

*Case No IV/M.1094 -
CATERPILLAR /
PERKINS ENGINES*

Only the English text is available and authentic.

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

Article 6(1)(b) NON-OPPOSITION

Date: 23/02/1998

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 23-02-1998

PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

to the notifying party

Dear Sirs,

Subject: Case No IV/M.1094 - Caterpillar/Perkins Engines

Notification of 18.12.1997 pursuant to Article 4 of Council Regulation No 4064/89. Notification declared incomplete on 12.01.1997 - Notification complete on 20.01.1997.

1. On 18.12.1997, the US company Caterpillar Inc. ("Caterpillar") notified the acquisition of the Perkins diesel engine business ("Perkins") from the British company Lucas Varity plc ("Lucas Varity"). This business is currently carried out by the Perkins diesel engine group which is engaged in the research, production, and marketing of diesel engines.
2. The notification was declared incomplete on 12.01.1998 according to Article 4 of Commission Regulation No 3384/94. Complete information was obtained on 20.01.1998 and the notification thus became effective within the meaning of Article 4(2) of Commission Regulation (EC) No 3384/94.

I THE PARTIES

3. Caterpillar operates in three principal business segments: (i) design, manufacture and marketing of construction, mining and agricultural machinery; (ii) design, production and marketing of diesel engines; and (iii) provision of financial products.
4. Lucas Varity is the parent company of an international group that designs, manufactures and supplies advanced technology systems, products and services in the automotive, automotive after market, diesel engine and aerospace industries. A part of its business consists of the research, production and

marketing of diesel engines, which is the object of the present proposed transaction.

II THE OPERATION

5. The notification concerns the acquisition by Caterpillar from Lucas Varity of the Perkins diesel engine division. In essence, the transaction comprises the sale to Caterpillar of effectively all of the assets of Perkins Ltd., the primary entity engaged in the design and manufacture of diesel engines and all shares owned indirectly by Lucas Varity in Perkins Engines, Inc. and Perkins Motoren GmbH.

III THE CONCENTRATION

6. The proposed transaction will result in Caterpillar acquiring sole control over the entire Perkins diesel engines business within the meaning of Article 3(1)(b) of Council Regulation (EEC)No 4064/89.

IV COMMUNITY DIMENSION

7. The combined aggregate world-wide turnover of the undertakings concerned exceeds 5,000 million ECU (Caterpillar: ECU 12,454 million and Perkins: ECU 814 million). Each of them has a Community-wide turnover in excess of 250 million (Caterpillar: ECU [...] million and Perkins: ECU [...] million), and they do not achieve more than two thirds of their aggregate Community-wide turnover in one and the same Member State. Therefore, the operation has a Community dimension.

V THE RELEVANT PRODUCT MARKETS

8. The parties submit that the operation concerns diesel engines. Furthermore, Caterpillar manufactures and sells earthmoving and construction equipment, as well as diesel generator sets (GenSets). According to the parties Caterpillar has an EEA market share in excess of [...] in the downstream product market for GenSets only. However, for the purposes of this decision, the downstream activities of Caterpillar in earthmoving and construction equipment are also considered to the extent that they are relevant for the assessment of the case. Perkins has no downstream activities.

A. Diesel engines

9. Diesel engines generate rotary motion which can be used to perform work in different applications. Diesel engines are used in a broad range of industrial, on-highway truck, power generation and marine applications. The choice of engine for each application depends on a variety of factors, including size, power, weight, speed, torque and cost. In general, the combination of these factors determines the performance of any engine. Therefore, the definition of the relevant product market

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³ Deleted for publication: between 20-30%.

in this sector is not straightforward, partly because of the heterogeneous nature of diesel engines.⁴

10. The parties submit that it would be impractical to regard each diesel engine application as a distinct market. For the purposes of the notification and calculation of market shares, the parties consider a product segmentation according to the different end-use applications, i.e. (i) industrial (construction, agricultural, material handling, earthmoving equipment); (ii) on-highway truck (light, medium and heavy duty trucks and other commercial vehicles); (iii) GenSets (stand-alone electricity generators powered by diesel engines); and (iv) marine (ships). Furthermore the four applications can be sub-divided into three horsepower (“hp”) ranges (1-200 hp; 201-600 hp; >600 hp), each of which offers different features.
11. According to the parties there is considerable supply-side substitutability as the same production lines are commonly used to manufacture engines covering a broad hp range that are destined for more than one end-use application. It is furthermore argued that diesel engines are generally produced in plants based on physical engine size rather than end-use applications. Also, it is submitted that within certain size ranges (and thus horse power), producers can cheaply and quickly switch production among different end-use applications. At the same time, the parties recognise that there is relatively little demand-side substitutability among engines designed for different end-use applications.
12. The Commission has in previous decisions acknowledged a certain degree of supply-side substitutability.⁵ However, the investigation has clearly shown that the four end-use applications in general are considered, both by competitors and customers, to constitute distinct product markets. From a supply side point of view, engine producers tend to focus their production on certain types of engines on which they have gained experience and success. Moreover, many competitors have stressed that adapting an engine does require important costs and technological capability. While the base engine may be similar in some applications, operating characteristics require unique development to provide the necessary engine options and performance and therefore it is generally considered neither technically possible nor commercially feasible to treat the four end-use applications as one distinct market. From the demand-side the customers are clearly very different and the investigation has thus confirmed that separate product markets can be identified on the basis of the different end-use applications and in some cases even more narrowly within each application. In particular, the investigation has shown that the industrial end-use application can be sub-divided into earthmoving and construction equipment applications. This is mainly due to the fact that engines used in these applications have very specific characteristics and performance capabilities; in particular special expertise (technological and commercial) in the production of the respective engines is required.

⁴ See cases No IV/M.768 - *Lucas/Varity* and No IV/M.1015 - *Cummins/Wärtsilä*.

⁵ The four applications represent around 60%, 25%, 13% and 2%, respectively, of the 1996 EEA sales by volume.

⁶ See *Cummins/Wärtsilä*, which however did not conclude on the exact product market definition.

13. Furthermore, the investigation has also shown that it cannot be excluded that each end-use application may be divided into horse power ranges. It can furthermore not be excluded that the horse power ranges indicated by the parties may be divided into narrower horse power ranges in order to define engines with common or similar characteristics. However, as it will be shown below, even based on narrower horse power ranges the transaction will not result in any significant material overlap and therefore the exact definition of horse power ranges can be left open.
14. Based on the above, the Commission has concluded that the above-mentioned end-use applications (i.e. industrial (further sub-divided into earthmoving and construction equipment), on-highway trucks, GenSets and marine) are distinct in character and therefore constitute separate product markets. For the purpose of the present assessment it is not necessary to consider whether the sub-divisions into horse power ranges may constitute separate product markets since even in the narrowest horse power range considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

B. Diesel Generator Sets

15. GenSets are stand-alone electricity generators powered by diesel engines. They are either mobile or stationary and are used to generate electricity either continuously or intermittently. GenSets range in size and power output from 1kVA to over 7,500 kVA. They are produced by combining a diesel engine, an alternator, switching gear and control systems on a platform, often with the addition of soundproof materials. The GenSets market was considered in a previous merger decision concerning the acquisition of joint control by Caterpillar and Emerson Electric Co. of a joint venture, F.G. Wilson (Engineering) Limited (“FGW”), which manufactures and sells GenSets⁷. No definitive position on a precise product market definition was reached.
16. The parties submit that, as with diesel engines, there are some efficiencies in focusing production around particular size and power ranges. For example, different engineering know-how and machinery are needed to build smaller, low-power GenSets than large, high-power GenSets. Consequently, different suppliers are stronger in some segments than others. From the demand-side GenSets are generally divided into power ranges for similar uses. The ranges usually identified in the industry are as follows: (i) 7-150 kVA; (ii) 150-1000 kVA; (iii) 1,001-2500 kVA; and (iv) >2,500 kVA.⁸ The different ranges are broadly speaking used for different operating modes such as standby and prime power applications. However, for the purposes of the present assessment the precise scope of the relevant product market for GenSets can be left open because, in all alternative market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

C. Earthmoving and construction equipment

⁷ See case No IV/M.700 - *Emerson/Caterpillar*.

⁸ See the *Emerson/Caterpillar* case. Because GenSets produce electrical power, output is typically expressed in kilo-volt amperes (“kVA”) rather than horse power.

17. There is a wide range of earthmoving and construction (i.e. roadmaking and materials handling) equipment. The range can be subdivided into three general segments, i.e. earthmoving machines, road making machines and materials handling machines. Broadly, these three segments constitute separate product markets. The relevant equipment covers a range of specific machines generally used in the preliminary phases of building construction and civil engineering, in order to prepare the site where building and civil engineering works are subsequently undertaken (earthmoving) and in road building and road maintenance projects (road making machines). Within each of these three segments the characteristics, size and power of the various machines vary according to the very specific nature of the construction in operation. Customers in these segments are generally construction, civil engineering companies as well as plant hire companies. On this basis it can be assumed that each machine within the broad category does not constitute a separate product market, to the extent that customers in these segments tend to buy a mix of different machines which are complementary in terms of use and characteristics. For the purposes of this decision, however, the precise delimitation of the product market is not appropriate, to the extent that these segments are examined in connection with the diesel engines market, for which a separate market for diesel engines to be used in earthmoving, roadmaking and materials handling as a whole has been identified.

VI THE RELEVANT GEOGRAPHIC MARKETS

A. Diesel engines

18. The parties submit that the relevant geographic market for diesel engines is at least EEA-wide. They base this *inter alia* on the fact that transportation costs within Europe are insignificant, no obstacles to intra-EEA trade exist and prices are normally set on an EEA-wide basis. Furthermore, while recognising that diesel engine suppliers compete in a world market, the parties emphasise that most EEA sales are derived from EEA plants and most EEA suppliers source the majority of components for plants located within the EEA from suppliers located within the EEA.
19. The Commission has in previous decisions considered that the relevant geographic market for diesel engines is at least EEA-wide but that it cannot be excluded that it is even wider and that it is a global market⁹. In the present case, the investigation has largely confirmed this view. However, for the purpose of the present case the exact determination of the geographic scope of the diesel engine market can be left open since even if the analysis is carried out at the EEA-level which according to the parties and all their main competitors, is the narrowest geographic scope to be taken into account, the operation will not lead to the creation or a strengthening of a dominant position.

B. Diesel Generator Sets

20. According to the parties the relevant geographic market for GenSets is at least EEA-wide. This is *inter alia* based on the fact that there is no legal or regulatory

⁹ See *Cummins/Wärtsilä*.

barriers to trade between Member States, low transport costs and local production does not significantly influence the level of sales in individual Member States. While recognising that there are some indications that the market may be world-wide, such as the fact that imports account for significant portions of supplies within the EEA, the parties stress that the suppliers tend to treat the EEA as a distinct market in planning production, marketing and sales, and some major suppliers in other regions of the world have only a limited presence in the EEA. The same arguments were put forward by Caterpillar in the *Emerson/Caterpillar* case, in which the majority of competitors believed that the market was world-wide. The Commission did not reach a definitive view on the geographic scope.

21. The investigation carried out among the main competitors did not allow the Commission to reach a definitive conclusion on this matter. However, for the purpose of the present case the exact determination of the geographic scope of the GenSets market can be left open since even if the analysis is carried out at the EEA-level, which is the narrowest geographic scope to be taken into account, the operation will not lead to the creation or a strengthening of a dominant position.

C. Earthmoving and Construction Equipment

22. There are indications according to which this business is moving towards a global basis due to the companies active in the sector are mainly active world-wide, to the lowering of transport costs and tariff barriers. The investigation has however broadly shown that for the moment the geographic relevant market cannot be enlarged beyond the EEA, particularly in view of the differences of price existing in different regions of the world , different specifications required in different areas of the world, the importance of having a distribution network in the area served as well of the relatively fragmented pattern of demand.
23. There are indications that the geographic scope for original equipment manufacturers' ("OEMs") earthmoving and construction equipment supplies to national distributors is EEA-wide based on the presence of international players, the absence of significant barriers and the existence of Community measures on public procurement, construction materials and health and safety.

VII ASSESSMENT

A. Diesel engines

24. On the basis of the four end-use applications and a further sub-division into horse power ranges of <200; 201-600 and >600, there will be little material overlap between the parties' respective diesel engines. The largest overlap based on the shares of non-captive 1996 EEA sales would be in the industrial applications for engines >600 hp where Caterpillar and Perkins accounted for around [...] ¹⁰ and [...] ¹¹ , respectively. In most other categories Caterpillar has a market share below

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[...]¹² . Even based on much narrower hp ranges (for example, the <200 hp range being sub-divided into five narrower hp ranges), the Commission's investigation has confirmed the lack of material overlap between the parties' products.

25. The complementarity can be explained by the fact that Caterpillar and Perkins produce differently sized engines, largely for different end-use applications. Broadly speaking, the vast majority of Perkins' global diesel engine production is below 200 hp and most of its engines are for industrial applications. In contrast, the vast majority of diesel engines produced by Caterpillar is larger than 200 hp and very few are used in industrial applications. In addition, the parties are to a large extent present in different regions of the world. Caterpillar primarily produces diesel engines for sale and captive use in the US and its EEA presence is minimal. By contrast, Perkins produces all its diesel engines in the UK and most of its sales are in EEA, Africa, and the Middle East.
26. Based on the above, it can be concluded that the parties' respective diesel engine product ranges are largely complementary and there is thus little material overlap in the parties' activities, however narrowly the product market is defined.

B. Diesel Generator Sets

27. In the EEA, virtually all of Caterpillar's GenSet business is made through the FGW joint venture.¹³ Caterpillar estimates that it accounted for around [...]¹⁴ of 1996 EEA total sales of GenSets and that in only one narrow market segment did it account for more than [...]¹⁵ of EEA sales; namely in the range of 1001-2500 kVA where Caterpillar accounted for [...]¹⁶ of the EEA GenSets sales. In the other ranges its share of the sales was between [...]¹⁷ and [...]¹⁸ (except for >2501 kVA where it was around [...]¹⁹). Perkins does not manufacture or sell GenSets but sells engines to GenSet manufacturers, including FGW.
28. The parties submit that Perkins is already Caterpillar's major supplier in this sector. For example, FGW sources around [...]²⁰ of its diesel engine needs from Perkins and post-transaction, FGW will continue to purchase diesel engines from Caterpillar on arm's-length terms. According to the parties, the transaction is not expected to increase the proportion of FGW's diesel engine needs sourced from Caterpillar/Perkins. Furthermore, many EEA GenSet producers have a captive source of diesel engines and it is therefore submitted that Caterpillar will obtain no material competitive advantage by acquiring Perkins. Also, according to the

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¹³ Caterpillar annually sells app. [...] diesel GenSets to the EEA for sale outside FGW, representing less than [5%] of EEA GenSets sale.

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parties, numerous alternative sources of engine supply exist and end-users regularly buy engines from more than one supplier. Leading EEA engine suppliers for GenSets have significant excess capacity and are capable of quickly expanding production. The parties consider competition in GenSets to be very intense.

29. With the acquisition of Perkins, Caterpillar will consolidate itself as a vertically integrated GenSet manufacturer in the EEA market. However, the vertical links will raise no significant competition concerns for the following reasons. As stated in the *Emerson/Caterpillar* case, both worldwide and in the EU there are a great number of players. In the EEA alone there are more than 200 GenSets manufacturers. All the large players in the EEA market are active at an international level and most of them sell worldwide. Some of the largest competitors are vertically integrated and have a captive source of diesel engines, such as Cummins, Detroit Diesel and Fiat Iveco. In particular, Cummins is a major player in GenSets generally, with strong sales across virtually the entire hp range. Furthermore, there are numerous other well-resourced suppliers, including SDMO, Wärtsilä, Volvo, MTU Motoren and Kirsch.
30. In the upstream market Perkins accounted for around [...] of the total non-captive EEA sales of diesel engines to the GenSets in 1996. Several other diesel engine competitors supplied diesel engines to the GenSets such as Deutz, John Deere, Yanmar, Hatz, Lombardini, Cummins and Lister-Petter, Wärtsilä, Volvo, MTU, MWM and Iveco. Some of these are independent suppliers, such as Deutz. The investigation has furthermore confirmed that most of the engine suppliers have a considerable amount of excess capacity. Finally, the investigation has also shown that GenSet competitors use multiple sourcing of diesel engines.
31. Based on the above it can be concluded that the Caterpillar's downstream presence in GenSets combined with Perkins' upstream presence in diesel engines will not lead to the creation or strengthening of a dominant position.

C. Earthmoving and Construction Equipment

32. Caterpillar is the world-wide leader in the sector of earthmoving and is equally active in roadmaking and materials handling equipment. However, in the EEA Caterpillar's market share for the sector in which it is strongest, i.e. earthmoving, is less than [...] . Other major competitors in this market include companies like JCB, Fiat/Ford, Volvo, Case, Komatsu. These companies all compete in earthmoving; some of them also compete in roadmaking machines and materials handling, where they face competition also from Ingersoll-Rand and Manitou.
33. In the EEA, 1996 supplies of earthmoving, roadmaking machines and materials handling equipment accounted for around 110,000 units. Perkins supplied diesel engines for use in this equipment for around [...] of the total

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production, while Caterpillar accounted for around [...] ²⁴ of diesel engines used in these machines. Therefore, the operation will allow the parties a share of around [...] ²⁵ (captive and non-captive) of diesel engines used in this sector.

34. The sector of earthmoving, roadmaking and materials handling machines is characterised by the presence of a number of competitors which are integrated upstream, in particular as concerns the production of diesel engines to be used in their equipment. This is the case for some of the major competitors operating on the market, like Volvo, Fiat/Ford and Caterpillar itself. Some other competitors, like for example JCB and Komatsu are not vertically integrated upstream and generate demand for diesel engines used in their equipment from other diesel engine producers.
35. Perkins' and Caterpillar's positions in 1996 non-captive sales of diesel engines to be used in this sector are around [...] ²⁶ and less than [...] ²⁷, respectively, of the market. Other non-integrated engine suppliers include Deutz (around [...] ²⁸) and Cummins (around [...] ²⁹). The investigation has shown that both Deutz and Cummins are strong competitors to Perkins in the supply of diesel engines suitable for use in this sector. Both companies have acquired expertise (both technological and commercial) in the production of this kind of engines. Both companies appear to constitute a valid alternative to Perkins for companies operating in earthmoving and materials handling. Indeed, the investigation has shown that some of the major competitors in this sector do source their diesel engine needs from both Perkins and Cummins or Deutz and some do not have Perkins as a supplier. Furthermore, the Commission is in possession of information according to which the sector of diesel engines for use in this kind of equipment is experiencing a general under-utilisation of capacities. In particular, it is clear that a company like Deutz, which currently has around [...] ³⁰ of the non-captive supply of diesel engines to be used in the sector has significant excess capacity which could be used in effective production and sale in case of an increase of prices. Also Cummins appears to have some excess capacity for the production of diesel engines of this type.
36. As indicated above, the sector of earthmoving, roadmaking and materials handling manufacturers is characterised by the presence of a number of other competitors which are integrated upstream as far as the supply of diesel engines for use in their equipment is concerned. These manufacturers compete on the non-captive market of diesel engines for use in the end-applications under examination to a limited extent. The investigation has however shown the existence of excess capacity also among these companies. This implies that

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a further source of competition on this market for diesel engines is represented by integrated competitors whose production is currently mainly captive.

37. For all these reasons it is considered that it can be concluded that Caterpillar's downstream presence in earthmoving and construction equipment combined with Perkins' upstream presence in diesel engines will not lead to the creation or strengthening of a dominant position.

VIII ANCILLARY RESTRICTIONS

38. The parties have requested a non-compete clause to be considered ancillary to the operation. According to this clause Lucas Varsity has undertaken not to compete, directly or indirectly, in the diesel engine sector worldwide for a period of [...] ³¹ years, not to solicit employees for [...] ³² years, without Caterpillar's approval. The Commission considers this clause to be necessary and directly related in order to guarantee the full value of the assets transferred.

IX CONCLUSION

39. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of Council Regulation (EEC) No 4064/89.

For the Commission,

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³² Deleted for publication: not exceeding 3 years.