#### **COMMISSION DECISION**

#### of 13 July 2005

#### declaring a concentration compatible with the common market and the EEA Agreement

(Case No COMP/M.3653 — Siemens/VA Tech)

(notified under document number C(2005) 2676)

(Only the German text is authentic)

(Text with EEA relevance)

(2006//EC)

On 13 July 2005 the Commission adopted a Decision in a merger case under Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings, and in particular Article 8(2) of that Regulation. A non-confidential version of the full Decision can be found in the authentic language of the case and in the working languages of the Commission on the website of the Directorate-General for Competition, at the following address: http://ec.europa.eu/comm/competition/index\_en.html.

#### I. EXECUTIVE SUMMARY

- (1) This case concerns the takeover by Siemens of the Austrian engineering group VA Tech.
- (2) Siemens is a diversified engineering group active in the following core business areas: information and communications, automation and control, power technology, transportation, street lighting and medical equipment.
- (3) VA Tech, headquartered in Linz, is Austria's largest industrial group with a EUR4,3 billion annual turnover and some 17 000 employees. Its four main business areas cover power generation, power transmission and distribution, metallurgy and electrical plant building and infrastructure.
- (4) On 10 December 2004, Siemens launched a public bid for VA Tech aimed at raising its current 16,45 % shareholding to at least 50 % plus one share. [...] (\*). The only outstanding condition for the bid to become effective at this point is the Commission's regulatory approval.
- (5) The proposed acquisition, whereby Siemens acquires sole control over VA Tech, constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.
- (6) The undertakings concerned have a combined aggregate worldwide turnover of more than EUR5 billion (Siemens: EUR74 billion for the year ending 30 September 2003; and VA Tech: EUR3,9 billion in 2003). Siemens and VA Tech each have an aggregate Community-wide turnover in excess of EUR250 million [...] (\*). Neither of the companies achieves more than two thirds of its aggregate Community-wide turnover within one and the same Member State. The notified transaction therefore has a Community dimension.
- (\*) Parts of this text have been edited to ensure that confidential information is not disclosed; those parts are enclosed in square brackets and marked with an asterisk.

- (7) The Commission's market investigation confirmed that the proposal leads to numerous horizontal and vertical overlaps in the fields of power generation (see Section A), power transmission and distribution (B), rail transport technology (C), frequency inverters (D), metallurgical and electrical plant building (E), low-voltage switchgear (F), building technology (G), infrastructure and ropeways (H) and other IT services (I).
- (8) The Commission came to the conclusion in its Decision that, having regard to the commitments given by the parties in the areas of (i) hydroelectric power equipment and (ii) mechanical metallurgical plant building, the notified merger did not significantly impede effective competition in any of these areas either in the common market or in a substantial part thereof.

#### II. DETAILED SUMMARY

A. POWER GENERATION

A1. EQUIPMENT FOR HYDROELECTRIC POWER PLANTS

#### Relevant markets

(9) Equipment for hydroelectric power plants comprises a large number of separate components, notably hydroelectric turbines, generators and various other mechanical and electrical parts (known as the mechanical (electrical) balance of plant). Customers often tender for these components separately, especially in Europe, where most demand is for replacement or modernisation of existing hydroelectric power plants. The different components are EN

not substitutable from the demand side. Following a series of mergers between manufacturers of mechanical and electrical hydroelectric power equipment, Siemens/VA Tech and their main competitors can supply the full range of components. Supply-side factors lead the Commission to agree with Siemens that there exists a single relevant product market for hydroelectric power plant equipment, although the products included in this market are significantly differentiated.

- (10) As to the relevant geographic market, the Decision explains that different sets of competitors compete in the different world regions, but that the leading European players (Siemens, VA Tech, Alstom and GE Hydro) operate worldwide. Particularly in China and the rest of Asia, there are a number of Chinese, Indian and Japanese companies that European customers do not recognise as credible bidders. Customers in the EEA either do not know these manufacturers or they rate them significantly lower than the suppliers active in Europe. They have so far neither won any contracts in the EEA, nor have they submitted bids (although Siemens has pointed to two successful Chinese projects in Albania in the 1960s and '70s).
- (11) [...] (\*) The Decision concludes that conditions of supply and demand differ significantly between the EEA and other world regions and that, consequently, the relevant geographic market is the EEA.

#### Competition assessment

(12) For the period from 2000 to 2004 Siemens estimates its combined EEA market share together with VA Tech at [40-50] (\*) % (Voith Siemens [20-30] (\*) % (¹), VA Tech [20-30] (\*) %). VA Tech's estimate is [40-50] (\*) %, whereas Alstom puts Siemens/VA Tech's combined market share at 61 %. Customers' market share estimates are generally in the same range, although one smaller competitor (Andino) believes that Siemens/VA Tech has 70 % of the EEA market. Based on the turnover figures submitted by the main competitors for the same five-year period, the following market shares arise (accepting Siemens's estimate of 'others' sales):

EEA 2000-2004	EUR (millions)	Market share %	
Siemens	318	[10-20] (*) %	
VA Tech		[30-40] (*) %	
Combined		50 %	
Alstom		[20-30] (*) %	
GE Hydro		[0-10] (*) %	

(1)	Voith Siemens is the joint venture through which Siemens is active in
	hydroelectric power.

EEA 2000-2004	EUR (millions)	Market share %	
Ansaldo		[<1] (*) %	
Andritz		[<1] (*) %	
Others	473	[20-30] (*) %	
Total		100 %	

Source: Commission's market investigation

- (13) Although Siemens argues that this is a bidding market and that market shares fluctuate greatly from year to year [...] (\*), a number of factors indicate that market shares nevertheless contain significant information about market power in this market. In particular, bids are frequent and often small in volume (only [...] (\*) of [...] (\*) tenders submitted by Siemens are larger than EUR[...] (\*) in size), and products are highly customised and significantly differentiated. In addition, for larger contracts, there is exante uncertainty about the actual value (i.e. profitability) of a project for the winning bidder. The expected value of the price offered by the lowest bidder is therefore bound to increase as the number of credible bidders decreases. Hence, Siemens/VA Tech's high combined market share, the relatively small size of the remaining competitors and the elimination of an important bidder increase the possibility that a dominant position will be created as a result of the merger.
- (14) From the replies to the market investigation [...] (\*), a group of four leading competitors (Siemens, VA Tech, Alstom and GE Hydro) can be identified. These companies are recognised by customers as credible bidders for large hydroelectric power equipment. All other competitors are rated significantly lower or do not produce comparable equipment, even if they are eligible for smaller contracts. The Decision presents a quantitative aggregation of customer ratings for the various hydroelectric equipment suppliers to corroborate this finding [...] (\*).
- (15) Bidding lists submitted by Siemens, [...] (\*) indicate, furthermore, that Siemens meets VA Tech more frequently in tenders (in [...] (\*) % of tenders above EUR[...] (\*) in value) [...] (\*) than it meets Alstom [...] (\*) or GE [...] (\*). In [...] (\*) of tenders, Siemens and VA Tech were the only companies among the Big 4 to submit a bid. The frequency of interaction is partly explained by the fact that GE Hydro rarely bids outside the Nordic region and the UK (GE Hydro originates from GE's takeover of Kvaerner's hydroelectric power unit.) Alstom participates more frequently across the different parts of Europe, although it has been somewhat more active in the Iberian peninsula than elsewhere. It also bids more frequently for larger projects than for smaller ones.

- (16) A large number of customers and competitors complained in their Article 11 replies that the transaction will lead to price increases, as two close competitors in an already concentrated market would be combined.
- (17) Siemens appears to agree with the Commission's finding that Siemens and VA Tech, along with Alstom, are at present the leading competitors for hydroelectric power equipment in the EEA. It consequently invokes mainly dynamic arguments in its defence.
- (18) According to Siemens, Chinese and small European suppliers would readily be able to supply competitive equipment if Siemens/VA Tech attempted to raise prices after the merger. Siemens argues that long-established supplier relationships have so far prevented new bidders from emerging and that, with some effort, customers could develop new supply sources. However, Siemens provides no evidence of any attempts or plans by suppliers not yet active in Europe to participate in tenders in the EEA. Apart from Chinese manufacturers, Siemens lists a number of small European manufacturers of small hydroelectric equipment and suppliers of small components that can, among other applications, also be used in hydroelectric power plants. However, all of these companies have market shares below 1 % and do not supply products comparable to those of Siemens and VA Tech.
- (19) The Decision concludes that Siemens's arguments are speculative and amount essentially to a general contention that every monopoly will in the long run attract new entrants. Siemens/VA Tech's high combined market share, the reduction in the number of credible bidders from four to three, bidding data indicating that Siemens/VA Tech supply close (or even the closest) substitutes and the large number of customer complaints lead the Commission to conclude that the transaction will lead to a significant impediment to effective competition ('SIEC'), through the creation of a dominant position, in the market for hydroelectric power equipment.

## A2. FOSSIL POWER PLANT EQUIPMENT

(20) In fossil power plant equipment, VA Tech supplies combined-cycle power plants as a turnkey integrator using mainly components supplied by third parties, notably gas turbines made by GE, together with turbo generators from its own in-house production. In the turnkey contracting market, several competitors remain after the transaction (mainly the turbine manufacturers Siemens, GE, Alstom and Mitsubishi, but also general contractors such as Bechtel and the boiler manufacturer Foster & Wheeler). VA Tech's EEA-market share for turnkey contracts is below 15 % [...] (\*). The notified transaction will thus deprive GE of one sales channel for its turbines and a supplier of generators designed to work with its turbines. However, given the strategic role of gas turbines in combined-cycle plants and GE's market-leading position in that area, the Decision concludes that GE will be able to replace VA Tech as a distribution channel for its turbines. GE has its own inhouse generator manufacturing capacity. It has itself not raised any concerns about the transaction. The Decision, therefore, concludes that no competition concerns arise in this area.

# B. TRANSMISSION AND DISTRIBUTION (T&D) EQUIPMENT

- (21) Like power generation equipment, the T&D market comprises a wide range of different components that are supplied to customers (mainly national grid operators and local/regional electricity distributors) at a certain level of aggregation. Based on Siemens/VA Tech's horizontal overlap, Siemens proposes to define relevant markets at the level of the product groups listed under a.-e. below.
  - a. HIGH-VOLTAGE PRODUCTS (FOR TRANSMISSION NET-WORKS OPERATING AT VOLTAGES BETWEEN 52 KV AND 800 KV)
    - (i) air-insulated switchgear
    - (ii) gas-insulated switchgear
    - (iii) circuit breakers
    - (iv) disconnectors
    - (v) instrument transformers
    - (vi) coils
  - b. TRANSFORMERS
    - (i) power transformers
    - (ii) distribution transformers
  - c. ENERGY AUTOMATION AND INFORMATION SYSTEMS
    - (i) power system management
    - (ii) protective relays

- d. TURNKEY PROJECTS
  - (i) high-voltage projects
  - (ii) medium-voltage projects
- e. T&D SERVICES
  - (i) asset services
  - (ii) network planning.
- (22) On product markets, the market investigation provided some indications that, contrary to Siemens's view, at least some of the components identified under (i), (ii), ... in each section may by themselves constitute separate relevant product markets. However, the exact product market definition can be left open for purposes of this Decision as no SIEC will arise under any possible market definition.
- (23) On geographic market definition, the Decision concludes that the T&D markets are EEA-wide. Technical standards no longer pose an obstacle for grid operators to source products from abroad, especially in the high-voltage markets, where products are significantly customised. The main suppliers participate successfully in tenders for T&D equipment throughout the EEA.
- (24) The following market share estimates provided by Siemens in the notification as well as the identity of the competitors in each market were largely confirmed by the market investigation. The exception is the market for high-voltage turnkey projects, where no other market participant estimated Siemens's market share as high as [50-60] (\*) %. However, the turnkey market comprises a range of products and components and allocating sales to turnkey services, as opposed to underlying components, may be handled differently by respondents to the market investigation.

	Product	Siemens	VA Tech	Combined	Main competitors
a.	High-voltage products	[10-20] (*)	[0-10] (*)	[20-30] (*)	Areva 18, ABB 15
	(i) air-insulated switchgear	[0-10] (*)	[0-10] (*)	[10-20] (*)	Areva 12; ABB 9, Cegelec 6, EFACEC 6
	(ii) gas-insulated switchgear	[30-40] (*)	[10-20] (*)	[40-50] (*)	ABB 33, Areva 23
	(iii) circuit breakers	[30-40] (*)	[0-10] (*)	[40-50] (*)	Areva 30, ABB 28
	(iv) disconnectors	[30-40] (*)	[20-30] (*)	[30-40] (*)	Areva 21, HAPAM 14
	(v) instrument transformers	10-20] (*)	[0-10] (*)	[10-20] (*)	Areva 20-25, ABB 10-15, Ritz 10-15, Arteche 10-15, Pfiffner 3-8
	(vi) coils	[20-30] (*)	[10-20] (*)	[40-50] (*)	Areva 22-27, ABB 17-22, Tra- fomec 5-10
b.	Transformers	[10-20] (*)	[0-10] (*)	[20-30] (*)	ABB 18-23, Areva 13-18, RWE Solutions 8-13, Schneider 4-7, Pauwels 4-7, others
	(i) power transformers	[10-20] (*)	[10-20] (*)	[20-30] (*)	ABB 20-25, Areva 15-20, RWE Solutions 7-14, Pauwels 2-5, EFACEC 2-5, others
	(ii) distribution transformers	[10-20] (*)	[0-10] (*)	[10-20] (*)	ABB 12-17, Schneider 10-15, RWE Solutions 8-13, Areva 7- 12, Pauwels 5-10, others

	Product	Siemens	VA Tech	Combined	Main competitors
c.	Energy Automation and Information Systems				
	(i) power system management	[10-20] (*)	[10-20] (*)	[20-30] (*)	ABB 8-12, Areva 6-10, others (including various software companies)
	(ii) protective relays	[20-30] (*)	[0-10] (*)	[20-30] (*)	Areva 23-27, ABB 13-17, Schneider 4-8
d.	Turnkey projects	[20-30] (*)	[0-10] (*)	[30-40] (*)	ABB 18, Areva 14, Cegelec 9
	(i) high-voltage projects	[50-60] (*)	[10-20] (*)	[70-80] (*)	ABB 21, Areva 9
	(ii) medium-voltage projects	[10-20] (*)	[0-10] (*)	[10-20] (*)	ABB 17, Areva 16, Cegelec 12
e.	T&D services	No affected markets on an EEA or national basis			

- (\*) 40 % non-controlling shareholding; 60 % sold in 2004 to Southern States LLC (United States)
- (25) Siemens, VA Tech, Areva and ABB supply a wide range of T&D components, whereas several smaller competitors, including Cegelec, EFACEC, Ansaldo, HAPAM, Pauwels and others cover only smaller product segments.
- (26) The transaction leads to high market shares in excess of [30-40] (\*) % in several tentative T&D markets, namely gasinsulated switchgear (GIS), circuit breakers and high-voltage turnkey projects. It would also reduce from four to three the number of credible competitors in these product markets (Siemens/VA Tech, Areva and ABB). The three markets are vertically related as a large proportion of HV-turnkey projects include GIS as the main underlying component. Circuit breakers, in turn, are used as a component in GIS. Siemens, VA Tech, Areva and ABB are all active at all three of these vertical levels.
- (27) In the remaining (tentative) T&D markets, Siemens/VA Tech's combined market shares are lower, and additional competitors exist. No competition concerns arise here.
- (28) Replies by customers and competitors to the Commission's market investigation have overall been less negative than in hydroelectric power. Negative remarks tended to be more general, pointing to the fact that a competitor is eliminated in an already concentrated market. The Commission's investigation therefore focused on the potential effect

- resulting from the reduction in the number of credible bidders from four to three in some tentative markets.
- (29) In the HV-turnkey market, the main competitive overlap between Siemens and VA Tech is in GIS-based turnkey substations. Market power in the HV-turnkey market is thus linked to the suppliers' market position in the underlying GIS components. The turnkey market is heavily projectdriven and market shares have fluctuated widely. During the five-year period from 1999 to 2003, Siemens's share varied from [5-10] (\*) % (2000) to [50-60] (\*) % (2003). VA Tech's market share ranged from [0-5] (\*) % (1999) to [15-20] (\*) % (2002). ABB and Areva captured the remaining projects in each year. A single large project can have a strong impact on a supplier's market share in a given year. Similarly, its strong market position in 2003 ([50-60] (\*) %) resulted from [...] projects in excess of EUR[...] million and [...] +EUR[...] million contracts. The Decision thus concludes that the HV-turnkey market is indeed a bidding market where competition is 'for the market' (rather than 'in the market') and where market shares reveal little about a competitor's ability to win future projects.
- (30) In GIS, the same competitors as in HV turnkey are active in the EEA: Siemens, VA Tech, ABB and Areva. Siemens/VA Tech's combined share in 2003, according to Siemens, was [40-50] (\*) % (Siemens [30-40] (\*) %, VA Tech [10-15] (\*) %). The combined market shares fluctuated between [40-50] (\*) % and [60-70] (\*) % in the period 1999 to 2003. Individual market shares fluctuated more widely (Siemens [10-15] (\*) %-[40-50] (\*) %, VA Tech [10-15] (\*) %-[40-50] (\*) %). As in the turnkey market, ABB and Areva accounted for the remaining EEA market share.
- (31) Although the safety-critical nature of HV products limits the number of eligible suppliers to European electricity operators, there appears to be little product differentiation between the equipment supplied by the four market leaders

for a given tender specification. Based on these characteristics (bidding market, little product differentiation among the majors), the GIS/HV-turnkey markets could in principle produce competitive outcomes, even with only three credible competitors.

- (32) The market investigation examined bidding lists for HV-turnkey projects, GIS and circuit breakers supplied by Siemens and data from competitors covering the periods from 1999 to date. The data show that ABB was Siemens's most frequent competitor in tenders, followed by Areva. VA Tech participated less frequently in GIS tenders and rarely bid in competition with Siemens. One explanation for the rare encounter of Siemens and VA Tech may be that VA Tech's European GIS business originates from its takeover of Schneider's HV activities in Grenoble. VA Tech's installed base is therefore concentrated in France, whereas Siemens's traditional geographic strength has been elsewhere in Europe.
- (33) Ganz-Transelektro of Hungary has submitted several bids in the EEA since the country became an EU member. It has recently won a GIS contract in the Netherlands (with Corus). By contrast, the Japanese GIS manufacturers Toshiba-Mitsubishi (TM) and JAEPS have in the EEA limited their activities to tenders in the island states of Iceland and Cyprus.
- (34) The Commission also compared bids from [...] (\*) tenders, where all four firms submitted bids, in order to verify whether any one firm frequently submitted the lowest or second-lowest bid. This was not the case.
- (35) As outlined in the Decision, the GIS market could potentially produce competitive outcomes even with three credible bidders, provided the merger does not involve the lowest and second-lowest-cost bidder or competitors who are particularly close substitutes by another dimension. The bidding data provided no indications to this effect.
- (36) The Decision also examines the possibility that the notified transaction may lead to coordinated effects. However, it appears from the structure of the GIS, HV-turnkey and circuit-breaker markets (three close competitors, inhomogeneous products, large customers) and the observed bidding pattern (all competitors participate successfully in tenders throughout Europe) that any effective coordination mechanism in the GIS market would have to be highly elaborate and would be difficult to implement.
- (37) The Decision concludes that no significant impediment to effective competition arises in the T&D market under any possible product market definition.

#### C. RAIL TECHNOLOGY

#### C1. RAIL ROLLING STOCK

- (38) The takeover of VA Tech leads to the disappearance of VA Tech Elin EBG Traction (ETR) as an independent supplier of electrical traction for trams, metros and regional trains. ETR is also a supplier to integrated manufacturers of rolling stock, forming consortia for particular types of trams and trains with among others Bombardier and Siemens.
- (39) Following past cases the present Decision analyses the impact of the proposed transaction on the basis of an EEA market for electrical traction and national markets for rolling stock, separate for the various types of rolling stock, i.e. trams, metros, regional trains and locomotives in this case. The overlap in the market for electrical traction is rather limited and does not lead to any competition concerns. However, owing to ETR's and Siemens's position in some Member States there are vertically affected markets.
- (40) The market investigation showed that in the markets affected by the proposed transaction, i.e. trams in Spain, Poland, Austria and the Czech Republic, metros in Belgium and regional trains in Germany and Austria, sufficient competition will remain after the transaction. In order to sever the links between ETR and Bombardier created by Commission Decision COMP/M.2139 Bombardier/Adtranz of 3 April 2001, it is proposed to adopt in parallel an Article 8(2) decision cancelling one of the commitments given by Bombardier in that case should Siemens acquire sole control of VA Tech. That commitment obliges Bombardier to offer its CityRunner tram of the 'Linz' type only with traction by ETR.
- (41) The non-integrated companies will not be foreclosed for the following reasons. First, at least one independent supplier of electrical traction for trams (Kiepe) and metros (Mitsubishi) will remain available. Secondly, there is the possibility for the non-integrated manufacturers to integrate within two to three years, as has been demonstrated by Stadler for trams and regional trains. Thirdly, the integrated suppliers have, in the past, often teamed up with the non-integrated, and this option will remain as well. Lastly, even if the non-integrated suppliers had to leave the market for electrically driven rolling stock, sufficient competition would remain in the market for rolling stock. The Decision concludes that no significant impediment to effective competition arises in

both the market for electrical traction and for trams, metros, regional trains and locomotives.

#### C2. CATENARY WIRES

(42) The Decision concludes that the question whether there is an overall market for all types of catenary wires or whether smaller product markets such as catenary wires for longdistance traffic exist can be left open. The concentration leads to one affected national market. In Germany, Siemens and VA Tech would have a combined market share of around [30-40] (\*) % in the overall market, followed by Balfour Beatty with a similar share and five small competitors. On the basis of the market investigation the Commission concludes that there is no significant impediment to effective competition after the concentration. The same applies to the smaller possible product market of catenary wires for long-distance traffic since there is only one customer, the incumbent Deutsche Bahn, for the product for which there is an overlap, and at least four credible competitors. Moreover, it turned out that Siemens and VA Tech were rarely competing against each other. Lastly, tacit coordination between the merged entity and Balfour Beatty seems very unlikely since the market is declining year by year, and VA Tech cannot be described as the maverick which would be taken over and, therefore, make coordination easier. The Decision concludes that no significant impediment to effective competition arises in the market for catenary wires.

#### C3. TRACTION POWER SUPPLY

- (43) Traction power supply concerns the supply of electricity into the catenary system of the railway operator through substations. The Decision identified two product markets, one overall market for substations and a market for components. In addition, there is an overlap in the market for the servicing of traction power generation stations in Germany. The concentration leads to two affected national markets for traction power supply. Siemens and VA Tech would have a combined market share of [40-50] (\*) % in the overall market in Austria. In addition to Siemens/VA Tech, there are four internationally active credible suppliers, ABB, Areva, Balfour Beatty and SAG (RWE), which have market shares between 5 and 25 %, and some fringe players. The demand side is highly concentrated: the national railway company ÖBB and Wiener Linien account for more than 90 % of demand in that rather small market, and use tenders. As a consequence, market shares in this bidding market vary a lot.
- (44) In Germany, Siemens and VA Tech would have a similarly high market share as in Austria. Competitors are ABB, Balfour Beatty, Elpro and Spitzke. VA Tech is almost exclusively active in the long-distance segment where there

is one customer, Deutsche Bahn. Given that this market is a bidding market with one powerful customer in the segment where the overlap is, there is no competition issue for entire substations for traction power supply. With regard to substation components it has been brought to the Commission's attention that the merged entity would become a monopolist for certain components with the potential to foreclose competitors. However, the market investigation showed that Siemens does not have any of the three components in question, there are other competitors for two of these components and that, for the one component where indeed VA Tech is the only supplier, the customer Deutsche Bahn played a very active part in getting it tested and ultimately approved by the regulator. The Decision concludes that no significant impediment to effective competition arises in the market for traction power supply. The same is true for the servicing of traction power generation stations where VA Tech only supplied one of approximately 20 stations for which it is best placed to do also the servicing and since there are several credible alternatives to Siemens and VA Tech.

## C4. LEVEL CROSSINGS

(45) Both Siemens and VA Tech are suppliers of level crossings. While VA Tech is active only in Austria, Siemens is not, but can be seen as a potential entrant. A customer raised the issue that after the merger Siemens might withdraw the VA Tech product and replace it with its own. However, the market investigation showed that VA Tech's product is owned by a German firm which has all the legal means to transfer the distribution rights to someone else if necessary. Therefore, the number of suppliers in the Austrian market does not change.

# D. FREQUENCY INVERTERS

- (46) Both Siemens and VA Tech are suppliers of frequency inverters. The market investigation confirmed Siemens's view that the relevant geographic market for frequency inverters is the EEA. In line with previous decisions the relevant product market is divided into two with the dividing line at 100 kW. Whether in the market for inverters above 100 kW a further segmentation for liquid-cooled and fourquadrant inverters is needed is left open since the competition assessment would not change.
- (47) The combined market share of Siemens and VA Tech in the market for inverters below 100 kW is less than [15-20] (\*) %. Since in 2004 VA Tech entered into a joint venture with Schneider and Toshiba ('STI') the market share of STI has to be added. However, even then the combined market share is below [30-40] (\*) %. Important competitors are ABB and Danfoss with 10-20 %, and Lenze, SEW

Eurodrive, Vacon and Yaskawa/Omron with 5-10 % each. There are numerous smaller companies which are strong at the local level. For inverters above 100 kW the combined market share including the STI JV is less than [20-30] (\*) %. For liquid-cooled and fourquadrant inverters the combined market share is below [20-30] (\*) %. Therefore, the Commission came to the conclusion that competition concerns are unlikely to arise under any plausible product market definition.

- E. METALLURGICAL AND OTHER INDUSTRIAL PLANT BUILDING
- RELEVANT PRODUCT MARKETS

# a. Fundamental distinctions

- (48) In the area of industrial plant building a distinction can be drawn firstly according to sectors (such as metallurgy, chemicals, paper, cement, etc.). This case relates primarily to metallurgical plant building. In this respect, a distinction can be drawn between mechanical plant building, electrical plant building and plant maintenance and services.
- (49) Mechanical industrial plant building involves planning the use of machines in the industrial production process in question, procuring those machines and installing them in the production plant. VA Tech is a supplier in this area via its subsidiary VAI. Siemens is not itself active in this area as a supplier but, in the metallurgical sector, has a [...] (\*) holding in SMS Demag, one of the VA Tech's two closest rivals.
- (50) Electrical plant building primarily covers general plant electrification, the configuration and assembly of traction solutions and the area of actual automation, which essentially consists of electrical monitoring and control systems and process automation. Both Siemens and VA Tech are suppliers in this area, the latter via its subsidiaries VAI (in the metallurgical sector) and Elin EBG (in various sectors).

(51) Plant maintenance and services include ongoing maintenance work and service provision, but exclude the redesign of parts of the plant. Siemens and VA Tech are both active in plant maintenance and services in the field of metallurgy.

#### b. Mechanical metallurgical plant building

- (52) Siemens considers the mechanical part of industrial plants to be sector-specific and therefore assumes a separate product market for mechanical metallurgical plant building. However, Siemens does not apply the further subdivision by process stage adopted by the Commission in its SMS/ Mannesman Demag decision (1) but takes the view that these are only segments of a larger market for mechanical metallurgical plant building.
- (53) The Commission concludes from the results of the market investigation that the subdivision by process stage in mechanical industrial plant building applied in the SMS/Mannesmann Demag case in the iron and steel sector can also be adopted for the purposes of this Decision. This involves making a distinction between product markets for pig iron making, steelmaking, continuous casting plants, hot rolling mills, cold rolling mills, strip plants, section rolling mills and hot pressing and forging. A distinction should also be made between metallurgical plant building for iron and steel on the one hand and for non-ferrous metals, in particular aluminium and copper, on the other.
- (54) However, the precise definition of the product market can be left open in the area of mechanical metallurgical plant building.

# c. Electrical metallurgical plant building

(55) Electrical metallurgical plant building covers so-called 'level 0' automation (electricity supply and traction), actual automation (levels 1 and 2) and the more recent area of IT solutions for drive logistics/MES (level 3).

# No uniform market

- (56) Siemens does not consider electrical industrial plant building for the metallurgical sector to be a separate market, but takes the view that electrical industrial plant building as a whole is independent of any sector.
- (57) In the context of the market investigation carried out by the Commission, however, most market participants expressed the view that special know-how is necessary for building electrical plants in the metallurgical sector. In their statements, competitors particularly stressed the specialisation of their engineers. The importance of reference lists in the replies received in the context of the market investigation leads to the conclusion that most customers demand relevant experience from suppliers in the area of metallurgy. [...] (\*). A further indication of an increasing branch-related specialisation is the advance of the former mechanical metallurgical plant building specialists, Danieli,

<sup>(1)</sup> IV/M. 1450 — SMS/Mannesmann Demag.

SMS Demag and VAI, in the area of electrical metallurgical plant building.

- (58) Although level-0 products (electrical, drives) are metallurgy-specific to a relatively minor extent, this is not true for level-1 and level-2 products (automation proper). This is because levels 1 and 2 require branch-specific solutions (software modules) in order to be applicable. Siemens and its competitors are developing such solutions in branch-specific product families in the area of electrical industrial plant building.
- (59) For the said reasons, the existence of a specific market for electrical plant building should be assumed for the purposes of defining the product market here, at least for the metallurgical sector. Such an overall market can be defined either as an overall market for electrical metallurgical plant building, including all possible submarkets, or more narrowly as a possible overall market for electrical metallurgical plant building at automation levels 0 to 2 in the area of iron and steel.

# Possible separate submarkets for individual process areas or steps

(60) Market participants also take the view that the market for electrical plant building can be subdivided even further according to the various process steps of metallurgical production. There was some evidence of this in the market investigation, although it can ultimately remain open whether separate electrical product markets exist according to the three main process stages of electrical metallurgical plant building (liquid phase, hot phase, cold phase) and the special area of long product rolling. The question whether there should be a further subdivision by process step can also be left open for the purposes of this Decision.

# Separate submarkets for level-1 and level-2 automation?

(61) It can also be left open for the purposes of this Decision whether separate product markets should be assumed for levels 1 and 2 combined or for submarkets thereof.

# Separate markets for the iron and steel sector and the aluminium sector, in particular for aluminium hot and cold rolling

(62) The question whether or not there should be a separation of product markets for the rolling markets in iron/steel and

aluminium can also be left open for the purposes of this Decision.

# Possible market for IT solutions for plant logistics/ MES/level 3

(63) The Commission's market investigation also revealed indications of a separate, possibly emerging metals-specific product market for IT solutions for plant logistics/MES/level 3. However, the question whether this is a specific branch and whether it should be included in or separated from the market for electrical metallurgical plant building can ultimately be left open for the purposes of this Decision.

#### d. Maintenance and services

(64) Siemens takes the view that there is a specific market for the provision of services to metallurgy plants. The Commission's market investigation tends to confirm this view. However, a precise market definition can be left open in this area.

# e. Electrical industrial plant building in non-metal sectors

- (65) For the purposes of this Decision the question of the branch-specific market definition of non-metallurgical electrical industrial plant building can be left open since the proposed merger does not give rise to any competition concerns whatever the definition of product market (i.e. covering several branches or in terms of a separate market for each branch).
  - f. Conclusion concerning the definition of product market in the areas of metallurgical plant building and industrial plant building in other branches
- (66) For the purposes of this Decision, therefore, the product markets are deemed to be the following in the area of mechanical metallurgical plant building:
  - an overall market for mechanical metallurgical plant building (either limited to ferrous metals or covering both ferrous and non-ferrous metals);

- possible submarkets for the various process steps of mechanical metallurgical plant building.
- (67) For the purposes of this Decision, the product markets are deemed to be the following in the area of electrical metallurgical plant building:
  - the overall market for electrical metallurgical plant building including all of the following possible submarkets:
  - the possible (more narrowly defined) overall market for electrical metallurgical plant building at automation levels 0 to 2 in the area of iron/steel;
  - the possible submarkets for electrical metallurgical plant building at the liquid phase, hot phase and cold phase and for long product rolling (process-stage markets) in the area of iron/steel and the possible process-step markets (or further subdivision, e.g. by levels of automation), and possible level-1 and level-2 submarkets;
  - the markets for aluminium hot rolling and aluminium cold rolling.
  - the possible market for IT solutions for plant logistics/ MES/level 3.
- (68) For the purposes of this Decision, at least one separate product market for metallurgical plant maintenance and services may also be assumed.
- (69) The definition of product market in electrical industrial plant building in other branches can remain open for the purposes of this Decision.
  - 2. RELEVANT GEOGRAPHIC MARKETS

# a. Mechanical metallurgical plant building

- (70) Siemens takes the view that the market for mechanical metallurgical plant building is a world market or at least an EEA-wide market with a strong tendency towards a worldwide market.
- (71) However, it is not necessary to determine the geographic market for the purposes of this Decision since the merger gives rise to competition concerns in the area of mechanical metallurgical plant building whichever definition of geographical market (EEA-wide or larger) is applied.

## b. Electrical metallurgical plant building

- (72) Siemens also assumes the existence of a world market in the area of electrical metallurgical plant building.
- (73) According to the findings of the market investigation, the relevant geographic market should at least be EEA-wide for the purposes of this Decision, but consideration should also be given to the possibility of a larger market than the EEA.
- (74) This is true for all possible submarkets and markets for electrical metallurgical plant building, including the possible market for IT solutions for plant logistics/MES/ level 3.
- (75) Siemens can agree with the Commission's definition of the geographic market for electrical metallurgical plant building only if the Commission is prepared to consider the possibility of a larger market than the EEA, but opposes the view that certain Asian regions cannot be included in the relevant market. The corresponding submarkets are entirely accessible to foreign suppliers.
- (76) However, the Commission continues to take the view that different competitive conditions exist in certain regions of the world which cannot be attributed purely to historical factors, and that, consequently, a larger market than the EEA but not a global market can be assumed.

# c. Maintenance and services

- (77) In Siemens's view, this market should be defined as EEA-wide, but it is perceived as being narrower by the majority of market participants, as geographical proximity to the supplier and, to a certain extent, the sharing of a common language are cited as being particularly relevant in this area. A number of customers would not select a supplier from a Member State other than the one in which their production site is located even if the prices for services from their current suppliers were to rise by 5-10 %. This applies to both the mechanical and the electrical areas.
- (78) For the purpose of this Decision, a precise market definition can ultimately be left open. In any case, the relevant geographic market is not smaller than national and not larger than EEA-wide.

#### d. Electrical industrial plant building in other areas

(79) VA Tech's internal organisation, according to which VAI is active worldwide in the area of metallurgical plant building

and Elin EBG, which generally covers electrical plant building, concentrates its activities in Austria and is otherwise highly active in the area of industrial plant building in Central Europe, suggests that the market or markets in other areas of electrical industrial plant building should be defined more narrowly in geographical terms than that of the specialised field of electrical metallurgical plant building. This view was confirmed by the Commission's market investigation, with many of the responding industrial companies indicating that they tended to consider there to be national or regional markets. For some specialised processing industries (such as paper and chemicals) a larger geographic market may, if necessary, be considered. However, the Commission's market investigation gave no indication of the existence of a geographic market which should be defined as larger than the area covered by the EEA.

- (80) The question of the precise definition of the relevant geographic market can ultimately be left open for the purposes of this Decision. The relevant market or markets are, in any case, not smaller than national and not larger than EEA-wide.
  - 3. COMPETITION ASSESSMENT

#### a. Mechanical metallurgical plant building

(81) The merger substantially weakens competition between Siemens/VAI and its main competitor, SMS, in the EEA or world market for mechanical metallurgical plant building or in the submarkets for mechanical plant building for steelmaking and for continuous casting. This will pose a significant impediment to effective competition, in particular by creating a dominant position for Siemens/VAI in the submarkets mentioned above.

#### (1) Market conditions

- (82) Only VA Tech is active in this area, not Siemens. Siemens estimates VA Tech's market share at [10-15] (\*) in all possible submarkets.
- (83) By contrast, market participants argued for considerably higher market shares for VA Tech in possible product markets in mechanical plant building. The worldwide and EEA market shares of VA Tech in the metallurgical plant building market were seen as being close to those of the previous sole market leader SMS-Demag (hereinafter called 'SMS'), followed by the third and only other full line supplier active in the EEA, Danieli. In individual possible mechanical engineering submarkets VA Tech is seen as the clear market leader.
- (84) Statements by market participants also suggest that the market or markets for mechanical metallurgical plant building are to be regarded as highly concentrated.

- (85) SMS sees VAI as its main competitor in most of its business areas. It gives its own market shares and those of VAI in mechanical metallurgical plant building overall as 24 % and 20 %. In the process step markets the combined market shares of the two leading firms are significantly higher. In one process step market, steel production, VAI is level with SMS (33 % each), while in the process step market of continuous casting VAI is well ahead of SMS (SMS: 23 %; VAI: 62 %). VAI has confirmed its leading position in continuous casting, with high market shares, in public statements.
  - (2) Overall market for mechanical metallurgical plant building in the area of iron and steel or overall market for mechanical metallurgical plant building including non-ferrous metals: significant impediment to effective competition
- (86) The Commission's market investigation shows that the merger will lead to a substantial weakening of the current competition between VAI and SMS owing to Siemens's minority stake in SMS. Because of VAI's market strength in this highly concentrated market and the very close competition between VAI and SMS, and in particular because other competitors are not able to restrict Siemens/VAI's competitive room for manoeuvre sufficiently if the competitive pressure exerted on Siemens/VAI by SMS is weakened, the merger will in any event pose a significant impediment to effective competition through uncoordinated behaviour and possibly also by creating a dominant position for Siemens/VAI.
- (87) VAI and SMS are the closest competitors in the relevant market. Because of this close competition between VAI and SMS, a customer who decides against VA Tech in a particular metallurgical project would very probably regard SMS as the next best alternative. This is shown by the ratings given by the competitors and customers questioned during the Commission's market investigation.
- (88) Danieli is usually regarded as the third strongest competitor, but on average well behind SMS and VAI. Its strength lies mainly in long product rolling, where it is the market leader. Because of its market position and customer rating, Danieli is unlikely to be able either to prevent a decline of competition in the market for mechanical metallurgical plant building as a whole or to threaten the dominant position that VAI might gain as a result of Siemens/VAI's information advantage. Moreover, customers need at least three competitive bids in order to negotiate successfully in the field of metallurgical plant building.
- (89) There is no significant competitive pressure from other competitors. The major suppliers mentioned by Siemens

besides the three market leaders are rarely or never active in Europe and so do not represent a proper alternative for European customers. Smaller suppliers are very unlikely to be able to bid successfully for major contracts. Apart from the three market leaders, competition is very fragmented and is not sufficiently capable of curbing the market power of the three leading suppliers.

- (90) A large supplier of mechanical metallurgical plant building has a large number of customers accounting for the bulk of the firm's orders and is not therefore highly dependent on individual customers.
- (91) The merger would substantially weaken the competitive pressure exerted by SMS on Siemens/VAI. It would give Siemens control of VA Tech in addition to its existing 28 % holding in SMS. In view of the special circumstances of the case (see following paragraph: prior exercise of the put option; it is common ground that the value of the share is to be determined as of 31 December 2004), it cannot be assumed with sufficient certainty that Siemens's 28 % share interest in SMS (and the financial participation in SMS's business success that this would normally entail) will induce Siemens/VA Tech to compete less strongly with SMS. [...] (\*)
- (92) Siemens has exercised a put option to sell its share in SMS to the majority shareholder. However, the matter is contentious as regards the value of Siemens's share and potentially lengthy litigation is pending before the German courts. Until this litigation has been settled and the sale of Siemens's 28 % share is therefore completed [...] (\*).
- (93) [...] (\*).
- (94) [...] (\*).
- (95) [...] (\*). Given Siemens's continuing 28 % share in SMS, the merger would thus substantially weaken competition between Siemens/VAI and SMS. Whether the information advantage over its strongest competitor SMS and its lead over Danieli in terms of market power would give Siemens/VAI a dominant position can be left open. In any event the merger would have a serious harmful impact on competition as a result of uncoordinated behaviour by firms. For these reasons there would be a significant impediment to effective competition in the overall market for mechanical metallurgical plant building.
  - (3) Submarkets of mechanical metallurgical plant building: Creation of a dominant position
- (96) The above conclusions apply even more forcefully to the possible process step submarkets in mechanical plant

building for steelmaking and for continuous casting. In the other possible submarkets in mechanical metallurgical plant building, however, it is impossible to state with sufficient certainty that the merger would constitute a significant impediment to effective competition.

- (97) In the possible market in mechanical plant building for steelmaking, VAI is the firm rated highest overall by competitors and customers in the Commission's market investigation. In second place, just behind, is SMS. VAI and SMS have high EEA and world market shares in a concentrated market. VAI and SMS each have estimated world market shares of around 30-40 %; their EEA market shares are, with a high likelihood, even higher. These high market shares suggest that the market is already highly concentrated, which makes a significant negative impact on customers more likely. This is especially true given the close competition between the two strongest players, which would diminish as a result of the merger in favour of the leading firm. VAI and SMS are the closest competitors. Danieli lies well behind in third place and is not in such close competition. The remaining competition is fragmented. Smaller suppliers cannot compete with the big players in major projects or rely on cooperation with the big suppliers or specialise in specific market niches.
- (98) In the possible market for mechanical plant building for continuous casting, VAI is clearly rated by customers and competitors alike as the market leader both in the EEA and worldwide. VAI very probably has market shares of over 50 % in the EEA and worldwide. SMS ranks second and is VAI's closest competitor. Danieli is well behind in third place. Competition is fragmented and is not sufficiently capable of curbing VAI's market power.
- (99) Under these circumstances [...] (\*) would result in a dominant position of Siemens in the possible markets for mechanical plant building for steelmaking and mechanical plant building for continuous casting, constituting a significant impediment to effective competition.

#### b. Electrical metallurgical plant building

Market for electrical metallurgical plant building (level 0-2, iron/steel), possible process area and process step markets

Market structure and market shares

(100) The Commission's market investigation has shown that Siemens is seen by many market participants as the most important supplier of electrical metallurgical plant building in the iron/steel sector in the EEA and worldwide. This is true for the possible overall market and in most of the

submarkets, except in the possible long rolling submarket, where Danieli is seen as the leader. In all these areas VAI is regarded as a strong competitor, usually in second place in the market; and in the field of continuous casting it is even regarded as roughly on a par with Siemens. It is, however, significant that besides them, around four other competitors are held to be strong and credible suppliers. The main firms in question are ABB, Alstom, SMS and Danieli, in some areas, especially worldwide, Toshiba (or TMEIC-GE) as well, and in some areas also Sundwig-Andritz, Ingelectric or ASI Robicon.

Market shares

- (101) Market shares are rather difficult to quantify objectively in this very varied and differentiated product or service area. The Commission has several estimates from Siemens, some produced for the purpose of the proceedings and others produced well before they started. The Commission also has estimates drawn up by VA Tech before the proceedings began as well as estimates drawn up during the proceedings at the Commission's request. Finally, estimates drawn up by SMS for the purposes of the proceedings were also submitted to the Commission. The estimates give quite a wide range of figures for market shares. Siemens's estimates generally assume combined market shares of less than 20 %, whereas VAI's estimates are considerably higher, somewhere in the region of 40-50 %. The highest figures, for some process step markets, appear in SMS's estimates.
- (102) In the view of the Commission (and of some of the competitors mentioned) none of these estimates can be regarded as very reliable.
- (103) The Commission carried out an analysis of the strength of the major competitors in the main part of the markets referred to above, i.e. for orders of more than EUR1 million, for the years 2002-04. It asked competitors about all the orders they had won during the relevant period and aggregated the figures. The results of the inquiry reflect the relative size of the firms questioned. At a late stage in the proceedings, Siemens provided further details about other competitors (in the liquid phase). The Commission checked the information and took it into account where it was confirmed in time by the customers and/or competitors in question. In the Commission's view this calculation represents a reasonable approximation of the actual market shares. However, the percentages indicated must be regarded as the upper limit and the actual market shares are very probably somewhat lower.
- (104) The figures show that the merger will probably not lead to market shares of more than 35–40 %. At least four strong suppliers will remain in the market in each process area

and process step, and they can be expected to exert sufficient competitive pressure on the merged firms.

Tender analysis

- (105) The relevant market/markets are bidding markets, where market shares are only indicative. The decisive factor is the strength of the competitive pressure exerted by firms on one another in the bidding process, although long-term market shares are an important indicator of such strength.
- (106) The tender analysis of data from Siemens and VAI showed that, at the most, Siemens and VAI can be regarded as close competitors in a few possible submarkets (continuous casting, liquid phase). But even in those few submarkets they are not the closest competitors.

Effect of Siemens's shareholding in SMS

(107) The commitments that were required from Siemens regarding its shareholding [...] (\*) in SMS in order to eliminate the competition concerns in the field of mechanical metallurgical plant building also rule out a significant impediment to competition solely as a result of this holding [...] (\*), at any rate in electrical metallurgical plant building. (This also applies to all other electrical metallurgical plant building markets.)

#### Possible level 1 and 2 automation markets

- (108) The market investigation has confirmed that competitors' level 1 and 2 software solutions are considered relevant indicators of market strength.
- (109) [...] (\*). However, in these possible markets also, a sufficient number of strong competitors remain: SMS, Danieli, ABB, Alstom and TMEIC-GE. In addition, there are a number of other competitors who are active above all in the area of level 1, where entry barriers are lower than in level 2, or in niche solutions in competition with the parties to the merger. This is confirmed by an analysis carried out by the Commission of market strengths in the case of level 1 and 2 software modules in a few process stages. Data from individual major competitors were lacking, but it was possible to carry out an analysis of a worst-case scenario which confirms the continued existence of strong competitors in the possible markets.

# Electrical metallurgical plant building for aluminium hot rolling and aluminium cold rolling

(110) The possible markets for aluminium rolling mill building are, in comparison with steel rolling, very small. For this reason alone, in the case of joint steel and aluminium rolling markets the above analysis of steel rolling markets could not be substantially affected.

- (111) The overwhelming majority of customers regard the impact of the merger in the area of electrical plant building for aluminium hot and cold rolling mills as unproblematic. It is true that both parties are often named prominently as being among the leading bidders. However, a number of other companies have won tenders. Mention was made of ABB, TMEIC, Alstom, ASI Robicon and IAS.
- (112) Entry barriers in the aluminium field are appreciably lower for suppliers of mechanical aluminium mills and for companies which already offer level 1 and 2 automation in the steel field. A certain degree of buyer power can definitely be ascribed to the highly concentrated demand side and this may promote the entry of new suppliers from these groups. Mention can be made above all of SMS in this connection.

# IT solutions for plant logistics/MES/level 3

(113) In this relatively young and relatively strongly growing market, the transaction does not give rise to any competition concerns. The area is small and therefore does not make a substantial difference when it comes to examining a possible overall market for electrical metallurgical plant building.

# Conclusion on a possible overall market for electrical metallurgical plant building including all the above submarkets and on all possible submarkets

(114) Since no competition problems arise in any of the possible submarkets of an overall market for electrical metallurgical plant building, the same necessarily holds true for a possible overall market. In no possible market for electrical metallurgical plant building is there any question of the creation or strengthening of a dominant position or of any other significant impediment to effective competition. Nor are any anticompetitive effects for electrical metallurgical plant building apparent from the supplementary examination of possible non-horizontal effects.

### c. Metallurgical plant maintenance and servicing

(115) The activities of Siemens and VA Tech overlap in this market also. The Commission's market investigation revealed, however, no signs of any competition problems in the market for metallurgical plant maintenance and servicing. The entry thresholds in this market are substantially lower than in the markets for electrical and mechanical plant building. A sufficient number of local competitors are active in the area of the maintenance and servicing of metallurgical plant. The customers of metallurgical plant manufacturers are, moreover, themselves capable of carrying out such work.

(116) The merger would therefore not lead in this market to the creation or strengthening of a dominant position or to any other significant impediment to effective competition.

### d. Electrical industrial plant building in other sectors

- (117) The planned merger is unobjectionable from a competition point of view in the electrical, non-metallurgical industrial plant building sector however the product market is defined
  - Conclusions on the electrical metallurgical plant building markets and on the market/s for electrical industrial plant building in non-metallurgical sectors
- (118) For the reasons given above, the notified transaction would not lead in any of the relevant electrical metallurgical plant building markets or in the market/s for industrial plant building in non-metallurgical sectors to the creation or strengthening of a dominant position or to any other significant impediment to effective competition.

#### F. LV SWITCHGEAR AND COMPONENTS

- (119) The relevant product market for low-voltage switchgear ('LV switchgear') can be segmented into three submarkets according to the built-in circuit breaker which can be an ACB, MCB or MCCB. In addition there is a separate market for busways, another component. Further components are programmable logic controllers and contactors. The markets for both the components and the assembled switchgear were, in line with previous decisions, analysed on a Member State basis, but since the proposed merger does not raise competition concerns at EEA level the question can ultimately be left open.
- (120) On that basis the markets for LV switchgear and some components in Austria and for other components in the EEA and in some Member States would be markets horizontally and/or vertically affected by the proposed transaction. VA Tech is a panel builder and sources all components it needs to assemble an LV switchboard from third parties. Siemens is both a panel builder and a supplier of all components needed. However, regardless of the market definition chosen the combined market share is in no horizontally affected market higher than [30-40] (\*) %, and there are strong competitors in all affected markets which either produce their own components or have their own, independent source of components so that it will be impossible for Siemens to foreclose these competitors. Therefore, the Commission came to the conclusion that

competition concerns are unlikely to arise.

# G. BUILDING TECHNOLOGY AND FACILITY MANAGEMENT

#### 1. RELEVANT PRODUCT MARKETS

# G1. Building technology

- (121) Siemens and VA Tech are active in the field of building technology, which in Siemens's view must be segmented into three levels: the component level, the system level and the installation level. Siemens states that, although there are markets for facility management (see G.2), other services should be allocated to the respective primary market. The component and system levels should be divided according to area of application. At the component level, a distinction should be made above all between the areas of electrical installation technology, safety technology, control and instrumentation technology and HVAC (heating, ventilating and air-conditioning), and at the system level between safety technology and control and instrumentation technology. Lastly, at the installation level, it is necessary to distinguish between electrical and mechanical contracting. On the basis of the results of the Commission's market investigation, a distinction ought to be made in the case of safety technology at least between the areas of (i) fire protection and (ii) access control/ intruder detection. The question of any further subdivisions can remain open for the purposes of this Decision.
- (122) At the installation level, a distinction can be made between electrical contracting and mechanical contracting. The market investigation showed that there may be a separate, overlapping market for the construction of electrical and mechanical building installations (1) by a technical general contractor bearing overall responsibility. The exact definition of the market can, however, ultimately be left open.

#### G2. Facility management

(123) The market investigation shows that the market may be segmented into technical facility management, commercial facility management and general facility management. The question of the precise product market definition can, however, be left open.

#### 2. RELEVANT GEOGRAPHIC MARKETS

# G1. Building technology

(124) In Siemens's view, all the markets referred to above in part G (apart from that for installation technology components) are at least EEA-wide. According to the findings of the market investigation, there are many indications that the markets are national. The question of the geographic market definition can, however, be left open.

#### G2. Facility management

(125) The same holds true for the market or markets in the area of facility management.

#### 3. COMPETITION ASSESSMENT

## G1. Building technology

- (126) At the component level, it is only in a vertical respect that there can be any relevant markets inasmuch as VA Tech is not itself active in these markets.
- (127) The market investigation provided insufficient indications that Siemens would as a result of the merger be in a position to foreclose the said component markets in Austria to its competitors on the component level. There is sufficient competition in the markets for downstream systems and installations. At the immediately downstream systems level, the addition of market shares due to the merger would, moreover, be very small. In the said component markets themselves, Siemens faces competition from large, internationally established companies (including ABB and Möller or Honeywell, Johnson Controls and Sauter).
- (128) According to the company itself, VA Tech is not at all active at the systems level. VA Tech attributes all of its turnover in this area to contracting (installation level). The horizontal effects of the merger in the area of individual works outside Austria are marginal. Likewise within Austria there are no relevant markets with a market share addition of more than 10 %. A sufficient number of alternative system suppliers and integrators are available. Also from a vertical standpoint the merger would not lead to any significant impediment to competition.
- (129) At the installation level, it is only in Austria that there are any overlaps worth mentioning between VA Tech and Siemens. Most pronounced are the direct competitive position and the respective market strengths of Siemens and VA Tech in the possible submarket for technical general contractors. Although the merger would result in a reduction in the number of suppliers in Austria, RWE Solutions, MCE, the Dutch Imtech group (through its German subsidiary) and M+W Zander (Germany) would still remain as technical general contractors in Austria. Medium-sized electrical contractors such as, for example, Klenk & Meder, Landsteiner and Bostelmann operate in the market through consortia. If, as might happen especially in the case of major projects, there were not enough suppliers available to carry out the technical general contract, then customers have indicated that they see no problem in reacting by breaking up tenders into smaller parts (for individual systems/works instead of the overall technical general contract). Customers would then either take care of

<sup>(</sup>¹) The parties' activities in this area relate as a rule to non-industrial building installations (residential and office buildings and such structures as concert halls, museums, hospitals and tunnels).

the planning and integration themselves or entrust it to an engineering consultancy. There would therefore not be any significant impediment to competition. The same holds true for the areas of electrical and mechanical contracting.

## G2. Facility management

- (130) Most of Siemens's and VA Tech's customers indicated in the market survey that the respective other party was not the most promising competitor in the context of the tendering or negotiated procedure. In Austria, the only possible relevant market, there are a number of other suppliers whose services in the area of technical facility management are from a customer standpoint basically equivalent to those of VA Tech and Siemens. Even smaller companies, especially at regional level, exert competitive pressure on the above-mentioned larger competitors. The merger would therefore not lead to any significant impediment to effective competition in this area.
  - H. INFRASTRUCTURE INSTALLATIONS AND ELECTRICAL EQUIPMENT FOR ROPEWAYS
  - H1. TRAFFIC INFRASTRUCTURE INSTALLATIONS
- (131) With respect to traffic infrastructure installations, only in Austria would there be a few small overlaps between Siemens and VA Tech in the case of street lighting, traffic signalling equipment, parking space control installations and traffic control installations. The question of product markets and geographic markets can be left open in these areas. Customers have sufficient alternatives available. The merger would therefore not lead to any significant impediment to effective competition.
  - H2. WATER TREATMENT INSTALLATIONS
- (132) The same holds true for water treatment installations.
  - H3. ELECTRICAL EQUIPMENT FOR ROPEWAYS
- (133) The same holds true for electrical equipment for ropeways.
  - I. OTHER IT SERVICES
- (134) The same holds true for electrical equipment for other IT services.

#### CONCLUSIONS

(135) The Decision therefore concludes that the notified concentration would lead to a SIEC, in particular through the creation of a dominant position, in the markets for (i) hydroelectric power equipment and (ii) mechanical metallurgical plant building.

#### J. COMMITMENTS

- (136) In order to address the aforementioned competition concerns in the markets for (i) hydroelectric power equipment and (ii) mechanical metallurgical plant building, the parties have submitted the commitments described below.
- (137) In hydroelectric power equipment, the parties commit to divest VA Tech Hydro, a subsidiary of VA Tech containing the company's activities in hydroelectric power equipment as well as in combined-cycle power generation equipment. No competition concerns were raised in the latter area, but most of this business is heavily integrated with the hydroelectric operations, both physically and financially. The market test confirmed that divestiture of VA Tech Hydro (which removes entirely the competitive overlap in hydroelectric power) would solve the competition problems in this market.
- (138) In mechanical metallurgical plant building, divestiture of Siemens's 28 % shareholding in VA Tech's most important competitor, SMS Demag, would be necessary to prevent a significant impediment to effective competition. Siemens has already exercised a put option (effective 31 December 2004) to sell its stake to SMS Demag's controlling shareholder. However, implementation of the divestiture is delayed for an uncertain period owing to litigation with SMS about valuation of the shares. Siemens has, therefore, submitted a commitment that will remove any competitive effect of the continued shareholding [...] (\*) in SMS and the economic interest in its future competitor. Under the commitment, a trustee will replace Siemens's representatives in SMS's shareholder committee and supervisory board. No sensitive strategic information concerning SMS's future business activities will be passed on to Siemens. The trustee will provide Siemens with information only as far as strictly required for Siemens's defence in the court proceedings and for producing its annual accounts. The former information will relate only to information before 31 December 2004, while the latter information will not rely on the shareholders' agreement, but on normal legal rights of minority shareholders. In addition, a nonbuyback commitment and clarification by Siemens that the shareholding will be valued as of 31 December 2004, as well as the fact that Siemens cannot count on dividends, eliminates any concern that Siemens can expect to continue to participate in SMS Demag's future profits. Hence the commitment replicates, as closely as feasible, a full divestiture of the SMS Demag stake while litigation continues. The market test of the proposed commitment in mechanical metallurgical plant building was positive.

(139) In its Decision, the Commission has, therefore, reached the conclusion that, on the basis of the commitments submitted by the parties, the notified concentration will not lead to a dominant position of the parties in (i) hydroelectric power equipment and (ii) mechanical metallurgical plant building.

#### K. CONCLUSION

(140) The Decision concludes that, subject to full compliance with the commitments given by the parties, the proposed concentration will not impede effective competition in the common market or in a substantial part of it. The Commission has therefore decided to declare the concentration compatible with the common market and the EEA Agreement in accordance with Articles 2(2) and 8(2) of the Merger Regulation and Article 57 of the EEA Agreement.

#### III. ADVISORY COMMITTEE

- (141) At its 133<sup>rd</sup> meeting on 29 June 2005 the Advisory Committee on Concentrations gave its unanimous support to the Commission's draft decision to clear the concentration subject to conditions and obligations based on the commitments given by the parties.
- (142) Pursuant to Article 19(7) of the Merger Regulation, the Commission is making public the opinion of the Advisory Committee together with the Decision, having regard to the legitimate interest of the undertakings in the protection of their business secrets. In the present case the Advisory Committee's opinion does not contain any business secrets.