

***Case No IV/M.149 -
LUCAS / EATON***

Only the English text is available and authentic.

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

Article 6(1)(b) NON-OPPOSITION
Date: 09.12.1991

*Also available in the CELEX database
Document No 391M0149*



MERGER PROCEDURE
ARTICLE 6(1)b DECISION

VERSION FOR THE PUBLIC

Registered with advice
of delivery

To the notifying parties

Dear Sirs,

Subject: Case No. IV/M149 - LUCAS/EATON
Your notification pursuant to Article 4 of Council
Regulation No. 4064/89.

I. THE PARTIES

1. Lucas (UK) is an international supplier of advanced technology systems components and services to a number of industries, in particular the aerospace and automotive industries.
Lucas is a leading European designer and manufacturer of vehicle braking and control systems for heavy duty road and off-highway vehicles.
2. Eaton's (USA) principal activities are the manufacture and sale of axles, transmission and vehicle components, electrical and electronic controls, hydraulic equipment and electrical switches. In addition, Eaton has commission income from marketing electronic equipment for the semiconductor business and viscous fans from the automotive industry.
Eaton is a leading designer and manufacturer of universal products for heavy duty road and off-highway vehicles in the USA.

II. THE OPERATION

3. Through the notified agreements, the parties intend to form a joint venture via two separate legal entities:
 - a partnership in the USA, which will be active in relation to both companies' range of products in that area;
 - a British limited company which will be active in Europe.
4. The JV will combine the assets, employees and business of the Heavy Duty Breaking Division of Lucas and of Eaton. Its product range will comprise:
 - foundation braking equipment for heavy vehicles (both air and hydraulically operated);
 - actuation systems, including ABS, for heavy vehicles;
 - kindred products, such as tyre inflation systems, that fall logically into the JV's market and technical competence.

Its main markets will be related to trucks (>3.5 tonnes) and off-highway vehicles over 40 hp in Europe and North America.

III. COMMUNITY DIMENSION

5. The aggregate worldwide turnover of Lucas and Eaton in their respective last financial year was 7,756 million Ecus. Their respective turnover in the Community exceeded 250 million Ecus. The parties do not achieve more than two-thirds of their Community turnover in one and the same Member State. Consequently, the proposed operation has a Community dimension.

IV. CONCENTRATION

1. Joint control

6. The shareholdings of Eaton and Lucas in the two JV companies do not in themselves reflect joint control, since Lucas retains a majority stake in both entities. However, the parties have entered into shareholder agreements which provide for joint control of each JV company, in the sense that the agreement of both parties is required in respect of major decisions regarding the commercial policy and the competitive strategy of the JV, and which go beyond the protection of minority rights.
7. Clause 9.4 of the agreement provides that unanimity is required in the shareholder's general meeting for the adoption of decisions relating to liquidation of the JV, modifications of the authorized share capital, alteration of the rights attaching to any class of shares, etc..
8. In addition, the agreement provides for a Board of Directors of 9 members (Lucas 5; Eaton 4) which has to decide by unanimity in areas clearly related to the commercial policy and competitive strategy of the JV. The Annual Business Plan, which has to be adopted by unanimity in the Board of Directors includes decisions regarding:

- application of funds;
 - capital expenditure;
 - engineering budget analyzed between research, product development and application costs;
 - proposals for acquisitions, disposals, business reorganization or new product plants;
 - marketing plan, including product launches and promotions.
9. The 3 year Strategic Plan, for which unanimity is also required, sets out the key strategic and financial objectives of the JV. It includes a strategic overview of industry and market trends, competitor analysis and benchmarks for product performance, quality factors and financial ratios. In addition it establishes functional plans for marketing, manufacturing, sourcing and new product development.

Moreover, any decision regarding significant capital expenditure, loans and concession of trade credit, levels of borrowing, dispositions of assets and agreements with third parties and which are not expressly foreseen in the business plan require a unanimous decision of the Board of Directors.

10. In the light of this, it is concluded that a jointly controlled company will be created.

2. Concentrative joint venture

Autonomous full function JV

11. The JV will design, develop, manufacture, assemble, market and sell heavy duty braking systems. It will have access to competitive supply sources on a worldwide basis and will sell the major part of its output directly to third parties. In principle, Lucas will transfer (sell) to the JV all its assets (leasing contracts, plant, machinery, tooling and equipment) relating to its heavy duty braking systems save for the exceptions discussed under point 14. Both Lucas and Eaton will transfer all their assets in the US to the US partnership.

The JV is an autonomous economic entity. By taking over all the relevant assets of the parents relating to the affected markets, it will be able to perform on a lasting basis the functions carried out by well established players in the braking systems market.

The JV will stand as a separate identifiable company on the market with all the assets necessary to play a role distinct from its parents. The parent companies withdraw completely and definitively from the production of the products of the JV. It therefore represents an autonomous economic entity within the meaning of Article 3(2) of the Merger Regulation.

12. In reaching this conclusion, the Commission has taken account of the following three factors:
- Lucas will supply Simplex Air Cam Drumbrakes and Automotive Adjusters to the JV, on the basis of an agency manufacturing agreement. These supplies are marginal and only represent a small percentage (1%-2%) of the JV's turnover. They do not prevent the conclusion that the JV performs on a lasting basis all the functions of an autonomous economic entity.

- Lucas and Eaton retain ownership of the intellectual and industrial property rights. However, they grant exclusive, royalty-free and perpetual patent and trademark licences to the JV, and none of the parents maintains a right to unilaterally terminate the licence. Licences may only be terminated by either party upon bankruptcy or termination of the JV. For the purposes of the examination of this case, these licences may be considered as a de facto transfer of intellectual property, in the sense that continued ownership by the parents could not possibly prevent the JV from carrying out its activity. In addition, the parents have included in their shareholder's agreement a non-competition clause by which they commit themselves not to design, manufacture or sell products in competition with the JV. This fact further limits any possible use by the parents of the relevant intellectual and industrial property rights outside the JV.
- Lucas Aftermarket Division will continue to assure the distribution of the JV's products worldwide (except in North America), in the independent aftermarket. The JV will be responsible though for all sales to the Original Equipment market. Projections for the JV's activity indicate that its sales to the independent aftermarket through Lucas will represent only 15% of its total sales.

The economic choice by the JV to use its parent's distribution facilities in this respect does not prevent a finding of autonomy. This factor alone does not enable the conclusion to be reached that the JV will simply undertake an auxiliary function for its parents. The JV will remain to all real extents an autonomous player in the market.

Relationships between the JV and Lucas aftermarket Division will be at arms-length, with the JV determining its own prices on a profit basis. The presence of Eaton as shareholder in the JV guarantees the transparency of the pricing of the JV's products for sales to Lucas. In addition, it has to be taken into account that demand for aftermarket products is determined by the end user. Lucas will only transmit to the JV the perceived demand, and will not act as the actual final customer.

Absence of risk of coordination

Withdrawal of parents from affected markets

13. Both Lucas and Eaton will place all of their assets in relation to the production and sale of heavy duty braking systems into the JV. The only exception to this concerns Lucas aftermarket distribution for the JV.

Activity of parents in neighbouring, upstream or downstream markets

14. Although the parents withdraw from the market of the JV, they are both present in certain markets which could be related to those of the JV.

Eaton manufactures and sells truck components in the Community, including front end gear boxes, gear sets and axle heads. Its customers for fan drives and fans manufactured in Germany (Eaton fluid power operation) and for pumps and motors, control valves and steering control units manufactured in the UK and USA (Eaton Hydraulic Operation) are also the JVs main clients in the off-highway segment (Ford New Holland, Massey Ferguson, J.I. Case, Fendt). In addition, Eaton is active in the service sector through Eaton's service/technical

engineers, who are based at five centers within the EEC (UK, Spain, Greece, Germany and France).

Lucas Automotive will continue to carry out the distribution of the JV's products and its own products in the aftermarket. It will remain active in sectors such as automotive electronics, chassis systems (brakes and actuation for cars), electrical systems (heavy duty electrical equipment, batteries, special purpose motors, wiring systems) and components for cars, trucks and tractors and power train systems. Therefore, it will continue supplying clients of the JV.

15. All the evidence available to the Commission indicates that in both technical and marketing terms there is very little overlap between the market for heavy duty braking systems and those products in which Lucas and Eaton are active in the Community. In this respect it should be noted that Eaton's European operations involve products which are not competitive with either Lucas' products or with heavy duty braking systems. Eaton's and Lucas' range of products in the Community are completely different and therefore they are not actual competitors within the Community.
16. As to possible spill-over effects between the markets of the JV and other car components, in particular car brakes, conditions of competition in both markets are very different. The market of braking systems for cars requires large volumes of standardized product, whereas the heavy duty market requires lower volumes of production with a much higher degree of flexibility. Customers split operationally their car and truck activities into separate divisions. The supply structure confirms this: suppliers present in both markets run the two businesses separately. Market leaders in braking systems for cars ([]*) have a weak position in the heavy duty market. Conversely, []* has always been relatively weak in the car market whereas it is a leader in the truck markets for braking systems.
17. From a technological point of view, spill over effects are unlikely. Vehicle dynamics are completely different; the laden and unladen weight of a car is not significantly different whereas in trucks the difference is very large. The emergence of ABS systems, the main technological development in braking systems, reflects these differences. The car ABS market shows that of the leading three suppliers, only one ([]*) has succeeded in entering the heavy duty ABS market, and only to a very limited level.
18. In the light of the above it is concluded that there are no grounds to believe that the establishment and operation of the JV will result in a coordination of competitive behaviour.
19. The Commission therefore concludes that the notified operation constitutes a concentration within the meaning of Article 3(2) of the Merger Regulation.

* Deleted in public version

IV. COMPATIBILITY WITH THE COMMON MARKET

A. Relevant product market

20. A braking system is divided into two basic parts: the actuation system, which connects the brake pedal to the brake itself, and the foundation brake. Additional facilities, such as ABS, can be added to the system. These categories represent distinct parts of the braking system. Manufacturers of trucks etc often install an actuation system of one producer together with the foundation brake of another. These product categories should therefore be considered to be a first level of distinction in market definition.
21. A second level of distinction can be made between braking systems for commercial vehicles, trailers and off-highway vehicles. These vehicles perform significantly different functions, and the braking systems differ accordingly. The design of brakes are significantly different in technical terms. Brakes for these three categories of vehicles can thus be viewed as belonging to separate product markets. It should be noted, however, that there is a level of supply-side substitutability between the three general markets. The underlying technology is common to both systems, and although design and manufacture differs significantly, a manufacturer of brakes for commercial vehicles is likely to be at least a potential producer of brakes for off-highway vehicles. However, due to design and retooling work, entry in the very short term (e.g. one year) by a manufacturer of brakes for commercial vehicles into the market for brakes for off-highway vehicles in response to increased demand would be highly unlikely. The role of supply-side substitutability in this respect is therefore considered below, under dominance (see section V).
22. A third level of distinction can be made between in-house production of braking systems (i.e. by vehicle manufacturers) and those manufactured by independent companies. Although the brakes produced in-house are comparable with and substitutable for those manufactured by independents, the Commission considers that these two categories must be viewed as distinct for the purposes of product market definition. This is to ensure that the competitive impact of the operation on undertakings that have little or no in-house production is fully taken into account. The role of in-house production as a factor potentially limiting the possible freedom of action of independent manufacturers is however taken into account once the market has been defined and market shares calculated.
23. Within these basic market sectors a number of further possible relevant product markets can be identified:

1. In relation to braking systems for commercial vehicles

Actuation systems

24. Generally speaking the design of actuation systems changes with the increasing weight of the vehicle in question. The pedal effort required to stop a vehicle above 2-3 tonnes becomes extremely high and even with vacuum assistance (above 5 tonnes) impossible for a human being to achieve. To overcome this, air at high pressure (which is controlled by the driver

through the foot pedal) is used in conjunction with the hydraulic system to apply the brakes. Another system uses air, controlled by the driver through the foot pedal, to push a rod attached to the brake which in turn pushes the shoe/pads on a drum/disc brake.

25. Because of these differing characteristics that follow the weight of the vehicle, the Commission finds it convenient to identify three different categories of actuation systems:
 1. those for commercial vehicles weighing 3.5 - 4.9 tonnes;
 2. those for commercial vehicles weighing 5 - 16 tonnes, and
 3. those for commercial vehicles weighing over 16 tonnes.
26. The division of the market into these three categories is not wholly satisfactory. There is no distinct gap in the weight of vehicle for which differing designs of actuation systems are used. The same system may be used in two categories. Nonetheless, it does represent a useful distinction to judge the market power of the undertakings concerned in relation to the different types of actuation systems. Again, the Commission is aware that there is some degree of supply-side substitutability between producers of actuation systems within these three categories. Almost all manufactures produce a range of actuation systems capable of covering all three categories. This factor is, for the reasons set out in paragraph 21, considered under dominance, at point point 37 e).

Foundation brakes

27. A number of different designs of foundation brakes exist for commercial vehicles. A first distinction is between drum brakes and disc brakes. A further distinction can be made according to the medium used to apply the force necessary to stop the vehicle. Smaller vehicles use hydraulic fluid, large vehicles must use pressured air systems, medium sized vehicles can use either hydraulic or air.
28. Defining markets based on concepts of reasonable substitutability in such circumstances is particularly difficult as no definite line relating to vehicle weight exists when hydraulic systems become insufficiently powerful or air systems become uneconomic. Any market definition will therefore be somewhat arbitrary. In general terms, the larger the vehicle, the more likely an air-based system will be used. Thus, in order to analyze the impact of the operation the Commission has chosen to accept the notifying parties' submission that distinct categories of brakes exist according to the weight of the vehicle in question. Three categories are defined: 3.5 - 4.9 tonnes, 5 -15.9 tonnes, and over 16 tonnes. Enquiries with competitors and customers of Lucas/Eaton indicate that this distinction is widely accepted within the industry. An alternative definition is to further divide, within each of these major weight categories, air and hydraulic foundation brakes. The Commission has analyzed the effect of the joint venture with respect to both of these possible market definitions.
29. Again, the Commission is aware that there is a level of supply-side substitutability between these various product sub-categories. This factor is, for the reasons set out in paragraph 21, considered under dominance, at point 37 e).

2. Braking systems for trailers

30. Such systems are largely identical to certain brakes used in commercial vehicles. There are differences between the two end uses in that trailer manufacturers will not accept more innovative products if this leads to a price increase.
31. In the present case it is un-necessary to decide whether such products form a relevant market distinct from those relating to commercial vehicles. Lucas sells negligible quantities of brakes to trailer manufacturers, Eaton is not present in this area of activity. To include this sector into the overall "commercial vehicle" markets would therefore only reduce the JV's market shares. As the existing market share (without including such products) in that market does not give rise to a finding of a creation or strengthening of a dominant position, this question is irrelevant for the purpose of the present analysis.

3. Braking systems for off-highway vehicles

32. Off-highway vehicles are used for agricultural and construction purposes. Three basic distinctions can be made:
- systems for vehicles below 40 bhp. Such machines (garden tractors, etc.) are made almost exclusively in Japan. Their braking systems (wheel mounted disc brakes) largely resemble those used in cars. They are fundamentally different from those used in the larger vehicles exceeding 40 bhp manufactured principally in Europe and the US. Neither Eaton nor Lucas produce braking systems for such vehicles below 40 bhp.
 - systems for agricultural vehicles and construction vehicles. Construction vehicles use very large heavy duty disc or drum brakes that are installed on the end of an axle at the wheel. These differ considerably from those used in agricultural vehicles described below which use either multi-plate disc brakes or annular piston brakes. Braking systems for these two vehicle categories can therefore be distinguished. Neither Lucas nor Eaton produce braking systems for construction vehicles.
 - Braking systems used on agricultural vehicles between 40 - 130 bhp and above 130 bhp can also be distinguished. The latter vehicles use annular piston brakes designed and manufactured by the vehicle manufacturers. For economic reasons they form an integral part of the axle gearbox assembly. The 40-130 bhp category can use either multi-plate disc brakes or annular piston brakes. It is therefore appropriate to distinguish these two categories. Neither Lucas nor Eaton produce braking systems for such vehicles above 130 bhp.
33. For the purpose of analyzing the operation in question, the Commission has therefore identified the following markets on which JV will be active.
- actuation systems for agricultural vehicles of 40 - 130 bhp;
 - foundation brakes for agricultural vehicles of 40 - 130 bhp.

34. The market could theoretically be further divided according to the type and weight of agricultural vehicle in question (eg tractors, combine harvesters). However, the braking systems for these vehicles (within the above bhp parameters) only differ in size, and no such division therefore appears strictly necessary. Nonetheless, for the purpose of certainty, the Commission has also examined the effect of the operation even if the market were to be so subdivided.

The role of supply-side substitutability, particularly between manufacturers of braking systems for commercial vehicles and agricultural vehicles is considered below for similar reasons to those set out in paragraph 21, above.

B. Relevant geographic market

35. The relevant purchasers of braking systems are the major large vehicle manufacturers. Enquiries by the Commission have established that the undertakings source their requirements for braking systems throughout the Community. Whilst undertakings may prefer to have a supplier located close to their manufacturing operation, this is by no means necessary. Transport costs do not play a significant factor. Lucas manufactures braking systems in Germany and the United Kingdom, and supplies customers throughout the Community. In the light of these factors, the Commission considers that the geographic reference market for the abovementioned products is the Community as a whole.

V. DOMINANCE

36. Annex 1 contains detailed market share information regarding the position of Lucas on the markets identified above. This shows that Lucas does have some very significant shares in this sector. The following are particularly of note:
- trucks 5-15.9 tonnes, approximately []^(a) of the foundation brakes hydraulic sub-sector and approximately []^(b) of the foundation air sub-sector.
 - trucks over 16 tonnes, approximately []^(c) of the foundation brake sector.
 - agricultural vehicles 40-130 bhp: []^(b) of the foundation brake sector and approximately []^(c) of the actuation sector.
37. In spite of these very high market shares, the Commission concludes that the operation will not create or strengthen a dominant position for the following reasons:
- a) Eaton is neither an actual competitor nor a realistic potential entrant into the EC market for the products of the JV. Little or no strengthening of existing position of Lucas therefore results on the market. Eaton sells no products falling within the scope of activity of the JV in the EC⁽¹⁾.

(a) less than 40%.

(b) above 50%.

(c) between 40% and 50%.

(1) Except from sales to Van Hool of Belgium. This company uses Eaton's brakes for coaches intended for export to the US. Sales in this respect are insignificant.

In the US, Eaton manufactures products falling into most of the sectors of the JV. However, due to a number of technical differences between braking systems used on commercial and agricultural vehicles in the US compared to the EC, these products are not directly and immediately substitutable for those used in the Community. In the late 1970's, Eaton attempted to sell heavy-duty braking equipment into the EC. It failed and withdrew. It must therefore be considered highly unlikely that the combination of Eaton and Lucas will lead to the creation or strengthening of a dominant position in the EC. This factor is very important in the Commission's assessment of this case.

- b) Most of the manufacturers of commercial vehicles and agricultural vehicles produce braking systems themselves. This significantly reduces any market power of independent producers. Any attempt to raise prices to such manufactures is likely to lead to increased in-house production. Furthermore, in certain cases one truck manufacturer may supply brake components to another truck manufacturer (cross-supply agreements). This, and the possible extension of the practice, as well as point c below, ensures that truck manufactures without in-house production dispose of the choice between a number of actual and potential suppliers.

- c) Independent competitors

The market share tables annexed to this decision indicate that independent competitors of Lucas exist on all markets.

- d) Buying power

The purchasing of braking equipment for commercial/agricultural vehicles is concentrated in a limited number of very large truck/ agricultural vehicle manufacturers. Independent braking system manufacturers are significantly dependent on these few purchasers.

- e) Supply-side substitutability

The various different categories of foundation brake and actuation system outlined above share to a large extent common technology and common manufacturing processes. This is true both within the general category of foundation brakes and actuation systems for commercial vehicles, and between foundation brakes/actuation systems for commercial vehicles and foundation brakes/actuation systems for agricultural vehicles;

Thus it is possible that any price increase in one sector or sub-sector will result in new entry onto the market in question. Braking systems for individual vehicles are usually "model-specific", designed by the manufacturer of the vehicle and the braking system together. Entry would therefore take a period of approximately two years to permit necessary design and re-tooling work.

Nonetheless, the threat of this entry will to a certain extent constrain the competitive behavior of existing manufacturers.

38. In the light of the above and in particular paragraph 37 (a), the Commission concludes that the operation does not create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it.

VI. ANCILLARY RESTRAINTS

42. The non-competition clause in the shareholders agreement is limited to the field of activity of the JV and binds the parties for the period that they remain shareholders in the JV. This clause constitutes a restriction directly related and necessary to the implementation of the concentration. The present decision covers this non-competition obligation.

*
* *
*

For the above reasons the Commission has decided not to oppose the notified concentration and to declare it compatible with the common market. This decision is adopted in application of Article 6(1)b of Council Regulation N° 4064/89.

For the Commission,