Case No COMP/M.6106
- Caterpillar/ MWM

Only the English text is authentic.

REGULATION (EC) No 139/2004
MERGER PROCEDURE

Article 8 (1)
Date: 19/10/2011
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Public version


declaring a concentration to be compatible with the internal market
and the functioning of the EEA Agreement

(Case No COMP/M.6106 - Caterpillar / MWM)

(Only the English text is authentic)
COMMISSION DECISION

of 19.10.2011

declaring a concentration to be compatible with the internal market
and the functioning of the EEA Agreement

(Case No COMP/M.6106 - Caterpillar / MWM)

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings, and in particular Article 8(1) thereof,

Having regard to the Commission's decision of 5 May 2011 to initiate proceedings in this case,

Having regard to the opinion of the Advisory Committee on Concentrations,

Having regard to the final report of the Hearing Officer in this case,

Whereas:

(1) On 14 March 2011, the Commission received a notification of a proposed concentration pursuant to Article 4 of Regulation (EC) No 139/2004 (the "Merger Regulation") by which Caterpillar Inc. ("CAT", USA) acquires within the meaning of Article 3(1)(b) of that Regulation indirect sole control of MWM Holding GmbH ("MWM", Germany) by way of a purchase of shares. CAT and MWM are hereinafter referred to as the "Parties".

1. THE PARTIES

(2) CAT is the ultimate parent company of a global diversified group that is, inter alia, active in the provision of machinery, engines and financial products. It manufactures and sells engines and machinery for a large number of applications (such as marine, petroleum, industrial, agricultural), including gas and diesel fuelled engines and

1 OJ L 24, 29.1.2004, p. 1. With effect from 1 December 2009, the Treaty on the Functioning of the European Union ("TFEU") has introduced certain changes, such as the replacement of "Community" by "Union" and "common market" by "internal market". The terminology of the TFEU is used throughout this Decision.
machinery for electric power generation systems. Among such electric power generation systems, CAT manufactures and sells (via its distribution network) "gensets". Gensets (short for engine 'generator sets' for power generation) are electricity generating devices that have as their main components a reciprocating (namely piston) engine and an electricity generating device. Gensets can be powered by various types of fuels, including diesel, natural gas and gas from other sources (non-natural gas).

(3) MWM and its subsidiaries produce and sell products, services and technologies for decentralised energy supply using gas and diesel reciprocating engines. MWM sells gensets, co-generation (heat and power) and related products.

(4) Although the Parties are active in a large variety of products, the Commission's Phase I and Phase II market investigations and this Decision focus on "gensets".

2. THE OPERATION AND THE CONCENTRATION

(5) Pursuant to the Share Purchase Agreement of 21 October 2010 between the Parties, CAT, indirectly through its wholly-owned subsidiary, Caterpillar Investment GmbH & Co. KG., will acquire all shares in MWM and, consequently, MWM will become a wholly-owned subsidiary of CAT. It follows that the proposed concentration concerns the acquisition of sole control of MWM by CAT and, thus, the proposed concentration is a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

3. UNION DIMENSION

(6) The proposed concentration does not have a Union dimension but was notifiable in Germany, Austria and Slovakia. Germany requested that the Commission examine the proposed concentration pursuant to Article 22(1) of the Merger Regulation. That request was joined by Austria and Slovakia. The Commission decided to examine the proposed concentration since the legal requirements for a referral were met. It was appropriate to refer the proposed concentration as the potentially affected markets are at least EEA-wide and the potential competition concerns would be better addressed at the Union level.

4. THE PROCEDURE

(7) On 14 March 2011, the Commission received a notification of the proposed concentration pursuant to Article 22(3) of the Merger Regulation, as referred to in recital 6 of this Decision.

(8) On 25 March 2011, the Commission received a complaint from a third party in response to a questionnaire regarding the proposed concentration (the "Third Party"). The Third Party subsequently made several submissions in the procedure. Several other respondents raised similar concerns during the Phase I market investigation².

² See responses to questions 55 and 56 of the Phase I Q1 Questionnaire to competitors; see responses to questions 71 and 72 of the Phase I Q2 Questionnaire to packagers; see responses to questions 70 and 71
On 6 April 2011, a state of play meeting took place with Commission officials where the Parties were informed of the Commission's competition concerns resulting from its Phase I market investigation and in particular:

(a) Unilateral effects were deemed to arise from the proposed concentration in view of the combined entity's high market shares in several of the power output ranges and geographical markets;

(b) Coordinated effects were deemed to result from the fact that the proposed concentration would reduce the number of competitors from three to two. Post-concentration, only General Electric Company ("GE", USA) would seem to remain a credible competitor, as other market players appeared to play only a marginal role. Also, MWM seemed to be the strongest competitor pre-concentration to both CAT and GE and consequently, it could not be excluded that the absorption of MWM by CAT would significantly reduce competition.

(c) The proposed concentration would allegedly lead to foreclosure. The combined entity would have both the ability and incentive to foreclose its competitors in the downstream markets, in particular so-called packagers. Packagers are market participants that either: (i) purchase bare gas engines and a complete genset that is sold to final customers, normally with various other ancillary equipment and services; or (ii) purchase a complete genset that is subsequently resold with accompanying equipment and services to final customers.

On 12 April 2011, the Parties proposed a remedy (the "Phase I Remedy"). By the Phase I Remedy, the Parties proposed to commit to [extend certain agreements in the EEA]* after the closing of the proposed concentration. According to the Parties, such a commitment would be sufficient to remove the competition concern regarding input foreclosure as expressed by the Commission. The Parties did not submit any proposals for remedies that would alleviate the Commission's concerns with regard to the potential horizontal effects (neither unilateral nor coordinated) of the proposed concentration because, according to the Parties, these are not warranted.

According to paragraph 81 of the Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004: "Commitments in phase I can only be accepted where the competition problem is readily identifiable and can easily be remedied. The competition problem therefore needs to be so straightforward and the remedies so clear-cut that it is not necessary to enter into an in-depth investigation and that the commitments are sufficient to clearly rule out 'serious doubts' within the meaning of Article 6(1)(c) of the Merger Regulation".

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3 Worldwide and in the EEA.

* 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.

The Parties themselves made it clear that: "the object of the [offered] commitment is to remove the potential foreclosure concerns the Commission has preliminarily found in the investigation"\(^5\). Consequently, the Phase I Remedy addressed only one of the Commission's initial concerns. It did not address, in particular, the Commission's concerns related to horizontal (both unilateral and coordinated) effects. Therefore, it was considered unnecessary to assess whether the offered commitment was suitable to remove the potential foreclosure concerns of the Commission.

On 5 May 2011, the Commission adopted a decision pursuant to Article 6(1)(c) of the Merger Regulation (the "6(1)(c) Decision") which found that the proposed concentration raises serious doubts as to its compatibility with the internal market and with the functioning of the EEA Agreement in relation to the potential market for gas gensets with a power output range between 0.5MW and 5MW and its possible segments for power output ranges between 1.5-2MW and between 2-2.5MW. The serious doubts raised in the 6(1)(c) Decision related to horizontal (unilateral) effects. As regards the coordinated and vertical effects, in particular input foreclosure, the 6(1)(c) Decision considered that they needed to be further investigated.

On 25 to 31 May 2011, inspections pursuant to Article 13(4) of the Merger Regulation took place at the premises of CAT in the United Kingdom and of MWM in Germany, and were continued at the Commission's premises in Brussels. Those inspections were warranted as the Commission had indications that the Parties may have:

(a) provided misleading information to the Commission in response to requests for information by the Commission, pursuant to Article 11 of Merger Regulation;

(b) provided misleading information to the Commission in the notification of the proposed concentration, which would impede the Commission to effectively exercise the control of a concentration between undertakings and/or have withheld from the Commission information relevant to the competitive assessment in this case;

(c) implemented the notified concentration before it has been cleared by the Commission in contravention of Article 7(1) of the Merger Regulation.

During the Phase I and Phase II market investigations, the Commission also adopted three Decisions pursuant to Article 11(3) of the Merger Regulation (the "Article 11(3) Decisions"):

(a) On 29 March 2011, an Article 11(3) Decision was addressed to International Engines Statistics Group ("IESG") mainly concerning market share data. IESG is an industry organisation that produces market statistics data regarding, inter alia, gas and diesel engines and gensets\(^6\);

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\(^5\) Phase I commitments proposed by the Parties on 12 April 2011.

\(^6\) IESG groups most gensets manufacturers and its main purpose is to provide figures on market trends to its members.
(b) On 14 June 2011, an Article 11(3) Decision was addressed to CAT concerning bidding data critical for the market definition analysis, originally requested on 17 May 2011. Pursuant to Article 10(4) of the Merger Regulation, the time limits referred to in Article 10(3) of the Merger Regulation were suspended until the receipt of complete and correct information. On 23 June 2011, the Commission reduced the scope of its request for information. That suspension was lifted on 8 July 2011.

(c) On 22 June 2011, an Article 11(3) Decision was addressed to GE concerning bidding data critical for the market definition analysis, originally requested on 20 May 2011 and for which no complete answer had been received in the meantime.

(16) The meeting of the Advisory Committee took place on 4 October 2011.

5. COMPATIBILITY WITH THE INTERNAL MARKET AND THE EEA AGREEMENT

5.1. Introduction

(17) This Decision assesses the concerns raised by the Commission in its 6(1)(c) Decision related to horizontal (unilateral as well as coordinated) effects and vertical effects, in particular input foreclosure, with regard to gas gensets, in the light of the results of the Phase II market investigation.

(18) A genset is a device that recombines a reciprocating (that is to say, piston) engine with various ancillary equipment, such as an electricity generator, a switching gear, a turbocharger and possibly other equipment (at the customer's option) to form a stand alone electricity generator device. The engine is one of the most significant components of a gas genset, also because the engine's design and characteristics are crucial determinants of the efficiency, output and emissions of the genset.

(19) According to the Parties, the relevant product market includes all gas gensets. The Parties' view is that neither power ranges nor engine speed are meaningful elements to delineate the relevant product market. The Commission has carefully investigated possible segmentations by power bands (both in terms of genset size and in terms of size of projects served by those gensets) and speed, as discussed in recitals 41 to 51 of Section 5.2.1.4, recitals 55 to 62 of Section 5.2.1.5 and recitals 63 to 71 of Section 5.2.1.6.

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7 Together with associated control systems that monitor and control the functioning of the engine and are normally proprietary to the engine manufacturer and supplied by the engine supplier.

8 Form CO, paragraph 147.
5.2. **Horizontal overlaps: gas gensets**

5.2.1. **Product Market**

5.2.1.1. Diesel fuelled gensets versus gas fuelled gensets

(20) The Commission has analyzed gensets in past Decisions and has considered gas and diesel gensets as two possible distinct relevant product markets, but it did not reach a definitive conclusion in that respect.

(21) The Parties agree that a distinction should be made between diesel and gas fuelled gensets.

(22) In this case, the Phase I and Phase II market investigations have generally confirmed that it is possible to distinguish between markets for diesel gensets and for gas gensets. Even though diesel gensets can be assembled on the same production lines as gas gensets, they constitute a different market from gas gensets.

(23) Firstly and most importantly, diesel gensets are particularly suitable for standby applications, as an emergency source of power, while gas gensets are more efficiently used as a continuous source of power, and an alternative to the power grid. Using diesel gensets as a continuous source would be sub-optimal, for example, in terms of fuel cost (diesel is more expensive than gas, and fuel represents up to 70% of the total cost for operating a genset), but could be justified in situations where the gas network or other gas sources (that is to say, no natural gas) are not accessible.

(24) In addition, environmental issues play a role in favour of gas gensets, as diesel gensets are characterised by higher CO2 emissions with respect to gas gensets of comparable power.

(25) As a result of the limitations in substitutability from the demand side, it should be concluded that diesel gensets and gas gensets constitute separate product markets for the purposes of this Decision.

5.2.1.2. Natural gas and non-natural gas gensets are part of the same relevant market

(26) Natural gas is a fossil fuel (that is to say, it is extracted from nature) constituting a combustible mixture of hydrocarbon gases. Non-natural gas is not a fossil fuel but is produced artificially. It is formed primarily of methane (70% to 90%) and can also include ethane, propane, butane and pentane. Examples of non-natural gas are coal mine and coal bed gases, flare gas, biogas (such as fermentation, landfill and sewage

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10 Form CO, paragraph 138.

11 See responses to questions 15 to 23 of the Phase I Q1 Questionnaire to competitors; responses to questions 15 to 23 of the Phase I Q2 Questionnaire to packagers; responses to questions 12 to 18 of the Phase I Q3 Questionnaire to distributors; responses to questions 12 to 17 of the Phase I Q4 Questionnaire to customers.
gas) and also gases with high contents of hydrogen such as pyrolysis gas, coke oven gas and others. Both natural and non-natural types of gas can be used to fuel gensets.

(27) In previous Decisions\textsuperscript{12}, a potential product market definition was considered for gas reciprocating engines by type of input used (that is to say, natural versus non-natural gas). However, the precise market delineation was ultimately left open.

(28) The Parties consider that no distinction should be made, from a supply side point of view, as there is hardly any difference in the manufacturing process for natural gas and non-natural gas gensets\textsuperscript{13}. The two types of gensets can be produced using the same production lines. As a result, manufacturers can easily switch production between the two products. The Parties argue that there are only marginal differences that relate to adjustments in electronic control and cooling systems. There are also some changes in the mechanical hardware, which ensure the appropriate treatment of the different types of gases, gas efficiency, gas variability and potential impurities. In particular, the required investment for a manufacturer of natural gas gensets\textsuperscript{14} in order to develop the appropriate non-natural gas technology and know-how may involve a cost of between EUR \([\ldots]\)* to \([\ldots]\)* million (including research and field tests). That would involve the adaptation of approximately \([5-10]*\)% of the parts of the existing natural gas engine and an increase of production cost of around \([0-5]*\)%.

(29) From a demand side, the Parties argue that gas gensets can be fuelled, depending on availability, with natural gas or with non-natural gas. Any gas genset can run on either natural gas or non-natural gas, conditional on making some minor modifications, mainly regarding the cleaning of the gas, not only in order to optimise the functioning of the gas genset but also to avoid an abnormal deterioration of the genset\textsuperscript{15}. This implies that switching from natural gas to non-natural gas only requires interventions, the cost of which can, however, be balanced by future savings, such as in fuel costs. Furthermore, even the availability of non-natural gas does not necessarily lead to choose a genset fuelled by non-natural gas. Such a choice can also be affected by technical risks relating to the extraction and the processing of non-natural gas, the relative process and other financial incentives, for example to the use of non-natural gas.

(30) The Phase I market investigation\textsuperscript{16} confirmed that, from a supply side perspective, minor changes in the production process are needed in order to manufacture a natural or a non-natural type of gas genset. The Phase I investigation was not conclusive on whether natural and non-natural gas gensets are substitutable from a demand side view point.


\textsuperscript{13} Form CO, paragraph 158 et seq.

\textsuperscript{14} See paragraph 33 of the Parties' submission of 12 August 2011 to the Commission's request for information of 9 August 2011.

\textsuperscript{15} In particular, non-natural gas needs to be cleaned of SO2, silicon and other impurities before the gas can be used to generate electricity. Otherwise, it will cause excessive wear and tear on the gensets and/or damage the exhaust gas after-treatment systems required for controlling pollutants.

\textsuperscript{16} See responses to questions 7 and 8 of the Phase I Q1 Questionnaire to competitors.
In the Phase II market investigation, the majority of the respondents considered that limited technical modifications suffice to convert an engine running on natural gas to non-natural gas. The main components which need to be replaced in the engine are parts of the fuel system. A higher gas flow is required and thus, valves and other fuel system components need to be enlarged. In addition, non-natural gases may have contaminants which can damage the engine components. In that case, certain elements need to be made from different materials.

Most of the manufacturers indicated that the cost of those adjustments is low, around 5% of the cost of the genset. Some respondents also indicated that no extra time or only a number of hours, at most a few days, are necessary to convert a natural gas engine to a non-natural gas one.

From a demand perspective, the Phase II market investigation revealed that competition between natural and non-natural gas gensets takes place ex-ante. Both natural and non-natural gas gensets cover similar needs and have comparable performance. Therefore, customers' choice depends on the availability of the fuel, and the overall price of the gensets (including the fuel cost). When both types of gas are available, both non-natural and natural gas gensets are close substitutes. In that case, the purchase decision will depend on the relative cost of the fuels available, which fluctuates depending on the supply/demand conditions.

In view of the high degree of substitutability, it should be concluded that gensets fuelled by natural and non-natural gas are part of the same product market.

Possible distinction segmentation along engine speed and power: the precedents

In previous Decisions, the potential segmentations of the market for reciprocating engines used for power generation or gensets, whether gas or diesel, by speed and by power output, was considered but the precise market delineations were ultimately left open. In particular, in a previous Decision concerning diesel gensets, the Parties had suggested that the market of gensets could be divided by power bands.

In M.6039 GE/Dresser, the market investigation suggested that the market for gas gensets could be divided into different segments according to the power output of engines and according to different speeds of engines (high speed above 1000rpm, and medium speed between 500 and 1000rpm, typically 750 rpm). The market investigation in GE/Dresser also suggested that: “there is a certain degree of substitutability between engines of different outputs, especially in light of the fact

See responses to question 11 of the Phase II R1 Questionnaire to competitors; responses to questions 14 and 15 of Phase II R4 Questionnaire to customers; responses to questions 21 and 22 of the Phase II R5 Questionnaire to consultants.

See responses to question 11 of the Phase II R1 Questionnaire to competitors.

See responses to question 11 of the Phase II R1 Questionnaire to competitors.

See responses to question 11 of the Phase II R1 Questionnaire to competitors.

See responses to question 11 of the Phase II R1 Questionnaire to customers.


Case No IV/M.700 Emerson/Caterpillar, recital 15. The Parties in that case suggested the following segmentation: below 120kW; from 120kW to 800kW; from 800kW to 2MW; and 2MW and above.
that customers take into account several factors in order to choose an engine that best suits their needs and in practice this is something that competitors competing for a project would model individually for a given customer. It also appears that boundaries between different output ranges and speeds tend to change over time as technology and efficiency improves”. However, a conclusion on that point was not reached in that Decision, as the market definition was left open.

(37) Differences in engine speed were also investigated in M.6172 Daimler/ Rolls-Royce/ Tognum/ Bergen, but the product market definition was left open, since the transaction did not lead to competition concerns, regardless of the product market definition considered. In that Decision, it was found that: “A significant criterion applied by customers in engine selection is engine speed. The speed of an engine depends on the bore and stroke length of the engine cylinders, but all the parameters may be adjusted by the engine designer in order to optimise a design for a particular application. For a given size of cylinder, increasing the engine speed will increase the power of the engine”. Additionally, as cylinder sizes increase, more time is required per piston stroke to ensure complete combustion occurs. The efficiency losses associated with incomplete combustion will also limit the degree to which engine speed can be increased.

(38) It was also found in that case that the costs of making those design changes are substantial and, in particular, the genset manufacturer Rolls-Royce's Bergen business ("Bergen", Norway) has not been successful at making high speed engines, while Tognum AG ("Tognum", Germany) has not been successful at making medium speed engines. However, the market definition was left open in relation to the speed of the engine.

5.2.1.4. Distinction based on the engine speed of the genset

(39) The industry association IESG, in charge of the collection and reporting of sales data, introduced in 2009 (in agreement with its stakeholders) a clear distinction between high- and medium-speed engines for power generation, setting the dividing line at the level of 1000rpm, on top of the pre-existing distinction in power classes. Without prejudging whether or not such market segmentation should be accepted in this Decision, that evolution in the practices of the industry association signals the relevance of that dimension of analysis.

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23 See recital 28 of that Decision.
24 However, the motion of the piston up and down the cylinder generates friction which produces heat which must be dissipated and will increase wear and tear in the cylinder. Larger bore pistons generate a greater amount of friction and the engine speed must therefore be reduced to ensure adequate heat dissipation.
25 Case COMP/M.6172 – Daimler/Rolls-Royce/Tognum/Bergen, recital 29. Adjustments of the engine speed involve increasing the length of the piston stroke by re-designing the crankshaft to increase the volumetric displacement between full compression and full extension of the combustion chamber. Increasing the stroke length will increase the power of the engine. Small increases in bore size can be achieved by machining out the cylinder block to increase the diameter of each cylinder and installing a piston with a larger head. Increasing the bore size in this way is relatively inexpensive but will increase the long term maintenance burden as the engine will suffer from increased wear and tear. Large changes of bore size will require a completely new engine block.
In this case, the Parties’ view is that: “there is no meaningful segmentation by engine speed of the market for gas gensets/reciprocating engines at the power output levels relevant in this transaction”26, as gensets with different speeds would compete against each other without significant difficulties.

The majority of respondents in the Phase II market investigation estimate that, from the demand side, fuel costs account for around 70% of total costs (purchasing and operation costs) over the running life of a genset, which explains why electrical efficiency is the most important factor which customers take into account when they purchase a genset. This is in line with the Parties' contentions.

Concerning this essential product characteristic, the Phase II market investigation27 also revealed that medium-speed gas engines for power generation typically have a higher electrical efficiency (up to 45 to 48%), a level which even the most efficient high-speed engines currently do not match (typically only up to 45%, but usually lower). As a result, fuel costs for operating medium-speed gensets are significantly lower for the same amount of power delivered. Medium-speed gensets are also characterised by lower maintenance costs and longer running lives (80-100,000 hours versus 40-60,000 typically for high-speed engines).

On the other hand, medium-speed gensets are characterised by higher fixed costs. They are more expensive to buy and have higher installation costs due to much heavier engineering work. In particular, the acquisition price per MW of nominal power is about 50% higher for medium-speed gensets than for high-speed gensets.

That clearly indicates that while the fixed costs related to a medium-speed gensets are much higher than the fixed costs for high-speed gensets, at the same time variable costs are lower for medium-speed as compared to high-speed engines.

The more detailed information revealed by the Phase II market investigation, as compared to the Phase I market investigation, has allowed the Commission to establish a certain degree of continuity in the trade off between high-speed and medium-speed gensets in the presence of which a possible segmentation along the engine speed dimension appears much less clear cut than it was at the end of Phase I market investigation.

The bidding data collected during the Phase II market investigation show that medium-speed gensets do not compete for projects of a size below 2.5MW, but that high-speed multiple-genset installations can to some extent compete with larger-capacity medium-speed gensets for large projects (for example, of 5-10MW).

No sales of medium-speed gas gensets with capacities below 2.5MW were recorded in the last five years worldwide. Rolls-Royce/Bergen and Wärtsilä, who produce only medium-speed gensets, appear marginally as competitors in bids for projects up to 5MW that could be served by manufacturers of high-speed engines with single or

26 See paragraph 33 of the Parties' submission of 12 August 2011 to the Commission's request for information of 9 August 2011.
27 See responses to questions 4, 9 and 10 of the Phase II R1 Questionnaire to competitors.
multiple-genset installations. They are present (and not successful) in only [5-10]% of the bids for projects with a power output between 2.5 MW and 5MW\(^28\).

(48) In their submissions, the Parties did not mention manufacturers of medium-speed engines such as Wärtsilä (Finland) or Rolls-Royce/Bergen among the "credible competitors" in their analysis of competitive constraints in the market or in their assessment of closeness of competition\(^29\).

(49) On the other hand, the presence of successful bids for large projects based on multiple high-speed gensets points in the direction of high-speed gensets of smaller (individual) size being competitive against medium-speed gensets of larger (individual) size\(^30\).

(50) It follows that the product characteristics give rise to a certain continuity in the trade off between high-speed and medium-speed gensets (in terms of fixed and variable costs) and that offers with multiple smaller high-speed gensets appear to be able to successfully compete with larger medium-speed gensets for large projects.

(51) In light of those considerations, there is no clear cut delineation between high-speed and medium-speed gas gensets. In this case, the market definition may be left open in that respect, as the competitive assessment would not change under any of the alternative definitions.

5.2.1.5. Distinction based on the power of the genset: gensets with a power lower than 0.5MW

(52) The electrical power output of a genset is approximately 2 to 3% less than the mechanical power output of the reciprocating engine with which it is powered. The figures referred to in recitals 54-62 make reference to the electrical power of the genset.

(53) The Parties’ view on a potential segmentation of the gas genset market by ranges of power output is that this would not reflect the market reality and be at odds with the Commission’s decisional practice. From a demand-side perspective, the Parties argue that customers can chose between a single genset and offers for several gensets that can together supply the same amount of total power ("multiple genset offers") and point to bidding data which they submitted in support of this conclusion. From a supply-side perspective, the Parties contend, on the one hand, that genset manufacturers may upgrade or downgrade products to achieve different power outputs and, on the other hand, that in a given power range, it is easy for suppliers to offer a range of power outputs with engines which derive from the same product family.

\(^{28}\) Bidding data received from MWM and CAT.

\(^{29}\) In another later submission on closeness of competition, the Parties only state on the basis of the same bidding databases referred to in recital 47 that medium-speed manufacturers have a presence in the market but again not mentioning Wärtsilä or Rolls-Royce in the analysis of closeness of competition (Submission of 15 July 2011 on Criteria of closeness of competition, page 16).

\(^{30}\) That finding is based on a pooled analysis of the bidding data from the Parties and other sources.
Concerning gensets with a power below 0.5MW, the Parties’ view is that such gensets do compete effectively with gensets with a higher power output in the form of multiple genset offers. The Parties submit that information from CAT’s distributors suggests that [40-50]% of gensets are offered as part of multiple genset installations, a figure which goes up to [60-70]% in some situations such as the one considered by the Parties in the bidding data submission related to Denmark. Apart from bidding data results, the Parties also stress that gensets may be run not at full capacity but at partial loads.

The Phase II market investigation has indicated that, in general, from a demand-side perspective consumer demand materialises in the form of projects for which manufacturers, but mainly distributors and packagers, submit bids, with certain power and other requirements, not in terms of a number of gensets. As a result, the importance of multiple genset offers, as opposed to single genset offers, can provide an indication of the degree of "upwards" substitutability (that is to say, multiple gensets of lower power size can compete with single gensets of larger power size).

As to upward substitution, namely, the substitutability of larger gensets with multiple 0.5MW gensets, the aggregate results of the bidding data used in the Phase II market investigation indicate that offers with multiple gensets having a power below 0.5MW account for less than [0-5]% of the projects for which a power above 0.5MW is required (and [0-5]% considering only the bidding data provided by CAT distributors).

The Phase II market investigation also showed that, in general, substitutability in this market takes place only very marginally "downwards", that is to say, with a gas genset of a given capacity substituting for a (single) genset of lower capacity. Even though gensets can in theory be operated at half-load, the majority of respondents say that they operate gensets at full capacity, which also makes sense from an economic point of view as gensets reach their optimal fuel efficiency when they run on full load.

As to downward substitution, gensets with a power above 0.5MW do not appear to represent a credible competitive threat for gensets with a power below 0.5MW.

The majority of respondents in the Phase II market investigation confirm that gensets with a power below 0.5MW generally have a shorter running life, a lower electric efficiency, but seem to have higher acquisition costs per MW than gensets with larger power outputs.

It must also be stressed that the supply side of gas gensets with a power below 0.5MW is substantially different from that for gensets with larger power. Since gas gensets with power lower than 0.5MW are often derived from truck motors, the suppliers of these gensets are different from those manufacturing gensets with larger power outputs.

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31 Data referred to in the Parties' reply to the Commission's request for information of 1 June 2011, as well as in the Parties' submission on market definition received on 15 July 2011.
32 See responses to questions 55 and 79 and 83 to 86 of the Phase II R4 Questionnaire to customers.
33 See responses to question 13 of the Phase II R1 Questionnaire to customers; see responses to question 7 of the Phase II R4 Questionnaire to customers.
34 See responses to questions 4, 9 and 10 of the Phase II R1 Questionnaire to competitors.
capacities. Important suppliers of smaller 0.5MW gensets are MAN AG ("MAN", Germany) and Scania AB ("Scania", Sweden) and, to a smaller extent, Fiat S.p.A. ("Fiat", Italy) and Deutz AG ("Deutz", Germany). These companies are insignificant, or even completely absent, in the supply of larger gas gensets.

(61) In view of those elements, it should be concluded on the basis of the limitations in demand-side substitutability that high-speed gas gensets with a power below 0.5MW and high speed gas gensets with a power above 0.5MW are part of different product markets.35

(62) That conclusion is not contradicted by the Parties' assertion that some market players have a portfolio of products covering power classes both below and above 0.5MW, as market players may be active in different product markets.

5.2.1.6. Distinction based on the power of the genset: gensets with a power higher than 0.5MW

(63) Concerning the size classes of 0.5MW and above, the market data for the last five years collected in the Phase II market investigation brings to light the following facts.

(64) Firstly, there are no sales worldwide of high-speed gensets with a power above 5MW. Secondly, only GE sold high-speed gas gensets with a power above 2.5MW. Thirdly, there are no sales of medium-speed gensets with a power below 2.5MW in the past five years. Such elements suggest a potential market delineation from a supply-side perspective below and above 2.5MW.

(65) However, from a demand-side perspective, customer projects requiring a power above 5MW may choose between acquiring single medium-speed gensets or a combination of smaller-sized high-speed gensets.

(66) In addition, evidence from the bidding data submitted by the Parties at the Commission's request suggests that competition by multiple-genset installations based on smaller gensets can successfully compete with single more powerful gensets also in smaller power ranges, although this is very limited in the lower power ranges but increases with project size. For example, multiple-genset bids account for fewer than 5% of the bids for projects with a power between 0.5MW and 0.75MW36. Conversely, the same dataset indicates that only about a third of the bids for projects with a required power output between 2.5MW and 5MW are with single gensets.

(67) This demand-side substitutability suggests that a segmentation according to project size (in terms of total power of the installation) possibly including multiple gensets would be more in line with customers requirements than a market segmentation based on the power of the individual genset offered or the speed of the engine.

35 Because the medium-speed gas gensets provide capacity output of more than 2.5MW (see recital (47)), it is not necessary to divide the market for gas gensets with a power below 0.5MW according to the engine speed of the gensets.

36 The percentage is based on a pooled analysis of the bidding data from the Parties and other sources.
However, information on project size is only available in the bidding data set. It may be argued that sales through tenders represent only a small part of the overall sales of gensets in the market. Nevertheless, the bidding database appears to be a sufficiently representative sample. The distribution of total gensets sales of the Parties and their competitors, as reported to the Commission, is similar to the one of their sales (that is to say, won contracts) in the bidding database. More precisely, according to the Commission's market reconstruction based on total sales (in power) provided by the Parties and the competitors, CAT would have approximately [10-20%] of the market, whereas MWM around [20-30%]. Based on total power of all bids won by the Parties, CAT would have again approximately [10-20]*%, and MWM would have approximately [20-30]*%. As the market shares are similar, the bidding data may be used to draw conclusions.

The bidding data set, including information submitted by the Parties and their competitors, shows substitutability between gensets of a given capacity and offers based on installations, including multiple gensets of lower capacity. Furthermore, the pattern is of an increasing degree of substitutability the larger the projects considered.

In the same data set, statistics further support demand substitution between single and multiple gensets. In particular, within the 1.5-2.0MW power range, [30-40%] of gensets are sold as part of multiple genset projects, and [30-40%] of projects with this power range are served with multiple genset bids. These figures increase with the total power output of the project, that is to say, the degree of substitution becomes higher in higher power bands. The proportion of tenders won by suppliers offering multiple gensets is sufficient to effectively constrain suppliers of single gensets. Consequently, a delineation according to the power output appears inappropriate because there is substitution from the other power ranges segments through the multiple offers.

That shows that while a significant degree of substitution exists between multiple genset offers and larger single genset offers (and especially so for larger projects), the number of gensets that can be pooled together in the same installation is rarely large. This indicates that, given the capacity of the largest existing high-speed gensets, it would be possible to consider that an upper bound exists in the size of projects that can be served with multiple high-speed gas gensets, but it is at the same time not possible to precisely define where that upper bound is located and, correspondingly, the point from which medium-speed gensets would be shielded from competition by these multiple genset installations. In any event, it is not necessary to establish where this upper bound is located, as it will not affect the competitive assessment of this case. In view of those elements, the product market may be defined as the market for gensets with a power above 0.5MW.

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37 These figures are based on a pooled analysis of the bidding data from the Parties and other sources.
5.2.2. **Geographic scope of gas genset market**

(72) In line with the findings of previous Decisions, the Parties submit that the relevant geographic market for gas gensets is at least EEA-wide in scope, and probably global.

(73) The Parties argue that: (i) technical requirements relating to gensets, customer preferences, price and environmental requirements are similar in the EEA, and even globally; (ii) there are no legal, regulatory or technical barriers to trade that would impede worldwide trade flows; and (iii) transport costs are minor in comparison to the cost of manufacturing costs or sales prices ([0-5]*% to [5-10]*% depending on the size of the genset).

(74) The Phase II market investigation confirms the Parties' contention. Brands are marketed on a worldwide basis and genset manufacturers appear to have worldwide structures to commercialise their products. There are no regulatory or tariff barriers preventing exports outside the EEA. Gas gensets are imported from non-EEA countries that share safety and environmental standards set by their national laws. As regards price differences, the majority of gas genset manufacturers other than the Parties responded that their prices apply equally worldwide or that price changes, if any, do not exceed 10%. According to most respondents, genset imports from outside the EEA are very significant and customers usually source gas gensets globally. Finally, the majority of the respondents considered the gas genset market to be worldwide.

(75) Nonetheless, gas gensets are channelled to end users through distributors, which usually operate on their respective national territories and are sometimes linked to gas genset manufacturers by contracts containing territorial exclusivity clauses.

(76) In any event, the geographic market definition may ultimately be left open since the proposed concentration would not impede competition under both EEA-wide or worldwide market definitions.

5.3. **Non-coordinated effects for gas gensets > 0.5MW**

(77) The proposed concentration gives rise to an horizontal overlap in the market for high-speed gas gensets above 0.5MW, as the Parties are both active in this power range. According to the Parties' submission, their combined market shares below

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38 See Case No COMP/M.6039 - GE/Dresser, recitals 36, 37 and 38; Case No COMP/M.3113 - GE/Jenbacher, recital 11.
39 See Form CO, paragraphs 183, 186 and 187.
40 See responses to question 31(c) and (d) of the Phase I Questionnaire to competitors.
41 See responses to question 31(e) of the Phase I Questionnaire to competitors, and question 44 of the Phase II R1 Questionnaire to competitors.
42 See responses to question 42 of the Phase II R1 Questionnaire to competitors.
43 See responses to question 41 of the Phase II R1 Questionnaire to competitors. See response to question 43 of the Phase II R3 Questionnaire to packagers.
44 See responses to question 47 of the Phase I R1 Questionnaire to distributors; question 49 of the Phase II R2 Questionnaire to distributors; and question 49 of the Phase II R3 Questionnaire to packagers.
45 See responses to questions 33 and 34 of the Phase II R2 Questionnaire to distributors.
0.5MW do not exceed 15% under any geographic market. Therefore, that market is not affected.\textsuperscript{46}

\textbf{(78)} The Phase II market investigation has allowed the Commission to reconstruct the market of gas gensets above 0.5MW. The market presence of the various competitors is therefore more precise than in the Phase I market investigation, where the size of certain competitors could not be captured with sufficient accuracy (in particular Cummins Inc. ("Cummins", UK) and Guascor Group ("Guascor", Spain)).

\textbf{(79)} It should also be emphasised that, besides the larger producers listed in Tables 1, 2 and 3 of recitals 80, 84 and 89, there are also a certain number of smaller ones. Therefore, the figures in those tables are, to a certain extent, overestimated.

\textbf{5.3.1. \textit{Market share analysis}}

\textbf{5.3.1.1. Analysis from a project perspective}

\textbf{(80)} Tables 1 and 2 of recitals 82 and 84 result from the market reconstruction obtained from the Phase II market investigation. It is based on sales data in volumes (in terms of nominal power of gensets / bare engines\textsuperscript{47} and not in units, contrary to the data collected by IESG) submitted by genset manufacturers pursuant to the Commission's data request dated 20 May 2011.

\textbf{(81)} As discussed in Section 5.2.1.6, it is appropriate to consider power bands within the market for gensets. However, power bands could be defined along two dimensions, that is to say, considering either the project size or the genset size. While genset size corresponds to a supply-side perspective and is logically reflected in sales data, the demand-side perspective reflected by the project size better corresponds to the way competition seems to takes place in this market, that is to say, at the level of projects, where a project of a given size can be served by a single genset or by an appropriate combination of multiple gensets (and in certain cases multiple high-speed gensets can compete with larger single medium-speed gensets).

\textbf{(82)} As no further subdivision by size class needs to be considered in either a genset size or a project size dimension, market shares in terms of gas genset size above 0.5MW correspond with market shares when assessed on a project dimension. Tables 1 and 2 of recitals 82 and 84 therefore correspond most closely to the market definition adopted in this case, a market in which competition is defined in terms of projects. Nonetheless, an alternative analysis by gas genset size-classes will also be considered in recitals 89-94 of Section 5.3.1.2.

\textsuperscript{46} See Form CO tables set out in paragraph 295. The Parties' combined market shares for gas gensets below 0.5MW for the year 2009 were [10-20]\% worldwide and [0-5]\% in the EEA, and had been decreasing over the past three years.

\textsuperscript{47} Respondents were requested to specify whether or not they were selling to third parties bare engines deemed to be used in gensets. In that case, those sales had to be included in the data reported.
Table 1: EEA and worldwide market shares for gas gensets (volume in MW)

<table>
<thead>
<tr>
<th></th>
<th>EEA sales</th>
<th>Worldwide sales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2009</td>
</tr>
<tr>
<td>CAT group</td>
<td>[10-20%]</td>
<td>[5-10%]</td>
</tr>
<tr>
<td>MWM</td>
<td>[10-20%]</td>
<td>[20-30%]</td>
</tr>
<tr>
<td>GE group</td>
<td>[40-50%]</td>
<td>[50-60%]</td>
</tr>
<tr>
<td>Cummins48</td>
<td>[10-20%]</td>
<td>[5-10%]</td>
</tr>
<tr>
<td>Guascor</td>
<td>[0-5%]</td>
<td>[0-5%]</td>
</tr>
<tr>
<td>Tognum/Rolls-Royce49</td>
<td>[5-10%]</td>
<td>[5-10%]</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>[0-5%]</td>
<td>[0-5%]</td>
</tr>
<tr>
<td>MAN</td>
<td>[0-5%]</td>
<td>[0-5%]</td>
</tr>
<tr>
<td>Wärtsila</td>
<td>[0-5%]</td>
<td>[0-5%]</td>
</tr>
</tbody>
</table>

Source: Reconstruction of the market based on Phase II market investigation results.

(83) Table 1 of recital 82 shows that in the market for gas genset projects > 0.5MW, the market share of CAT is decreasing while the market share of MWM is increasing. The decrease of CAT is slightly more significant at the worldwide level (from [10-20%] in 2008 to [10-20%] in 2010) while the increase of MWM is more pronounced in the EEA (from [10-20%] in 2008 to [20-30%] in 2010). As a result, the combined market share is moderately increasing in the EEA (from [20-30%] in 2008 to [20-30%] in 2010) and decreasing worldwide (from [20-30%] in 2008 to [20-30%] in 2010).

(84) Table 2 below presents the same market reconstruction, but focusing only on high-speed genset projects, as opposed to the table in recital 82 that also includes genset of lower speeds (that is to say, below 1000rpm).

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48 Cummins' market share for the years 2009 and 2010 includes […] sales of gensets. […] If Cummins' market share were to be divided between […] and Cummins, the result would be the following: (i) on an EEA basis, Cummins would have [0-5%] and [5-10%] in 2009 and 2010, while […] would have [5-10%] and [10-20%] in 2009 and 2010, respectively. Globally, Cummins would have [0-5%] and [0-5%] in 2009 and 2010, and […] would have [0-5%] and [0-5%] in 2009 and 2010, respectively.

49 Market shares for Tognum and Rolls-Royce are combined, as Daimler and Rolls-Royce have recently acquired joint control over Tognum.
Table 2: EEA and worldwide market shares for high-speed gas gensets (volume in MW)

<table>
<thead>
<tr>
<th>High-speed gensets (rpm &gt; 1000) with nominal power &gt;0.5MW</th>
<th>EEA sales</th>
<th>Worldwide sales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2009</td>
</tr>
<tr>
<td>CAT group</td>
<td>[10-20%]</td>
<td>[5-10%]</td>
</tr>
<tr>
<td>MWM</td>
<td>[10-20%]</td>
<td>[10-20%]</td>
</tr>
<tr>
<td>GE group</td>
<td>[40-50%]</td>
<td>[50-60%]</td>
</tr>
<tr>
<td>Cummins(^{50})</td>
<td>[10-20%]</td>
<td>[10-20%]</td>
</tr>
<tr>
<td>Guascor</td>
<td>[0-5%]</td>
<td>[0-5%]</td>
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<tr>
<td>Tognum / Rolls-Royce</td>
<td>[0-5%]</td>
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<tr>
<td>Mitsubishi</td>
<td>[0-5%]</td>
<td>[0-5%]</td>
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<tr>
<td>MAN</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wärtsila</td>
<td>-</td>
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</tr>
</tbody>
</table>

Source: Reconstruction of the market based on Phase II market investigation results.

Table 2 of recital 84 shows that in a market for gas genset projects >0.5MW that only includes high-speed gas gensets, the market share of CAT is decreasing while the market share of MWM is increasing. The decrease of CAT is slightly more significant at the worldwide level (from [20-30%] in 2008 to [10-20%] in 2010) while the increase of MWM is slightly more pronounced in the EEA (from [10-20%] in 2008 to [20-30%] in 2010). As a result, the combined market share is moderately increasing in the EEA (from [20-30%] in 2008 to [30-40%] in 2010) and decreasing worldwide (from [30-40%] in 2008 to [30-40%] in 2010).

A comparison between Tables 1 and 2 of recitals 82 and 84 demonstrates that the developments of the Parties' individual and combined market shares for genset projects >0.5MW, as well as those of their competitors, is only marginally different when a market is considered that includes only high-speed gensets, or whether such a market includes also lower speed gensets (that is to say, below 1000rpm), implying that it is

\(^{50}\) On the basis of the same reasoning set out in footnote 56, if Cummins' market share were to be divided between […] and Cummins, the result would be the following: (i) on an EEA basis Cummins would have [0-5%] and [5-10%] in 2009 and 2010, while […] would have [5-10%] and [10-20%] in 2009 and 2010, respectively. Globally, Cummins would have [0-5%] and [5-10%] in 2009 and 2010, and […] would have [0-5%] and [5-10%] in 2009 and 2010, respectively.
immaterial for the competitive assessment if the market definition is left open on that point.

5.3.1.2. Gas gensets > 0.5 MW from a sales data perspective (narrow power bands)

(87) The data obtained during the Phase II market investigation allows a complete market reconstruction by power segments only along the genset size dimension, while only a partial reconstruction is possible along the alternative, project size dimension (using the bidding data where information on genset size and overall project size could be matched). The bidding data, however, only represents part of the total sales and, as provided by the respondents during the Phase II market investigation, only covers EEA projects.

(88) The analysis in recitals 89-94 nonetheless presents the market reconstruction by segment along the genset size dimension, despite the fact that as discussed earlier (in Section 5.2.1.6) this is not the most appropriate way to look at market segmentation and needs to be qualified.

(89) Table 3 below presents the market reconstruction by genset power bands as used by IESG. However, the Parties contest the relevance of a segmentation of gas gensets for power generation on the basis of IESG power output bands as being highly artificial and narrow\(^51\).

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\(^51\) According to the IESG definition, the following power output bands can be distinguished: 0.35MW-0.5MW, 0.5MW-0.75MW, 0.75MW-1.0MW, 1.0MW-1.5MW, 1.5MW-2.0MW, 2.0MW-2.5MW, 2.5MW-5.0MW, 5.0MW-10.0MW, above 10.0MW.
Table 3: EEA and WW market shares for gas gensets by power band (in MW, 2010, **all speeds**)

<table>
<thead>
<tr>
<th>Segment size as % of total market</th>
<th>EEA sales</th>
<th>Worldwide sales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;0.5</td>
<td>&gt;0.5</td>
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<tr>
<td></td>
<td>-0.75</td>
<td>-0.75</td>
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<tr>
<td></td>
<td>&gt;0.1</td>
<td>&gt;0.1</td>
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<td></td>
<td>-1.5</td>
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<td>&gt;1.5</td>
<td>&gt;1.5</td>
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<td></td>
<td>-2.0</td>
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<td>&gt;2.0</td>
<td>&gt;2.0</td>
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<td>[90-100%]</td>
<td>[90-100%]</td>
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</tbody>
</table>

**Source:** Reconstruction of the market based on the Phase II market investigation

(90) Considering that table of gas genset power bands, the Parties would have non-marginal overlaps only in the power range between 0.5MW and 2.5MW. In those power bands (other than the 1.5-2MW), CAT’s market shares would always be below [10%]* in the EEA and [20%]* globally. The Parties' cumulative market share appears particularly high and with a very significant overlap only in the segment 1.5-2MW. On first view, it therefore appears that also under the alternative perspective of gensets by power bands, no competition concerns arise except maybe in the segment 1.5-2MW.

(91) However, the high market shares in both the EEA and global markets for gensets in the power band 1.5-2MW must be considered in the light of the information collected during the Phase II market investigation concerning the size of the projects served by 1.5-2MW gensets. It appears that a significant part of the gensets belonging to that power range are combined into multiple offers for larger projects. More precisely, more than half of the projects in the 2.0-2.5 MW class are supplied with 1.5-2.0 MW gensets. As a result, the *prima facie* indication resulting from the Parties showing a combined market share of [50-60%] in the (high-speed) genset power band 1.5-2MW in the EEA is considerably diluted once considered in terms of project size.
Furthermore, as shown in Table 3 of recital 89, it should be emphasised that the 1.5-2MW segment represents only about [10-20%] of the total gas gensets market (both in the EEA and worldwide) and that, in neighbouring power bands, CAT is significantly weaker or even absent (for example, as in the 2-5MW segment in the EEA).

The relatively stronger presence in the particular 1.5-2MW genset power band can be fully attributed to two specific engine models manufactured by CAT (the […]* and […]* models) that are considered in the industry as particularly reliable.

That finding corresponds at least in part to what is represented in Table 4 below. In its category, CAT's […]* model (the only one represented in Table 4 where the […]* is not reported) faces the "best-in-class" MWM's […]* model, while GE's […]* model appears to be less competitive than GE's models in other categories. This seems to justify, in addition to the perception of the […]* model as reliable, as already referred to in recital 93, the relative strength of CAT in this segment as compared to neighbouring segments where both GE and MWM (contrary to CAT) are perceived as "best-in-class".

Table 4: A snapshot of the "best-in-class" engines by CAT, MWM and GE

[Table 4 shows a comparison of gas gensets by CAT, MWM's and GE per KW band, showing their relative competitiveness and product gaps of the three manufacturers.]*

Source: CAT internal documents. Yellow: competitive engine; green: 'best in the class' engine, and red: gap or non competitive engine.

As shown in Table 4 of recital 94, MWM has a […]* complete portfolio of successful models, spanning over […]* power bands. That explains MWM's strength (as compared to CAT) in all power bands. [Specific analysis of MWM's product portfolio compared to CAT in all power bands and with GE's portfolio, in particular in relation to the 1-1.5MW and 2-2.5MW genset power bands]*. MWM presence remains below [20-30%] in most power bands, with the exception of the 0.5-0.75MW ([40-50%] in the EEA in 2010) and 1.5-2MW ([30-40%] in the EEA in 2010). However, those relatively high market shares in some particular genset power bands are of less importance considering that MWM's market share remains below [20-30%] in the broader product market (that is to say, considering high-speed gas gensets in the EEA as shown in Table 2 of recital 84).

The partial representation provided in Table 4 of recital 94 does not do justice to the fact that, in all genset power bands, strong competitors will remain in the market in addition to the market leader GE, namely Cummins as well as Tognum and Guascor. As discussed in detail in the Sections on research and development ("R&D") competition and potential entrants, Tognum, Guascor and also MAN have been or are being acquired by large companies (Tognum by Daimler and Rolls-Royce, Guascor by Dresser Rand, MAN by Volkswagen) with know-how and financial means likely to further boost their capacity to compete with the combined entity that would result from the proposed concentration.

Finally, none of the genset customers that replied to the Phase II market investigation expressed any significant concern as regards the horizontal overlap in the 1.5-2MW power band. Also, none of the respondents attributed the combined entity with a
particular capability referred to the 1.5-2MW power band that no other supplier would be able to match or compete with.

(98) It should therefore be concluded that the proposed concentration would not significantly strengthen the position of the combined entity in any of the bands referred to Table 3 of recital 89 for the following reasons: (i) the power band where the overlap is significant (1.5-2MW) represents a minor part of the overall genset market; (ii) that power band is defined in terms of genset power and, once considering the more appropriate dimension of project size, it appears that a significant part of gensets recorded in this power band actually serves projects of a larger size; and (iii) strong and equally capable competitors remain in the market (to some degree further strengthened in their capability to compete in R&D by the on-going consolidation process in the industry).

5.3.2. The Parties are not close competitors

(99) Paragraph 28 of the Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings 52 states that: "...The merging firms' incentive to raise prices is more likely to be constrained when rival firms produce close substitutes to the products of the merging firms than when they offer less close substitutes. It is therefore less likely that a merger will significantly impede effective competition, in particular through the creation or strengthening of a dominant position, when there is a high degree of substitutability between the products of the merging firms and those supplied by rival producers."

(100) The Parties claim that CAT and MWM are not close competitors, supporting that claim with submissions based on bidding data. Also, the Parties claim that CAT and MWM are not close competitors in terms of technology, R&D efforts and market positioning.

5.3.2.1. Quantitative analysis

(101) The Parties separately provided bidding data for the period from 2006 to 2010 pursuant to the Commission's requests for information during the Phase II market investigation. 53 These data have been analysed by the Commission and the conclusions for the data of CAT and MWM are set out in the following recitals.

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52 OJ C 31, 5.2.2004, p. 5 (the "Horizontal Merger Guidelines").

53 These databases were submitted as "best-of-knowledge" information for all projects of which the Parties are aware, including those where bids were made by distributors and/or packagers. The information on other participants, as well as on the winner for lost or abandoned projects is provided, again, to the best of Parties' knowledge. There are likely to be other projects where the Parties were not invited to submit a bid or were not aware of. MWM submitted data which referred to [...] tenders over the period from 2006 to 2010, while the submission from CAT is the result of the collection coordinated by CAT's lawyers and economic consultants of the information requested from CAT's distributors (preserving the confidentiality with respect to CAT). These data includes [...] bids in which CAT's distributors were involved. Both data sets include bidding processes in which the Parties were involved either directly, or via distributors (exclusive and independent) and packagers. In addition to those databases, the Parties provided, at the very end of Phase I market investigation, a list of gas gensets projects in which MWM competed. That list was only referred to by Germany, it covered only the years 2009 and 2010 and only contained a subset of the information that was necessary to
Quantitative analysis on CAT bidding data in the EEA

(102) Based on the bidding data received from the Parties, CAT's distributors and packagers faced a bid from more than [0-5]* genset competitor in [0-5]* out of [0-5]* cases. For bids where there was more than one competitor, the data provided shows that GE is the competitor most often encountered by CAT, with GE appearing in […]% of the bids, whereas MWM is present in only […]% of the bids in which CAT was present. Tognum ([…]%), Cummins ([…]%) and Guascor ([…]%) are also facing CAT's distributors and packagers in a significant number of bids.

(103) The bidding data reveals that CAT has a limited range of gas gensets with its two most successful products ([…]° and […]° models both falling within the 1.5-2MW power range). Just [below 50%]* of CAT's distributors and packagers bids were for projects within that range.

(104) Even in the 1.5-2MW power range where CAT is relatively stronger, the Parties are not close competitors. In particular, in that segment the presence of competitors other than GE and MWM is even more relevant. More precisely, Tognum was present in […]% of the bids in that segment and Cummins in […]%.

(105) When CAT's distributors and packagers lost a bid, the winning bidder was GE in […]% of the cases, while MWM was the winner in […]% of the bids lost by CAT. In addition, CAT's distributors and packagers lost projects on a regular basis against Cummins (in […]% of the cases), Tognum ([…]%) and on multiple occasions to Guascor and others. In the 1.5-2.5MW power range, the percentage of bids where Cummins won was even more significant, reaching […]%, while MWM won in […]% of the bids lost by CAT distributors.

(106) Therefore, it should be concluded from CAT's bidding data that the Parties are not close competitors in the overall market for gas gensets and that GE is by far the most important constraint to the combined entity. Additionally, there are also other relevant competitors, such as Tognum, Cummins and Guascor among others, which are closer to CAT than MWM. Even in the power range where CAT is stronger (that is to say, 1.5-2MW), the bidding data analysis reveals that MWM and CAT are not close competitors.

Quantitative analysis on MWM bidding data in the EEA

(107) Based on the bidding data submitted by the Parties, MWM almost always faced a bid from more than one genset manufacturer. In bids where CAT was competing against MWM, GE was present as a competitor alongside CAT in a large majority of cases ([…]° overall and […]° in the 1.5-2.5MW segment), while MTU/Tognum was also present in a substantial proportion of cases ([…]° and […]% respectively).

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conduct the analysis in this case. That information was provided in the larger datasets compiled after Commission's indications in the Phase II market investigation.

54 When known.
55 For this particular analysis, 1.5-2.5MW segment was considered as a single range as sample sizes for narrower ranges are very small.
A close analysis on the data submitted by the Parties demonstrates that GE is undeniably the most important competitive constraint on MWM, both across all project sizes and specifically in the 1.5-2.5MW power range. GE is by far the competitor that MWM faces most frequently, across all power output segments (in [...]% of bids overall and in [...]% of bids in the 1.5-2.5 MW segment). CAT is encountered much less frequently ([...]% and [...]% respectively) and to a similar extent as Tognum ([...]% and [...]% respectively). Cummins also appears to have a role in competing against MWM, being present in [...]% of the bids overall and in [...]% of the bids in the specific 1.5-2.5MW power range.

In bids that MWM lost to a competitor, GE was again the most frequent winning bidder ([...]% overall), with CAT ([...]% overall) and Tognum ([...]% overall) winning infrequently. Cummins won in [...]% of the bids.

Analogous results are observed in the 1.5-2.5MW power range. GE won in [...]% of MWM’s lost bids, CAT in [...]%, Tognum in [...]%, while Cummins, with [...]%, won against MWM more frequently than either CAT or Tognum.

The above quantitative evidence supports the conclusions from the Phase II market investigation showing that GE and MWM are technology leaders in the relevant market and, therefore, closer competitors than CAT and MWM.

Furthermore, the proposed concentration cannot reasonably be characterised as a "3 to 2" transaction on any of the suggested product markets based on the quantitative analysis of the bidding data submitted by the Parties. Tognum is consistently equally important as a competitor to MWM as CAT, and this applies both in the overall market and in the specific 1.5-2.5MW power range. It is not surprising that Tognum appears significantly in the MWM database given that both companies are German. This shows that CAT is not a strong competitor to MWM in the area where the latter has its highest influence. Cummins also plays a significant role in the market and exerts a competitive constraint on both MWM and CAT, being as or more important than CAT both in the overall market and in the specific 1.5-2.5MW power range.

Consequently, it should be concluded from MWM's bidding data that the Parties are not close competitors. MWM and GE are closer competitors than MWM and CAT; and Tognum and Cummins represent stronger competitive constraints to MWM than CAT.

5.3.2.2. Qualitative analysis

Difference in R&D efforts/innovation

Paragraph 38 of the Horizontal Merger Guidelines states the following: "(...) effective competition may be significantly impeded by a merger between two important innovators, for instance between two companies with 'pipeline' products related to a specific product market. Similarly, a firm with a relatively small market share may nevertheless be an important competitive force if it has promising pipeline products."

Investment in R&D is of strategic importance in the gas gensets industry. As the buying decision by customers depends on the lifecycle cost analysis (driven not only
by purchase price of the genset but also by its energy efficiency, maintenance costs and other cost considerations), R&D efforts are very important to ensure the competitiveness of a company. In addition, the market demands engines/gensets to be increasingly more efficient, generate more power, and at the same time have a lower environmental impact, which requires that all competitors constantly develop new products or optimise the products they offer.  

(116) For instance, in July 2010, GE Jenbacher opened a new competence centre for gas engine technology in Germany. In May 2011, Cummins announced the opening of Cummins Oil and Gas Centre of Excellence in Houston, Texas, the USA.

(117) As submitted by the Parties, in the late 1990’s, CAT was a market leader in the gas genset market. However, during recent years, its products have become less competitive due to a lack of R&D investments. This is because CAT was historically rather specialised in diesel gensets and had no strategic focus in gas gensets. Also, during the last decade CAT chose to update its diesel gensets to comply with new emissions standards, and thus, allocated [...] R&D efforts to its diesel gensets.

(118) MWM, on the other hand, has not focused on diesel gensets. Following its acquisition by 3i Group plc ("3i", UK) in 2008, capital investments were made to improve and intensify the R&D efforts, inter alia. Whilst CAT spent approximately [...]% of its annual turnover in 2009 in R&D efforts for the gas gensets, MWM invested approximately [...]% of its annual turnover in the last financial year 2009 to 2010. Therefore, MWM has concentrated its R&D spending on the development of its gas gensets, which has allowed MWM to have a complete product line from 0.4MW to 4.3MW with 'best in class' technology and fuel efficiency gas gensets at present. MWM is a supplier of highly efficient and environmentally friendly systems for power generation, focused on high efficiency products and state-of-the-art natural and non-natural gas gensets. This is supported by the Parties internal documents.

(119) CAT's internal documents, as depicted in Table 4 set out in recital 94, show CAT's own perception of its own gas gensets in comparison to MWM's and GE's gas gensets. In the power range from [...] MW, MWM's engines/gensets are perceived as the most efficient of the market. GE, in turn, is seen as having highly efficient gensets in the power bands [...] MW and [...] MW. By contrast, CAT's gensets are [...] and its portfolio does not cover [...] power ranges. CAT further states that [...] in the power band where its gensets are more successful (that is to say, [...] MW), this is due to the reliability of [...] models, [...].

Within the last 20 years, R&D efforts have resulted in a number of improvements. For instance, mechanical efficiency of medium-sized gas engines increased from 36% to 45% and the mean effective pressure doubled nearly from 10 bar to 19 bar. Other major technological innovations relate to: (i) increasing the specific output of given engines by increasing the turbo charging pressure with high pressure turbochargers or two-stage turbo charging; (ii) improving the combustion via optimisation of spark plugs, channels and equalising the load to different cylinders in an engine; (iii) improving the ability to control an engine and to adapt it to different ambient conditions, required loads and dynamic load responses by introducing waste gates and by-passes, flexible valve timing; (iv) increasing the ability to run with non-natural gases, especially syngas (such as pyrolysis gas) with low calorific values and fluctuating parameters by adapting the gas mixing devices, the gas trains and the control devices; and (v) improving the ability to use the heat for either co- or tri-generation plants or to convert the heat into electrical energy by using steam turbines, ORC processes.
The results of the Phase II market investigation confirm that perception, as well as the conclusions concerning closeness of competition (see Section 5.3.2). Competitors, customers, consultants and distributors stress the competitive nature of innovation (and, in particular, energy efficiency, see recitals (122) to (131) in this industry and generally do not consider MWM and CAT as close competitors as regards innovation. MWM is considered to be more efficient and innovative, more similar to GE, while CAT is lagging behind, though its engines are considered reliable.  

Based on those findings, it should be concluded that the Parties are not close competitors as regards innovation.

Differences of the electrical efficiency

According to the Parties, the electrical efficiency of a gas genset is the most important factor that customers consider when purchasing a gas genset. Fuel costs represent [80-90]* to [90-100]**% of operating costs, and roughly [60-70]**% of the lifetime ownership and operation costs of a gas genset. Low electrical efficiency leads to high fuel consumption and thus to higher costs. Thus, the differences in electrical efficiency between CAT's and MWM's gas gensets result in […]* differences regarding the cost of fuel. These arguments have been broadly endorsed by the respondents to the Phase II market investigation: "The most important [costs] are the life time costs and they are determined by electrical efficiency."  

The Parties submit there are […]* gaps between the efficiency of the gas genset models of the two companies. Both non-natural and natural gas gensets of CAT have […]* lower electrical efficiency than the closest corresponding MWM products. The electrical efficiency of MWM's products is much closer to that of GE's products. In that sense, it should be noted that the vast majority of customers responding to the Phase II market investigation indicate that technology related product characteristics as the most determinant element in their purchase decisions.

The diagrams below illustrate the different levels of electrical efficiency of existing natural gas gensets for the Parties and their competitors. An indispensable preliminary caveat concerns Cummins, whose competitive strength is not fully reflected (if at all) in these diagrams, which are based on publicly available information on electrical efficiency data. There is, however, only one natural gas model manufactured by Cummins for which public information is available (and it is the only one included in the diagram below).  

Figure 1: Electrical efficiency in natural gas gensets

[Figure 1 reflects the electrical efficiency of the different natural gas gensets models of the Parties and their main competitors, such as Cummins, GE, Guascor, MAN, MTU, Wärtsila.

[120] See responses to questions 51 and 57 of the Phase II R1 Questionnaire to competitors; responses to question 48 of the Phase II R4 Questionnaire to customers; responses to questions 44 and 51 of the Phase II R5 Questionnaire to consultants; responses to question 61 of the Phase II R2 Questionnaire to distributors.

[121] See response to question 52 of the Phase II R5 Questionnaire to consultants by […].

[122] See responses to questions 43, 44, 48 and 49 of the Phase II R4 Questionnaire to customers.
and Waukesha, in relation to electrical power (between 0 and 4.4MW). Figure 1 shows that GE and MWM products are more efficient than CAT's.]*

Source: Parties' submission

(125) In the market for gas gensets >0.5MW, CAT's gensets have efficiency rates ranging from 37% to 42%, whereas MWM constantly sells products of better efficiency. All MWM's products range above an efficiency of 42%. Moreover, the efficiency rates of MWM's gensets are rather uniform, meaning that there are no huge gaps between their most and least efficient products.

(126) The diagram set out in recital 124 also shows two main groups of competitors. The first group consists of GE and MWM, who offer a broad range of highly efficient gensets. Nearly all products of these manufacturers have efficiency rates between [30-50]%. The second group is composed by CAT/Perkins, Tognum/MTU and Guascor, whose gensets have an electrical efficiency between [25-45]%. On average, these manufacturers' gensets' efficiency is [...] lower than the efficiency of GE's and MWM's natural gas gensets. Even in the power range where CAT has its most efficient gas gensets (that is to say, [...]MW), and thus its presence in the market is stronger, both MWM and GE have more efficient gas gensets.

(127) Those differences in electrical efficiency between CAT's and MWM's gensets become even more evident when considering non-natural gas gensets.

Figure 2: Electrical efficiency in non-natural gas gensets

[Figure 2 reflects the electrical efficiency of the different non-natural gas gensets models of the Parties and their main competitors, such as GE, Guascor, MAN and MTU, in relation to electrical power (between 0 and 4.4MW). Figure 2 shows that GE and MWM products are more efficient than CAT's.]*

Source: Parties' submission

(128) CAT offers only a [...] limited number of non-natural gas gensets, although non-natural gas gensets represented approximately [30-40]% of the EEA market in 2010. Compared to MWM's non-natural gas gensets, CAT's gensets are [...]% less efficient, whilst GE offers products that are much closer to MWM's electrical efficiency's standards. This results in [...] additional fuel demand for customers using CAT's gensets.

(129) In that regard, the Parties submit that the ability to adjust a genset’s performance to the ambient conditions also has an impact on efficiency. [Some suppliers, competitors of CAT, are able to adjust their gensets to meet the customers' requirements in terms of altitude, temperature or humidity. The lack of customization can have a negative effect on optimizing the genset's performance and efficiency].* This leads to efficiency losses so that in these circumstances the efficiency gaps become even larger.

(130) Furthermore, as it appears from the diagram set out in recital 127, GE and MWM offer non-natural gas gensets with [high] efficiency in the market, whereas CAT offers non-natural gas gensets with [lower] electrical efficiency, [...] below Guascor, MAN and Tognum/MTU.
The Phase II market investigation has also largely confirmed that consultants, distributors and packagers consider MWM as offering technologically superior products than CAT in terms of electrical efficiency. Only for customers, a roughly equal number of responses from customers could be found in favour of each company.

Accordingly, it should be concluded that MWM and CAT are not close competitors as far as electrical efficiency is concerned.

Differences in overhaul time

Overhaul time is the period of time needed when a genset must be shut-down for significant repairs and maintenance. The overhaul times of CAT's and MWM's gensets are quite different and this difference applies almost equally to all power band ranges. MWM's products usually only require a full inspection and overhaul after a runtime of [...] hours. CAT generally already recommends a full inspection and overhaul for its products after a runtime of [...] hours. It follows that, if a gas genset is operated continuously, a CAT customer needs an overhaul [...] earlier than a MWM customer. In monetary terms, this can make a substantial difference for customers as the costs for a complete overhaul can run up to two thirds of the initial costs of a genset, in addition to the lost electrical output during the shut-down time of the genset.

The Phase II market investigation partially endorses the Parties' arguments referred to in recital 133. The majority of the competitors that replied to the Phase II market investigation mention both CAT and MWM as having low maintenance costs and short downtime. However, none of them are marked as market leaders in that respect. On the other hand, customers submit that CAT's gensets are "old-fashioned and expensive to maintain". Distributors credit CAT with being good at engine reliability and maintenance needs. That seems to stem from the "old" or "more conservative" technology CAT uses: "low technology – simple engines – easy maintenance". Still, distributors see MWM as having better technology which includes a "very sophisticated and functional control system", reducing maintenance costs.

Different positioning of the Parties in the market

According to the Parties, the activities and the positioning of CAT and MWM differ significantly. MWM almost exclusively manufactures and sells gas gensets, whereas CAT's business activities cover a much broader area. Within power generation, CAT has focused its activities on diesel gensets rather than on gas gensets. Diesel gensets

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60 See responses to questions 44 and 51 of the Phase II R5 Questionnaire to consultants; responses to question 60(d) of the Phase II R2 Questionnaire to distributors; responses to question 60(d) of the Phase II R3 Questionnaire to packagers.
61 See responses to question 47 of the Phase II R4 Questionnaire to customers.
62 See responses to questions 59(e) and (f) of the Phase II R1 Questionnaire to competitors.
63 See response to question 44 of the Phase II R4 Questionnaire to customers by […].
64 See response to question 60(c) of the Phase II R2 Questionnaire to customers by […].
65 See response to question 60(c) of the Phase II R2 Questionnaire to distributors by […].
66 See response to question 60(d) of the Phase II R2 Questionnaire to distributors by […].
67 See response to question 60(e) of the Phase II R2 Questionnaire to distributors by […].
represented [5-10]*% of CAT's total turnover in 2009, while gas gensets amounted to [0-5]*%.

(136) The different activities of the Parties have the effect that their brands are perceived entirely differently. CAT's brand recognition results primarily from its long-standing activities in earth-moving and mining equipment, as well as its diesel engines/gensets. CAT's gas gensets, however, are [less]* known and are perceived as being [less]* efficient. By contrast, MWM is a well known brand for gas gensets, with the reputation of offering tailor-made, reliable gas gensets with a good price performance. Those differences in perception between the Parties’ respective gas gensets are also in line with the objective differences in efficiency and innovativeness, as set out in recitals 114-121 and 122-132. As a result, customers [...] of gas gensets are likely to have a preference for MWM's products over those of CAT.

(137) Moreover, the Parties underline the complementarity of the proposed concentration as regards their business portfolio and their geographic scope. The gas genset product portfolios of CAT and MWM differ significantly in terms of fuel used (natural gas/non-natural gas). With respect to non-natural gas gensets above 0.5MW, CAT only offers three models68, while MWM offers seven69.

(138) The geographic focus of both companies is also different. CAT has a stronger presence on a worldwide level, but a weak one on an EEA basis. MWM, on the contrary, is strong in the EEA but with limited distribution presence in the rest of the world.

(139) The Phase II market investigation reveals that CAT has a reputation of being "solid" and "expensive"70, while MWM is seen as having a more aggressive price policy, especially concerning rebates. The overall image is of CAT offering lower, simpler technology than MWM, with MWM being "good and getting better"71. Competitors share the same views72. CAT is regarded as being a global player, with a diversified portfolio in different end applications and heavy equipment, but lagging behind the main competitors in the gas genset market. MWM is considered as an aggressive and dynamic player that has been successful in building brand recognition in a short period of time and launching competitive and innovative products in the market for gas gensets.

(140) Taking those elements into account, it should be concluded that MWM and CAT are not close competitors as regards their positioning in the gas genset market.

68 G3512 LE (769.6kW), G3516 LE (1,100kW), and G3520C IM/G3520C (2,000kW). Parties' submission of 15 July 2011.
69 The TCG 2016 V12 (0.45 MW-0.6 MW), the TCG 2016 V16 (0.6 MW-0.8 MW), the TCG 2020 V12 (0.9 MW-1.2 MW), TCG 2020 V16 (1.17 MW-1.56 MW), the TCG 2020 V20 (1.5 MW-2.0 MW), the TCG 2032 V12 (2.12 MW-2.83 MW) and the TCG 2032 V16 (2.83 MW-3.77 MW). Parties' submission of 15 July 2011.
70 Response to question 44 of the Phase II R4 Questionnaire to customers by [...].
71 See response to question 44 of the Phase II R4 Questionnaire to customers by [...].
72 See responses to questions 51, 53 and 58 of the Phase II R1 Questionnaire to competitors.
5.3.3. **Potential entrants**

(141) The Parties consider that several new entrants on the market and potential new entrants will constrain the combined entity's competitive behaviour. In that sense, paragraph 68 of the Horizontal Merger Guidelines states that: "When entering a market is sufficiently easy, a merger is unlikely to pose any significant anti-competitive risk. (...) For entry to be considered a sufficient competitive constraint on the merging parties, it must be shown to be likely, timely and sufficient to deter or defeat any potential anti-competitive effects of the merger."

(142) The Parties estimate that the gas gensets market will grow at approximately [10-20]% per year from 2011 to 2020, which is a very significant rate. Market drivers for growth are population growth, environmental concerns with constraints on carbon emissions, and crude oil prices. In particular, population growth and increased electricity demand per capita is causing an upwards pressure on demand for electrical energy. In addition, there is and will be continued pressure to meet the demand for more electrical energy using technologies that generate electricity in a more fuel efficient way, emit less carbon per unit of power and do not rely on liquid hydrocarbon fuels. Taking those matters into account, the Parties believe that growth in demand for gas gensets will rapidly increase over the coming years. That means that there is space to accommodate the growth of existing players, as well as new entrants to the market for gas gensets.

(143) In that respect, both the Phase I and II market investigations confirmed that the market for gas gensets is growing rapidly. In particular, an annual growth of between 10 to 15% in the coming years is expected and will continue in the future due to environmental reasons, as well as an increase in the market demand, inter alia. As a consequence, many respondents to the Phase II market investigation indicated that Asian (namely Chinese and Korean) players could enter the EEA market in the near future.

(144) According to the Parties, there are also no significant barriers to entry, in particular for manufacturers that are already present in the diesel genset market. It should be emphasised that all gensets are derived from diesel gensets. Most of the current gas gensets manufacturers are also diesel gensets manufacturers, such as GE, CAT, Cummins, Guascor or Mitsubishi. Tognum is the most recent example of a diesel supplier who has entered the gas market in the EEA.

(145) The Parties point out that an important element for a successful gas genset is the access to a technologically competitive bare engine, in particular as far as the control system of the engine is concerned. This is the reason why most gas gensets suppliers are vertically integrated, since that allows control of product development, production costs and system integration.

(146) However, the Parties argue that the lack of a proprietary gas engine is not an obstacle for market entry. In the past, suppliers have either developed their own engine/control systems, or purchased engines/control systems from third parties or

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73 See responses to question 74, 74(b) of the Phase II R2 Questionnaire to distributors; responses to question 78 of the Phase II R4 Questionnaire to customers.
74 See responses to question 76 of the Phase II R4 Questionnaire to customers.
adapted diesel engines to gas gensets. Based on the experience of MWM, in order to launch a 0.5MW gas bare engine, a diesel manufacturer would need to invest approximately EUR [...] million to market a gas engine developed from an existing diesel engine.75

(147) Potential competitors who are not active in diesel engines/gensets can also enter into the market by acquiring know-how regarding the gas engine from third parties. AVL, Austria, sells advanced control systems or know-how in relation to control systems to gas or diesel engine manufacturers. Bosch and Ricardo are other examples of such companies.

(148) Packagers can also enter the gas genset market by sourcing the engine from existing gas bare engine suppliers, such as Cummins or Guascor in the EEA. Packagers acquire a significant amount of know-how on the engines and gensets they acquire from manufacturers and also have the expert personnel for sales and marketing, as well as knowledge about the final customers, and supply maintenance and spare parts. An example of a recent entry is packager 2G Energietechnik GmbH who has entered the gas genset manufacturing market. 2G has developed its own gas engine line with power outputs below 0.4MW, based on MAN engines.

(149) Furthermore, the Parties stress that the availability of a company's own sales network as such is not a necessary requirement to become a successful supplier, as proven by the example of MWM. MWM has effectively developed its sales network in only a few years. Thus, a new entrant can successfully supply its gensets via independent distributors or packagers, without being forced to set up its own distribution network.

(150) In addition, many respondents to the Phase II market investigation point to the fact that new developments are constant in the market, and that competitors need to regularly launch new or improved products. Numerous examples are given in that regard, including the main innovations brought about in recent years, such as the current pipeline products and R&D efforts carried out by manufacturers.76 As a consequence, the market for gas gensets is highly dynamic and competitive, enabling recent entrants (such as MWM or Tognum) to increase its market share in a short period of time, and vice versa, making manufacturers that do not invest in R&D obsolete ([…]*). It also explains the fluctuation of the market shares for the main competitors in the gas genset market, both on a global and EEA basis and provides an indication that historic market shares are an insufficient proxy for market power.

(151) Additionally, the Phase II market investigation shows that entering the gas genset market is not as costly as suggested by respondents to the Phase I market investigation77. Firstly, to develop a distribution network is feasible in a short period of time. It is not necessary for a company to have its own distribution network, a newcomer can supply its products through highly sophisticated independent distributors or packagers, who have the market knowledge and have access to a wide customer base.

75 Access to the gas grid would be excluded as this largely depends on the distance of a plant from the gas grid.
76 See responses to questions 60, 61 and 62 of the Phase II R1 Questionnaire to competitors.
77 See responses to question 80 of the Phase II R4 Questionnaire to customers.
Furthermore, as confirmed by the Phase I and II market investigations, to develop a new gas genset from scratch requires significant costs and time. However, to develop a gas genset from an existing genset significantly reduces time and expenses.\footnote{See responses to question 79(a) of the Phase II R4 Questionnaire to customers.} For that reason, it is feasible for a player already offering a gas genset of a given size, to start offering a gas genset with different capacities. In the market for gas gensets >0.5MW, there are a number of players that offer certain sizes of gas gensets and thus could start developing new gas gensets, such as MAN (Diesel and Turbo), Cummins, Tognum/Rolls Royce, Wärtsila, Niigata and Mitsubishi, as well as packagers. In addition, undertakings currently manufacturing diesel gensets could also start producing gas gensets (virtually all gas gensets' manufacturers have started producing diesel gensets). Furthermore, Japanese, Korean and Chinese players currently offering their gas gensets in Asia could also start supplying both EEA and worldwide markets. Finally, undertakings active in the market for gas gensets <0.5MW could also start producing higher output gas gensets, although some time and investment is needed in this case. These companies are, inter alia, MAN (Truck and Bus), Scania, Fiat, Deutz and Yanmar.

Taking into account those characteristics of the gas genset market, it should be concluded that entry into the market is feasible, as well as the expansion of the existing players through R&D efforts.

5.3.4. Effects on competition: the proposed transaction does not create a dominant player

As can be derived from Tables 1 and 2 set out in recitals 82 and 84, the proposed concentration does not create a dominant market player. Post-concentration, the combined entity will have moderate market shares in the market for gas genset projects above 0.5MW, remaining below the [30-40\%] mark in the EEA even considering the conservative market delineation including only high-speed gas gensets (see Table 2). The same conclusion may be drawn from the alternative assessment made on the basis of genset sizes instead on the basis of the (preferred) project perspective. GE will continue to be the market leader in the market, followed by the combined entity, Cummins, Tognum and Guascor.

The Parties claim that the proposed concentration will enable the combined entity to better compete with GE, the clear market leader and the point of reference of all market players. In addition to GE, the Parties face competition in the EEA from other manufacturers, such as Tognum, Cummins and Guascor. Tognum is a price aggressive competitor which is expected to increase its presence and R&D efforts in the gas market, given that has been acquired by Daimler and Rolls Royce. Cummins is a vertically integrated manufacturer that offers gas gensets at very competitive prices. Cummins is the largest manufacturer of bare gas engines. Finally, Guascor is a small player in the EEA with a stronger presence worldwide. However, its presence is also expected to grow in the EEA, since it has recently been acquired by Dresser-Rand, a global supplier of high-speed rotating equipment and service solutions.
The findings of the Phase II market investigation corroborate those claims by the Parties. There is a broad consensus on GE's leadership in the gas genset market. A number of consultants, distributors and customers also indicate Tognum, MAN and MWM as credible opponents of GE from a technological point of view.

As extensively developed in recitals (99) to (140), the Phase II market investigation also substantiates that the Parties are not close competitors in terms of technology and innovation. Thus, it is unlikely that the proposed concentration will significantly impede effective competition when both Parties are not close competitors.

In addition, it is feasible for a newcomer to expand its presence in the gas genset market. This is corroborated by the fact that all players' market shares are highly volatile and significantly change from one year to another. If a given competitor develops a new gas genset, it could gain a substantial market share in a very short time horizon. Moreover, customers can easily switch from one supplier to another, as projects are usually ad-hoc and unconnected from previous projects. Thus, from a customer's perspective, there is no technical impediment for switching beyond the capacity of suppliers to cover the technical requirements of its projects.

The Parties further submit that the three-year market shares, referred to in Table 2, reveal a remarkable decrease of CAT's shares over that period, from [10-20%] in 2008 to [5-10%] in 2010. As explained in recitals 117 to 119, this is [the result of CAT's R&D focus on other business segments]*, which has resulted in [...] less efficient gas gensets. Given the lower market presence of CAT at present, the increment brought about by the proposed concentration would be modest. The proposed concentration would therefore not change the structure of the market.

The Phase II market investigation also validated that point. CAT is perceived as a company with low investments in R&D, although some respondents indicated that CAT still has some reliable and competitive gas gensets. The Phase II market investigation fully endorsed the Parties' arguments as regards MWM's and GE's improved products. Both companies have recently launched improved products into the market.

The proposed concentration is unlikely to affect overall competition based on technological progress and product innovation also in view of the fact that Tognum, Guascor and MAN have recently been acquired by large, well-endowed companies. In particular, Tognum has been acquired by Daimler and Rolls-Royce. Both prospective parents are active in the production of gensets and Rolls-Royce will, moreover, contribute its (lower speed) genset business. Guascor was acquired by Dresser Rand and MAN is being acquired by Volkswagen. Tognum, Guascor and MAN are, therefore, likely to become financially and/or technologically better

See responses to questions 43, 46, 47, 48, 50 and 51 of the Phase II R5 Questionnaire to consultants; responses to questions 58 and 59 of the Phase II R2 Questionnaire to distributors; responses to questions 43, 44, 46 and 51 of the Phase II R4 Questionnaire to customers.

See responses to question 59 of the Phase II R1 Questionnaire to competitors; responses to question 60 of the Phase II R2 Questionnaire to distributors; responses to questions 43, 44, 46, 47 of the Phase II R4 Questionnaire to customers; responses to questions 43, 46, 47, 48, 50 and 51 of the Phase II R5 Questionnaire to consultants.
endowed competitors, equally incentivising other competitors, including the combined entity, to maintain R&D efforts.

(162) Furthermore, the Parties underline the importance of the packagers' role as competitors in the gas genset market. Packagers are original equipment manufacturers (OEMs) which usually include the gas gensets they acquire from manufacturers as part of a larger product or together with other components and equipment, sometimes in a container. Packagers exercise a significant competitive constraint on gas gensets suppliers to the extent that they do not have a specific relationship with a given gas genset manufacturer and source from different producers. The Parties believe that they should be considered as competitors of genset suppliers, since packagers also sell gas gensets and other accessories and components to customers (that is to say, semi-turnkey solutions). In addition, packagers sell complete turnkey installations to customers including a much larger range of products. These packagers are in charge of the servicing and maintenance of the gas gensets.\(^81\)

(163) The Parties note, however, that there are packagers that tend to source gas gensets from only one supplier. In such cases, those packagers are to a lesser extent competitors of the gas genset manufacturers but instead act more as distributors.

(164) The Phase II market investigation partially confirms the Parties' views as regards packagers. Many respondents, in particular a number of customers\(^82\), consider packagers as gas genset suppliers and, therefore, as competing at the same level as gas genset manufacturers. Two packagers, in particular, were mentioned by customers: 2G and Enerflex. From a customer's perspective, a packager could offer the same service as gas gensets manufacturers and, often offers complete turnkey solutions, which are not provided by all gas gensets manufacturers. CAT, for instance, does not supply turnkey installations.

(165) The Phase II market investigation also clarified the different roles that packagers could have in the market\(^83\). Some packagers not only supply gas gensets, but source gas reciprocating engines and produce gas gensets themselves. In that case, packagers act more directly as competitors of gas genset manufacturers. On the other hand, many packagers purchase complete gas gensets from the manufacturers and supply them integrated in a larger product, such as semi-turnkey installations or complete turnkey solutions. When a packager only provides semi-turnkey solutions, its services could also be supplied by specialised distributors. In that case, packagers do not compete directly with gas genset producers, but instead compete more with other packagers and distributors. In any event, it is clear from the Phase II market

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\(^81\) The largest packagers in the gas gensets market in the EEA are Pro 2 Anlagentechnik GmbH, 2G Energietechnik GmbH, SEVA Energie AG, Haase Energietechnik AG, ETW Energietechnik GmbH, SES Energiesysteme GmbH, Lindenberg-Anlagen GmbH, and Dreyer & Bosse Kraftwerke GmbH. Other packagers active in the EEA are SDMO, Enerflex Europe, Powertec Energy Inc..

\(^82\) See responses to question 68 of the Phase II R5 Questionnaire to consultants; responses to question 81 of the Phase II R2 Questionnaire to distributors; responses to questions 43 and 71 of the Phase II R4 Questionnaire to customers.

\(^83\) See responses to questions 44(d), 64, 68 of the Phase II R5 Questionnaire to consultants; responses to question 71 of the Phase II R4 Questionnaire to customers.
investigation that packagers play an important role in the market for gas gensets for power generation.

(166) The Parties claim that customers have significant countervailing buyer power. The Phase II market investigation did not fully confirm the Parties' views in that regard. Competitors point to the importance of tender processes (formal and informal) in the market as an important element conferring buyer power to customers, and to the role of consultants, who advise customers for specific projects/tenders. However, customers responding to the Phase II market investigation regarded suppliers as having significant negotiating power as projects are usually complex and highly technical. To conclude, it is not clear whether the customers have significant buyer power, regardless of the possibility to launch competitive tenders and use the consultants' knowledge of the market.

(167) On a worldwide level, the Parties' combined market shares in the market for high-speed gas gensets above 0.5MW power are similar to those in the EEA ([30-40%] in 2010). GE will continue to be the market leader, followed by Cummins ([10-20%]), Guascor ([5-10%]), Tognum ([0-5%]) and Mitsubishi ([0-5%]). On a global basis, Guascor plays a more significant role than on an EEA level, exerting an important competitive constraint over the Parties. As stated in recital 96, Guascor's presence is expected to increase in the near future, following its acquisition by Dresser Rand. In this sense, the Parties underline that Guascor has announced plans to open a gas genset assembly plant in Venezuela. It should also be noted that the medium-speed gas gensets exert an important competitive constraint on the market for high-speed. If a wider market encompassing medium- and high-speed gas gensets were to be considered, the Parties' shares would be further diluted and not exceeding [20-30%].

(168) As in the EEA market, CAT's worldwide market share has significantly decreased over the last three years, from [20-30%] in 2008 to [10-20%] in 2010. This is due to CAT's reduced R&D focus in a period when its competitors significantly invested in R&D and launched improved products in the market. Globally, the manufacturers that most benefited from CAT's decline have been MWM, Cummins and Guascor, which have grown rapidly during recent years. The Phase II market investigation also underlined that the proposed concentration would not remove a competitive player from the market, since CAT's gas gensets are considered to be near obsolete in most of the power bands where it is present. CAT offers models in the 1.5-2MW power range. Whilst these gensets are appreciated for their reliability, they cannot be considered as competitive. This is in line with the results of the Phase II market investigation, which suggest that CAT is only competitive in few instances and due to the reliability of certain of its gas gensets.

5.3.5. Effects on prices and customers' choice

(169) During the Phase II market investigation, few competitors and customers considered that prices could go up after the proposed concentration. They also underlined that the market would be more concentrated post-concentration. Distributors and packagers, however, did not express any significant concern as regards non-

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84 See responses to questions 30, 63 to 66 of the Phase II R1 Questionnaire to competitors.
85 See responses to question 83 of the Phase II R4 Questionnaire to customers.
coordinated effects. Also, the majority of customers stated that enough suppliers would remain in the gas genset market after the proposed concentration. Therefore, customers would have enough possibilities for switching suppliers.\(^ {86}\)

(170) Overall, most of the respondents to the Phase II market investigation expressed no major concerns as regards the proposed concentration. The majority believe the proposed concentration would have no impact in the market for gas gensets as a whole or in any in particular sub-segment of it.

(171) The Phase II market investigation also confirms that competitors are likely to increase their supply if a price increase occurs. Rival firms have substantial spare capacity, so they can easily expand their output if prices go up. In addition, the Phase II market investigation reveals that the combined entity will have no ability or incentive to hinder expansion by competitors, as the combined entity will have no possibility to restrict the ability of rival firms to compete via R&D efforts. Medium and small companies have proved to be competitive in the gas genset market provided they are innovation-driven. Moreover, if prices would increase, newcomers would enter the market for gas gensets, as it would make this market even more attractive.

5.3.6. **Conclusion as to non-coordinated effects in the gas genset market > 0.5MW**

(172) It should therefore be concluded that the proposed concentration would not lead to a significant impediment of effective competition in the market of gas gensets with power above 0.5MW based on non-coordinated effects.

5.4. **Coordinated effects**

5.4.1. **Introduction**

(173) The 6(1)(c) Decision raised doubts that the proposed concentration would impede competition due to coordinated effects. There was a concern that the proposed concentration would remove the strongest challenger to GE and CAT from the market of gas gensets for power generation, giving rise to a slowdown in technological innovation and reduced competition on prices and services. The Phase I market investigation also indicated that the gas genset market was relatively transparent in terms of volumes due to the existence of the IESG data-collection system providing market participants with a clear view of their respective market shares in very detailed market segments. Therefore, based on the Phase I market investigation the Commission concluded that the possibility of coordinated effects on the market for gas gensets, in particular for gas gensets with a power output range between 0.5MW and 5MW, needed to be investigated further.

(174) The Parties argue that the proposed concentration would not lead to a duopoly, that the genset market was not prone to coordination prior to the proposed concentration and that it would not become so post-concentration. They add that the market is growing strongly, that it is projected to continue doing so in the near future, that the various suppliers' market shares are volatile and that asymmetries between the

\(^ {86}\) See responses to questions 66 and 83 of the Phase II R4 Questionnaire to customers; responses to question 75 of the Phase II R2 Questionnaire to distributors.
combined entity and GE would make any coordination unlikely. They submit that transparency is low in the markets concerned, as such limiting the possibility to monitor and retaliate, and that any remaining opportunity for coordination would be defeated by competitors and customers.

5.4.2.  Assessment

(175) A concentration is to be declared incompatible with the internal market if it significantly impedes effective competition.\(^87\) That would be the case if the proposed concentration changes the nature of competition in such a way that firms that previously were not coordinating their behaviour, are now significantly more likely to coordinate and raise prices or otherwise harm effective competition, or if it makes coordination easier, more stable or more effective for firms which were coordinating prior to the proposed concentration.\(^88\) For the reasons developed in recitals 176 to 184, the Phase II market investigation did not provide conclusive evidence that the proposed concentration would bring about such changes.

5.4.2.1. The proposed concentration would not lead to significant changes to the structure of the market

(176) Asymmetry of market positions: Post-concentration, GE will remain the market leader by far. Whilst the combined entity would have market shares in the market for high-speed gas gensets above 0.5MW of a level comparable to that of the current market leader GE ([30-40%] vs. [40-50%] for GE) on a worldwide basis, the merged entity's combined share would remain at a significant distance from that of GE in the EEA ([30-40%] vs. [40-50%] for GE). Moreover, the increment in the EEA is limited ([5-10%]).

(177) Other sources of asymmetry in the market will continue to exist post-concentration, in particular differences in electrical efficiency as well as in the R&D investments among the main competitors.\(^89\) The market for gas gensets is a market in which the technical characteristics of the product are crucial for the commercial success of the genset and in which a lack of R&D focus leads to a gradual exit from the market\(^90\) and re-entry other than through acquisitions takes time. Moreover, as is typical of a market based on tendering for contracts, the respective positions of the different gas genset suppliers have been fluctuating significantly over recent years, which would indicate that industry trends can only be evaluated over a longer term period.\(^91\)

(178) The Phase II market investigation has also showed that the Parties are not close competitors.\(^92\) MWM and GE on the one hand and Caterpillar, Tognum, Cummins and Guascor on the other hand are closer competitors than MWM is with Caterpillar. Most of CAT's sales in the EEA concern only [...] engine models between 1.5MW and 2MW, creating an overlap with MWM but only in a narrow part of the overall market. As such, the disappearance of this limited competitive constraint can be compensated

\(^{87}\) Article 2(3) of the Merger Regulation.
\(^{88}\) See paragraph 22(b) of the Horizontal Merger Guidelines.
\(^{89}\) See recitals (115) to (120) and (122) to (131).
\(^{90}\) See recital (115).
\(^{91}\) See recital (150).
\(^{92}\) See generally Section 5.3.2.
by Tognum, Cummins and Guascor. Each of these manufacturers may be considered as fringe competitors.\footnote{See recital (113).}

(179) **Competitive constraint from fringe players**: The results of the Phase II market investigation indicate that other market players have a much larger market share than suggested by the data available during the Phase I market investigation. With [40-50\%] of the market worldwide and [20-30\%] in the EEA, these outsiders were and will continue to be important enough to exert an effective competitive constraint and jeopardise the outcome expected from any coordination between the large market participants, such as GE and the combined entity. In view of the discrepancies with regard to their market position, in particular Tognum, Cummins and Guascor have an incentive to expand their sales in response to tacit collusion by the main market participants. In particular, Cummins' incentives were and will remain unaligned as it also sells significant amounts of bare gas engines to packagers. Most competitors, including Tognum, Cummins and Guascor have either spare production capacity or plants with flexible production capacity and, thus, continue to be able to increase production in response to tacit collusion. Furthermore, competitors such as Tognum, Guascor and MAN have been or are being acquired by respectively Rolls Royce/Daimler, Dresser Rand and Volkswagen, which will give them access to additional resources for developing pipeline products thereby enabling them to maintain and increase the competitive pressure on GE and the combined entity and compensate for any loss (which is limited) in competitive pressure due to the proposed concentration.\footnote{See recitals (96), (155) and (161).}

5.4.2.2. Genset competition is characterised by demand and supply heterogeneity

(180) **Competition on the gas genset market mainly takes place on the basis of bilateral negotiations with final customers, in which often not only the price and type of gensets offered (single engine or multi engine), but also engineering services for the installation of the genset and long-term maintenance are subject to negotiation.**\footnote{See responses to questions 79 and 83 to 86 of the Phase II R4 Questionnaire to customers; responses to question 21 of the Phase II R1 Questionnaire to competitors; responses to questions 108 and 109 of the Phase II R2 Questionnaire to distributors; responses to questions 103 and 104 of the Phase II R3 Questionnaire to packagers; responses to questions 75, 76 and 77 of the Phase II R5 Questionnaire to consultants.} In other words, competition focuses on projects, not gensets. In addition, customers are not homogeneous; they range from farmers and hospitals, to highly sophisticated industrial players, such as RWE AG or E.ON AG, each with different needs, requirements and financial means. Consequently, gas gensets are highly customised products giving the market a rather heterogeneous character.

(181) **Lack of transparency on projects**: The Phase II market investigation has pointed to a high degree of transparency in terms of volumes of gensets due to the existence of the IESG data-collection system that provides market participants with information of their respective market shares in very detailed market segments. However, without prejudice to any anti-trust assessment under Article 101 of the TFEU, the Phase II market investigation did not demonstrate that this would be sufficient to enable firms to coordinate their behaviour in the gas genset market concerned, in particular when...
it comes to monitoring compliance to and deviation from a coordinated outcome. This is due to the specificity of genset competition, which is driven by competition for projects in which the genset is only one composing element.

(182) The complexity and heterogeneity of the projects can be found on three levels. Firstly, genset manufacturers meet demand for a given power output by either offering an individual genset for that power output or a combination of smaller gensets that combined produce the required output. Secondly, in a substantial number of instances, the genset is only part of a wider product offering that customers seek, and to which suppliers can reply with differing levels of integration, ranging from the supply of a genset to a full scale turnkey solution. Thirdly, genset manufacturers will generally bundle the supply of the genset configuration together with long-term maintenance / overhaul services included in an overall price which further reduces price transparency.

(183) In the absence of the ability of genset manufacturers to monitor each other's behaviour on the gas genset market, it should be concluded that the level of transparency on gas genset volumes, as found during the Phase I market investigation, is not relevant in this case as it cannot translate into coordination.

(184) Transparency is limited by factors such as the presence of distributors and packagers. Distributors are important sales channels, at least for GE and CAT, and to a somewhat lesser extent, also for MWM, which render reaching a state of tacit coordination more difficult to achieve and sustain. There is also no evidence hinting that these manufacturers are able to control their distributors' sales, with regard to either price or volume, in order to monitor or enforce a collusive equilibrium. The presence of packagers in the market for gas gensets creates an additional sales channel, which makes deviations by genset manufacturers from a collusive equilibrium less easy to monitor. Firstly, packagers rebrand the equipment obtained from gas engine/genset manufacturers, rendering it less transparent which manufacturer would be deviating. Secondly, packagers may obtain completed gas gensets or gas engines that they transform themselves into gas gensets, rendering the means of deviation more varied. Thirdly, packagers are not committed to a given manufacturer, rendering it more difficult to determine which manufacturer, via increased sales through packagers, would be seeking to deviate from a hypothetical collusive equilibrium. These circumstances are not altered by the proposed concentration. The proposed concentration will not alter the ability and incentives of the combined entity to foreclose packagers and packagers will continue to be able to purchase bare gas engines and complete gas gensets from other suppliers such as Cummins, Guascor or Tognum.

5.4.3. Conclusion

(185) Therefore, the Phase II market investigation did not confirm the concerns that proposed concentration would remove the strongest challenger to GE and CAT from the market of gas gensets for power generation, giving rise to a slowdown in technological innovation and reduced competition on prices and services.

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96 Both on an EEA and world-wide level, MWM distributes more than [60-70]% of its gas gensets through indirect channels, that is to say, independent distributors and packagers. See Form CO, paragraph 191.
Taking those elements into account, it should be concluded that the proposed concentration would not bring about a change in the market structure conducive to coordination, nor would it necessarily increase the future sustainability of any coordination.

It should therefore be concluded that the proposed concentration does not lead to a significant impediment of effective competition in the market of gas gensets for power generation based on coordinated effects.

5.5. **Horizontal overlaps: diesel reciprocating engines for power generation**

5.5.1. **Introduction**

The 6(1)(c) Decision considered that, in principle, the proposed concentration would not raise significant competitive concerns regarding the diesel reciprocating engines market due to the small increment that CAT's market shares would undergo, both EEA wide and worldwide. However, it could not rule out higher market shares if the market was further segmented. Further segmentations of that product market according to input, power output and different speeds were further investigated during the Phase II market investigation.

The Parties only submitted market share calculations based on the broad market segmentation, namely: (i) below 0.5MW; (ii) between 0.5MW and 10MW; and (iii) above 10MW, from which it may be implied that the Parties take the view that diesel engines within the 0.5-10MW range would be substitutable and therefore belong to the same market. On that segmentation, the Parties' market shares would be low and the diesel engines would not constitute an affected market.

5.5.2. **Product market**

5.5.2.1. Diesel versus gas engines

In previous Decisions, liquid fuel (that is to say, diesel and heavy fuel oil) and gas reciprocating engines have been considered as distinct product markets, but ultimately the market definition was left open. Although the market investigation in Daimler/Rolls Royce/Tognum/Bergen seemed to confirm the above product market distinction, mainly due to supply side requirements and specialisation, as well as demand side specifications, the market definition was ultimately left open.

As explained in recital (22), the Phase I and II market investigations in this case seem to confirm a distinction by fuel type. The Parties do not contest that a distinction should be made between diesel and gas engines.

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97 Form CO, paragraph 101.
98 A small number of reciprocating engines are “dual fuel”, that is to say, they can operate on gas and diesel/heavy fuel oil. Typically, dual fuel engines are optimised to work on gas but with the possibility of running on diesel as a backup (for example, in the event of a gas supply interruption). Neither Tognum nor Bergen produces dual fuel engines.
100 Case No COMP/M.6172 – Daimler/Rolls-Royce/Tognum/Bergen, recital 21.
(192) It should therefore be concluded on the basis of the limitations in substitutability from the demand side that diesel engines would constitute a separate product market.

5.5.2.2. Distinction based on the diesel engine's application

(193) According to earlier Decisions, diesel reciprocating engines may be grouped into the following end-application segments\(^{101}\): (i) diesel reciprocating engines for industrial applications, including agricultural, construction and other industrial applications; (ii) diesel reciprocating engines for railway applications namely, diesel reciprocating engines used to power locomotives or rail cars; (iii) diesel reciprocating engines for power generation (namely for generator sets); (iv) diesel reciprocating engines for marine applications including marine propulsion and marine auxiliary.

(194) The market investigation in *Daimler/Rolls Royce/Tognum/Bergen*\(^{102}\) has recently confirmed that end-application segmentation, based mainly on the different characteristics diesel engines are required to meet depending on the application and the costs involved in converting a diesel engine from one application to another.

(195) In any event, the product market definition by application may be left open, since the proposed concentration would not give rise to any competition concerns under any alternative product market definition.

5.5.2.3. Engine speed

(196) In COMP/M.6172 – *Daimer/Rolls-Royce/Tognum/Bergen*,\(^{103}\) it was concluded that engine speed was a significant criterion applied by customers in engine selection. The market investigation in that case confirmed that the most appropriate segmentation would be as follows: (i) low (<300 rpm); (ii) medium (300-1000 rpm); and (iii) high (>1000 rpm).

(197) The Parties do not contest that a distinction should be made based on engine speed.

(198) For the purpose of the proposed concentration, the product market definition may be left open, since the proposed concentration would not lead to any competition concerns regardless of the product market definition considered.

5.5.2.4. Power output ranges

(199) In *GE/Dresser*,\(^{104}\) it was confirmed that, to a certain extent, diesel reciprocating engines with different power outputs are used for different applications. However, it appears that the boundaries between different output ranges and speeds tend to change over time as technology and efficiency improves.

(200) According to the Parties, product substitutability should lead to the splitting of the market in broader segments as follows: (i) below 0.5MW; (ii) between 0.5MW and 10MW; and (iii) above 10MW.

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\(^{101}\) See Case No IV/M.1094 – *Caterpillar/Perkins Engines*, recital 14.

\(^{102}\) Case No COMP/M.6172 – *Daimler/Rolls-Royce/Tognum/Bergen*, recital 25.

\(^{103}\) Case No COMP/M.6172 – *Daimler/Rolls-Royce/Tognum/Bergen*, recitals 29 to 35.

\(^{104}\) Case No COMP/M.6039 – *GE/Dresser*, recitals 11 and 12.
The market investigation has recently confirmed in *Daimler/Rolls Royce/Tognum/Bergen*\(^{105}\) that, although different market segmentations by output are possible, a delineation by IESG bands appeared to be overly narrow, whereas alternative similar but broader market sub-segmentations referred to in previous Decisions\(^{106}\) would be more appropriate (0.35-1MW, 1-2MW, 2-5MW, and above 5MW). In any event, the product market definition was left open as regards power output segmentation.

For the purpose of this Decision, the product market definition may continue to be left open, since the proposed concentration would not raise competition concerns under any alternative product market definition.

5.5.3. *Compatibility with the internal market and the EEA Agreement*

As regards the market for diesel reciprocating engines for power generation, CAT's worldwide market share measured in MW volume terms was approximately [5-10]*% in 2009, while MWM's was only [0-5]*%. In the EEA, CAT's share for that year was [10-20]*%, while MWM's market share was negligible ([0-5]*%). Therefore the proposed concentration only leads to a minor increment.

If an analysis is made on the basis of power size bands\(^{107}\), in particular those of 0.35-1MW, 1-2MW, 2-5MW, and above 5MW (which were deemed more appropriate in COMP/M.6172 *Daimler/Rolls-Royce/Tognum/Bergen* than the narrower IESG bands), it may be concluded that the proposed concentration does not give rise to competition concerns. Neither of the Parties had any sales of diesel reciprocating engines above 5MW in the EEA and worldwide during the period 2008, 2009 and 2010. In the segment of 2-5MW, only MWM is present worldwide and EEA-wide (and its presence was only marginal\(^{108}\)). Overlaps only exist in the 0.35-1MW and the 1-2MW size classes. In both these size classes, MWM sales are, however, marginal\(^{109}\). That implies that the proposed concentration would also not lead to any significant overlap in those size classes.

5.5.4. *Conclusion*

It should therefore be concluded that the proposed concentration would not lead to a significant impediment of effective competition in the market for diesel reciprocating engines for power generation.

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\(^{105}\) See Case No COMP/M.6172 – *Daimler/Rolls Royce/Tognum/Bergen*, recitals 38, 40 and 41.

\(^{106}\) See Case No COMP/M.6039 – *GE/Dresser*, recital 16.

\(^{107}\) Parties' submission of 8 September 2011. The Parties have been unable to provide market size data on a size class basis. Market share estimates can therefore not be provided.

\(^{108}\) In the 2-5MW size class, MWM only sold both worldwide and EEA wide only […]*, […]* and […]* diesel engines for power generation during the years 2008, 2009 and 2010 respectively.

\(^{109}\) In the 1-2MW size class, MWM only sold worldwide […]*, […]* and […]* and EEA-wide […]*, […]* and […]* diesel gas engines for power generation during the years 2008, 2009 and 2010 respectively. MWM sales were only somewhat higher in the 0.35-1MW segment (EEA, 2008, 2009, 2010: […]*, […]*, […]* respectively; and WW, 2008, 2009, 2010: […]*, […]*, […]* respectively).
5.6. **Horizontal overlaps: diesel gensets**

5.6.1. *Introduction*

(206) The 6(1)(c) Decision considered that, in principle, the proposed concentration would not raise significant competitive concerns regarding the diesel gensets market due to the small increment that CAT's market shares would undergo, both EEA wide and worldwide. However, it could not rule out higher market shares if the market was further segmented. Further segmentations of that product market according to input, power output and different speeds were further considered during the Phase II market investigation.

(207) The Parties\(^{110}\) only submitted market share calculations based on the broad market segmentation, namely: (i) below 0.5MW; (ii) between 0.5MW and 10MW; and (iii) above 10MW. On the basis of that segmentation, the Parties' market shares would be low and the diesel gensets would not constitute an affected market.

5.6.2. *Product market*

(208) The Parties take the view that, similar to the gas gensets market, that market segmentations according to power ranges does not reflect market reality\(^{111}\).

(209) It has been confirmed in previous Decisions that the ranges usually identified in the industry for diesel gensets are as follows: (i) 0.007-0.15MW; (ii) 0.15-1MW; (iii) 1-2.5MW; and (iv) >2.5MW\(^{112}\). The different ranges are broadly speaking used for different operating modes, such as standby and prime power applications. Another, even more detailed segmentation by power range is by the ranges used in the IESG reporting, which are considered in the assessment of this Decision in recitals 87 to 98. With regard to speed, the same potential segmentation, as discussed in recital (196), applies to diesel gensets as to diesel engines, that is to say: (i) low (<300 rpm); (ii) medium (300-1000 rpm); and (iii) high (>1000 rpm).

(210) For the purposes of the assessment in this Decision, the precise scope of the relevant product market for diesel gensets may be left open, since in all alternative market definitions no significant impediment to effect competition could arise.

5.6.3. *Compatibility with the internal market and the EEA Agreement*

(211) Concerning diesel gensets for power generation, CAT's worldwide share was approximately [10-20]*% in 2010, while MWM's was less than [0-5]*%. In the EEA, CAT's share for that year was appropriately [10-20]*%, while MWM's was [0-5]*\(^{113}\). MWM's market share in the market for diesel gensets is marginal. MWM only sold [...]* diesel gensets in 2008, [...]* diesel gensets in 2009 and [...]* diesel gensets in...

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\(^{110}\) Form CO, paragraph 101.

\(^{111}\) See paragraph 14 of the Parties' submission of 12 August 2011 to the Commission's request for information of 9 August 2011.

\(^{112}\) See Case No IV/M.1094 – *Caterpillar/Perkins Engines*, recital 16; Case No COMP/M.6172 – *Daimler/Rolls-Royce/Tognum/Bergen*, recital 44.

\(^{113}\) See paragraph 13 of the Parties' submission of 12 August 2011 to the Commission's request for information of 9 August 2011.
2010 worldwide. In the EEA, [...]*, there was no overlap between the Parties in [the years 2008 and 2010]*. MWM only sold [...]* diesel genset in the EEA in 2009\textsuperscript{114}.

(212) If the detailed segmentation, based on IESG power bands, is considered the assessment would not change. The increment due to the proposed concentration is not appreciable on an EEA, as well as world wide level, in each power band (and combination thereof). Moreover, CAT's market share in 2010 was below 30% in all conceivable relevant markets\textsuperscript{115}.

(213) The Parties also submit that the diesel gensets market is highly competitive. In 2009, CAT's largest competitors in the EEA were SDMO (Société de Distribution des Moteurs de l'Ouest), Cummins, Himoinsa and Pramac\textsuperscript{116}. Other competitors include Coelmo, MAN, Tognum, Volvo, Rolls-Royce, Visa and Scania.

5.6.4. Conclusion

(214) In light of those elements, it should be concluded that the proposed concentration does not lead to a significant impediment of effective competition in the market for diesel gensets.

5.7. Foreclosure effects

5.7.1. Concerns of third parties concerning foreclosure

(215) On 25 March 2011, the Third Party made a reasoned submission\textsuperscript{117} to the Commission raising concerns regarding the proposed concentration. According to the Third Party, few manufacturers of gas engines and gensets sell their products to intermediary packagers. CAT and GE generally sell their engines and gensets to the final customer through their distributors. The Third Party considers MWM to be a very competitive gas engine and genset manufacturer that is also willing to sell to packagers. The Third Party asserts that, post-concentration, CAT would extend its current policy to MWM, that is to say MWM will not sell bare engines and gas gensets to packagers, thereby denying packagers access to bare gas engines and gas gensets, thereby foreclosing these packagers from supplying (semi-)turnkey solutions to final gas genset customers. In addition, the combined entity would increase its presence in the downstream maintenance market by foreclosing packagers and independent service providers from spare parts, tooling and technical information\textsuperscript{118}. Some packagers share some of those concerns with the Third Party, albeit in a less

\textsuperscript{114} Form CO, paragraph 94.
\textsuperscript{115} See paragraph 17 of the Parties' submission of 12 August 2011 to the Commission's request for information of 9 August 2011.
\textsuperscript{116} See paragraph 32 of the Parties' submission of 12 August 2011 to the Commission's request for information of 9 August 2011.
\textsuperscript{117} See Third Party's submission of 25 March 2011.
\textsuperscript{118} On 6 April 2011, Commission officials and the Third Party had a meeting in order to further explain the claims submitted in its submission of 25 March 2011. The Third Party confirmed the assertions made in his letter of 25 March 2011. On 14 April 2011, the Third Party provided further information in response to inquiries by the Commission officials. In response to a telephone conference held on 25 May 2011, the Third Party made further submissions on 15 June 2011 in which it elaborated on the competitive pressure packagers would bring to bear against vertically integrated gas genset manufacturers and restated fact and allegation made earlier.
elaborated way. The 6(1)(c) Decision announced that certain vertical concerns were to be considered in the Phase II market investigation.

(216) As is described more in detail in recitals 240 and 257, CAT is not present on the markets for (semi-) turnkey solutions and the provision of spare parts and maintenance of gensets. Consequently, the proposed concentration does not constitute a vertical merger within the meaning of Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings with respect to those markets. Nevertheless, this Decision analyses whether the proposed concentration would give rise to foreclosure effects whilst using the framework for analysing foreclosure as set out in the Non-Horizontal Merger Guidelines.

5.8. Foreclosure of packagers from the market of (semi-)turnkey solutions

(217) Foreclosure of packagers from the market of (semi-)turnkey product may arise from conduct of the Parties on the markets for: (i) reciprocating gas engines; and (ii) gas gensets.

5.8.1. Market for reciprocating gas engines

(218) The potential product market definitions for gas reciprocating gas engines have been considered in previous Decisions. It was considered that reciprocating engines could be distinguished according to their applications (that is to say, transportation versus power generation versus mechanical drive/gas compression), the input used (that is to say, diesel- versus gas-fuelled, and within the gas-fuelled category, natural versus non-natural gas) and their output ranges. It was also considered that reciprocating engines could be distinguished from all types of turbines by reason of their operating conditions, efficiency, technical characteristics and price, which was confirmed at the time by the market investigation.

(219) The Parties consider that the detailed segmentation into the IESG power bands does not reflect market reality.

(220) With regard to output ranges and in accordance with the power ranges retained for gas gensets, in which gas fuelled reciprocating gas engines are the main component, the output ranges most pertinent for the purposes of this Decision are those from 0.5 to 5 MW. This is in view of the close technical connection between the capacity of the gas reciprocating gas engine and the gas genset on the one hand and fact that the Parties overlap in this segment. In any event, as foreclosure concerns would not arise under any size class retained, the precise delineation in terms of size power bands may be left open.

119 OJ C 265, 18.10.2008, (the "Non-Horizontal Merger Guidelines").
120 Case No COMP/M.3113 – GE/Jenbacher, recitals 7 to 10; Case No COMP/M.6039 – GE/Dresser, recitals 7 to 21.
122 Parties' submission dated 18 August 2011 (update on Parties' submission dated 12 August 2011).
In geographic terms, in line with earlier Decisions\textsuperscript{123}, the relevant geographic market is at least EEA-wide, and probably global, given that conditions of competition are generally homogeneous across regions.

5.8.2. \textit{Market for gas gensets}

The product and geographic market definitions for the upstream market for gas gensets are discussed in recitals (20) to (71) and (72) to (76) respectively.

5.8.3. \textit{Market for (semi-)turnkey power plant installations}

Gas gensets are supplied in different ways according to the level of integration required by the customer. The Phase II market investigation\textsuperscript{124} has shown that the vast majority (namely, more than 80\%) of gensets supplied by genset manufacturers, including the Parties, are supplied as such without further engineering services or additional power plant related equipment\textsuperscript{125}. Where the services are limited to the provision of the genset with the accessory equipment, the installation is referred to as a semi-turnkey solution.

A minority of gas gensets are supplied in combination with additional services (design and engineering) and power plant accessory equipment (including heat exchangers, coolers, pumps, valves, silencers, catalysts, piping and switchboards) that are not part of the genset in itself. To the extent that the customer devolves all responsibility for building and operating the installation to a third party supplier, which typically includes the civil works and the steel construction for the foundation and surrounding of the power plant, the installation is referred to as a turnkey solution.

The outcome of the Phase II market investigation\textsuperscript{126} does not allow concluding whether turnkey installations as provided by either genset manufacturers, their distributors or by packagers would constitute a market separate from semi-turnkey. The additional services and equipment that a turnkey product entails, in addition to a semi-turnkey product, are available independently from the genset manufacturers and final customers can substitute integrated solutions by a 'mix and match' purchasing policy\textsuperscript{127}. On the other hand, it appears that there are final customers that have only a limited ability to oversee the integration of the various equipment and associated services and tend to prefer procuring a turnkey installation.


\textsuperscript{124} See responses to question 26 of the Phase II R1 Questionnaire to competitors; responses to question 28 of the Phase II R1 Questionnaire to distributors; responses to question 28 of the Phase II R3 Questionnaire to packagers; responses to question 22 of the Phase II R4 Questionnaire to customers.

\textsuperscript{125} See responses to questions 84, 85 and 86 of the Phase II R4 Questionnaire to customers; responses to questions 108, 109 of the Phase II R2 Questionnaire to distributors; responses to questions 103 and 104 of the Phase II R3 Questionnaire to packagers; responses to questions 75, 76 and 77 of the Phase II R5 Questionnaire to consultants.

\textsuperscript{126} See responses to question 28 of the Phase II R1 Questionnaire to competitors; responses to question 30 of the Phase II R2 Questionnaire to distributors; responses to question 30 of the Phase II R3 Questionnaire to packagers; responses to question 24 of the Phase II R4 Questionnaire to customers.

\textsuperscript{127} Over the course of the Phase II market investigation, it has appeared that it is not uncommon for customers to engage consultants to design installations adapted to the customers' needs and to provide assistance to the tendering process.
For the purposes of this Decision, the precise market delineation may be left open as it does not affect the result of the competitive assessment.

For the purposes of the proposed concentration, the related markets for (semi)turnkey power plant installations need not be defined from a geographical point of view as it does not affect the result of the competitive assessment.

5.8.4. Compatibility with the internal market and the EEA Agreement

According to the Commission's Non-Horizontal Merger Guidelines: "For input foreclosure to be a concern, the vertically integrated firm resulting from the merger must have a significant degree of market power in the upstream market. It is only in these circumstances that the merged firm can be expected to have a significant influence on the conditions of competition in the upstream market and thus, possibly, on prices and supply conditions in the downstream market." 128.

5.8.4.1. The Parties' position on the upstream market for bare gas engines

CAT is vertically integrated in relation to the gas engines and it manufactures gas engines for power generation almost exclusively for captive use, that is to say, as an input product for the manufacture of gas gensets. The exception is a relative small number of bare gas engines sold by its subsidiary, Perkins. Such gas engines for power generation have power outputs below 1.042MW. MWM only manufactures power generation gas engines for captive use. These facts have been confirmed by the Phase II market investigation.

As regards what the Third Party had stated in its submissions, namely, that it was purchasing gas engines from MWM, it was found during the Phase II market investigation that MWM has not sold bare gas engines at least since 2005 129. It follows that, as such, the proposed concentration does not alter the current established situation with regard to bare gas engines.

This Decision nevertheless assesses whether the proposed concentration would give rise to input foreclosure of packagers with regard to the ability and incentive of the combined entity to cease selling CAT's Perkins gas engines.

According to the Parties 130, there is only very residual demand for bare gas engines for power generation. Most of the manufacturers of gas gensets are vertically integrated and do not sell gas bare engines in the merchant market. Thus, the market size of that market is not significant. In relation to the EEA, the Parties refer to the GE/DRESSER case 131 where it is claimed that the total volume for bare gas engines for power generation would be at least 400 MW or approximately 25% of total demand for gas gensets and bare gas engines. However, the Parties believe that sales

128 Non-Horizontal Merger Guidelines, paragraph 35.
129 Form CO, paragraphs 91, 103, 532 and 533; Parties' reply of 19 September 2011 to the Commission's request for information (from which it is apparent that the sole exception is the supply of gas engines for maintenance purposes in exchange for another broken down engine. This excludes resale or transformation into a genset by packagers)
130 Form CO, paragraph 224.
131 Case No COMP/M.6039 – GE/Dresser, recital 35.
of bare gas engines in the EEA may be considerably lower than 25% and they estimate it to be at most 10% of the demand for gas gensets and bare gas engines.

(233) On the basis of IESG data and Perkins' sales data as provided by the Parties\textsuperscript{132}, the Commission has calculated the EEA and world-wide market shares of the Parties on the market for bare gas engines, both under the assumption that gas engines represent 10% and 25% of EEA and world-wide sales of bare gas engines and gas gensets\textsuperscript{133}.

Table 5: Parties' (Perkins') share in bare high-speed gas engines sales (year 2010)

<table>
<thead>
<tr>
<th>Power ranges in MW</th>
<th>&gt; 0.5</th>
<th>0.5 - 0.75</th>
<th>0.75 - 1.0</th>
<th>1.0 - 1.5</th>
<th>&gt; 1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>World-wide market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parties (Perkins) market size under 10% hypothesis</td>
<td>[0-5]*%</td>
<td>[10-20]*%</td>
<td>[5-10]*%</td>
<td>[5-10]*%</td>
<td>[0-5]*%</td>
</tr>
<tr>
<td>Parties (Perkins) market size under 25% hypothesis</td>
<td>[0-5]*%</td>
<td>[0-5]*%</td>
<td>[0-5]*%</td>
<td>[0-5]*%</td>
<td>[0-5]*%</td>
</tr>
<tr>
<td>EEA-wide market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parties (Perkins) market size under 10% hypothesis</td>
<td>[5-10]*%</td>
<td>[10-20]*%</td>
<td>[10-20]*%</td>
<td>[10-20]*%</td>
<td>[0-5]*%</td>
</tr>
<tr>
<td>Parties (Perkins) market size under 25% hypothesis</td>
<td>[0-5]*%</td>
<td>[5-10]*%</td>
<td>[0-5]*%</td>
<td>[5-10]*%</td>
<td>[0-5]*%</td>
</tr>
</tbody>
</table>

(234) In the segment for gas engines comprising gas engines of capacity of 0.5 and higher (that is to say, corresponding with the downstream market for gas gensets) the Parties EEA-wide market shares do not exceed [5-10]*%. Even if more narrow bands within this market would be assessed, the Parties market shares would still not exceed [10-20]*% in any of the more narrow bands above 0.5 MW.

(235) In light of the low combined market shares of the Parties on the bare gas engines market, it may be considered that the proposed concentration would not lead to a significant impediment of effective competition significant in the market for bare high-speed reciprocating gas engines.

5.8.4.2. Parties' position on the upstream market for gas gensets

(236) In the upstream market for gas gensets and based on the reconstruction of the market conducted during the Phase II market investigation, CAT's and MWM's market share for gas gensets (as indicated in recital (83)) is not indicative of a significant degree of market power ([20-30]% worldwide and [20-30]% in EEA for 2010\textsuperscript{134}).

(237) The Phase II market investigation has revealed that, whereas CAT and also GE, operate an exclusive distribution system and do not sell to packagers, other genset manufacturers do sell to packagers. It has been confirmed that, apart from MWM,

\textsuperscript{132} E-mail of 18 August 2011. In unit terms, Perkins' sales for the year 2009 were […]* and […]* on a world-wide and EEA-wide scale respectively (Form CO, paragraph 227).

\textsuperscript{133} Bare engines are sold on a market where purchasers are packagers that seek to build a genset of a given size. It is, therefore, not necessary (nor possible as bare gas engines cannot be attributed to projects, let alone project sizes) to consider substitutability of single and multiple engines for a given project size equivalent to what was done for gas gensets.

\textsuperscript{134} See Table 1 in recital (82).
competing genset manufacturers, in particular [...] supply gensets to packagers. Each of those genset manufacturers is a ready alternative to MWM and none of those manufacturers is faced with capacity constraints. Combined, most of those alternative manufacturers cover the full output range that MWM currently markets. The Parties also refer to the fact that there are strong competitors offering bare gas engines such as MAN, Mitsubishi and Scania as alternative suppliers of bare gas engines.135

5.8.4.3. Conclusion as to upstream markets

(238) In view of the Parties' market shares on the market for gas reciprocating engines of power generation and the market for gensets with capacity > 0.5 MW, it is highly unlikely that the Parties would have the ability to significantly affect the competitive conditions in the downstream market for (semi) turnkey product, for example, by increasing prices for supplies to packagers or foreclose packager's access to gas gensets and/or gas engines for power generation by ceasing to supply them all together136.

5.8.4.4. The Parties' position on the downstream market for (semi-)turnkey products

(239) The Non-Horizontal Merger Guidelines indicate that the incentive to foreclose actual or potential rivals may also depend on the extent to which the downstream division of the integrated firm can be expected to benefit from higher price levels downstream.137

(240) CAT does not supply turnkey or semi-turnkey installations since it markets its gas gensets solely through independent distributors that resell the gensets as part of semi-turnkey or turnkey installations to end-users. CAT also does not sell gas gensets to packagers (other than its own independent distributors) for resale. MWM is itself active in providing semi-turnkey power plant installations directly to final customers but does not supply complete turnkey power plant installations. MWM also supplies gas gensets to packagers and independent distributors that resell these gas gensets subsequently as part of semi-turnkey and turnkey projects.

(241) The Parties estimate MWM's position in semi-turnkey power plant installations (and hence the parties combined market shares) to be less than [0-5]*% in the EEA138 and worldwide and cite packagers, plant builders and other gas gensets suppliers as competitors. A Commission estimate would put the Parties' combined market share in a market for semi-turnkey products slightly higher, namely at [5-10%] on an EEA level and [5-10%] on a world-wide level139. If turnkey installations are included in...
the downstream market, the Parties' combined market share would be smaller as neither MWM nor CAT sell turnkey solutions\textsuperscript{140}.  

\textbf{(242)} The combined entity would have an incentive to foreclose rivals' access to inputs only if it would anticipate increased revenues in the downstream market for (semi-) turnkey installations capable of compensating for the loss of upstream revenues for gas gensets.  

\textbf{(243)} First of all, sales through packagers by MWM are substantial as they represent [40-50]\% in the EEA and [20-30]\% of MWM's worldwide sales in 2010, in MW terms\textsuperscript{141}. As CAT does not operate at the downstream level, sales deviated from packagers to its distribution network would benefit only CAT's distributors and not the combined entity. CAT does not earn any downstream margin on sales made by its distributors as these companies are not part of the CAT group. Similarly, even if MWM itself also sells direct to final customers, it distributes a substantial part of its produce through official distributors ([20-30]\% in the EEA and [50-60]\% worldwide\textsuperscript{142}). Consequently, any sales deviated from packagers to MWM distributors would not benefit the combined entity. The combined entity would not earn downstream margins on such deviated sales as the distributors to which sales are deviated are not part of the MWM group.  

\textbf{(244)} Moreover, such a shift away from MWM supplying packagers would be likely to give rise to a significant loss of sales of the combined entity (MWM's current sales through packagers are substantial). In that respect, CAT submits that its distributors: (i) offer services which are narrower in scope than those of packagers buying MWM gensets; (ii) have [limited]\% knowledge of the relevant customer base (in order to secure invitations to tender); and (iii) have [limited]\% material presence in non-natural gas gensets, which are the main focus of MWM's packagers. As a result, CAT's distributors are not considered as a good substitute for independent distributors and packagers buying MWM gensets. These elements were confirmed in the Phase II market inquiry.  

\textbf{(245)} The incentive to engage in input foreclosure is greater if the products of the combined entity and the foreclosed companies are close substitutes at the downstream level\textsuperscript{143}. However, MWM only supplies semi-turnkey products whereas packagers tend to be active also as providers of turnkey products. The combined entity is, therefore, not well placed to divert the downstream demand from the foreclosed packagers facing increased costs because it cannot meet the downstream demand for turnkey products. In addition, MWM's low market share on the semi-turnkey segment, does not provide an incentive for an input foreclosure strategy. Neither is this incentive affected by the proposed concentration, as CAT is absent on the downstream market.  

\textbf{(246)} It follows that the Parties are unlikely to have an incentive to engage in an input foreclosure of the packagers acting on the downstream market for (semi-) turnkey

\textsuperscript{140} Parties' reply to the 6(1)(c) Decision.  
\textsuperscript{141} Form CO, paragraph 192. Figures for the year 2009 were [20-30]\% EEA-wide and [10-20]\% worldwide. Percentages are even significantly higher for certain EEA countries.  
\textsuperscript{142} Form CO, paragraph 192.  
\textsuperscript{143} See Non-Horizontal Merger Guidelines, paragraph 42.
products as they are not capable of capturing a significant part of any increase in margins through a strategy to increase prices\(^{144}\).

(247) In the EEA, besides MWM, […]sell gas gensets to packagers as a means either to distribute products in those EEA countries where they have no or only limited distribution infrastructures in place, or to increase market penetration in EEA countries where they already have a developed distribution structure. It follows that other gas genset manufacturers and their distributors (not affected by the foreclosure strategy and with no apparent capacity constraints) are equally well (if not better\(^{145}\)) placed to benefit from an increase in price and margin than the Parties.

5.8.4.5. Business practices and internal documents of the Parties do not indicate that the proposed concentration would change the ability and/or incentives for foreclosure inputs.

(248) According to the Non-Horizontal Merger Guidelines: "In its assessment of the likely incentives of the merged firm, the Commission may take into account various considerations such as […] the type of strategies adopted on the market in the past or the content of internal strategic documents such as business plans\(^{146}\)."

(249) Because of its existing activities downstream, MWM in the absence of the proposed concentration could already stop supplying gensets to its independent distributors and packagers and make sales only via its own network. The fact that MWM did not follow such strategy in the past constitutes evidence that it would not be profitable and that situation is unlikely to change post-concentration. While the proposed concentration gives MWM the possibility to make sales through a CAT's dealer, there is no strategic reason for the combined entity to use CAT's distribution network in preference to MWM's customers.

(250) The Parties' conduct subsequent to previous concentrations in the gas genset sector does not support the view that CAT has strong incentives to stop distributing gas gensets through MWM's distribution network, including to packagers. Following the recent acquisition of Perkins and Wilson, both Perkins and Wilson have continued to use their own distributor network for the distribution of its gensets. In particular, Perkins continues to distribute its gensets solely through packagers. Similarly, after the acquisition of Wilson by CAT, CAT maintained its distributors\(^{147}\).

(251) As regards the proposed concentration, internal documents of MWM substantiate that: (i) MWM does not plan to cease supplying MWM distributors, including packagers, post-concentration\(^{148}\); and (ii) any changes of conditions for supplying packagers occurred as a result of business decisions that are unrelated to the proposed concentration\(^{149}\). This is also consistent with CAT's commercial documents that set out its intended distribution arrangement post-concentration, notably its

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144 See Non-Horizontal Merger Guidelines, paragraph 43.
145 Market participants that are closer competitors to packagers than the Parties are also better placed to benefit from customer switching in response to a foreclosure strategy by the Parties.
146 See Non-Horizontal Merger Guidelines, paragraph 45.
147 Parties' Submission (Frontier Economics) of June 2011, page 9.
148 For instance, M AVH 10. (Reference to inspection documents)
149 For instance, M AVH 12, 13 and 14 and their dates. (Reference to inspection documents)
intention to maintain the current MWM subsidiaries and the full MWM distribution system\textsuperscript{150}.

(252) The examples put forward by the Third Party\textsuperscript{151} allegedly demonstrating the incentive and/or ability to replace MWM's distribution network are not pertinent in this Decision. They concern either activities of the Parties (CAT) in a completely different sector (namely, mining) or the conduct of a genset manufacturer other than the Parties. That genset manufacturer replaced the acquired company's distribution network of gas gensets by its own distribution network. However, unlike the Parties in this Decision, the acquired company in that case sold a small quantity of gas engines for power generation and gas gensets (whereas in that case the acquirer had a strong downstream presence)\textsuperscript{152}. Both those elements are not present in the proposed concentration.

(253) It follows that evidence of actual business practices in the genset sector contradicts the view that an acquisition alters the ability and/or incentive to foreclose packagers of distributors.

5.8.5. Conclusion

(254) It should therefore be concluded that the proposed concentration does not lead to a significant impediment of effective competition, as the proposed concentration does not materially affect the ability and incentive of the Parties to foreclose packagers from the market for (semi-) turnkey products.

5.9. Foreclosure of packagers from the market for the provision of spare parts and maintenance for gensets

(255) Foreclosure of packagers from the market of (semi-)turnkey product may arise from the Parties' conduct on the markets for the manufacturer of gas and diesel gensets.

5.9.1. Market for the manufacture of gensets

(256) The product and geographic market definitions for the manufacture of gas and diesel gensets are discussed in recitals (20) to (71) and (72) to (76) respectively.

5.9.2. Market for the provision of spare parts and maintenance services

(257) The provision of spare parts and maintenance services over the running life of a genset constitutes an important market downstream from gensets, as over the period of use of a gas genset (10 to 15 years), the sales of such services are nearly equivalent in terms of value to the purchase price of the genset. It follows that adjacent to the market for gensets an aftermarket for maintenance and repair services and the supply of spare parts for gensets exists.

\textsuperscript{150} Paragraph 80 and Annexes 31.2 and 31.4 of Parties' submission of 6 June 2011 in response to the Commission's request for information of 1 June 2011.

\textsuperscript{151} Parties' Submission of 19 August 2011.

\textsuperscript{152} Responses to questions 9 to 13 of GE's amended reply of 30 June 2011 to the Commission's request for information of 17 June 2011.
MWM offers spare parts and after-sales services for its own gensets, but not for gensets of other manufacturers. CAT markets its gensets through independent distributors that provide the customer with after-sales support and spare parts for CAT genset products. Hence, CAT is not present itself on the market for supplying spare parts and maintenance. CAT supplies spare parts but only for its own gensets. CAT's independent distributors have direct access to original spare parts from CAT and can order the parts directly through a database. It is common for distributors to order spare parts and stock them for resale.

As indicated by the Phase II market investigation, genset customers may use the maintenance services of either the original genset manufacturers or independent service providers, which may include independent distributors and packagers. Spare parts are available from the original manufacturers for their own gensets and to a lesser degree from third parties that are independent from the genset manufacturers. According to the Phase II market investigation, services originating from the OEMs and independent maintenance service providers (including spare parts) are to a large extent substitutable both from the demand and the supply point of view, at least outside the warranty period applying to the genset. Both genset customers as independent service providers and packagers have confirmed that restrictions are limited to the obligatory use of OEM spare parts and services by the OEM or installer during the warranty period in order to identify the manufacturer's liability during that period. The Phase II market investigation confirmed that after the guarantee period customers are free to choose alternatives to the OEM or installer for both maintenance work and the provisioning of spare parts.

Whilst there is a tendency for customers with in-house service competences not to conclude long term maintenance contracts, a considerable number of customers without such in-house service competences prefer to have independent service providers competing with the manufacturers for maintenance services. The vast majority of customers indicated that they source original spare parts and that these are included in the maintenance contract of either the OEM or the independent service provider. From the supply side, packagers and independent service providers have confirmed that they can obtain OEM spare parts from the distribution chain and that they can provide a comparable service to that of the manufacturers.

Since genset users are not necessarily captive customers of maintenance services and OEM spare parts, there is a market for the provision of spare parts and maintenance services to genset buyers. For the purposes of this Decision, the precise market

153 Parties' reply of 12 August 2011 to question 8 of the Commission's request for information.
154 Form CO, paragraph 205.
155 See responses to questions 26 and 27 and 83 to 86 of the Phase II R4 Questionnaire to customers; responses to question 21 of the Phase II R1 Questionnaire to competitors; responses to questions 108 and 109 of the Phase II R2 Questionnaire to distributors; responses to questions 103 and 104 of the Phase II R3 Questionnaire to packagers; responses to questions 75, 76 and 77 of the Phase II R5 Questionnaire to consultants.
156 Parties' reply of 12 August 2011 to question 8 of the Commission's request for information.
157 See responses to questions 112 and 113 of the Phase II R1 Questionnaire to competitors; responses to questions 100 and 101 and 103 to 106 of the Phase II R2 Questionnaire to distributors; responses 31 and 102 to 106 of the Phase II R3 Questionnaire to packagers; responses to questions 26 and 27 and 84, 85 and 86 of the Phase II R4 Questionnaire to customers.
delineation of the provision of spare parts and maintenance services may, however, be left open as it does not affect the result of the competitive assessment.

(262) The geographic scope of the spare parts and after-sales services follows that of the upstream genset markets. For the purposes of this Decision, the related markets for maintenance and spare parts need not be finally defined from a geographical point of view, as it does not affect the result of the competitive assessment.

5.9.3. Compatibility with the internal market and the EEA Agreement

(263) The 6(1)(c) Decision considered that the proposed concentration could lead to the combined entity restricting access to spare parts in order to raise barriers to entry for packagers and independent service providers that compete with the combined entity downstream in the markets for the supply, installation and maintenance of gensets. That concern was amplified by the importance of the lucrative aftermarkets on the one hand and customers citing the provision of qualitative maintenance as a criterion in selecting which genset to buy on the other hand.

(264) During the Phase II market investigation, some packagers / independent service providers expressed the fear that their cooperation with the future combined entity would be terminated, as CAT's distribution network is more developed than that of MWM. As a result, the combined entity would favour its own distribution channel for selling, installing and maintaining gensets instead of packagers. According to those third parties, packagers and independent service providers would become increasingly marginalised as the combined entity could limit access to spare parts and technical support for gensets already installed.

(265) The Third Party, a genset packager and service provider, suggested that the combined entity would generalise a CAT practice that consists of allowing only CAT dealers to intervene when a technical problem arises with the genset engine during the warranty period, even where the genset in question has been packaged and installed by a packager independent from CAT's distribution network. Such practices would allegedly hurt the reputation of third party packagers and would provide the combined entity with an additional opportunity to have aftermarket services channelled to its own distributors. The Third Party also alleges that these warranty service practices could have repercussions on the initial sale of packaged gensets as customers would prefer one-stop suppliers that provide services both during and outside the warranty period.

5.9.3.1. The incentive of the combined entity to foreclose third party aftermarket service providers from spare parts, tooling and technical information

(266) The incentive for the combined entity to foreclose aftermarket input is limited for the same reasons as established in recitals 229 to 238 for the input of bare engines and gensets.

(267) Specifically for the aftermarkets, it is to be understood that the combined entity only provides maintenance and spare parts for its own gensets. Given the importance that customers attach to reliable and qualitative aftermarket services, any action taken by the combined entity to foreclose its aftermarket competitors may have significant consequences for the perceived reliability and quality of the genset itself. Any short
term gains that the combined entity may achieve by foreclosing its aftermarket services competitors could have significant negative impact on genset sales in the longer term. As such, it is unlikely that the combined entity would have an incentive to foreclose aftermarket rivals' access to inputs even if it anticipated increased revenues in the downstream maintenance market. The Phase II market investigation has shown that when a customer outsources maintenance work it generally enters into long-term service contracts. Since the final genset customer would be directly affected by a delay or failure to obtain spare parts, tools or technical information and the origin of such foreclosure would be immediately detected, any action by the combined entity to gain aftermarket business would be likely to cause irreparable damage to its brand and the reliability of the genset business itself.

(268) Both MWM and CAT already impose conditions on independent aftermarket service providers in order to assure the final customer that its gensets are serviced to the required quality levels. For instance, MWM [spare parts distribution model is based on quality criteria of distributors, in particular in relation to maintenance services]*158. Whilst CAT does not supply parts and services directly, it imposes comparable quality levels on its dealers. Such limitations are unrelated to the proposed concentration.

(269) CAT dealers currently stock and sell spare parts for CAT gensets. Whilst CAT dealers do not compete against each other for maintenance services, they still face competition for maintenance services from independent maintenance providers and from the customer itself where the latter decides not to outsource the maintenance work. In both cases, the CAT distributor is not in the market for supplying maintenance services. The Phase II market investigation did not confirm that CAT dealers would not compete for selling spare parts. According to CAT, any dealer can order spare parts from the CAT database for further resale. Respondents to the Phase II market investigation have not otherwise. To the extent that the combined entity's distributor would, post-concentration, also sell spare parts for MWM gensets, the incentive to foreclose is limited as foreclosing access to spare parts would deprive it of a margin on selling those spare parts without increasing its ability to compete for the maintenance services.

5.9.3.2. The ability of the combined entity to foreclose third party aftermarket service providers from spare parts, tooling and technical information

(270) In terms of ability to foreclose, the assessment of the combined entity's degree of market power in the upstream markets of bare engines and gensets is discussed in recitals 228 to 234. The combined entity would have a certain degree of market power only for a narrow power output range which represents a limited number of gas gensets in terms of volume. With regard to bare gas engines, the combined entity's market share would be minimal. In the downstream aftermarkets, the combined entity's market share would be, at most, that of installed gensets since CAT and MWM do not provide aftermarket services for gensets other than their own.

158 As put forward by the parties, [MWM spare parts distribution model is based quality criteria of distributors, in particular in relation to maintenance services]*.
As regards the question whether the combined entity could foreclose third party aftermarket service providers from accessing spare parts, tools or technical information, the proposed concentration would not change the Parties' ability to do so. The Phase II market investigation did not point to existing foreclosure practices of either CAT or MWM. Both Parties provide access to spare parts, tooling and technical information in order to preserve the reliability and reputation of their gensets. Both CAT and MWM, as well as other genset manufacturers intervene directly when technical problems occur during the warrantee period in order to safeguard their liability and warranty obligations vis-à-vis the customer. It is, therefore, unfounded that such practice is limited to CAT and that it could have a foreclosing effect on the continued ability of packagers other than manufacturers to service gensets.

The competitive effect of third party aftermarket service providers being foreclosed from spare parts, tooling and technical information

Even if, post-concentration, the combined entity were to restrict aftermarket inputs to third party service providers, it is unlikely that there would be any adverse effect on customers as competition in the markets for gensets and (semi)-turnkey installations would be unaffected since the combined entity provides aftermarket services only for its own products.

Conclusion

It should therefore be concluded that the proposed concentration would not lead to a significant impediment of effective competition, as it would not materially affect the ability and incentive of the Parties to foreclose packagers from the market for the provision of spare parts and maintenance of gensets.

Vertical relationships

The proposed concentration would give rise to several vertical links within the meaning of the Non-Horizontal Merger Guidelines, in particular:

(a) Reciprocating gas engines (upstream) – Gas gensets (downstream)
(b) Diesel reciprocating engines (upstream) – Diesel gensets (downstream)

Vertical relationships: Reciprocating gas engines (upstream) – Gas gensets (downstream)

Upstream market for reciprocating gas engines

The product and geographic scope for the upstream market for reciprocating gas engines are discussed in recitals (218) to (221).

Downstream market for gas gensets

The product and geographic market definitions for the downstream market for gas gensets are discussed in recitals (20) to (71) and (72) to (76) respectively.
5.10.1.3. Compatibility with the internal market and the EEA Agreement

(277) The Parties' position on the upstream market for reciprocating gas engines is discussed in recitals (229) to (234). The Parties' combined market share does not exceed [10-20]*% on any of the conceivable market definition and the Third Party's statement, namely that it was purchasing gas engines from MWM, was not confirmed in the Phase II market investigation. As such, the proposed concentration would not alter the current established situation with regard to bare gas engines. In the event that CAT decides to stop supplying (or significantly raise the price of) bare gas engines, packagers can switch to alternative suppliers, such as Cummins or Guascor.

(278) The Parties' position on the downstream market for gas gensets is discussed in recitals (99) to (172). The reconstruction of the market conducted during the Phase II market investigation found that in 2010 CAT's and MWM's combined market share for gensets > 0.5MW gensets are [20-30]% on a worldwide basis and [20-30]% on an EEA-wide basis and was not indicative of a significant degree of market power.

5.11. Conclusion

(279) It should therefore be concluded that the proposed concentration would not lead to a significant impediment of effective competition due to the vertical relationship between the markets for gas reciprocating engines and gas gensets.

5.11.1. Vertical relationships: diesel reciprocating engines (upstream) – Diesel gensets (upstream)

(280) Although the 6(1)(c) Decision considered it unlikely that competition concerns would arise as a result of the vertical relationship between the markets for diesel reciprocating engines (upstream) and diesel gensets (downstream), it stated that such concerns would be further investigated in the Phase II market investigation.

5.11.1.2. Upstream market for diesel reciprocating engines

(281) The product and geographic scope for the upstream market for diesel reciprocating engines are discussed in recitals (190) to (202).

5.11.1.3. Downstream market for diesel gensets

(282) The product and geographic market definitions for the downstream market for diesel gensets are discussed in recitals (208), (209) and (210).

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159 Form CO, paragraphs 91, 103, 532 and 533; Parties' reply of 19 September 2011 to the Commission's request for information.
160 See responses to questions 47 of the Phase II R4 Questionnaire to customers; responses to questions 60 and 97 of the Phase II R3 Questionnaire to packagers.
161 Recital 73 of the 6(1)(c) Decision.
5.11.1.4. Compatibility with the internal market and the EEA Agreement

(283) The Parties' position on the upstream market for diesel reciprocating engines is discussed in recitals (203) and (204). Overlaps between the Parties are marginal, as MWM is only marginally present on that market.

(284) The Parties' position on the downstream market for diesel gensets is discussed in recitals (211), (212) and (213). Overlaps between the Parties are marginal, as MWM is only marginally present on that market.

(285) It also follows that the proposed concentration would not result in significant structural changes in the market for reciprocating diesel engines, as well as the market for diesel gensets.

5.11.2. Conclusion

(286) It should therefore be concluded that the proposed concentration would not lead to a significant impediment of effective competition due to the vertical relationship between the markets for reciprocating diesel engines and diesel gensets.

6. CONCLUSION

(287) For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the internal market and with the EEA Agreement. This Decision is adopted in application of Article 8(1) of the Merger Regulation,
HAS ADOPTED THIS DECISION:

*Article 1*

The notified operation whereby Caterpillar Inc. acquires sole control of MWM Holding GmbH within the meaning of Article 3(1)(b) of Regulation (EC) No 139/2004 is hereby declared compatible with the internal market and the functioning of the EEA Agreement.

*Article 2*

This Decision is addressed to:

Caterpillar Inc.
100 NE Adams Street
61629, Peoria, Illinois
USA

Done at Brussels, 19.10.2011

*For the Commission*
(signed)
Joaquin ALMUNIA
Vice-President
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