

***Case No COMP/M.1339 -  
ABB / ELSAG BAILEY***

Only the English text is available and authentic.

**REGULATION (EEC) No 4064/89  
MERGER PROCEDURE**

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Article 6(2) NON-OPPOSITION  
Date: 16/12/1998

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## COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 16.12.1998

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EEC) No 4064/89 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE  
ARTICLE 6(1)(b) DECISION

To the notifying party

Dear Sirs,

**Subject: Case No IV/M.1339 – ABB/Elsag Bailey**

1. On 3 November 1998 a completed notification was received pursuant to Article 4 of Council Regulation (EEC) No 4064/89 as last amended by Council Regulation (EC) No 1310/97, ('the ECMR'), under which ABB Transportation Participations BV, ("ABB TP") would acquire, by means of an agreed public bid launched on 20 October, control of Elsag Bailey Process Automation NV ("Elsag Bailey").

### **I THE PARTIES**

2. ABB TP is wholly owned by ABB Asea Brown Boveri Ltd, which is jointly owned by ABB AG (Baden, Switzerland) and ABB AB (Stockholm, Sweden). Elsag Bailey's common shares are 61% owned by Finmeccanica SpA ("Finmeccanica") and 39% by other shareholders through its listing on the New York Stock Exchange. Finmeccanica, whose shares are publicly traded on the Milan Stock Exchange, is controlled by the Italian Government through Istituto per la Ricostruzione Industriale SpA, which owns approximately 81% of Finmeccanica's Ordinary Shares.
3. ABB TP is active in a range of engineering activities including process control. Elsag Bailey is active only in process control automation.

### **II THE OPERATION AND THE CONCENTRATION**

4. The proposed concentration involves the acquisition by ABB TP of sole control of Elsag Bailey. Under an Acquisition Agreement of 14 October between ABB TP and Elsag Bailey, ABB TP undertakes to launch a cash tender offer to purchase all outstanding common shares of Elsag Bailey, and all outstanding preferred securities of Elsag Bailey Financing Trust convertible into shares of Elsag Bailey.
5. Under a separate Shareholders' Agreement with ABB TP, Finmeccanica, in response to the offer, will tender and agree not to withdraw all its shares in Elsag Bailey, and all its securities convertible into such shares.
6. ABB TP's offer is conditional on there being at least 75% of the fully diluted share capital of Elsag Bailey available for purchase at the end of the tender offer period. However, ABB TP could elect to purchase a smaller percentage. Finmeccanica's offer means that ABB TP would be able to acquire at least 53% of the shares, irrespective of the level of interest from holders of shares or securities other than Finmeccanica.

### **III COMMUNITY DIMENSION**

7. The world-wide turnover of the ABB group in 1997 was over ECU 27 000 million and its Community-wide turnover was in excess of ECU 11 000 million. The world-wide turnover of Elsag Bailey was over ECU 1 200 million and its Community-wide turnover was in excess of ECU 600 million. Neither company earned more than two thirds of their EC turnover in one and the same EC Member State, nor more than two-thirds of their EFTA turnover in one and the same EFTA state. The notification does not fall to be treated as an EFTA co-operation case.

### **IV COMPATIBILITY WITH THE COMMON MARKET**

#### **A. Relevant product markets**

##### *Introduction*

8. Process control systems are used in the control of industrial production processes within a manufacturing plant or site, for example, at an oil refinery, pharmaceutical plant, power plant, pulp and paper factory, or a chemical plant. They comprise a range of different components, inter-linked in such a way as to produce a coherent control system which enables the plant to operate within the desired operational parameters. Some of the instruments will collect data on parameters such as temperature, pressure, levels, flow rates, electrical resistance, chemical composition, etc. Other components will assemble the data, possibly analyse them, and present them either to a human operator for review or, in an automated system or sub-system, send instructions to control valves or similar components to alter the appropriate settings on the machinery in order to bring the relevant parameters back within the desired range. The components of a process system are various and can include, for example, control valves, flow meters, temperature sensors and liquid and gas analysers, as well as distributed control systems, programmable logic controllers, and process control software.

9. The main players active in the process control sector usually provide not only the components to be used in a system, but also a 'system integrator' function by which they will offer complete automation packages, combining all the separate elements into seamless systems. These packages may be composed of in-house components, or may use components from other suppliers. In some cases the client may insist that certain equipment, perhaps from a competing supplier, is incorporated into the system. The ability to assemble complete systems in this way is being assisted by the development of certain widely used, open standard in-plant communications protocols and technologies, such as Fieldbus and Profibus, which make it easier for systems integrators to piece together components and sub-systems from different suppliers, knowing that they will be compatible with one another.
10. Market investigations suggested that the demand in this sector could be divided into three broad product/service groupings, within each of which there was a degree of substitutability, namely into *process automation systems*, consisting essentially of control units comprising both hardware and software; *process instruments* whose function is to measure the variables; and *process analysers* to measure the physical and chemical composition of materials used in the process. In most respondents' views these categories represented the limits of substitutability, as an instrument was not substitutable for an analyser and vice versa, nor could either substitute for a complete system. Accordingly a competition assessment was undertaken based on markets at these levels.

#### *On-line gas chromatographs*

11. Notwithstanding the above, the Commission's investigations showed that there was at least one particular type of analyser, namely the on-line gas chromatograph, whose conditions of use meant that it could not be regarded as substitutable for by other types of analysers, and which therefore had to be considered as a possible product market within its own right. On-line gas chromatographs ("GCs") are used mainly in the petrochemical and related industries for analysing the composition of streams of hydrocarbons. The on-line versions can be distinguished from their laboratory equivalents because they have to be more rugged and reliable, and capable of operating continuously. Unlike the laboratory version, they are also usually configured so as to be capable of interfacing with other elements of a control system.
12. It was argued by the notifying party that GCs were no more than a particular type of analyser which, in functional terms, could be substituted for by other types of analyser, including, for example, mass spectrometers. It was said that a mass spectrometer, although still more expensive than a gas chromatograph, could do everything a gas chromatograph could do, but also offered a higher sampling throughput. It was claimed that largely as a result, GCs were a technology in decline, as evidenced by a fall in world-wide demand from about 2600 units five years ago to about 2000 units per annum today.
13. Users of GCs painted a different picture. It was true that mass spectrometers offered a faster sampling rate. But a typical plant utilising gas chromatographs, say a refinery, might have perhaps around 40 units, whose location would have had to be settled upon when the plant was being designed. This would represent an expensive commitment to a particular type of technology. Even where there was the possibility of entirely replacing the existing technology, for example when building a new plant or when a plant was being redesigned, alternative forms of analyser such as a mass spectrometers

could substitute for the analytical functions of a GC only to a very limited extent, and not sufficiently to impose competitive pressures on users.

14. If a unit became so defective as to require replacement, it would not usually make commercial sense to replace it with an entirely different technology, not only because the rest of the process control system was designed to work with gas chromatographs and would probably require major re-design, but also because significant costs would be incurred in retraining staff. Moreover, economies of scale in terms of, say, spares handling and stocking and maintenance would be lost. It was considered that the current generation of GCs were likely to remain an important piece of equipment for a considerable period of time to come, in the order of at least ten years. Indeed it was likely that, when due for replacement, they would be replaced by improved designs rather than by an entirely different type of technology.
15. In the light of the above, it was concluded that GCs were likely to form a separate relevant product market.

#### *Mass spectrometers*

16. The issue was raised as to whether mass spectrometers might form a separate product market in their own right. ABB TP supplied such instruments. Eltag Bailey had no commercially available product, but did have a product in development. However because of the form of divestment proposed by way of modification to the concentration (see below), which included Eltag Bailey's development activities on mass spectrometers, it was not necessary to consider whether a separate product market existed or whether the impending arrival of product in development on such a market might have contributed additional market strength to the combined entity. Accordingly the issue did not need to be pursued further.

#### B. Relevant geographic markets

17. Due to legislative harmonisation of standards and codes throughout Europe, public procurement obligations; low transport costs, buyer power on the part of customers (large utility companies capable of sourcing on a European-wide or global basis), markets were considered to be at least European-wide. This view was endorsed in the responses to inquiries of competitors and customers, many of whom felt all the product markets concerned in this sector were not merely European-wide, but even global. As the assessment was not substantially affected by whether the markets were considered European or global, the question was left open.

#### C. Competitive assessment

##### *Process automation systems, instruments and analysers*

18. If a market were defined for automation systems as a whole, combined market shares at European level (in this case either EU or EEA-wide) would be no more than 15% and no competition concerns would therefore have arisen. If a market were defined for instruments alone, the concentration would lead to a combined market share of under 10% at European level. No competition concerns would therefore have arisen. If analysers were taken as a separate market, the combined entity's share would be under 20% at European level, with an increment of around 5%. No competition concerns would therefore have arisen.

### *Gas chromatographs (“GCs”)*

19. World-wide sales of GCs were estimated to be worth in the region of US\$100 million per annum. About 2000 units a year are currently sold. According to the parties, world-wide sales dropped over the past five years from around 2600 units per year to around 2000 now. They attributed this to declining demand for the technology. However, third parties believed the fall was attributable to a drop in demand from the refinery sector and was a temporary phenomenon.
20. Competitors said to be active in offering GCs included Siemens, Siebe (Foxboro), Therma Electron, Daniel Industries, Emerson (Fisher Rosemount) and Yokogawa.
21. If the GC market were defined with a European-wide geographic extent, the parties would have a combined share of 50–60%, with an increment of 20–30%. The next strongest competitor would be Siemens, with a share of about 20%, which is understood to arise mainly from Siemens’ sales in Germany. No other competitor would have over 8%.
22. However, if the markets were taken as world-wide, the parties’ combined share would be some 60–70%, with an increment of 30–40%, and the nearest competitor would be Yokogawa with a share of about 10%. On either geographic definition, therefore the acquisition would give ABB/Elsag Bailey a very strong position, with a market share which, at the minimum, would have been almost three times that of its nearest competitor, and at the maximum over 60% of the market. Even this may understate the strength of their position, as many third parties consulted appeared to regard ABB TP and Elsag Bailey as undisputed leaders in this sector. One queried whether any of the competitors could produce equipment, and provide the necessary backup services, which was capable of operating across the full range of technical applications for which the relevant ABB TP and Elsag Bailey products could be used.
23. The combination of circumstances described was considered sufficient to give rise to concerns about potential dominance, and to warrant the opening of proceedings in accordance with Article 6(1)(c).

### **V. MODIFICATIONS TO THE PROPOSAL**

24. In order to remove the concerns raised by the operation, not only in relation to the notification made to the European Commission but also following consultations with other competition authorities, ABB TP submitted a proposal for modification of the operation in accordance with the terms of Article 6(2) of the ECMR. This proposal involved an undertaking to divest the Analytical Division of Elsag Bailey’s subsidiary, Applied Automation Inc., based primarily in the United States, but with some relevant operations in Europe and Asia. The divestment would comprise that part of the business which undertakes the manufacture, R&D, engineering, sales and market of gas chromatographs and the development of the mass spectrometer product, as well as related systems integration operations, and relevant intellectual property rights and personnel. The divestment of the business activities concerned, would have the effect of removing any competition concerns which might otherwise have arisen in relation to the parties’ activities in gas chromatography. The divestment proposal is set out in more detail in the text of the modification as accepted, which is annexed hereto and forms an integral part of this Decision.

25. The Commission conducted a market test to verify that these undertakings were sufficient to remove the competitive concerns raised by this operation. The responses from those consulted were generally favourable.

## **VI. CONCLUSION**

26. The Commission has thus concluded that these undertakings are sufficient to address the competition concerns raised by this concentration. Accordingly it has decided not to oppose the notified operation and to declare it compatible with the common market and with the functioning of the EEA Agreement. This decision is adopted in application of Article 6 (1)(b) of Council Regulation (EEC) No.4064/89, as amended by Regulation No.1310/97, and of Article 57 of the EEA Agreement.

For the Commission,  
Leon BRITTAN