomerates still exist in large numbers. General Electric, one of the most successful American companies, produces light bulbs, locomotives, plastics and much more. FIAT owns besides its carplants hotelchains, produces pacemakers and much more. In France conglomerates like Bouyges, Lyonnaise des Eaux, General des Eaux, Matra-Hachette constitute the core of the national economy.

Germany has its own brand of conglomerates. Many of the large heavy industries companies, like Krupp-Hoesch, Mannesmann and Thyssen, have been diversifying to get into more promising markets than steelmaking. The expected boom in telecom have urged many big companies to invest some of their large resources into new ventures.

Conglomerates come in many sorts. But one way or the other, they must prove that it makes economic sense to undertake the different activities in one company. Viag tries to prove this by stressing two strategic considerations.

In the first place, the different divisions of Viag can have some important linkages by delivering to each other. Thus Viag energy division, might deliver electricity to the aluminum division which is very energy-intensive, the aluminum division might provide the metal packaging division with its basis material, etc. Still, this kind of vertical integration may not save any money. Cheaper aluminum might help the packaging division, but why should the

aluminum division lower its price for its sister company? This only means internal profits are shift from one division to the other, unless some efficiency gains are to be won. This kind of forced purchasing from group companies may hurt the companies, as they lack the incentive to produce more efficiently. Still, for example to Kuhne&Nagel, the transportcompany in which Viag holds a 33% share, the 1 billion DM Viag spends annually on transport, provides a good basis for further expansion.

Viag stresses a second element in its strategy. This a purely financial argument. The package ('portfolio') of investments in companies under the Viag umbrella can provide for a relative stable development of the group. Shareholding in highly cyclical industries like chemicals and packaging, are offset by the stable incomes from the energy division. Investments in stagnating industries where the only way to survive is to cut costs, are balanced with investment in promising sectors like logistics and telecom.

Viag has been highly criticised for its lack of strategy. 'Much money, no concept' to quote the German 'Manager Magazin' (july 1994). Wirtschaftswoche wrote: 'Where Veba and RWE concentrate their activities at a maximum of 6 divisions, at Viag with its 8 divisions, almost nothing fits together.' (23-7-93). Veba forces its companies (mostly 100% owned) to work together, at Viag for instance the trading and transport firms do not cooperate. Some experts call Viag a electricity company with some badly operating industrial companies added to it. (Frankfurter Rundschau 28-10-92).

Viag pretends to act as a management holding, acting as an overall manager to its companies and designing a general strategy, for instance in deciding strategic growth opportunities. But its strategy of pursuing minority or small majority interests makes this very difficult and tends to make Viag more of a investment fund. The choice for not owning subsidiaries by a large majority was justified 'to maximise local management responsibility within a loose group strategy devised by a 4-man Board of Management.'

But in fact it is also out of financial considerations that Viag is satisfied with small majority holdings. So, the successful chemical division built around SKW, a 100% own daughter company will be taken to the stock exchange, and also VAW Aluminium AG and Klöckner & Co. AG. This may provide SKW with the cash needed for acquisitions. In the eyes of management, SKW still lacks the size needed for a chemical firm to be a strong player in this sector.

In theory, Viag central management decides on large investments, the flows of capital within the group, appoints top level managers and also those just under top level, and intervenes only when there are very large problems in one of the daughtercompanies.

Because of the strategy of small majority holdings, implementation of important decisions takes a long time debating with other shareholders and with quasi-autonomous management. Without a real grip on the operational units, other than to decide how much of their cash-flow is to be handed over to the parent company, no synergy can be realised.

A sign of Viag's lack of strategy is the character of a follower that Viag showed. For instance, by taking over of the trading company Klöckner & Co AG in 1989, Viag followed its main example Veba, which already owned the Stinnes trading company; Thyssen, which had its own Thyssen Handels Union trading company.

Viag step into the transport sector by becoming shareholder in K&N, followed after the big conglomerates Veba/Stinnes and Thyssen stepped into the transport industry by taking over Schenker-Rhenus AG and Haniel Logistik respectively.

Germany's big conglomerates all pursue the same strategy. They aim at combining their traditional products with 'value added services', for instance the scrap metal trade is converted into the organization of recycling. By this they continue the tradition of the old heavy industries: avoiding markets where many firms operate, moving into markets which are dominated by a few big companies so sheer size might be the decisive factor in building competitive strength. Viag wants to own companies which either take key positions in sectors or which are market leader. Didier-Werke for instance, bought by Viag in 1989 is the world's largest producer of fire-proof products.

Telecom, logistics, energy, trading are markets where large international 'systembuilders' will be the controlling companies. Thus it comes as no surprise that all large German conglomerates move into these markets.

Viag's packaging strategy may be viewed in this light. The packaging industry also provides opportunities for system-providers. For example TetraPak-AlfaLaval, which produces both the machines and the carton boxes to package milk. The takeover of Gerresheimer glass was presented as a considerable extension and broadening of Viag's packaging activities. Viag could offer the whole range of packaging: paper-based, metal and glass. Viag seemed to follow French firms like Saint Gobain and Pechiney which also built up a broad range of packaging activities. But in fact the operations of the VAW, Gerresheimer, SLA and PWA were not coordinated at all. No attempts were made to realise synergies in marketing, sales or administration. Packaging was promoted as a core activity of Viag, but Viag refused to invest in it. Supervisory boards in the packaging plants criticised the lack of R&D investments. Viag companies lack presence in important innovative sectors of the packaging branch, like special foils. The sale of PWA means a retreat from the strategy of offering the total range of packaging.

In the packaging industry, even the big ones have found out too that you cannot be everything to everyone. Specialization is needed, either to special markets (e.g. food, cosmetics or branded consumer goods), or to specific technologies. The sale of PWA does not indicate in itself that Viag now has a clearer view of what it wants with packaging. Indeed some analysts have been bewildered and wondered whether perhaps personal problems between PWA and Viag management have been the cause (G.W. Brucker, april 1995).

3. Management change and core-activities

Viag management seems to have realised the need for a change. In 1994 it decided to intensify the work of the central management and to develop an elaborate internal information system.

This change have lead to a change of management too. In 1994 Viag announced that it was about to enter a new phase in its business policy. As a clear signal that expansion is soon to end and consolidation to begin, chairman Alfred Pfeiffer unexpectedly announced to retire in July 1995, two years before his current contract expires. Pfeiffer, 64, will join Viag's supervisory board. The company's financial director, Georg Obermeier, will take over. Mr Pfeiffer became chairman in 1982. Although Viag says there has been no argument, reports suggest that Obermeier is a more convincing strategist. (Investment Dealers' Digest, Inc.: Mergers & Acquisitions Report 14 November 1994).

The quality of the management board is considered to be less than RWE and Preussag, and especially Veba. (Manager magazin 7/1994)

The consolidation stage will also result in the sale of some non-core and 'under-performing' companies. According to the Financial times (14-11-1994) Viag is considering making divestments a part of its decision to concentrate on key businesses. However, the company says there is no time pressure to do so. It is also considering joint ventures.

The three businesses which it had decided are non-core are its refractory business, Didier, its paper manufacturing arm PWA and Goldschmidt, a chemicals firm in which it has a minority holding. Says one analyst: 'They are just acquisitions that went wrong.' In addition, the company may decide it makes sense to sell certain sectors of its Klöckner steel business, which is itself a core business. The divestment of Didier will not be easy, as the refractory industry is a declining sector. Viag will prefer a complete sale if they can achieve it.

Still the 'core-business' strategy is not quite convincing. Why should PWA not be core-business in this loosely tied group of companies where packaging is defined as core-business, whereas Viag intends to keep its hold over for instance a credit firm like Reichskredit-Gesellschaft?

The company has decided that it now has four core businesses: energy, chemicals, packaging and logistics. Supplementary businesses - including telecommunications, which might be built up to a mainstream operation - would be open for possible partnerships.

The financial strength of Viag does not provide a backing for its companies. On the contrary: it comes at a high price for its daughtercompanies. For example: VAW even had to pay 71 million mark dividend to its parent, but in fact produced an operational loss of 50 million mark. Also Schmalbach Lubeca paid 5 mark pro share to its shareholder, despite heavy losses.

4. The Viag-Bayernwerk merger

Bavaria's largest electricity utility Bayernwerk, Munich and the Viag Group have long since been preparing the ground for a merger.

A change of Minister-President in the state and an accompanying adjustment to policy over privatisation catapulted the plan forward. In the past capital links had already been created, with Bayernwerk holding 24.9% of Viag and Viag 38.8% in Bayernwerk. The two companies also operate a joint company, Viag-Bayernwerk Beteiligungsgesellschaft, with various industrial holdings (Klöckner&Co, Kühne&Nagel, Gerresheimer Glass). In 1993 former Bayernwerk chairman Dr Jochen Holzer took up his new post as chairman of the Supervisory Board of both Bayernwerk and Viag, with the aim of co-ordinating their activities more closely.

The major block to the merger in the past has been Bavarian Minister President Max Streibl who refused to contemplate the sale of all or part of Bavaria's 58.3% share in Bayernwerk, because he wanted to secure low electricity prices in his state. However, in May 1993 Mr. Streibl was replaced by Edmund Stoiber who took a much more favourable attitude to the idea of partially privatising Bayernwerk.

A deal was struck in which Bavaria's share in Bayernwerk would be roughly equivalent to a 35% share in the merged Bayernwerk/Viag. However, Stoiber agreed that Bavaria should take a stake of 25.1% in the new company and a cash compensation for the remaining 10%.

The Viag-Bayernwerk merger is considered to be one of the most important mergers of Germany's post-war history. To the 38.8% stake Viag previously held, it has now acquired another 58.26% from the state of Bavaria lifting its stake to 97.1%. Viag paid DM2.3 bn in cash and surrendered a 25% share package of its stock - worth around DM2.6 billion - to the Bavarian state government. The Bavarian state will have a blocking minority in the future Viag-Bayernwerk. At the same time, all of Viag's energy activities were concentrated in Bayernwerk. Bayernwerk has taken over Viag's participations in Innwerk (99.96%), Thyssengas (50%), ILSE-Bayernwerk Energieanlagen (50%), Bayerische Wasserkraftwerke (33.33%) and Bewag (10%). The Bayernwerk subsidiary Contigas AG transferred its 10.6%-stake in Viag to its parent in exchange for stakes in the regional energy suppliers.

The private Bavarian electricity supplier Isar-Amperwerke AG of Munich wanted 'in any case' to remain a shareholder in the future Viag AG with at least 10%, said Mr Alfred Bayer, board chairman. The stake it held covered 12.7%. After the merger it eventually got a 14% stake in Viag.

As part of the merger, Viag transferred its base from Bonn to Munich.

Viag said the deal was 'not cheap', but 'still pretty attractive' given Bayernwerk's annual pre-tax profits of about DM 1bn and the high liquidity of the electricity generation business. Small shareholders voiced opposition to the purchase price.

The takeover of Bayernwerk will increase group turnover to about DM40bn, moving Viag into the top 10 German companies in sales terms.

The European Commission has cleared the Viag/Bayernwerk transaction, because there was no overlap between Viag and Bayernwerk in the energy market. In the gas sector, where Ruhrgas was main competitor, both companies were active in different geographic markets. In the electricity sector Viag uses its produced electricity for its own aluminium and chemical plants. Apart from the energy sector, Viag and Bayernwerk are active in different sectors (Viag: aluminium, chemicals, packaging materials, trade; Bayernwerk: paper manufacturing).

The acquisition of Bayernwerk, one of Germany's largest utilities, was a tactical move to increase the importance of electricity generation and distribution within the Viag group. It also underscores the chairman's goal of concentrating 50% of Viag business on energy. The energy division currently contributes around DM3.7 billion, or 16%, of group sales. Pfeiffer wants the industrial division to contribute 40% of sales and the trading and transport division to generate the remaining 10%. To reach these goals, Pfeiffer has announced Viag's intention to buy out another state-owned utility. Through Bayernwerk, Viag has decided to acquire 77.5% of Rhein-Main-Donau AG (RMD) for DM620 million.

The merger of Viag and Bayernwerk has by some been considered a 'reverse take-over'. Bayerwerk used Viag to privatise itself. In fact, a large sum of the money for the take-over was paid out of the large liquidity funds of BW.

5. Ownership, privatization and competition

In 1986 40% of the shares of the Federal state in Viag were sold on the stock exchange, in 1988 the other 60%.

In 1994 a stock broker analyst wrote enthusiastically: 'Viag AG is living proof that privatization works. Almost immediately after the federal government sold its 60% share in 1988, the company started reinventing itself. Through acquisitions in a wide-range of businesses, Viag has become one of Germany's fastest growing companies and has doubled its turnover.' (German Brief, a publication of FAZ, 1991-1995)

However, one could question the extent towards this privatisation will lead to a more market dynamics in the sector. It could also be argued that state monopolies have been replaced by private monopolies. Although Veba, RWE and Viag compete head to head in new markets like telecom, in other segments they all pursue the same strategy and do not really seem to compete, especially in the energy sectors. They have some joint operations, for instance Viag and the other two large electric utilities, Veba's PreussenElektra AG and RWE AG - have taken over the former East German VEAG group.

Viag and RWE are connected through their shares in Isar-Amperwerke, itself a main shareholder of Viag. In 1994 Bayernwerk bought an indirect stake in Isar-Amperwerke (IAW). The von Finck family has announced that it and members of other families who founded Isarwerke sold roughly 35% of the holding company of IAW: Bayernwerk has acquired just under 20% in a transaction valued at DM1.3bn. The remainder was bought by Bankgesellschaft Berlin.

The von Finck family and other founder families still hold 30% of Isarwerke. The 25% and 10% stakes held by RWE and Allianz respectively remained unchanged. The holding concern, in turn, has 75% of the IAW shares, with another 10% held by Lech Elektrizitätswerke.

Bayernwerk says that a bigger participation is 'presently' not possible for cartel reasons. Observers think this means that Bayernwerk is exploring other ways of increasing its stake, and the RWE interest seems to be one possibility. For the moment, Bayernwerk wants to extend the already existing cooperation between the two electricity suppliers to include the joint optimising of their power stations.

In december 1994 Viag increased its influence in IAW, by having Obermeier appointed chairman of the IAW supervisory board. Obermeier is replacing August von Finck who has now sold his remaining 16% interest in Isarwerke, which holds 80% of IAW. Bayernwerk itself is planning to set up a 'hydro holding company' which is to group its hydro activities and those of Rhein--Main-Donau AG. It could also include IAW. Although IAW also has a 13% stake in Viag, there is no doubt about the balance of power between the two companies. IAW chairman Alfred Bayer had to resign from the Viag supervisory board to clear the way for Obermeier's appointment to that of IAW.

The big German conglomerates are all connected through interlocking board members. Deutsche Bank have representatives on the boards of Viag, Veba and RWE, Dresdner bank on RWE and Veba; Westdeutsche Landesbank Girozentrale on RWE and Viag; Allianz AG (partner of Viag in telecom ventures) on RWE and Veba, Bayer on RWE and Veba. Mr. Leysen from Gevaert sits on the boards of Veba and Viag.

Another company with the same character as Veba, Viag and RWE is Preussag AG, active in energy, steel, trading and transport, plant engineering and shipbuilding and building engineering. On the board we again find Deutsche Bank, Westdeutsche Landesbank Girozentrale, Dresdner bank and also RWE.

Apart from these factors, indicating at least some form of coordination between the large German conglomerates, the private market character of Viag is also restrained by the influence of the bavarian state, which holds a blocking minority. Viag has been accused of returning to state control as a result of the Bayernwerk merger. All of Viag's large shareholders belong to the (former) Bavarian industrial-financial-state network. They all have close business links to the Bavarian government.

Who owns Viag?

Freistaat Bayern	25,1
Isar-Amperwerke (Von Finck family)	14
Bayerische Landesbank	5
Bayerische Vereinsbank	6
Bayernhypo	5
Others	44,9

Source: Manager Magazin 7/1994

So, it may not come as a surprise that in january of this year, the Bavarian state government lined up behind Viag AG to demand an early end to Deutsche Telekom AG's monopoly on basic telephone services.

6. Financial results

Viag has always been a very profitable company, trusting on the profits coming from its electricity business. Four of the Viag group's other subsidiaries wrote large losses in 1993, although each is expected to return to profitability in 1994.

In most of these areas - primarily aluminium, glass and packaging - industry overcapacity persists. In metal packaging the competitive pressures felt last year should ease some what as stocks are run down, so earnings should stabilise. But the glass-making operations could do worse. Trading is not the sole concern just now. Viag has a 20 per cent stake in steel maker Klöckner Werke, struggling to pay off huge debts. Through its own subsidiary Klöckner & Co, Viag also buys and sells Klöckner steel. This is not a lucrative business, but Viag has little choice but to help keep its associate afloat.

Group turnover in 1993 fell two per cent to DM23.7bn, from DM24.3bn the year before, due to losses in the aluminium and packaging operations. The company has spent DM120m on redundancy costs for about 10 per cent of its workforce and said it would shed a further 4,000 jobs this year. Viag's special glass subsidiary, Gerresheimer Glas AG, for instance, wrote a loss of DM54 million on sales of DM1.3 billion in 1993.

Another troubled subsidiary was Papierwerke Waldhof-Aschaffenburg AG (PWA) sold at the end of 1994. Because of depressed international paper prices, the company wrote a loss of DM120 million on sales of DM3.9 billion. Figures over 1994 have been published only partly.

The Viag group in figures (in DM millions)

Results	1994	1993	1992	1991	1990
Turnover	28,900	23,734	24,311	23,587	19,423
Pre-tax profit	850	614	935	1,085	883
Net profit	-	302	371	405	336
Cash Flow	-	2,326	2,381	2,402	1,953
Investment	7,600	2,183	2,487	4,003	2,219

Per division	1994	1993	1992	92-93 % change
Total sales	28,900	23,734	24,311	- 2.3%
Energy	5,300	3,720	3,531	5.3%
Aluminium	-	4,733	5,272	-10.2%
Chemicals	2,140	1,648	1,599	3.1%
Refractories	-	1,441	1,414	1.9%
Glass	-	921	1,049	-12.2%
Metal packaging	-	3,556	3,452	3.0%
Trading and services	-	6,434	7,367	-12.6%
Transport and logistics	-	1,281	627	104.3%

Viag expected the positive development in all lines of its business, which marked the first half of 1994, to continue in the second half. In the energy sector, turnover remained virtually unchanged, at DM2bn, from the first six months of 1994. It says both turnover and earnings remained constant due to the electricity and gas businesses of Bayernwerk, Innwerk and Thyssengas. While power sales in these utilities' own supply areas remained virtually unchanged, gas sales rose 4%, thanks to the cold weather.

Viag invested DM370m in grid and plant in the period. Investment in shareholdings rose to DM454m, with the bulk undertaken by Bayernwerk, in particular in regional and supra regional acquisitions in East Germany.

Among them were the purchase of 22.5% of Veag and of the majority share in the three Thuringian regional utilities which have been merged to form TEAG Thüringer Energie. Other important investment projects over 1994 included a new packaging plant.

5. Viag by division

CHEMICALS DIVISION

The Chemicals Division reported sales of DM 1,648 million in 1993. It is concentrated under the umbrella of SKW Trostberg AG, one of the older acquisitions of Viag. Some years ago, Viag started to turn the SKW Group into a supplier of specialty chemicals. Subsequent acquisitions were aimed at this goal. Now the SKW companies are loosely grouped together in four sectors, which will be subscribed subsequently.

* Building Chemicals

Annual sales of the sector Building Chemicals reached DM 800 million in 1993, which accounts for 47% of the sales of the SKW Group. This sector has developed into the core area of SKW in recent years. It has been benefiting strongly from the reunification of Germany in 1990. Foreign sales have been more depressed, reflecting the situation in the building industry in most other countries.

Subsidiary PCI opened a new factory for tile laying and chemicals in Hamm in 1992, which reached full capacity in the summer of 1993.

In 1993 an important takeover took place through the acquisition of Büfa Baeuerle GmbH & Co., which manufactures varnish and paint. Annual sales of Büfa Baeuerle are around DM 250 million.

TABLE 1 : Building Chemicals Sector			
Subsidiary	Location	Country	Ownership
PCI Augsburg GmbH	Augsburg	Germany	100%
	Hamm		
	Wittenberg		
SKS-Technik Säure- und Korrosionsschutz GmbH	Göppingen	Germany	100%
Büfa Baeuerle GmbH & Co.	Oldenburg	Germany	100%
Cela Farbenfabrik C.Lagoni & Sohn GmbH & Co.	Kiel	Germany	100%
SKW Bauwerkstoffe Piesteritz GmbH	Wittenberg	Germany	100%
BWK Krieglach Bauwerkstoffe GmbH	Krieglach	Austria	100%
Bettor, S.A.	Barcelona	Spain	100%

Nordisk Bygge Kemi A/S	Rodekro	Denmark	100%
ChemRex Inc.	Shakopee	USA	100%
Canadian Adhesives Ltd.	Montreal	Canada	100%
SKW East Asia Ltd.			75%

*** Chemicals, Agriculture, Nature's Products Sector**

The companies in this sector on the one hand produce nitrogen compounds for a broad spectrum of applications. On the other hand, extracts of natural substances are produced.

In 1993, the nitrogen business was not doing very well, while in the area of Nature's Products sales again went up. For some years the profits in this sector have been dropping, because of changes in exchange rates, a weaker demand for some products from Eastern Europe, increasing personnel and raw material costs, and necessary investments in environmental protection and infrastructure.

To expand the activities of this sector into the field of biotechnology, the new firm SKW Biotechnológiai was set up in Hungary in 1993. It will produce antibiotics.

In November 1994 the bio-industry business of Sanofi, the pharmaceuticals division of the French state-owned oil group Elf-Aquitaine, was bought by Viag for FF 4.4 billion (DM 1.28 billion). This division covers a range of activities including production of ingredients such as gelatin and flavours for dairy and meat processing. The food additives business has annual sales of FF 3.3 billion (DM 960 million), and the rendering business has annual sales of FF 1.5 billion (DM 435 million).

Subsidiary	Location	Country	Ownership
SKW Stickstoffwerke Piesteritz GmbH	Wittenberg	Germany	100%
NIGU Chemie GmbH	Waldkraiburg	Germany	100%
HEG Hopfenextraktion GmbH	Münchsmünster	Germany	70%
Fromm, Mayer-Bass GmbH	Munich	Germany	65%
SKW Biotechnológiai Kft.		Hungary	100%
Sanofi Bio-Industry		France	100%
SKW Italia S.r.l.		Italy	100%

SKW Chemicals UK Ltd.		UK	100%
SKW Chemicals Inc.	Marietta	USA	100%
SKW Nature's Products Inc.		USA	100%

*** Metallurgy Sector**

This sector supplies chemicals to the steel and metal industry. Due to the continuing worldwide recession in these sectors, sales and profits of this sector have been depressed during the last few years.

TABLE 3 : Metallurgy Sector			
Subsidiary	Location	Country	Ownership
Stollberg GmbH.	Oberhausen	Germany	50%
Graphitwerk Kropfmühl AG	Munich	Germany	33%
Affival S.A.	Solesmes	France	50%
Anglo Blackwells Ltd.		UK	100%
SKW Metals UK Ltd.		UK	100%
Tecpro Corp.	Atlanta	USA	100%

*** BHS-Bayerische Berg-, Hütten- und Salzwerke AG**

BHS-Bayerische Berg-, Hütten- und Salzwerke AG produces salt and garden products, and owns an mechanical engineering plant in Sonthofen. Annual sales of BHS dropped with 35% in 1993, because of the sale of two engineering plants in Peissenberg and Weiherhammer. Earnings improved in 1993, but remained low.

TABLE 4 : BHS-Bayerische Berg-, Hütten- und Salzwerke AG			
Subsidiary	Location	Country	
Bayerische Berg-, Hütten- und Salzwerke AG	Munich	Germany	100 %
Bad Reichenhaller Salz Handelsgesellschaft mbH	Munich	Germany	100 %
Eufloer GmbH für Gartenbedarf	Munich	Germany	100 %
BHS-Voith Getriebetechnik GmbH	Sonthofen	Germany	60 %

* Non-consolidated Chemical Interests

In June 1994, Viag pooled its interest in the German chemicals company Goldschmidt with Rütgerswerke. Together the two companies own a 45.8%-stake in Goldschmidt. By pooling their interest, Viag and Rütgerswerke claim a say in the decision-making of Goldschmidt. So far, this company has been dominated by the group of Goldschmidt heirs and the Allianz insurance company.

Viag and Rütgerswerke refer to the necessity of securing Goldschmidt's future through realignment. To this end as well as for acquisitions and substantial investments required, financial funds at considerable level are necessary. Viag and Rütgerswerke have suggested a capital increase at Goldschmidt, in which they intend to participate.

* Results

In Table 5 the results of the total SKW Group, including all four sectors are being summarized.

TABLE 5 : Key Figures SKW Group / Chemicals Division						
Figure (DM million)	1989	1990	1991	1992	1993	1st Half 1994
Sales	1,798	1,526	1,922	1,599	1,648	980
Profits				45	45	
Investments	120	119	157	133	86	65
Depreciation	78	75	105	121	89	
Employees	5,365	5,081	6,898	5,591	6,400	6,243

As can be seen in the table, investments are mostly higher than depreciation, but only to a small extent. SKW Group still is eager to expand by buying new companies. At the same time, unprofitable companies are being sold. This is one reason for the fluctuations in sales and the number of employees.

But the fluctuations in sales also reflect the cyclical nature of the markets on which the division operates. The volatility of these markets makes it very difficult to stay profitable over the years. The fact that SKW Group was able to maintain the same profit level in 1993 as in 1992, was only possible because of the very strong sales in the building chemicals sector.

In the first half of 1994, sales and profits improved. The increase in sales was almost completely due to the acquisition of SKW Stickstoffwerke Piesteritz, while the increase in profits again came entirely from the building chemicals sector.

* Perspectives

The production of specialty chemicals seems to be the only quality the different companies in the SKW Group are sharing. They don't share a common technology-base, which would give their cooperation surplus value in the field of R&D. Nor do they share common markets, which would enhance their marketing possibilities.

Furthermore, many of these products (nitrogen, salt) are very low-tech. This means according to the company that the high German labor costs adversely affect the competitiveness of these business on the world market. Since East European countries, where labour costs are much lower, are expanding their exports of these kind of products as well, the future of these operations seems to be questionable.

A clear, well-defined strategic focus would certainly be necessary to give the SKW group long-term profit opportunities. This would imply the disposal of several companies now belonging to the SKW Group, and using investment funds to strengthen the position of its core products.

The most logical choice for SKW seems to be to concentrate on its building chemicals and biochemical operations. Success in biotechnology however is rather unpredictable, and requires a lot of R&D-investments. And some caution is needed concerning the building chemicals sector: it should not be expected to continue growing so rapidly when the east German building boom is over.

ENERGY DIVISION

The Energy Division reported consolidated sales of DM 3,720 million in 1993. It is the oldest, and one of the largest divisions within the Viag conglomerate. Its consists of several companies producing, transporting and distributing electricity, and transporting natural gas. These companies will be described in more detail underneath.

* Bayernwerk AG

Bayernwerk AG is Germany's third-largest supplier of electricity which, through equity interests in regional distributors, provides Bavaria with most of its requirements for electricity. 58% went to distribution companies (distributing electricity to private consumers and small companies) and 42% to end consumers (big companies and institutions). Of this 40.1 kWh, three quarters were met by Bayernwerk's own power stations.

Annual sales of Bayernwerk reached DM 6.4 billion in 1992/93, and net income for the year was DM 372 million. The company invested DM 1.0 billion in tangible fixed asset. New power station are being built in Rostock, Erlangen and Lippendorf, built together with VEAG, Badenwerk and Energieversorgung Schwaben.

In former East Germany, Bayernwerk is active at both the supraregional as well as regional and local levels, above all in Thuringia. At the supraregional level Bayernwerk, together with RWE and PreussenElektra, in February 1994 has taken over Vereinigte Energiewerke AG (VEAG) and Lausitzer Braunkohle AG (LAUBAG). In this way, the three largest West-German electricity companies secured the control over the high-voltage electricity transport network in eastern Germany.

At the regional level, Bayernwerk is investing in modernization and reorganization of the regional electricity and district heating supply system in Thuringia. In January 1994 a majority interest in the three regional energy utilities in Thuringia was acquired. The three will be merged in Thüringer Energie AG (TEAG), to arrive at an optimum company size.

Bayernwerk is also active at an international level, through EuroBayernwerk GmbH. In some projects outside Germany, Bayernwerk collaborates with Electricité de France (EdF), PreussenElektra and RWE Energie.

* Innwerk AG

Innwerk AG (owned 100% by Viag), together with its subsidiary Innkraftwerke GmbH, operates twelve hydroelectric power stations on the river Inn, with a total generating capacity of 480 MW. The company produced 3.1 billion kWh in 1993.

Innwerk has a 25% interest in Österreichisch-Bayerische Kraftwerke (ÖBK), which operates power stations on the Inn with a total generating capacity of 363 MW. Total output of ÖBK reached 2.1 billion kWh in 1993.

Other important companies include:

*** Bayerische Wasserkraftwerke AG**

*** Berliner Kraft- und Licht AG**

(BEWAG), in which Viag has a 10%-share, is the electricity distribution company for West Berlin. It was merged with the East Berlin utility company EBAG.

*** Rhein-Main-Donau AG**

Bayernwerk as the leader of a consortium took over the respective shares of the Federal Republic of Germany and the State of Bavaria in Rhein-Main-Donau AG on January 1, 1995. Bayernwerk AG's share is 77.5%. RMD is a rather unusual utility, in that it operates 57 hydroelectric power stations and also runs the Rhine-Main-Danube canal that winds through Bavaria. RMD has about 9.4% of Bavaria's total power generation capacity. The company has annual sales of about DM 200 million and pre-tax profits of about DM 60 million. It employs about 1,050.

*** Isar-Amperwerke**

Also on January 1, 1995, Viag has taken over Bavarian power supplier Isar-Amperwerke (IAW).

*** Thyssengas GmbH**

Thyssengas GmbH, of which Viag owns 50%, is one of the leading long-distance gas supply companies in Germany.

*** Rohöl-Aufsuchungs AG**

In the first half of 1994, Viag acquired a 25%-stake in the Austrian gas company Rohöl-Aufsuchungs AG (RAG).

TABLE 1 : Main Energy Division Subsidiaries in 1993			
Subsidiary	Ownership	Production (mln kWh)	Viag share (mln kWh)
Bayernwerk AG	38,8%	30,000	11,640
Innwerk AG	100%	3,100	3,100
Innkraftwerke GmbH	100%		
ÖBK	25%	2,100	525
Bayerische Wasserkraftwerke AG	33,3%	1,200	400
Berliner Kraft- und Licht	10%		
Other interests	100%	2,009	2,009
Total Viag Electricity		38,409	17,674
Thyssengas GmbH	50%	70,000	34,916

All companies which are under the control of the Viag conglomerate produced 38.4 billion kWh of electricity, which is 7.3% of the total electricity production in Germany in 1993. The Viag-share in this is 17.7 billion kWh, which is 3.4%

of total German electricity output.

However, of Viag's share 46% is being produced by nuclear power stations, compared with 29% at the national level. Of the two other large electricity companies in Germany, Veba and RWE, the last one does depend on nuclear energy to a much lesser extent. For Veba, the share of nuclear energy is 44% of total power generated. RWE only depends for 21.4% on nuclear energy as a primary source of electricity. The high dependency of Viag and Veba on nuclear energy may form a business risk, as a forced retreat from nuclear energy by political pressure is still not impossible in Germany (Manager Magazin, 7/1994). The acquisition of RMD therefore seems to be a very smart move for Bayernwerk, because it will give the company access to more hydroelectric power generation plants.

* Results

In Table 2 the results of the Energy Division are being summarized. Sales are steadily rising and profits are solid. The levels of employment and investments are very steady. The full acquisition of Bayernwerk will of course mean that the sales of the Energy Division will rise substantially.

TABLE 2 : Key Figures Energy Division						
Figure (DM million)	1989	1990	1991	1992	1993	1st Half 1994
Sales	2,859	3,049	3,213	3,531	3,720	2,032
Investments	377	404	417	481	448	370
Depreciation	493	474	445	471	435	
Employees	11,140	11,182	11,280	11,923	11,959	11,999

* Perspectives

The profits of the Energy Division have always provided the cash to build and extend the Viag conglomerate. This is due to two important properties of the energy sector. Firstly, this sector is relatively insensitive to economic cycles, resulting in a steady and solid growth of sales. Secondly, the generation and distribution of electricity and the distribution of gas are to a large extent protected from competitive pressures, resulting in relatively high margins. The first property will not change very quickly, but the second one is bound to change on the short or medium term.

For some years now, the European Commission has been trying to liberalise the European gas and electricity markets, partly inspired by the experiences with the liberalisation of these markets in the United States and the United Kingdom. These proposals have been attacked very heavily by almost all utilities within the European Union. Not only by state monopolies like Electricité de France, Gasunie

(the Netherlands) and ENEL (Italy), but also by the large private utilities in Germany like Veba, RWE and Bayernwerk (also know as the Big Three).

In a very moderate form, the proposals of the European Commission were eventually adopted in December 1993. All attempts to force the European gas and electricity monopolies (including the quasi-monopoly of the Big Three) to open their markets to competition have been removed. Nevertheless, this cannot be seen as a definitive victory for the powers that be in the gas and electricity sector.

In the electricity sector real competition is somewhat further away than it is in the gas sector, as cheap supplies cannot be transported economically over very long distances. Competition will therefore take the form of building competing power stations near the customers. On the one hand it is conceivable that companies like Wintershall, will take such a step as well in the near future. As gas powered stations at this moment, and probably in the coming years as well, produce much cheaper electricity than nuclear power stations, such a development could bring Bayernwerk in some trouble.

But at the other hand, the Big Three belong to the largest electricity companies of Europe. Liberalisation of the European markets does also offer them opportunities to conquer new markets, for instance in Eastern Europe. But also in monopolised markets as France, Belgium, Spain and the Netherlands they may find good opportunities.

It will depend on the strategic skills of the Bayernwerk management how these threats and opportunities of the coming liberalisation of the European gas and electricity markets will be handled. But one thing is sure: the quiet and stable growth of sales and profits will soon be something of the past.

REFRACTORIES DIVISION

Since 1986 Viag has a close cooperation with Didier-Werke AG, producer of fireproof materials and technical ceramics. In summer 1989 Viag's 27% stake increased to 49.9%, which was regarded as a logical consequence of the extension of the cooperation. The stake is held indirectly via Elektrowerke GmbH Holding. February 1991 Viag's stake increased to 51%, leaving the Deutsche Bank with 26% as a major minority stakeholder.

* Division-level

The division contains a refractory and an engineering services sector. Until recently, Advanced Ceramics was meant to be the divisions' third pillar. The ten year old growth predictions did not materialize. Notwithstanding several technical successes, sales fell short of the expectations. A strategy was developed to transfer activities to joint-ventures with a major partner as majority shareholder. Most activities were sold end 1993. From that moment on regular activities manage the remaining ceramics activities, like high performance ceramic materials.

The division met difficult market conditions, with a European crisis in iron and steel industry the division's most important customer. Other sales markets like glass industry remained difficult as well. Overseas markets abroad, United States and South east Asia, look better, with increasing sales. Nevertheless, sales on division level stabilize in spite plant optimization and rationalization measures. Didier continued its implant programme of site and product improvement with emphasis on domestic locations. Additional cost-cutting measures related primarily to administration and marketing.

Mid 1993 the Italian specialist of high grade cast refractory products for glass industry, REFEL, was acquired. Sales went up 2%, but the division's result stayed negative.

* Refractories

Refractory involves high temperature units for industrial smelting and firing processes, thermal isolation and heat storage. Didier is one of the largest in the world in this sector.

Two years ago a restructuring and cost cutting programme started. Measures aim at concentration of production in a smaller number of plants and reduction of general overhead in production, research, marketing and administration.

In Europe earnings in France and Spain, as for the Scotland subsidiary, went down in 1991. In Germany two sites closed but still utilization dropped from 82% to 75%. The pressure on prizes is strong. The Didier 2000 strategy was developed based on cost cutting and integrating the German and European activities. Soon after the Spanish Ecuelles plant closed, with production shifted to Breuillet (France) and German plants. France plants in Valenciennes and Flaumont shifted to a new company Lhoist-Didier Réfractaires SA in which Didier is minority shareholder. Didier 2000 was extended with a programme of

reducing management hierarchies, creating more effective marketing structure and more problem orientated research. The Belgium and Scottish activities performed well. REFEL in Italy was acquired. Nevertheless, losses increased with east European imports as extra threat.

Best performance is found in Malaysia pushed forward on the wave of South East Asian economic growth. A Malaysian plant opened in the summer of 1993 for unshaped refractory products completing the distribution activities in Singapore. Overseas activities stayed profitable, but were not able to compensate the European losses.

TABLE 1: Refractory Sector			
Subsidiary	City	Country	Ownership
Didier Refractorios SA	Lugones	Spain	100%
D.S.I.C.	Breuillet	France	99.9%
Thor Chemicals Ltd	Clydebank	UK	100%
NARCO Ltd	Dorval	Canada	100%
North American Refractories Co.	Cleveland	United States	90.9%
Zircoa Inc.	Solon	United States	100%
REFEL SpA	San Vito al Tagliamento	Italy	70%

*** Engineering services**

This sector deals with two activity-areas: high temperature and energy engineering and environmental and corrosion protection.

In 1992 a growth strategy was formulated, together with a restructuring plan. The German company Gütling GmbH was acquired and the pig iron and energy engineering department hived off.

TABLE 2: Engineering Services			
Subsidiary	City	Country	Ownership
Didier Anlagentechnik Holding	Wiesbaden	Germany	100%
Didier M & P Energietechnik	Wiesbaden	Germany	66.7%
Dinova GmbH	Königswinter	Germany	100%
Didier Säurebau GmbH	Königswinter	Germany	100%
Gütling GmbH	Fellbach	Germany	100%

In 1993 the sector matured as seeable by the establishment of Didier Anlagen-technik Holding GmbH. This company internationalized soon with a subsidiary in Poland and a joint-venture in Shanghai, China.

But the sector faced problems due to the reluctance to invest of the Chemical industry and negative trends in the automobile industry. Earnings improved, but special charges caused a loss over 1993.

* Results

The Division's sales stabilized, with sharply declining results. The number of employees tended to stabilize too, but a small decrease showed. These figures are too some extend clouded by acquisitions and shedding of activities.

	1989	1990	1991	1992	1993
sales (DM million)	1,152	1,516	1,401	1,414	1,441
of which: refractory			±1,200	±1,200	±1,100
engineering			±150	±190	±300
advanced ceramics			±50	±30	
profit (DM million)				1.2	-39.8
investments (DM million)	61	60	56	46	46
depreciation (DM million)	53	58	59	49	48
dividend per share (DM)				4	none
employees	7,648	7,700	6,927	6,934	6,764

The first six month of 1994 showed a hesitated increase in sales. The Division's result is still negative, but improved compared with the first half of 1993.

Investments in and depreciation of tangible assets are relatively balanced, with a change from net investments in 1989 and 1990 to net de-investments in later years.

* Perspectives

The outlook for the Division remains difficult. The management claims, recovery only be possible with ongoing optimisation of capacity, cost reduction and increased volumes of overseas trading. With a continued crisis in the European steel-industry prospects are bad. Investments and product renewable stays behind, with a crumbling market potential as result. In such circumstances the division's high world market share and well-known product know how can not be materialized.

Not surprisingly Viag announced to merged its fireproofing activities with Radex-

Heraklith of Austria. Viag said it would acquire an 18% stake in Radex, and sell the Austrian company a 25.5% stake in Didier-Werke, and then a majority stake, starting in mid-1997. Viag is expected to gradually withdraw from Didier.

GLASS DIVISION

In 1990 VIAG's holding company VBB (VIAG-Bayernwerk Beteiligungs-gesellschaft) acquired a majority interest in Gerresheimer Glas. VBB possesses a 51% stake, formerly owned by Westdeutsche Landesbank Girozentrale. The other 49% being scattered among small investors.

Gerresheimer Glas was supposed to be VIAG's 'jewel in the crown'. A preten-sion still to be met. Nevertheless, the company is market leader in its sector in Europe and in some fields even in the world. Together with its subsidiaries it forms the Glass Division. With sales reaching DM 1,326 million in 1993, this division is one of VIAG's minor divisions.

The divisions product-range consists of:

- container glass: standard containers for beverage and food industry; special glass packaging for cosmetic and health care industries, as well as for medical and pharmaceutical packaging.
- tubing glass: ampoules, bottles and special packages for pharmaceutical, medical and laboratory uses.

*** Division-level**

The expectations for the Glass Division were never met. After several years on ongoing growth, sales and profits deteriorated in 1992. In particular the effects of the German unification were overrated. Combined with a reduced propensity to consume, the profit margins of container glass products fell and the company faced a large overcapacity. During 1992 two melting furnaces were shut down for the rest of the year. By mid-1993 the division's sales were down 12% and the number of personnel 16%. Part of this reduction was caused by the inter-firm sale of some plastic activities. As per 1 May 1993 Bramlage and Ver-packungs-Industrie Kutenholz were sold to Gerresheimer Glass' sister company Schmalbach-Lubeca. This transaction accounted for 4% of the division's 12% decrease in sales. Over 1993 the division made a DM 40 million loss, despite the profit made by selling the plastic sector and assets no longer needed.

End of 1993 the company acquired a majority interest in the US firm OI Kimble FTS, Inc. producer of glass packaging and tubing glass. Kimble is said to supplements the European activities.

*** Container Glass**

All production sites are located in Germany. The container glass products are severely hit by overcapacity, decreasing demand and price pressure. As general trend one can say, that the more a product is standardized, the more it is hit by the above mentioned threats. But in 1993 the specialized, customized products did not meet the 1992 level of sales and earnings, too. One production site for standardized, high volume products was closed. These products are now manufactured in Düsseldorf, Achern, Budenheim and Bernsdorf.

TABLE 1: Container Glass Sector			
Subsidiary	City	Country	Ownership
Bernsdorfer Glas GmbH & Co KG	Bensdorf	Germany	100%
Glashütte Budenheim GmbH	Budenheim/Rhein	Germany	100%
Gerro Plast GmbH Kunststoffartikel	Dusseldorf	Germany	100%
Glashüttenwerke Holzminden GmbH & Co KG	Holzminden	Germany	90%
Spessart Glas GmbH	Lohr/Main	Germany	100%
Tettauer Glashüttenwerke AG	Tettau	Germany	73.7%

*** Tubing Glass**

The tubing glass products are less affected by general trends than container glass products, although conditions worsen. A European trend of cutting health care budgets directly affects the tubing glass standard products sales. Special products are not affected at all so far. Combined sales for this sector dropped in 1993 compared with 1992. Earnings dropped too, but were still satisfactory. In 1992 sales remained stable in spite of the loss of the eastern markets and declining demand. Result were on par with the previous year.

The seven European production facilities were supplemented end 1993 by an American sister company, OI Kimble.

TABLE 2: Tubing Glass Sector			
Subsidiary	City	Country	Ownership
Kimble Italiana Spa	Pisa	Italy	100%
Bünder Glas GmbH	Bünde	Germany	100%
FBG-Trident Ltd	Bristol	United Kingdom	100%
Flacor SA	Chalon-sur-Saône	France	51%
Verretubex SA	Nogent-Le-Roi	France	100%
Fritz GmbH & Co KG		Germany	100%
Anchor Glass Company Ltd		United Kingdom	100%
OI Kimble FTS Inc	Toledo/Ohio	United States	51%

* Results

The increase and following decline of the division's sales is clearly shown in table 3. Both profits and number of employees show the same trend.

TABLE 3: basic figures Glass Division					
	1989	1990	1991	1992	1993
sales (DM million)	987	1,193	1,536	1,512	1,326
of which: container glass				±1,200	1,134
tubing glass				±300	192
profit (DM million)			52.0	11.6	-39.1
investments (DM million)	111	156	249	144	170
depreciation (DM million)	82	91	136	136	133
dividend per share (DM)			11	5	none
employees	5,065	5,708	7,127	6,892	5,808

Sales breakdown demonstrates a similar development for both the container glass and tubing glass sector.

Both investments and depreciation of tangible assets fluctuate strongly. Net investments were positive in the five-year period examined, but fluctuate from DM 8 million (1992) to DM 113 million (1991).

* Perspectives

The first six months of 1994 showed a strong recovery. Compared with the first six months of 1993 sales increased with 12% to DM 536 million. The division even made a profit. However, both sales increase as profit recovery were to a large extent due to the acquisition of the 51% interest in OI Kimble. Notwithstanding that acquisition, management claims first results of the extensive measures carried out in the container glass sector.

It has to be that way, will the division succeed in making the most out of its large domestic market share in container glass and overcoming the strong price drops in that sector. If this hurdle is taken, the decrease in tubing glass market has to be taken with the company's world leadership as main advantage.

TRADING AND SERVICES

In 1988 the Deutsche bank took over the trading company Klöckner&co. The company was in serious difficulties as a result of the European steel crisis. After restructuring, it was sold in 1990 to Viag, which thereby got hold of a trading company, just like Veba, owning Stinnes. But Klöckner still is less integrated in Viag, compared to Stinnes in Veba. For instance, Veba integrates trading and transport, whereas Viag keeps these two sectors apart. Also the financial companies of Viag (Reichs-Kredit Gesellschaft Berlin, Viag Immobilien Management Bonn, Deutsche Industrie-Versicherungsstelle GmbH Berlin/München) are kept apart, unlike those of Veba. Some integration of companies within Viag has started around this division. For instance Klöckner took over the aluminium semi-finished products business from VAW in 1992.

Klöckner trades in steel, raw materials, chemical products, machine tools, energy resources, textiles and since 1994 computers. Besides warehousing and industrial production activities are also part of this sector.

TABLE 1: Trading and Services Division			
Subsidiary	Location	Country	Owned
Klöckner & Co AG	Duisburg	Germany	51%
Steel			
Löwe & Jaegers AG & Co KG	Duisburg	Germany	100%
Howard E. Perry & Comp Ltd	Willenhall	UK	100%
Debrunner Koenig Holding AG	Dietikon	Germany	60%
Oving Diepeveen Struycken BV	Rotterdam	Netherlands	100%
Moritz Waldmann & Bruder GmbH & Co KG	Vienna	Austria	100%
Klöckner Namasco Corporation	Wilmington	USA	100%
Klöckner East Asia Ltd	Hong Kong	Hong Kong	100%
Raw Materials Recycling Enviroment			
HKS Hoogovens Klöckner Scrap Metals BV	's Gravendeel	Netherlands	50%
Altwert Oecotec GmbH	Essen	Germany	100%
Chemicals, Energy, Textile			
Langlois SA	Rennes	France	100%

Wilh. Ispert AG & Co KG	Cologne	Germany	100%
Industrial Plants, Machine Tools			
Klöckner Industrie-Anlagen GmbH	Duisburg	Germany	100%
Klöckner Stadler Hurter Ltd	Montreal	Canada	
Gebr. Hoffmann werkzeug- maschinen AG & Co KG	Hilden	Germany	100%

A important part of Klöckners business besides trading consists of 'turn key projects'. For example in 1991 a consortium of Klöckner Industrie-Anlagen and Saarberg-Holter-Lurgi won a DM381m contract to construct the first smoke desulphurisation equipment for a hard coal power plant in Poland. Klöckner said the order is for six turn-key pieces of equipment, built according to the process developed by Saarberg-Holter. The equipment will be installed in the Opole power station currently under construction.

Another major acquisition in the past was the take-over Deutsche Fina liquid-gas operations in 1991. Deutsche Fina was the German operating unit of Petrofina (Belgium).

Klöckner bought a controlling stake in Germany's pan-European computer distribution and services group Computer 2000 AG (Munich). The company netted profit of DM42.3 million in 1993 on sales of around DM2.79 billion. Computer 2000 is now one of the three largest computer distributors in the world, and forecasts Dollars 2,200m sales this year. The company told Handelsblatt it wants to gain a foothold on the US market in the next 24 months and to become a global player by the year 2000 with turnover of Dollars 6,250m. It regards Ingram Micro Inc and Merisel Inc as its major competitors. Computer 2000, which will be managed by Klöckner&co, has been consistently ranked as one of Germany's fastest growing companies, although its profit margin has been put under pressure by the price-cutting fever in the PC industry.

In december 1994, Klöckner merged its recycling activities with those of Thyssen Handelsunion, into Thyssen Klöckner Recycling employing 2500 people. THU will have a 80% stake in the new venture, Klöckner 20%.

The perspectives of the sector look very mixed. Some parts are quite strong, like the textile trader Ispert, but the traditional steel related parts are still having difficult times. The escapade in taking over a computer distributor will take a lot for the company to be successful. If so, it may mark the beginning of a move into high-tech trading.

TABLE 2: basic figures Trading and Services Division

	1989	1990	1991	1992	1993
sales (DM million)	11,495	9,854	10,761	10,613	9,268
investments (DM million)	99	128	161	202	149
depreciation (DM million)	64	81	97	107	112
employees	8,305	8,297	9,546	10,718	9,539

ALUMINUM

This sector contains a vertically integrated chain: production and processing of aluminum. Moreover, as an important purchaser of electricity and as an element of a possible packaging strategy, the division is much more part of a 'Viag-concept' than many others.

On the world market of primary aluminium, VAW is one of the ten largest companies, with a market share of 2.6%. Among the European aluminium producers, VAW is the fourth largest company after Pechiney, Norsk-Hydro and Alusuisse.

The sectors products include: rolled products, flexible packaging, die casting, extruded products, systems engineering, aluminum, special materials.

TABLE 1: Aluminum Division			
Subsidiary	Location	Country	Owned
VAW Aluminium AG	Berlin/Bonn	Germany	100%
Rolled Products			
Aluminium Norf GmbH	Neuss-Norf	Germany	50%
Flexible packaging			
VAW Europack GmbH	Teningen	Germany	100%
Société Alsacienne d'Aluminium SA	Le Chable-Beaumont	France	100%
Tscheulin-Rothal GmbH	Teningen	Germany	83%
Bolding Verpakkingen BV		Netherlands	100%
Burgopack SpA	Lugo di Vicenza	Italy	99%
Manpac SA	Burgos	Spain	97%
Die Casting			
EB Brühl Aluminiumtechnik GmbH	Brühl	Germany	100%
Alumetall GmbH	Nuremberg	Germany	100%
Ritter Aluminium Giesserei GmbH	Wendlingen	Germany	100%
Extruded Products			
VAW of America Inc	Ellenville	USA	100%
Systems Engineering			

VAW Aluform System-Technik GmbH	Bonn	Germany	100%
Ritter Aluminium GmbH	Wendlingen	Germany	100%
Zarges Leichtbau GmbH	Weilheim	Germany	75%
Aluminium Oxid Stade GmbH	Stade	Germany	50%
Hamburger Aluminium-Werke GmbH	Hamburg	Germany	33.3%
VAW Australia Pty Ltd	Sydney	Australia	100%
VAW Aluminium Canada and Company Ltd	Montreal	Canada	100%
Special Materials			
VAW Flussspat-Chemie GmbH		Germany	100%

In 1991 Viag planned a substantial expansion in the aluminum can-stock and can-making markets. In 1991 VAW bought a 37.1% stake in the aluminum foundry of Eisenwerke Brühl. VAW planned to invest DM700 mil in its aluminum assets.

VAW's upstream diversification program came at a time when sagging ingot prices were applying pressure on aging European smelters, and at a time when North American aluminum interests were drawing beads on Europe's budding aluminum beverage can market. Viag itself had already started negotiations to take over CCE at that time.

At the same time Viag stroke a deal with KHD in 1991. Viag took a step toward beefing up its aluminum rolling capacity through an agreement with the Klöckner Humboldt-Deutz AG (KHD) engineering interests involving upgrading and increasing rolling capacity of its principal operating unit VAW.

In 1992 VAW transferred its aluminium semi-finished product business to Klöckner&co. The transfer involved VAW Leichtmetall Handel (Langenfeld, Germany), and VAW's sales firms in the UK, France and Italy. VAW is focusing on its plant business, under its new strategy. Klöckner expects the takeover to improve its market share in aluminium trade, especially in specialities, and for its mainly German business to spread to neighbouring European markets. Aluminium trade is worth about DM300 mil in total.

In 1992 VAW again cut its primary aluminum production capacity in Germany. The Viag unit's action means that German production will be 300,000 tpy, in the wake of a 26% (105,000 tpy) reduction, after the changes have been totally implemented. The firm cites the action as being based on a sharp drop in the price of aluminum due to the significant, ongoing exports of primary aluminum from the Commonwealth of Independent States.

Another threat to the sector are the high electricity price in Germany, which makes the perspective of the German aluminum smelters very dim.

The planned disposal of a 49% stake in VAM, at present a 100% (aluminium) subsidiary, could improve the financial structure of the group.

TABLE 2: basic figures Aluminium Division					
	1989	1990	1991	1992	1993
sales (DM million)	5,778	5,689	5,134	5,272	4,733
investments (DM mill)	214	318	509	655	618
depreciation (DM mill)	316	276	287	301	297
employees	18,152	17,880	19,791	19,548	17,307

In 1993 the sector made a operational loss of 50 million DM, but still paid 71 million out in dividends to its owners (Manager magazin 9/1994).

METAL PACKAGING

Besides VAW and Gerresheimer, this is the third area of activities in the packaging sector. Activities include tinplate, plastic and aluminum packaging and vacuum closures, made at over 60 locations mainly in Europe and the US. With over an estimated 35 production locations, it is one of the most dispersed and international orientated manufacturing sectors of Viag. Ownership structures are quite complicated and gave rise to tensions directly after the take-over: who was to be the mothercompany?

Viag owns 100% of Continental Can Europe (CCE), which owns 51% of Schmalbach Lubeca AG (SLA) and 99,8% of TDV. Taking over CCE, Viag at first held 64% of the shares in SLA, but following the increase in share capital in 1991, Viag did not exercise its subscription rights. Deutsche Bank owns another 10% of SLA. SLA is the mothercompany running the operations in the daughter companies like TDV. Mr. Kanofsky is chairman of the board of both SLA and CCE.

The hugh metal packaging division has been built in less than 3 years. After the take over of CCE, in the same year Viag bought the US firm Continental White Cap and became the world's leading supplier of vacuum closures. In 1992 Poliesa in Spain was bought, the leading PET manufacturer in Spain. New plants were established in Hungary, Poland (beverage cans), the former DDR (beverage cans) and Wales (vending cups).

TABLE 1: Metal Packaging Division			
Subsidiary	Location	Country	Owned
Schmalbach Lubeca AG	Braunschweig	Germany	51%
Beverage packaging, PET metal packaging, White cap closures			
Thomassen&Drijver Verblifa NV	Deventer Oss	Netherlands	100%
Continental Can Company Ltd	Chester	UK	100%
Continental Can France SA	Bergues	France	100%
Continental PET UK Ltd.	Corby	UK	100%
Continental PET France SA	Bergues	France	100%
Continental PET Espana SA	Madrid	Spain	100%
Continental Femscsomagolo Magyarország Kft.	Vaja	Hungary	100%
White Cap Inc.	Downers Grove	USA	100%

White Cap Italia S.r.l	Parma	Italy	100%
White Cap Magyarorszag Kft	Vaja	Hungary	100%
Plastic packaging			
bebo-Plastic GmbH	Bremervörde	Germany	99%
Cobelplast NV	Lokeren	Belgium	100%
Tedeco BV	Deventer	Netherlands	100%
Bramlage GmbH	Lohne	Germany	100%
Verpackungs-Industrie Kutzenholz GmbH	Kutzenholz bei Stade	Germany	100%
Beten SA	Madrid	Spain	100%
Sobemi NV	Lint	Belgium	100%

In 1993 important acquisitions broadened the scope of this division. Impetus Packaging, the PET manufacturer, has been sold to Viag by CarnaudMetalbox, which is to concentrate on metal packaging and some plastic packaging. Impetus will be controlled by SLA. The company has three units in France, the UK and Spain. Viag is now one of the largest PET producers in Europe. In the plastics sector, plants located in Kutzenholz (Germany) and Beten (Spain) were bought.

Metal packaging forms a basic element in Viag's plans to boost its investment in Asia. End of 1994, the group said it wants to double sales in the region from DM2 billion per year at present (5% of turnover) by the year 2000. The group's CCE division recently acquired 25% of Pacific Can, a drinks can producer based in Hong Kong. It has several plants in China and is currently building a new one in Beijing.

* Results

The hot summer of 1994 proved a profitable outlet for drinking can producers. Turnover increased 7%. The growth sectors PET and white cap were reported to have a very positive development already before the summer had started. The year 1993 was a bad one, with net income dropping from 91 million DM to 10 million DM. Despite this decrease of earnings with 88% over 1993, dividend paid out to the mother company only decreased 37%. In 1993 the sector made a operational loss paid 5 DM per share out in dividends to its owners (Manager magazin 9/1994).

TABLE 2: basic figures Metal Packaging Division					
	1989	1990	1991	1992	1993
sales (DM million)	1,566	1,817	3,400	3,452	3,556
investments (DM million)	114	136	277	275	202
depreciation (DM million)	77	80	157	192	211
employees	5,919	6,553	12,553	12,849	13,210

From 1991 onwards, CCE figures are included in the table. The table clearly shows the lack of investment in 1993 (net investment only 9 million DM). Perspectives of the sector remain difficult, as the industry is marked by high over-capacity. We may expect further exchange of activities between the large European multinationals like CMB, to be able to built specializations. SLA high market shares in almost all of its markets, may provide a basis for the future, but further restructuring is to be expected pushing labour productivity. Already in comparison with 1993, SLA produces with 20% less personnel, 20% more drinking cans in 1994.

TRANSPORT AND LOGISTICS

This division is based on the German/Swiss firm Kühne & Nagel (K&N), which is owned for 33.34% by Viag since 1992. Although Viag only has a minority share, it is considered a full Viag company.

TABLE 1: Transport and Logistics Division			
Subsidiary	Location	Country	Owned
Kühne & Nagel International AG	Schindellegi	Switzerland	33%
Ocean freight, Airfreight, Overland/Logistics			
Kühne & Nagel Beteiligungs-AG	Bremen	Germany	100%
Kühne & Nagel Speditions-AG	Bremen	Germany	100%
Kühne & Nagel (AG & Co)	Bremen	Germany	100%
Kühne & Nagel Investment Inc	Jersey City	USA	100%
Kühne & Nagel Canada Holding Inc	Toronto	Canada	100%
Kühne & Nagel Asia Pacific Holding	Schindellegi	Switzerland	100%
Forwarding-related services			
Unimar Shipping Corporation	Schindellegi	Switzerland	100%
Nacora (Insurance) Holding AG	Schindellegi	Switzerland	100%

From the early 1990s onwards, Viag decided to beef up its transport activities. At first this was pursued by the Klöckner&Co subsidiary. In 1991 it bought the aircargo activities from Dutch Nedlloyd, Union Air and Gorlach Union. The integration of trading and transport activities is a trend which Veba and Thyssen, and also some Japanese companies had already pioneered. But when Viag bought a share in K&N, it was not through Klöckner&Co. As a part of the deal Klöckner even had to sell Union Air and hand over Stute Spedition to K&N.

Mr Kühne is the arch-typical entrepreneur, who heavily emphasised his independency. Mr Kühne has been the sole owner of the company since buying out the 50% owned by UK trading conglomerate Lonrho in 1992 for Dm310m (Dollars 195m). He had been obliged to sell it in 1981 when K&N ran into some difficulties but he did not reveal the price for the 33% stake to go to his new partner, but said it was enough to cover the loan he had taken out to repurchase the 50% from Lonrho. The deal has been completed through Viag subsidiary VBB Viag. He still owns 56,66% of the company. Another 10% is owned by the Deutsche Handelsbank.

K&N had heavily expanded in the late 1980s to build a Euro-network, buying

shares in Naku Luftfracht A/S in Denmark, Oy Nakutrans Ltd in Finland, TresH in Spain (sold again later), Domenichelli S.r.l. in Italy, Van Vliet in the Netherlands and Hollis Transport Group in the UK.

Most important strategic goals of K&N in 1993 were to seize Viag's internal logistics and to expand its Euro-logistics concept. This includes the merger of distribution with other activities, as for instance for Hewlett Packard, where K&N not only ships printers but also installs them on site at the customer and integrates them into their system. The electronics industry is a main customer for K&N, but they demand an overall presence in Europe. For Viag's 'union of logistics in production' ('Logistik in Produktionverbund') K&N plans to create an electronic cargo-exchange. This concept will later be offered to outsiders to win other large multinationals.

In 1993, K&N made a profit of DM 53 million (10% of sales). This led to a dividend distribution of 20%.

K&N employees are scattered over almost 400 locations in 70 countries.

TABLE 2: basic figures Transport and Logistics Division					
	1989	1990	1991	1992	1993
sales (DM million)	5,057	4,975	5,602	5,415	5,534
investments (DM million)	76	61	60	31	44
depreciation (DM million)	23	23	28	28	34
employees	9,918	10,326	10,094	10,088	9,696

Note the decrease in net investment from 1992 onwards, the year Viag took control over Kühne & Nagel.

Over 65% of K&N sales are based on Europe:

Sales 1993 (DM billions)

Germany	2.3
rest of Europe	1.3
North America	1.4
Asia Pacific	0.3
Other Countries	0.2

The perspectives of the sector are rather good. Large 'integrators' will become the dominant group in the transport sector. K&N is considered to have high competencies in logistics. Moreover it is very big in aircargo and world market leader in ocean freight. Weak points are its European logistics network. K&N still is not present in every important part of Europe. Starting activities in the travel agencies sector is also considered to be not a very good step of K&N.

CORPORATE NETWORK

This newly built division is based on the telecom subsidiary, Telekommunikation Gesellschaft für Betrieb und Dienstleistungen GmbH (TB&D), formed by Viag and Bayernwerk at the end of 1993. Results and figures have not been published yet.

Viag AG is emerging as the third large Germany industrial group to target telecommunications provision as a strategic business. Viag does not have the immediate telecom prospects of industrial rivals Mannesmann AG and Veba AG. But it plans to use its financial muscle (annual sales of DM38 billion) and thousands of kilometres of fibre optic cable to offer capacity to foreign operators.

Like Mannesmann and Veba, Viag intends to challenge Deutsche Bundespost Telekom when its network infrastructure and basic services monopolies are abolished by the year 2000. But unlike Mannesmann, which owns part of competitive GSM network operator Mannesmann Mobilfunk GmbH, and Veba, part owner of startup personal communications operator E-Plus GmbH, Viag has no commercial telecom licenses.

Viag's market position could have changed when Germany chose a mobile data operator to compete with DBP Telekom's Modakom. TB&D was bidding for the license with German insurance company Allianz AG, Bayerische Hypotheken und Wechsel-Bank AG and IBM Deutschland GmbH. But it lost the bid to a RWE lead consortium including the Deutsche Bank and Mannesmann.

Domestically, German law allows public gas and electric utilities to lay their own telecom cable and operate private voice and data networks. Bayernwerk gives Viag more than 4,000 kilometres of fibre optic cable in southern Germany and fibre in eastern Germany, with the other two large electric utilities.

None of Germany's upstart corporate network service providers is expected to make money until DBP Telekom's network monopoly is abolished. As long as these operators depend on DBP Telekom for leased lines, they will have a very difficult time making a profit. However, demand is growing for low-cost bandwidth as large manufacturers connect production and design systems nationally and internationally.

Viag also has applied for a license to provide voice and data services to corporate closed user groups. It expects to start commercial service by 1995.

But Viag, like Mannesmann and Veba, must still define its telecom role. They have money and access to infrastructure but none of them has sufficient (commercial) networking and service experience, and all of them need an international partner. Like Mannesmann, which has teamed with Deutsche Bank AG and RWE, Viag is looking for partners.

Veba has already won the license for a third digital cellular network in Germany, together with Thyssen, BellSouth and Vodafone. In France, Veba is part of a consortium led by the construction firm Bouygues, which has won the license to

operate the country's third cellular network. Mannesmann has won the license for Italy's second mobile network, together with Olivetti, Atlanticbell and other partners. Veba has announced investment of 4 billion DM in telecom, RWE of 1 billion and Thyssen of 'whatever it takes'.

In January 1995 British Telecom and Viag announced a joint venture that will try to break Deutsche Telekom's stranglehold on the highly profitable German telecom sector.

The partners said they would invest 'several hundred million pounds' in the venture, Viag InterKom, over ten years. That could rise sharply if, as expected, it receives a broad telecom licence in 1998, when Deutsche Telekom loses its voice and network monopoly.

The joint venture marks BT's biggest step into Europe before general deregulation comes into effect. It represents BT's single largest investment outside the UK. Viag InterKom, which will have its headquarters in Munich, will be owned 37.5 per cent by BT and 37.5 per cent by Viag. The remaining 25 per cent will be sold to other German partners. BMW is said to be interested.

A real battle of the giants is looming. Viag lags behind the other players, like RWE whose 14,000 kilometre internal network can already reach 50% of the German population. Viag's 4,000 kilometre internal network is limited to Bavaria and Thüringen. The BT alliance comes much needed.

6. Labour issues

According to the 1993 annual report Viag aims at a personnel and cultural integration of the group. This implies amongst others:

- an internal job market (including rights of transferring pension claims from one Viag company to another)
- developing ways and basic standards in personnel policy
- information and communication within the group
- inter-company career development
- intensive training schemes
- backing up the individual companies

Emphasis is on continuous adaption of organisational forms and work processes, introducing and modification of flexible forms of working time, adjusting staff levels, success orientated remuneration schemes.

Besides this, little can be said on the development of employment within Viag in general. The next table only indicates the enormous growth of Viag. As the group buys and sells plants every year, growing employment can go hand in hand with job losses (see Viag by division for more detail).

Viag, overall employment at year end

1985	1986	1987	1988		
21,985	33,188	32,733	33,427		
1989	1990	1991	1992	1993	1994
34,657	55,848	74,122	84,543	80,683	84,613
Average over the year			80,354	82,871	-
Average at pro rata consolidation:			36,269	39,119	-

Source: annual reports